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# Availability and Utilization of Audio-Visual Resources for Teaching and Learning in Government Day Secondary School, Nukkai,Jalingo, Taraba State, Nigeria

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**ABSTRACT**

*This study investigates the availability and utilization of audio visual (AV) resources for teaching and learning in* Government Day Secondary School, Nukkai, Jalingo, Taraba State, Nigeria*. The descriptive survey design was adopted. The study population was 1,342 made up of 1,275 students from Junior Secondary (JS) 1 to Senior Secondary (SS) 3and 67 permanent staff of the school. A sample size of 268 respondents was drawn using a combination of complete census and stratified-simple random sampling techniques. An observation checklist and a questionnaire were the instruments for data collection. A total of 268 copies of the questionnaire were distributed but 202 copies were returned giving a response rate of 79%. Mean score was adopted in analysing the collected data. The study found the availability of AV resources such as slide/film projectors, computers, internet (audio and video) lessons, android mobile devices/phone tablets, etc. However, only few of these resources were being utilized and to a low extent. Only slide/film projectors, films, audio/video cassettes, compact disks, and video cassette recorders were being highly utilized. The study also found that harsh climatic condition, inadequate fund, inadequate AV resources, poor maintenance culture of AV resources, etc. are among the challenges facing the availability and utilization of AV resources. Based on the findings, the study recommended among other things, the provision of adequate funds, educating the students, training and re-training of staff, as ways of achieving high availability and effective utilization of AV resources for teaching and learning in the secondary schools*.

**Keyword:** Availability, Utilization, Audio-Visuals, Teaching, NigerianSecondary Schools

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## Introduction

The Nigerian school system has continued to experience series of transformations as a result of the introduction of information and communication technologies (ICTs) in the teaching and learning processes, and the constant increase in the number of pupils and students enrolled into the system. However, the duo is now making it difficult for effective teaching and learning to take place without appropriate tools and mechanisms. Among these technologies, are the audio-visual (AV) resources or materials. According to Hornby (2015), audio-visual resources oraudio-visuals are resources using both sound and pictures. According to Singh as cited in GradesFixer(2019), AV resources are those devices, which by sight and sound increase the individual's experience. Furthermore, GradesFixer (2019, p.1) posits that AV resources are those instructional devices, which are used in classroom to encourage learning, in order to make it easier and interesting. Though full of benefits in respect to teaching and learning in secondary schools, where these AV resources are not appropriately made available and utilized, their benefits are jeopardized. This will result in adverse negative effect on the quality of students produced by the nation and the inability of the students to suit the job market. Notwithstanding, due to the large number of secondary schools in the country, there is need to closely watch the processes of teaching and learning in the areas of the resources employed, the extent of application of the resources, the response of the pupils or students to these resources as well as the end product of the application of such resources. This is what availability and utilization of audio-visuals in teaching and learning seeks to cover. Considering the worrisome state of the Nigerian school system.Topo, as cited in Doosuur and Igyuve (2013) affirm that the need today is the thoughtful integration of audio-visual resources and activities such as projectors, models, film strips, television, photography, printing and drawing, sewing and crafts, 3-D and digital art, hip-hop, and online services in our secondary schools. It is expected that when they are integrated, there will be a reversal in the decline in book reading among secondary school students, thereby enhancing their learning capabilities.

Additionally, the world is becoming more digitalized, thereby trying to eradicate the manual method of teaching and learning using the chalkboard. Corroborating the assertion, Adamu, Ibrahim, Adamuand Ibrahim (2018)

observe that with audio-visuals, the communication of information can be done in a more effective manner, and it can be an effective instructional medium for delivering information.The process of communicating information or ideas, is what teaching and learning processes is all about. Natoli (2011) stresses that audio-visual materials are very important in the teaching and learning process because having seen something, most people remember what they have seen easily. Hence, the importance of audio-visual materials in the teaching and learning process cannot be undermined. The teaching and learning process in Government Day Secondary School**(**GDSS), Nukkai, Jalingo in Taraba State, Nigeria is not different from the teaching process in other secondary schools. However, the only difference may be on the availability and utilization of audio-visuals for the process. This is what this study wishes to establish. GDSS, Nukkaiis a co-educational secondary school located in Jalingo, the Taraba State capital. It lies beside Taraba State Polytechnic, Jalingo. The school has a student population of over 1,267 and a staff strength of 123 made up of staff on *N-Power*programme, staff on *Rescue Mission,* workforce on *Industrial Training,* workforce on *Teaching Practice,* and permanent staff. Currently, the permanent staff strength is 67.

Notwithstanding the efforts of the government and school management in equipping the school with some ICT facilities, preliminary observation have shown a decline in the rate at which audio-visuals are applied in the teaching and learning process in GDSS, Nukkai. Could it be that the right audio-visuals are yet to be acquired or that the teachers and students are not aware or lack basic technological knowledge of making use of the gadgets, among other things? Rather than depend on the preliminary observation or mere assumption, it is important to investigate the problem. This is the thrust of this study, which seeks to explore into the audio-visuals available and utilized and the extent to which they are utilized. The paper also explores the challenges and solutions to the challenges facing the availability and utilization of audio-visuals in teaching and learning in GDSS, Nukkai.

**Purpose of the Study**

The purpose of this study is to examine the availability and utilization of audio-visuals for teaching and learning in Government Day Secondary School (GDSS),

Nukkai, Jalingo. Specifically, the study seeks to answer the following questions:

1. What audio-visuals areavailable in GDSS, Nukkai for teaching and learning?
2. What audio-visuals are utilized for teaching and learning in GDSS, Nukkai?
3. To what extent do GDSS, Nukkai utilize audio-visuals for teaching and learning?
4. What challenges do GDSS, Nukkai face in the availability and utilization of audio-visuals for teaching and learning?
5. What are the solutions to the challenges facing the availability and utilization of audio-visuals for teaching and learning in GDSS, Nukkai?

**Literature Review**

Audio-visuals present easy and fast means of communication. According to Eze (2013), it has been revealed that human being learns more easily and faster by audio-visual processes than by verbal explanations alone. Oketunji (2000) and Ngozi, Samuel and Isaac(2012) stress that audio-visuals, when effectively utilized, can lessen major weakness of verbalism, humanize and vitalize subject matter, provide interesting approach to new topics and give initial correct impressions, economize time in learning, supply concrete materials needed, and stimulate the initiative of the students or pupils.

Adamu, et. al. (2018) opine that the power of audio-visual lies in the fact that it is multisensory, stimulating the many senses of the audience. It is also interactive, enabling the end users of the application to control the content and flow of information. In their study, Ho and Intai (2017) found that audio-visual aids are effective in increasing the understanding of students, and the students were observed to be more attentive when audio-visual aids were played. The reason being that majority of students in the experimental group agreed that the use of audio-visual aids increased their interest and ability to remember the contents (Ho &Intai, 2017). In their separate studies, Gilakjani (2012) and Shah and Khan (2015) reported that animation and information presented onscreen provided a different learning experience from printed text which was beneficial

to the development of critical thinking, and aids in enhancing teaching and learning.

Being an important resource in the educational system, the issue remains its availability. To this end, Adomi (2005) and Chandel and Saikai (2012) in their studies, revealed that audio-visual materials were not visible to the users as in traditional settings where resources are physically available for browsing and use. They authors believed that even where these resources were available, empirical evidence has shown that this does not necessarily guarantee access to them, therefore, availability of resources is not conterminous with accessibility to resources. It is only when these resources are readily available and accessible, can one talk about its utilization. Aguolu and Aguolu (2002) reveal that although efforts are being made worldwide to promote access to information in all formats, it has not yielded much result, especially in most developing countries, as a result of issues related to power failure, machine breakdowns, and lack of spare parts and technicians, that intermittently stall the performance of the modern gadgets of information storage and transfer. However, there has been constant emphasis on the fact that availability does not necessarily transform to utilization.

Additionally, Doosuur and Igyuve (2013) conducted a study on the use of audio-visual materials in the teaching and learning processes in colleges of education in Benue State-Nigeria with specific reference to the College of Education, Katsina-Ala and revealed that the College collection of audio-visual materials was fairly adequate. However, lecturers in the college rarely used these audio-visual resources in teaching. The study found that chalkboard was the only audio-visual material frequently used by the lecturers. Non-availability, lack of supporting infrastructures and human factors were discovered to be among the hindrances to the use of audio-visual aids in the college. This is not different from the lamentations of Nnadozie, Chukwueke and Iroegbu (2017) who decried the state of adoption of innovation in teaching and learning within the Nigerian educational institutions. On the contrary, Akram, Sufiana and Malik (2012) reported the availability of great number of AV resources for teaching and learning of biology in the secondary school they investigated.

According to Aina and Adekanye (2013), the audio-visual technology mainly utilized in the educational system, especially the Nigerian system, is the interactive whiteboard**.** The authors reveal that more than two million interactive whiteboards are now installed worldwide, and this product continues to show strong growth. The audio-visuals in use in some educational institutions for teaching and learning, include: records, tapes and cassettes, radio broadcasts, models, real objects, three dimensional displays, the chalkboard, bulletin board, adhesives, graphs, diagrams, charts, maps and cartons There are also posters, pictures and projected forms like transparencies, slides, filmstrips and films, slides-tape decks, television programmes, videotapes and dramatization. Others include educational programmes/games, programmed instructions, demonstration and field trips (Doosuur&Igyuve, 2013).

Sadly, the items that Doosuur and Igyuve (2013) outlined as audio-visuals applied in the teaching and learning process cannot be true in all educational institutions owing to certain problems or challenges as articulated by Popoola (2003), Awasthi (2014) as well as Ho and Intai (2017).These include: inadequate finance, poor maintenance culture, shortage of suitable or relevant audio-visual equipment or materials, negative effects of tropical climate of excessive temperature, high relative humidity, dust, and rodents, administrative problem, and internet connectivity. All these have negatively affected the attitudes and intentions of teachers and students towards the use of such AV resources in teaching and learning.

In order to overcome these numerous challenges facing the availability and utilization of audio-visuals for teaching and learning, Capper (2003), Popoola (2003), Awasthi (2014), Ramesh and Maranna (2016), Nnadozie, et. al. (2017), and Adamu, et. al. (2018) recommended adequate funding of the Nigerian educational system, ensuring proper and adequate maintenance culture, providing user education in order to train the students on the use of such devices, regular training and re-training through workshops, seminars, conferences, in-house-training etc. Other recommendations are provision of constant power supply, provision of internet connectivity, acquisition of current or relevant audio-visuals, the need for the teachers to download the suitable audio-visual aids beforehand and get the help of other teachers teaching the

same subject to review the aids to ensure their suitability as well as devising means of encouraging the students on the use of these AV resources.

The literature reviewed so far reveal that the subject of availability and utilization of AV resources, the challenges and solutions have received a reasonable attention in the literature. However, the researchers are not aware of any study that has focused on the availability and utilization of AV resources for teaching and learning in GDSS, Nukkai. This is the gap that this research seeks to fill.

## Methodology

The descriptive survey research design was adopted. The study population comprised 1,275 students and 67 permanent staff of GDSS, Nukkai, giving a total population of 1,342. A sample of 268 respondents, made up of 201 students and 67 permanent staff of the secondary school was used. For the staff sample, the complete census technique was adopted while for the students; the stratified-simple-random sampling technique was used based on the different classes and their numerical strength. A combination of observation checklist (for AV resources availability), and a questionnaire were used for data collection. The questionnaire was divided into four parts. Part one covered The AV resources utilized, Part two covered the extent to which AV resources are utilized, Part three covered the challenges facing availability and utilization of AV resources, while Part four covered the solutions to the challenges facing availability and utilization of AV resources in GDSS, Nukkai. 268 copies of the questionnaire were personally administered by the researchers to the participants. Close supervision of the administration of the questionnaire ensured 202 (79%) return rate. Data was analyzed using percentage, mean scores and standard deviation. In answering the research question, a criterion mean of 2.50 was adopted to determine the level of agreement or disagreement with item statements. It implied that any item(s) with mean score of 2.50 and above indicated agreement or high extent with the statement as it affected the factor of the study. In the same vein, mean score below 2.50 was regarded as “disagreement or low extent as the case may be.

## Analysis and Discussion of Findings

The results are presented in accordance with the research question.

**Research Question 1***:* What audio-visuals are available in GDSS, Nukkai for teaching and learning?

**Table 1: AV Resources Available in GDSS, Nukkai for Teaching and Learning**

| S/n | Av resources | Available | Not Available | Remark |
|---|---|---|---|---|
| 1 | Slide/film projector | | | Available |
| 2 | Computers | √ | | Available |
| 3 | Transparencies (diorama) | | √ | Not Available |
| 4 | Internet (audio and video) lessons | √ | | Available |
| 5 | Android mobile devices/phone tablets | √ | | Available |
| 6 | Compact disc | √ | | Available |
| 7 | Television set | √ | | Available |
| 8 | Digital video disc (DVD) | √ | | Available |
| 9 | Tape recorder/player | | √ | Not Available |
| 10 | Video cassette recorder | √ | | Available |
| 11 | Video cassette player | | √ | Not Available |
| 12 | Photographs | √ | | Available |
| 13 | Pictures/Posters | √ | | Available |
| 14 | Maps/charts | √ | | Available |
| 15 | Films | √ | | Available |
| 16 | Interactive white boards | | √ | Not Available |
| 17 | Xerox machine | | √ | Not Available |
| 18 | Audio/video cassettes | √ | | Available |
| | | 13(72.2%) | 5(27.8%) | Available |

Table 1 presents the AV resources observed to be available for teaching and learning in GDSS, Nukkai. A total of eighteen (18) AV resources were investigated out of which 13(72.2%) were found available while 5(27.8%) were not available. The AV resources observed to be available include: slide/film projector, computers, internet (audio and video) lessons, android mobile devices/phone tablets, compact discs (CDs), television set, digital video disc (DVD), photographs, pictures/posters, maps/charts, films and audio/video cassettes. However, transparencies (diorama), tape recorder/player, video cassette player, interactive white boards, and Xerox machine are not available. Based on the result, with 72.2% of AV resources being investigated, being available, one could rightly assume that there is high availability of AV resources in GDSS, Nukkai.

The findings of this study, which recorded high availability of AV resources for teaching and learning, is in accordance with the study ofAkram, Sufiana and Malik (2012), which reported the availability of great number of AV resources for teaching and learning of biology at secondary schools level. The authors further found positive relationship between facility of audiovisual aids and the teacher's attitude. Similarly, the study byDoosuur and Igyuve (2013) reported the availability of audio-visual materials in the college they studied to be fairly adequate. The implication of all these is that the issue of availability of AV resources for teaching and learning in the educational sector is no longer new.

However, considering the unavailability of some modern AV resources, such as the Xerox machine among others, is a clear indication that GDSS, Nukkai is not moving with the technological trends. The study also disagrees with the study of Adamu, et. al. (2018), which revealed that there is unavailability of AV materials in their study area. Consequently, the unavailability of electronic interactive board disagrees with the earlier submission of Aina and Adekanye (2013), which revealed the supply of over two (2) million interactive whiteboard across the Nigerian schools, and also claimed that these boards are widely used in the Nigerian school system.

**Research Question 2***:* What audio-visuals are utilized for teaching and learning in GDSS, Nukkai?

**Table 2: Mean and Standard Deviation Responses of AV Resources Utili zed in GDSS, Nukkai**

| S/n | AV Resources | Mean | St. Deviation | Decision |
|---|---|---|---|---|
| 1 | Computers | 2.70 | 0.458 | A |
| 2 | Video cassette recorder (VCR) | 2.58 | 0.495 | A |
| 3 | Android mobile devices/phone tablets | 2.55 | 0.498 | A |
| 4 | Audio/video cassettes | 2.53 | 0.510 | A |
| 5 | Compact disc (CD) | 2.50 | 0.501 | A |
| 6 | Films | 2.50 | 0.501 | A |
| 7 | Pictures/Posters | 2.49 | 0.501 | R |
| 8 | Video cassette player | 2.48 | 0.501 | R |
| 9 | Photographs | 2.48 | 0.501 | R |
| 10 | Xerox machine | 2.48 | 0.501 | R |
| 11 | Television set | 2.45 | 0.499 | R |
| 12 | Maps/charts | 2.45 | 0.498 | R |
| 13 | Digital video disc (DVD) | 2.44 | 0.497 | R |
| 14 | Transparencies (diorama) | 2.43 | 0.496 | R |
| 15 | Interactive white boards | 2.43 | 0.496 | R |
| 16 | Internet (audio and video) lessons | 2.41 | 0.493 | R |
| 17 | Tape recorder/player | 2.35 | 0.479 | R |
| 18 | Slide/film projector | 2.15 | 0.356 | R |
| | Grand Mean | 2.47 | 0.488 | R |

Table 2 presents the result generated on the AV resources utilized in GDSS, Nukkai. Findings show that only few of the AV resources investigated are utilized. The resources that the majority of the respondents agree as being utilized, obtained mean scores between 2.50 and 2.70 and happen to fall within the criterion mean of 2.50.These resources include: computers (Mean=2.70), VCR (Mean=2.58), android mobile phones/phone tablets (Mean=2.55), audio/video cassettes (Mean-2.53), CDs and films, which have a mean score of 2.50 respectively. However, items 7 to 18 scored means from 2.15 to 2.49. Since the scores are below the criterion mean score of 2.50, the inference drawn from the result is that those AV resources are utilized. Considering the grand mean of 2.47 and standard deviation of 0.488, it could be right to say that there is poor utilization of AV resources for teaching and learning in GDSS, Nukkai. This is as a result of the grand mean score falling within the mean range of disagreement.

Based on the results presented, the findings of this study on the utilization of AV resources for teaching and learning corroborates with that of Chandel and Saikai (2012), which decried the low utilization of AV resources in secondary school systems as a result of the AV resources not being visible to the teachers and students as in traditional settings where resources are physically visible. Furthermore, the assertion that availability does not necessarily translate into utilization, comes to be effective considering the fact that most of the AV resources observed to the available were not being utilized.

**Research Question 3***:* To what extent does GDSS, Nukkai utilize audio-visuals for teaching and learning?

**Table 3: Mean and Standard Deviation of Responses on the Extent to which AV Resources are Utilized for Teaching and Learning in GDSS, Nukkai**

| S/n | Av resources | Mean | St. Deviation | Remark |
|---|---|---|---|---|
| 1 | Slide/film projector | 2.94 | 1.204 | High Extent |
| 2 | Films | 2.67 | 0.953 | High Extent |
| 3 | Audio/video cassettes | 2.66 | 0.995 | High Extent |
| 4 | Compact discs (CDs) | 2.65 | 1.051 | High Extent |
| 5 | Video cassette recorder (VCR) | 2.56 | 0.992 | High Extent |
| 6 | Android mobile devices/phone tablets | 2.48 | 0.978 | Low Extent |
| 7 | Photographs | 2.47 | 1.070 | Low Extent |
| 8 | Computers | 2.41 | 1.090 | Low Extent |
| 9 | Pictures/Posters | 2.35 | 0.988 | Low Extent |
| 10 | Digital video disc (DVD) | 2.18 | 1.089 | Low Extent |
| 11 | Internet (audio and video) lessons | 2.08 | 1.661 | Low Extent |
| 12 | Television set | 2.03 | 1.090 | Low Extent |
| 13 | Maps/charts | 2.03 | 0.962 | Low Extent |
| | Grand Mean | 2.42 | 1.086 | Low Extent |

Table 3 presents data generated on the extent of utilization of AV resources for teaching and learning in GDSS, Nukkai. Out of 13 AV resources found to be available as presented in Table 1, only five (5) items are rated as being utilized to a high extent. These AV resources, which include slide/film projector, films, audio/video cassettes, CDs, and VCR have mean scores ranging from 2.56 to 2.94, clearly higher than the criterion mean score of 2.50.The table shows that the AV resource with the highest mean score is slide/film projector (2.94). However, items 6 to 13 with mean scores below the criterion mean score of 2.50 are rated low extent by a majority of the respondents, with television set, and maps/charts having the lowest mean score of 2.03 respectively. Furthermore, a close look at the grand mean of 2.42 obtained shows that the extent to which AV resources are utilized for teaching and learning is low.

Consequently, the findings of this study corroborates with that of Doosuur and Igyuve (2013), which held that chalkboard was the only audio-visual material frequently used for teaching and learning. The study of Chandel and Saikai (2012) also revealed the low utilization of AV resources in secondary schools. Therefore, from the findings of this study, there is clear indication that AV resources, though somewhat available, are being utilized to a low extent for teaching and learning in GDSS, Nukkai.

**Research Question 4***:* What challenges do GDSS, Nukkai face in the availability and utilization of audio-visuals for teaching and learning?

**Table 4: Mean and Standard Deviation Responses of Challenges Facing Availability and Utilization of AV Resources in GDSS, Nukkai**

| S/n | Statement | Mean | St. Deviation | Decision |
|---|---|---|---|---|
| 1 | Harsh climatic condition | 2.84 | 1.024 | A |
| 2 | Inadequate fund | 2.77 | 1.027 | A |
| 3 | Inadequate audio visual materials in the school | 2.67 | 1.061 | A |
| 4 | Poor maintenance culture of audio visual materials | 2.65 | 1.097 | A |
| 5 | Incompetence nature of student on the use of audio visual materials | 2.62 | 0.976 | A |
| 6 | Incompetence nature of staff on the use of audio visual materials | 2.57 | 0.96 | A |
| 7 | Poor Internet connectivity | 2.46 | 1.065 | R |
| | Grand Mean | 2.65 | 1.030 | A |

Table 4 presents the result generated on the challenges facing the availability and utilization of AV resources for teaching and learning in GDSS, Nukkai. Result shows that majority of the respondents agree with most of the statements as they recorded mean scores between 2.57 and 2.84. These challenges, which a majority of the respondents agree as facing the availability and utilization of AV resources in GDSS, Nukkai, include: harsh climatic condition, inadequate fund, inadequate audio visual materials in the school, and poor maintenance culture of audio-visual materials. Others are incompetence of students and staff on the use of audio-visuals. However, majority of the respondents disagree that poor internet connectivity is among the challenges. Going by the grand mean of 2.65 and standard deviation of 1.030, it could be stated that the availability and utilization of AV resources in GDSS, Nukkai is faced with numerous challenges. Aside the items contained in Table 4, most of the respondents indicated the challenge of internet subscription, absence of an AV laboratory for training, and the enclosure of most of the AV resources in cartoons instead of their release for use by the teachers and students.

The above findings are in line with the findings of Doosuur and Igyuve (2013), Adamu, et. al. (2018), Ibe and Abamuche (2019), which revealed numerous things, among which are inadequate funds, lack of technical know-how, etc. as the challenges confronting the availability and utilization of AV resources for teaching and learning

**Research Question 5***:* What are the solutions to the challenges facing the availability and utilization of audio-visuals for teaching and learning in GDSS, Nukkai?

**Table 5: Mean and Standard Deviation of Responses on Solutions to the Challenges Facing Availability and Utilization of AV Resources in GDSS, Nukkai**

| S/n | Statements | Mean | St. Deviation | Decision |
|---|---|---|---|---|
| 1 | There should be training and re-training of teachers on the use of AV resources | 2.78 | 1.028 | A |
| 2 | Provision of user education training for students | 2.72 | 1.023 | A |
| 3 | There should be regular maintenance of AV materials | 2.62 | 1.050 | A |
| 4 | Provision of strong Internet connectivity in the school | 2.58 | 0.986 | A |
| 5 | Provision of adequate current audio visual materials by the school management | 2.56 | 1.128 | A |
| 6 | The school management should provide a standby generator for constant power supply | 2.48 | 1.061 | R |
| 7 | Adequate funding by the school authority, government and other stakeholders | 2.45 | 1.017 | R |
| | Grand Mean | 2.60 | 1.042 | A |

Table 4 presents data generated on the solutions to the challenges facing the utilization of AV resources for teaching and learning in GDSS Nukkai. Based on the result obtained, majority of the respondents are of the view that 5 of the items are appropriate solutions to challenges facing the utilization of AV resources for teaching and learning in the school. This is evident in the fact that the items with mean scores ranging from 2.56-2.78 are higher than the criterion mean score of 2.50. However, items 6 and 7, with mean scores of 2.48 and 2.45, respectively are not considered good solutions. Additionally, majority of the respondents opined that government should establish a monitoring team to ensure the strict acquisition and use of AV resources in teaching. Some of the respondents reported that the use of AV resources for teaching and learning should be made highly compulsory across all classes. Others noted that access to AV resources in the school should be made open to all as well as the provision of internet subscription during classes.

The implication of this result is that majority of the respondents believe that training and retraining of teachers on the use of AV resources, provision of user education training for students, provision of strong Internet connectivity, and provision of adequate current audio visual materials, among other things, by secondary school management constitute major solutions to the challenges facing the availability and utilization of AV resources in GDSS, Nukkai. Therefore, this is in agreement with the findings of Ibe and Abamuche (2019), which saw the need for classroom teachers to keep pace with the trend of development by learning and using new technologies (Audio-visual) in instructional delivery.

**Conclusion**

The study considered the availability and utilization of audio-visual (AV) resources for teaching and learning in GDSS, Nukkai. This study was conceived based on the importance placed on the application of AV resources in teaching and learning, as was revealed in the literature. In order to carry out the study, five (5) research questions were answered. The findings showed that although a greater number of AV resources were observed to be available, only few of them were utilized for teaching and learning in the secondary school studied. However, the available AV resources were utilized to a low extent. The findings of the study also revealed numerous challenges facing the availability and

utilization of AV resources for teaching and learning as well as numerous solutions to these challenges.

In conclusion, the study holds that although AV resources are available for teaching and learning, the utilization of these resources is low and very discouraging. The Implication is that GDSS, Nukkai is still making use of the traditional or manual means of teaching and learning, which many researchers and authors believe is not good enough for secondary school teaching and learning in the digital age.

**Recommendations**

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

1. The government and secondary school management authorities should make adequate provision for funds to enable secondary schools acquire AV resources and effectively utilize them for teaching and learning.
2. Most of the AV resources available in secondary schools are not being utilized. To this end, the management of the schools should intensify efforts in ensuring effective utilization of AV resources available in the secondary schools.
3. The students should be frequently tutored on the use of AV resources as easier way of learning. This will ensure the application of proper caution in handling the AV resources by the students as well as embracing them in enhancing their teaching and learning processes.
4. The teachers are at the frontline of ensuring adequate utilization of AV resources for teaching and learning. However, most of them shy away from these devices as a result of poor knowledge on their usage. Based on this, secondary school authorities should make effort in ensuring that these teachers are trained and re-trained on the use of AV resources for teaching and learning.
5. Most of these AV resources require constant power supply for its utilization. Consequent upon this, management and authorities of secondary schools should ensure the provision of standby generators or solar panels as alternatives to the frequent power failures often experienced in the nation.

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