THE INFLUENCE OF AUDIOVISUAL MATERIALS IN THE TEACHING AND LEARNING OF PHYSIOLOGY AMONG SPECIAL EDUCATION STUDENTS IN THE UNIVERSITY OF BENIN, BENIN CITY

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DEPARTMENT OF EDUCATIONAL EVALUATION AND COUNSELING PSYCHOLOGY
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JULY, 2023.

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BEING A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF EDUCATIONAL EVALUATION AND COUNSELING PSYCHOLOGY, UNIVERSITY OF BENIN, BENIN CITY. IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE BACHELOR OF EDUCATION (B.Ed) DEGREE IN SPECIAL EDUCATION

JULY, 2023.

DECLARATION

Chukwudi Ifeanyi ARINZE declare that,

i. This study is based on a study undertaken by me in the Department of Educational Evaluation and Counselling Psychology, Faculty of Education, University of Benin, Benin City, under the supervision of **Dr. C.P. Ojiyi** of the Department of Educational Evaluation and Counselling Psychology, Faculty of Education, University of Benin, Benin City.

ii. This work has not been submitted for the award of degree elsewhere.

iii. Ideas and views are products of my personal research, and where the views of others have been expressed, they have been duly acknowledged.

iv. Any liability arising from this work is to be wholly borne by me alone

_____ _____

Chukwudi Ifeanyi ARINZE **DATE**
EDU1804147

CERTIFICATION

We, the undersigned, certify that this research was carried out by Chukwudi Ifeanyi ARINZE with matriculation number EDU1804147 in the Department of Educational Evaluation and Counselling Psychology, Faculty of Education, University of Benin, Benin City.

Dr. C.P. Ojiyi **(Project Supervisor)**	**Date**
DR. (Mrs) C.G Abey-Fashae **(Project Coordinator)**	**Date**
Dr. (Mrs) M.U. Orheruata **(Head of Department)**	**Date**

DEDICATION

This project work is dedicated to God Almighty for His abundant grace in my life and for seeing me through my academic pursuit and aspirations. He has been my source of strength, and on his wings only I have soared. I also want to dedicate this project to my family and friends for the love and encouragement they have shown towards me during the course of this programme; all I can say is thank you and God bless you.

ACKNOWLEDGEMENT

The researcher acknowledges his project supervisor, Dr.C.P. Ojiyi for directing me on the right path to take and for making invaluable suggestions, support and guidance through out this project.

The researcher also wants to thank the Head of Department, Dr. (Mrs.) M.U Orheruata and all the lecturers and staff in the of Department of Educational Evaluation and Counselling Psychology for their input and contributions in my educational journey.

My special thanks also go to my parents, Mr. and Mrs. James Arinze for their support, unconditional love, contributions, encouragements, prayers and financial provision throughout my stay in school and also making sure that this project is a success, words are not enough to describe how much impact you have in my life. I also want to thank my siblings Arinze, Jotham, Precious, Goodness, Prudence and Bernice Arinze for their immense love, support both emotionally and financially, and my friends Akhere, Gabriel, Jeremiah, Jarvis, Micheal, Precious, Ella and Eunice for their love, care and support throughout my academic journey y'all are amazing people. I am very grateful.

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ABSTRACT

The study investigated the influence of Audio-visual materials in the teaching and learning of physiology among Special Education students in the University of Benin. The sample of the study comprised eighty (80) Special Education students in Faculty of Education, University of Benin.

The study adopted descriptive survey and the instrument for data collection was titled “Use of Audio-visual material questionnaires. Three research questions were raised and analyzed with descriptive statistics of mean and standard deviation.

The findings of the study revealed that not all the audiovisual materials are available in the teaching and learning among Special Education students in the University of Benin, it therefore recommended among others, collaborating with the government to provide adequate audio-visual materials for the Special Education students.

CHAPTER ONE

INTRODUCTION

Background to the Study

Teaching and learning is without a doubt the most significant part of education. To optimise each student's capacity for learning, the teacher uses a range of instructional strategies and tools. As the years go by, new educational methods and approaches are developed, and teachers employ a wider variety of pedagogical tools to optimize student learning. In order to promote learning and make it easier and more engaging, teaching aids are utilized in the classroom. A teacher uses teaching tools, such as diagrams, models, tangible objects, film strips, projectors, radios, and TVs, to successfully communicate lessons. By using teaching aids, teachers may more effectively explain complex ideas to students while also investing their attention. Undoubtedly, the educational resources used in the classroom to support teaching and learning are audio-visual materials. In Webster's Encyclopaedia Unabridged Dictionary of the English Language, audio-visual materials are defined as "Films, recordings, pictures, and other similar media used in classroom instruction, library collections, or the like are examples of training or educational materials that target both the senses of hearing and sight."

According to Burton: audio visual aids are those sensory objects or images which initiate or stimulate and reinforce learnin According to Carter .v .Good: audio visual aids are those aids which help in completing the triangular process of learning that is motivation, classification and stimulation. According to good's dictionary of education: audio visual aids are any thing by means of which learning process may be encouraged or carried on through the sense of hearing or sense of sight. According to Edger Dale: audio visual aids are those devices by the use of which communication of ideas between persons and groups in various teaching and training situations is helped. These are also termed as multi sensory materials. According to McKean and Roberts: audio visual aids are supplementary devices by which the teacher, through the utilization of more than

one sensory channel is able to clarify, establish and correlate concepts, interpretations and appreciations. According to KP. Neeraja: an audio visual aid is an instructional device in which the message can be heard as well as seen.

The terms non-print, non-book and audio-visual materials or resources are used interchangeably in library and information science profession. In line with this statement, audio-visual materials are print documents or "special formats" and sometimes require equipment to use. The Macmillan Dictionary of Information Technology define audio-visual technology as a general term for non-book materials that can be viewed or listened to such as films, filmstrips, e.t.c. Audio-visual materials are those centre materials that do not solely depend on reading to convey information or knowledge. Before printing was invented, papyrus vellum, codex, etc, were used in recording human knowledge. With the invention printing, came books and other printing forms. Recently, audio-visual media has come into prominence as another form of media. They are resources that are used by librarians and teachers to communicate effectively and meaningfully with students/pupils so that they can receive, understand, retain and apply the experienced to achieve educational goals (Alokunm2004) Audio-visual in this context refers to technology that is employed in the resource centres like the academic libraries, and classrooms for the purpose of student's instruction which when properly used by teachers can revolutionize the teaching profession and promote services. Audio-visual technology has been classified into three main types, these are: Audio aids, -pro and non-projected Visual and Audio-visual aids.

(Ngozi, et al (92012) in their article emphasize the significance of audio-visual materials in education. They contend that this is because the average learner comprehends in terms of multiple impressions recorded through the eye, ear, touch, and other series. Any preceptor mechanism that is triggered by outside events carries out this function cooperatively rather than autonomously. This would imply that such audio-visual resources are the tools for carrying out

that purpose. Because of the way the human brain is designed, information is best absorbed when it is given ina combination of verbal and visual representations. However, the process by which he transformsperceptual information into abstract concepts is a phenomenon that is neither fully known nor possibly even fully explicable.

Special education like it name suggests, is an educational programme that is different from general education. It is one education with a 'unique curriculum and syllabus' that is uniquely designed and taught by 'unique teachers' to meet the needs of 'unique people'. The Federal Republic of Education (FRN, 2013) described it as a customized educational programme designed to meet the unique need of persons with special needs that general education cannot cater for. It is an educational programme that is supported by the federal government in the provision of equal opportunity and access to education for all Nigerian children of school-going age. Unfortunately, one group of learners that are yet to receive the much needed attention in Nigeria, are special needs students. Buttressing this, Funadai (2010) argued that one area that has not been given the pride of place in Nigeria's educational system is catering for special needs students in the general education programme.

Furthermore, Oketunji (2000) stated using audio-visual resources may aid in achieving centain advantages such as providing real life expense excitement to subjects, offer a fresh perspective on the unexplored ground, and faithfully convey original ideas. Audio-visual Aids also encourage student initiative, provide the necessary practical tools, and quicken the speed of learning. Information that students hear, see, and feel is more likely to stick in their minds than information that they only hear. The usage of audio-visual resources will be encouraged through visual education, assisting pupils in solidifying their knowledge of abstract ideas. So learning is more than just a memory exercise, it is the duty of the educator to make it relevant to daily life. This may be done by using audio-visual elements in teaching and learning to efficiently transfer

knowledge to students. Teachers hold that the best teaching and learning outcomes occur when a student is actively engaged with the content being studied. In other words, educators increasingly recognize that the most effective way for pupils to learn is through active participation. Without the use of audio-visual resources, which are crucial for doing so, learners cannot be given the chance to do this. This is because using audio-visual materials enhances one's ability to focus, stay motivated, and retain information.

Students may now participate more actively in their education thanks to the introduction of audio-visual materials. Students that utilize audio-visual technology may be expected to create audio-visual applications as part of their learning assignments. As a consequence, students would be recognized as active participants in the teaching and learning process rather than passive consumers of instructional content.

Statement of the Problem

Audio-visual materials is the primary impetus behind this study. The student is neither engaged nor excited by this kind of education, which discourages active engagement. Because it is not based on sensory experience, it does not add to or expand upon their past knowledge. Above all, it is impossible to retain such knowledge permanently in memory. There is evidence, nevertheless, that in such institutions audio-visual materials are either not accessible in classrooms or are not fully utilized. As a consequence, the research will look into the extent of the use of audio-visual materials in integrated science teaching and learning at the University of Benin, which serves as a training ground for future instructors of the

In light of these, audio-visual materials can be used to improve the quality of instruction in the classroom. Every teacher should now ever, acquire basic knowledge and skills i.e. they should be proficient in planning design, development and production of instructional materials. The

educational authorities and the school system on the other hand, should encourage teachers to produce materials by providing for them, the necessary materials, facilities and opportunities to acquire and continue and develop skills in production.

subject. A record of the difficulties will be kept as a consequence, and steps will be done to increase the use of audio-visual materials.

Research Questions

The following research questions were raised:

To align the study, the following were formulated as research questions:

1 What types and how many audio-visual materials are available at the University of Benin for teaching and learning physiology by Special Education Students?

2 What types of audio-visual materials are used by lecturers?

3 How frequently do lecturers include audio-visual materials in their lectures?

4 What are the obstacles the use of audio-visual materials in the institution?

5 What advantages do students see in the use of audio-visual materials?

Purpose of the Study

The purpose of this study is to

1 Identify and categorize the degree of the use of audio-visual materials in teaching and learning processes of integrated science, with a focus on the University of Benin.

2 The survey will also show what types and quantities of audio-visual materials are accessible in the library, along with any difficulties in accessing them and how frequently academics use them.

3 It will examine the steps the librarian takes to tell instructors about the available audio-visual materials.

Significance of the Study

This is in line with the idea that the difficulties will be found first. The study's findings will provide advice on how to purchase printed and non-print resources for educational institutions, such as schools and universities, to educators, the government, funding organizations, and donors. A significant demand for audio-visual materials will undoubtedly exist once they are pushed. Due to the increasing demand, manufacturers will work harder to make them and could even come up with new ideas on how to include them in the teaching and learning process. This could encourage the pupil to think independently rather than depend on the teacher. The study will pave the way for further investigation into other areas of interest and concern and provide scholars with new points of view on the topic at hand.

The study focused on the influence of audio-visual materials in the teaching and learning of physiology a case study of special education students in the university of Benin, Benin city.

The variables of the study are Audio visual, which is the independent and teaching and learning of physiology as the dependent variable. The study will be deliberated to 300 level and 400 level students of the university of Benin, 2021 and 2022 academic session.

According to Kinder S. James: (2014) Audio visual aids are any device which can be used to make the learning experience more concrete, more realistic and more dynamic.

Scope and Delimitation of the Study

The University of Benin will be the setting for the study. This was selected due to its proximity to convenient data collection for researchers.

It is also restricted to the use of audio-visual resources in the teaching and learning processes of integrated science in order to enhance the exchange of knowledge between instructors and students.

Definition of Terms

Audio Visual Materials: All the teaching materials use by teachers

which deals with seeing and hearing. They are multimedia materials includes television, radio, tape recorder.

Trained Teachers: Is one trained to give instructions, knowledge and skills to someone in a particular field or more

Teaching Materials: All the equipment's used by teachers while teaching and which makes teaching clearer and easier for the students to understand

Laboratory: A room or building used for scientific experiment, research and testing and given report to

Film Strip: These are series of picture with scripts written by teachers are shown on screen for academic purposes with aid learning and teaching effective.

SLIDE PROJECTOR: These are electrical project which show pictures in motion and to learning diagrams or instruction on a screen.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter presents a review of literatures relevant to this study. It is organized under the following sub-headings

- Concept of Audio-visual Materials in Special Education
- Using Audio-visual Materials in the Classroom
- What is Special Education
- Audio-visual Materials in Making the Class Dynamic
- The Use of PowerPoint As A Visual Material
- Types of Audio-visual Materials Special Education
- Using Video As Audio-visual Materials
- Using Pictures As Visual Aid in the Classroom
- Advantages of Audio-visual Materials
- Summary of Review Literature

Concept of Audio-visual Materials Special Education

Audiovisual materials refer to a dynamic and captivating form of communication that combines both auditory and visual elements to convey information, entertain, and educate. These multimedia resources encompass a wide range of mediums, such as videos, films, presentations, animations, audio recordings, and interactive content. The seamless integration of sound, images, and sometimes text, creates a compelling and immersive experience for the audience, making audiovisual materials an invaluable tool for various purposes, including enhancing learning experiences, effectively communicating complex concepts, and engaging viewers on a deeper emotional level. Whether utilized in educational settings, entertainment industries, corporate

environments, or artistic endeavors, audiovisual materials play a crucial role in shaping modern communication and continue to evolve in sync with advancing technology and audience demands.

What is Audio Visual Material?

Audio visual material refers to any form of media or content that utilizes both auditory and visual elements to convey information, ideas, or stories. This multimedia approach combines sound, images, and sometimes text to create a more engaging and immersive experience for the audience. Examples of audiovisual materials include videos, films, slideshows, presentations, animations, interactive content, and audio recordings.

The use of audiovisual materials offers several advantages over traditional text-based communication. By appealing to multiple senses simultaneously, these materials enhance comprehension and retention, making complex concepts more accessible and understandable. Visual learners, in particular, benefit from the combination of images and sound, as it aids in processing information and reinforces learning.

In various fields and industries, audiovisual materials play a crucial role. In education, they enrich classroom teaching and online courses, making learning more interactive and enjoyable. In entertainment, audiovisual materials are the foundation of movies, television shows, and online content, captivating audiences with compelling narratives and stunning visuals. Additionally, in the corporate world, audiovisual materials are used in presentations, training programs, and marketing campaigns to communicate ideas effectively and leave a lasting impact on viewers.

As technology advances, so does the potential of audiovisual materials. Innovations such as virtual reality (VR), augmented reality (AR), and interactive media are pushing the boundaries of

storytelling and engagement, allowing users to immerse themselves in virtual worlds and actively participate in the content they consume.

- **Enhancing Engagement:** One of the primary needs for audiovisual materials in teaching and learning lies in their ability to captivate and sustain students' attention. Visuals, accompanied by audio elements, create a dynamic learning environment that sparks curiosity and stimulates interest. Engaging videos, animations, and interactive content pique students' imaginations, making the learning experience more enjoyable and captivating. As students actively participate in the educational journey, their motivation to explore and understand the subject matter increases, leading to more profound levels of learning.
- **Facilitating Understanding:** Complex concepts and abstract theories can be challenging to comprehend through traditional text-based methods alone. Herein lies another crucial need for audiovisual materials. Visual representations, diagrams, and animations help break down intricate topics into easily digestible components, simplifying difficult ideas for students. The combination of images and explanations reinforces key points, leading to better understanding and retention of information. As a result, audiovisual materials serve as powerful aids that bridge the gap between theoretical knowledge and practical application.
- **Addressing Different Learning Styles:** Every student possesses a unique learning style, and educators face the challenge of catering to diverse preferences. Audiovisual materials prove invaluable in addressing this need by accommodating various learning styles. Visual learners benefit from images and graphics, while auditory learners engage with spoken words and sound effects. Moreover, interactive elements cater to kinesthetic learners, encouraging hands-on exploration and learning. By providing a multimodal approach,

audiovisual materials enable teachers to reach a broader spectrum of students, fostering inclusivity and diversity in the classroom.

- **Promoting Active Learning:** Static learning experiences often lead to passive absorption of information, limiting critical thinking and problem-solving skills. Audiovisual materials play a pivotal role in promoting active learning, encouraging students to participate actively in the learning process. Interactive educational games, simulations, and virtual experiments allow students to explore concepts, test hypotheses, and draw conclusions. Through these interactive activities, students become co-creators of knowledge, enhancing their ability to apply theoretical concepts to real-world scenarios.
- **Global Access and Flexibility:** The advent of online educational platforms and digital resources has revolutionized the accessibility of education. Audiovisual materials contribute significantly to this need for global access and flexibility. Video lectures, interactive content, and online presentations enable asynchronous learning, allowing students to study at their own pace and convenience. This accessibility transcends geographical boundaries, granting learners from various locations the opportunity to access quality educational content and resources.

According to Katherine (2009) learning takes place effectively when the learner is provided with learning situation because of his natural reactions to the provided materials. During this process of learning, the learner has to be provided with the learning situation to satisfy his natural reaction and this is through the use of instructional aids. Fawcett (2004) also contributing on the role of audio-visual aids in stimulating interest stated that “A friendly, accepting group climate is important in any learning situation especially those materials that require learners to reveal their ignorance”. When there is climate of acceptance for learning, then learning is stimulated. It has been said that audio-visual materials provide a means of individualizing instruction. This is said to

be possible through programmed learning and tapes which enables learner to learn at his pace and also work without supervision.

Audio-visual aids provide experience not easily secured in other ways and hence contribute to the depth and variety of learning. They play a major role of making learning permanent because having seen something, most people remember; for whatever that things was, it conjures up an image at a mere mention and can be talked about freely. Dike (2003) explains that knowledge acquired is easily forgotten because of lack of interest and opportunity to use the knowledge that has been gained.

Generally, the importance and the usefulness audio-visual aids in teaching and learning are explained under the materials are valuable assets in learning situations because they make lessons practical and realistic. pivots on which the wheels of the teaching learning process rotate. Since it does concretize issues, it then facilitates revision (recall) activities and provides very unique opportunities for self and group evaluation for the teacher and the students alike. It captures the student intellect and eliminates boredom; make the work easier, neater, and boosting for clarity and more appeal.

Special education teachers help craft the lessons for inclusive classroom to ensure that the needs ofstudents with disabilities are considered. They work together to develop a curriculum that is accessible to all students or the special education teachers might make modifications to the general education teacher lesson plans American University 2020. Having a good knowledge of special Education makes a general teacher more effective in an inclusive class.

However success of teaching-learning process depends to a large extent on the attitude of the teacher. They either create a save and conducive atmosphere or environment in class. Teachers must examine students' strengths, weaknesses, interests, and communication methods when

crafting lessons. The students' IEPs must be carefully followed to meet achievement goals.

As many general education teachers have limited training in inclusive learning, it is important for the special education teacher to help the instructor understand why certain accommodations are needed and how to incorporate them. American University 2020.

Special needs learner are who are different from their peer in character, educational skills and different reasons. They are children who do not function like they are supposed to at a certain age or stage, due to certain or different challenges. These learners on the other hand come to class with different wide range of needs and behaviour, which then requires special attention and special education guides. They need more care than other children. Inclusion largely depends on teachers' attitudes towards pupils with special needs and on the resources available to them. In quite a number of studies, the attitude of teachers towards educating pupils with special needs has been put forward as a decisive factor in making schools more inclusive. If mainstream teachers do not accept the education of these pupils as an integral part of their job, they will try to ensure that someone else (often the special education teacher) takes responsibility for these pupils and will organize covert segregation in the school (e.g. the special class) (Mutasa, Goronga, Using Audio-visual Materials in the Classroom

Although it has been a standard practice to employ audio-visual materials in the classroom, this topic has not received enough research, particularly in our scope. Any research on this topic, however, may bear reliable source of secondary data for this investigation. Research on the usage of audio-visual materials has been taken by various researchers. Mathew & Alidmat, in (2013) claimed that when teachers are forced to rely solely on textbooks for linguistic input, "teaching and learning become repetitive." In their study, they looked at the benefits of audio-visual materials for teachers in the classrooms. According to the findings of their research, employing audio-visual aids in the classroom are advantageous for both teachers and students. Ronald Osei in (2022) carried out

research on the use of audio-visual materials at junior school level where he mentioned that despite that the use of audio-visual materials is a current technological tool to motivate student, there are challenges faced when it comes to its availability.

Extending Experience

Physical boundaries of time and space in a novel way with the help of audio-visual materials. Audio-visual materials assist the instructor in overcoming physical challenges associated with the subject matter presented. That is to say, the barriers of distance and communication are overcome via audio-visual materials. Slides, videos, film strips, and projectors can be used to introduce students to the cultures and climatic conditions of various nations. Once the phenomena are seen, the picture and information become very clear and permanent, this is significant. According to a Chinese philosopher from the 20th century, a picture speaks a thousand words. The abundance of opportunities provided by audio-visual materials allow students to improve their communication skills while actively tackling pertinent issues. In other words, if kids are involved in worthwhile and enjoyable activities, they will undoubtedly like it more and learn more. For instance, getting students involved in bulletin board displays will improve their colour choices and help them comprehend the idea at hand,or when they participate with the instructor in dramatizing an occasion or a procedure.

Become Less Verbal

A comprehensive foundation for conceptual thinking is provided by audio-visual materials, which also inspire meaningful associations. As a result, they provide the most effective treatment for the verbalism condition. Words are excellent because they are simple to create, duplicate, store, and move. However, using words excessively or in excess might have catastrophic consequences. Verbalism may be considerably decreased by addressing the verbalism issue in teaching, learning, research, entertainment, and other fields. Research done by Jurnal (2022) suggested that the use of

audio-visual can increase the number of students abilities in listening to dialogue

Fostering Interest

A big portion of audio-visual materials are interesting. The real component in every teaching and Learning process is attention with the use of audio-visual materials, teachers may create the ideal environment for and holding students' interest in their classroom activities. Audio-visual materials encourage student participation in teaching and learning in this way. By using teaching aids, the instructor may create a learning environment that will fulfil the learner's natural reactions while they are learning. The student is now ready to study after having his interest and attention captured. Audio-visual media can foster more curiosity and interest on the materials presented to students (Samsul Pahmi 2022)

Personalized Instruction

The experiment's findings suggest that the skillful application of audio-visual materials can promote self-activities. The use of audio-visual materials encourages the improvement of recreational facilities and the prevention of local crime. Therefore, we can encourage self-activity by using audiovisual materials. Audio-visual materials offer a way to customize training. According to him, this is made feasible through recorded lessons and programs that let students study independently and at their own speed. Additionally, since routine drills are no longer necessary, the machine frees the teacher to work with specific students. Another kind of individualized training is for students to create their own materials. The use of audio-visual materials in teaching and learning increases students learning outcome and promotes self-activities (Journal of Science Technological Education 2020)

Acts as a Resource for Knowledge

The young person must have the information necessary to think critically," (2013) Peterson. This audio-visual material is useful because it allows for the effective use of perceptive teaching

materials, particularly those that are made available in our community. Their familiarity provides a background for grasping the content when they are utilized in class. Audio-visual materials are excellent educational, psychological, and instructional, (Mahmudah, 2018). He also emphasized the use of audio-visual materials in situations when presentation uniformity is desired. They offer opportunities that are difficult to get in other ways, which adds to the depth and variety of learning.

Making Learning Permanent

The "performances" are significantly influenced by the learning experience's quality. It is clear how much audio-visual materials have to offer in terms of vividness and impact. Therefore, the experience of using high-quality audio-visual materials provides significant learning. Learning situations are made more vivid by audio-visual materials. Since they tend to cause the maximum reaction of the complete body to the learning environments, audio-visual techniques do seem to improve the acquisition, retention, and recall of lessons learned. Additionally, perceptual elements effortlessly link themselves to each person's own experiential history. Audio-visual resources are crucial for teaching and learning because having seen something, most people recall, whatever that item was, it conjures up an image at the simple mention and maybe talked about freely. Because they enable students to picture what they have learned, audio-visual tools can improve the clarity of the information that is provided (Ashaver & Igyuve, 2013).

Types of Audio-visual Materials for Special Education

Teachers may significantly alter both the classroom atmosphere and the way they teach by using audio-visual materials. Teachers may communicate a topic both vocally and visually by employing audio-visual materials in the classroom, which is highly beneficial for the students to pay more attention throughout the lecture. They are able to relate verbal and nonverbal communication as well as abstract and concrete problems. There are certain abstract concepts in education that are hard to clearly convey. The learners may have trouble understanding the material,

and they may also have trouble understanding what the teacher is going to say. However, teachers may improve their students' understanding by utilizing a variety of visual aids. The material may be rapidly understood by students if the verbal and visual components are provided simultaneously.

Using Video as Audio-visual Materials

It is now standard practice for instructors to use videos to educate in the classroom. Teachers jobs are now made simpler by internet capabilities and the availability of many strategies. From the internet, teachers can download a variety of movies that are suitable for their students. Teachers may pick from hundreds of pre-made films created with teaching in mind and simply meet their demands. There are several ways that videos may help in teaching. Reducing the learners' boredom, makes the classroom engaging. Additionally, it aids the students in coming up with conversation topics. It increases engagement and effectiveness in the classroom. The learners receive real feedback thanks to the usage of video in instruction. Additionally, viewing content-related films aids students in conceptualizing concepts and gaining an in-depth understanding of a subject. Additionally, students can focus on how the films employ non-verbal language elements and contextual language to better grasp how the target language is used. Cunning (2019) emphasized the benefits of utilizing films in language instruction, claimingthat they give students stimuli and give them a chance to develop a background schema for the subject. Additionally, watching movies gives students a better understanding of the emphasis and rhythm of the target language. Additionally, it enables students to anticipate, deduce, and evaluate data related to the subject. Additionally, viewing a movie gives students the chance to experience the nuances of linguistic communication. Video provides language learners opportunities to experience the dynamics of communication, and because such resources are readily available, it may offer a better and viable choice for listening comprehension

Using Pictures as Visual Aid in the Classroom

The use of images in language instruction is now a widespread practice. Pictures are useful Supplemental teaching tools in a classroom. Different pertinent images are used in the classrooms to make learning engaging and participatory. It aids teachers in putting instructional material into visual form. Additionally, it increases students' attention spans and works engagement. When a concept is introduced to students via images, it becomes more realistic and relevant. Students acquire a general concept of the subject and are better able to come up with ideas. The learner's capacity for understanding is enhanced. Learning is more durable when audio-visual elements are used rather than conventional textbooks. The use of images has various benefits. First off, it's easy to find photographs online. Second, Google does have practically all pictures kinds. Anyone may find an image that is appropriate for their lesson and students. Giving a lecture just in words is less successful than using images to convey ideas.

Increased Retention of Information

According to Gwede and Seo (2014), audio-visual materials can help students to retain information better than traditional teaching methods. This is because visual aids, such as diagrams, charts, and videos, can help to break down complex concepts into simpler, more understandable pieces. Additionally, audio-visual materials can appeal to multiple senses, making it easier for students to remember what they have learned.

Advantages of Audio Materials

Advantages of Audio Visual Materials

The advantages of using audiovisual materials in teaching and learning are vast and impactful. Here are some of the key benefits:

1. **Enhanced Engagement:** Audiovisual materials, such as educational videos, interactive presentations, and animations, have the power to capture students' attention from the outset.

The use of moving images, dynamic content, and sound effects creates a visually stimulating and immersive learning environment. When students are engaged, they are more likely to actively participate in discussions, ask questions, and take an active role in their learning journey.

2. **Improved Comprehension:** Audiovisual materials excel at breaking down complex concepts into more manageable and comprehensible parts. Through visual representations and step-by-step demonstrations, abstract ideas become clearer and easier to understand. Visual cues help students connect theoretical knowledge to real-world applications, making learning more practical and relatable.
3. **Catering to Diverse Learning Styles:** Not all students learn the same way, and audiovisual materials offer a versatile solution to cater to various learning styles. Visual learners absorb information better when they see images and diagrams, auditory learners benefit from listening to explanations and lectures, and kinesthetic learners engage with interactive elements that allow them to actively participate and manipulate the content.
4. **Multi-Sensory Learning:** Audiovisual materials create a multi-sensory learning experience by combining visual and auditory elements. This multi-sensory approach enhances memory retention as information is processed through different channels simultaneously. As a result, students are more likely to remember and recall the material long after the learning session.
5. **Real-World Relevance:** One of the most significant advantages of audiovisual materials is their ability to provide real-world context to academic concepts. Educational videos, virtual tours, and case studies present practical applications of theoretical knowledge, helping students see the relevance and importance of what they are learning in their daily lives and future careers.

6. **Flexibility and Accessibility:** Digital audiovisual materials can be accessed anytime and anywhere, providing flexibility in learning. Students can review lectures, demonstrations, and presentations at their convenience, which is especially beneficial for self-paced and distance learning. Additionally, educators can adapt and customize audiovisual content to meet the specific needs of individual learners.
7. **Enhanced Retention:** The combination of visuals and auditory elements in audiovisual materials enhances memory encoding and retrieval. Students are more likely to retain information presented through multimedia due to the increased level of sensory stimulation and engagement. This leads to better long-term retention and application of knowledge.

Improved Comprehension and Understanding

Audio-visual materials can also help students to comprehend and understand complex scientific concepts. According to Ross and Schulz (2014), visual aids can help to provide context and a visual representation of abstract concepts, making them easier to understand. Additionally, audio-visual materials can help to engage students and keep them interested in the subject matter, leading to better comprehension and understanding.

Increased Motivation and Engagement

According to Zhang, Li, and Liang (2016), the use of audio-visual materials in teaching and learning can help to increase student motivation and engagement. Audio-visual materials, such as videos and interactive simulations, can make learning more interesting and enjoyable for students. This, in turn, can lead to improved student engagement and motivation, which can help to improve learning outcomes.

Improved Critical Thinking Skills

According to Carvalho and Goodyear (2018), the use of audio-visual materials can help to

improve students' critical thinking skills. Audio-visual materials can help students to analyze and interpret scientific information, leading to improved critical thinking skills. Additionally, audio-visual materials can provide opportunities for students to practice problem-solving and decision-making skills. According to Jonassen (2011), multimedia learning can be used to create authentic learning environments that require students to use higher-order thinking skills. For example, students might be asked to analyze a video clip or a graph to draw conclusions about a scientific concept. This can help to develop critical thinking and problem-solving skills that are essential for success in integrated science.

Enhanced Creativity

Audio-visual materials can also help to enhance students' creativity. According to Karim and Hashim (2015), audio-visual materials can help students to visualize scientific concepts and think creatively about how they can be applied in real-life situations. Additionally, audio-visual materials can help students to develop their own creative projects, such as videos or animations, which can help to reinforce learning and engage students in the subject matter.

Improved Accessibility

Audio-visual materials can also improve accessibility for students with different learning needs. According to Pentiuc and Pentiuc (2014), audio-visual materials can provide multiple ways of presenting information, which can help students with different learning styles to understand and retain information. Additionally, audio-visual materials can provide support for students with disabilities, such as visual or auditory impairments.

Increased Teacher Flexibility

The use of audio-visual materials can provide increased flexibility for teachers. According to Aparicio, Bacao, and Oliveira (2015), audio-visual materials can provide teachers with more opportunities to customize their teaching to meet the needs of individual students. Additionally,

audio-visual materials can help to save time in lesson preparation and can be easily shared among teachers, leading to increased efficiency and collaboration.

Providing authentic learning experiences

Audio-visual materials can provide authentic learning experiences that connect students with real-world applications of scientific concepts. As noted by Ozer and Saka (2018), audio-visual materials can provide students with opportunities to observe and analyze real-life phenomena and understand their scientific principles.

Enhancing understanding and retention of concepts

According to Egwunyenga and Okoye (2018), the use of audio-visual materials can aid in the understanding and retention of scientific concepts. Audio-visual materials such as videos, animations, and images can provide visual aids that help students understand complex concepts and remember them better.

Encouraging active learning

Audio-visual materials can encourage active learning among students. As noted by Aladejana and Owoeye (2018), audio-visual materials provide an interactive and engaging learning experience for students, promoting critical thinking and inquiry-based learning.

Catering to different learning styles

The use of audio-visual materials can cater to different learning styles. According to Rahayu and Santoso (2019), audio-visual materials can help visual learners better understand concepts while auditory learners benefit from audio-based materials such as podcasts.

Fostering interest and motivation

Audio-visual materials can also foster interest and motivation among students. As noted by Özmen and Şenocak (2018), the use of audio-visual materials can make the learning experience more exciting and enjoyable, leading to increased motivation and interest in the subject matter.

Facilitate Collaborative Learning

Audio-visual materials facilitate collaborative learning by providing a shared learning experience. As Dr. Edward J. Lazaros notes, "Audio-visual materials can facilitate collaborative learning by providing a shared learning experience that encourages interaction and discussion among students.Challenges of Using Audio-visual Materials in the Classroom

Although audio-visual resources aid teachers in their instruction, this does not mean that they are without drawbacks. If the audio-visual choices are poor, it could occasionally be for nothing. Cost, inconvenience, upkeep, and in some cases, a phobia of technology, are the biggest drawbacks. Additionally, the quality of the copies or self-produced materials, as well as the sound and picture, could not be perfect. In this scenario, the teacher's training in using and utilizing the video is another crucial factor. Otherwise, the pupils find it monotonous and pointless. Therefore, there are a few things to think about while employing audiovisual materials in the classroom. The goal cannot be achieved if the materials are not carefully chosen. The linguistic level of the audio or video may not always be suitable for learners. As a consequence, they are unable to understand the materials, which may cause a significant level of worry in the students. Additionally, it might be quite challenging to locate audio resources for elementary-level Students at times. The audio- the topic. Because of this, teachers must be cautious when choosing audio-visual resources for their students.

Summary of Related Literature

Special education students, the use of audio-visual materials in the teaching and learning of Physiology has numerous benefits. The use of audio-visual materials can help to make the subject more interesting and engaging for students, simplify complex scientific concepts and theories, improve students' retention of information, and increase students' motivation to learn. However, there are also some limitations to the use of audio-visual materials, such as lack of access to

technology and teachers' lack of skills and knowledge. To maximize the benefits of audio-visual materials, teachers should receive training in their use and have access to the necessary equipment and materials. Additionally, efforts should be made to make the materials more affordable and accessible in regions where they are.

CHAPTER THREE

METHODOLOGY

This chapter gives a detailed explanation on how the research work was carried out, the method of data collection and processes employed by the researcher. The following are subheadings to be treated in this chapter.

- Research Design
- Population of the Study
- Sample and Sampling Techniques
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

Research Design

This study adopted the descriptive survey research design. This design is chosen as a sample of the population is studied and was generalized to the entire population. This study tries to discover the perception of students on the influence of audio-visual materials on the teaching and learning of physiology a case study of special education students in the university of Benin, Benin city

Population of the Study

The population of a study includes all three hundred level and four hundred level student in Special Education in the University of Benin, Benin City, Edo State. 2021 and 2022 academic

Sample and Sampling Technique

The sample size of this study consists of Eighty (80) students each across all three hundred and four hundred level students of Special Education in the University of Benin, Benin City Edo state

Table 1 - Descriptive Details of Samples and Sample Technique

S/No.	*Academic Level*	*No. of Students*
1	Year 3 (300)	40
2	Year 4 (400)	40
	Total	**80**

Research Instrument

For this study, A questionnaire titled Use of Audio-Visual Materials Questionnaire"(AVMQ) was the instrument used for the data collection. The questionnaire is divided into two (2) sections. The first section gathers information about the respondent's demographic

variables on course Area Section B solicits views on the use ofaudio-visual materials and is a is four-point Likert scale of; Strongly Agree (SA) - 4 points, Agree (A) - 3 points,Disagree (D) - 2 points and Strongly Disagree (SD) - 1 point

Validity of Instrument

For the validity test of the instrument, a draft copy of the instrument (questionnaire) was given to my supervisor who is a research expert and two other expert researchers in the department to validate. Their criticisms and corrections were duly observed to produce the final copies of the questionnaire.

Reliability of the Instrument

Ten (10) students with comparable academic status to the research respondents were utilized to test the reliability of the instrument. However, the research did not include this sample. Cronbachalpha methods were used to analyze the data that had been obtained and the reliability score was

Method of Data Administration

The instrument will be analysed with the means and

Method of Data Analysis

The data collected were analyzed will be analyzed with mean and standard deviation

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter presents the results of the study and then discussion.

Presentation of Result

Demographic Data of Respondents

Question 1 : what type of audio-visual materials are available at the university of Benin for teaching and learning physiology of special education students.

Table 1 Descriptive Statistics of available of audio-visual material

audio-visual materials	N	X	Std. Deviation	Criterion X
magnetic boards, chalkboard	78	3.35	0.865	2.5
Slides, projectors		2.441	0.986	
Magazines and newspapers		3..09	0.885	
Specimens		2.45	1.289	
Few audio and visual material		3.47	0.618	

For positively warded items > 2.5 is available

For negatively warded items > 2.5 is not available

From table 1 above magnetic boards, chalkboard and few audio-visual materials with means of 3.35 and 3.47 respectively are above the criterion mean of 2.5, which implies that these materials are available in the university of Benin. However few audio-visual materials with the highest mean of 3.47 is more available compared to others. Magazines and newspapers, slides, projectors and specimens are not available.

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Question 2 : what type of audio-visual materials are used by lectures

Table Descriptive Statistics of audio-visual materials are used by lectures

audio-visual materials Uses	N	X	Std. Deviation	Criterion X
posters and pictures	78	2.59	1.025	2.5
television, filmstrips, DVD		2.26	0.844	
		2.86	0.833	
Radio		2.96	1/038	
Extent of use		2.74	0.975	

From table 2 above posters and pictures and charts with means of 2.59 and 2.96 respectively been greater than the criterion X of 2.5 in an indication that these materials are used by lecturers in the University of Benin, while television, filmstrips, DVD and radio with means of 2.26 and 2.86 are not used by lecturers in the university of Benin. However the extent of use of these audio-visual materials in 2.74 which is a slight increase above the criterion mean of 2.5. This implies that university of Benin lecturers often use these audio-visual materials. Although with charts been more in used compared to posters and pictures.

Question 3 : What advantages do students see in the use of audio-visual materials

Descriptive Statistics of advantages do students see in the use of audio-visual materials

Advantages	**N**	**X**	**Std. Deviation**	**Criterion X**
source of information	78	3.49	.552	2.5
better understanding		3.27	.715	
advantage derived		3.42	.547	
Learners attention		3.31	..870	
Level of audio-visual materials		3.40	.631	

From table 4 above source of information better inform interest development and Learners attention are all advantages derived by students in the use of audio-visual materials with means of 3.49, 3.27, 3.42 and 3.31 been greater than the criterion mean of 2.5. Audio-visual materials as a source of information has the highest mean of 3.49 which implies that in the highest advantage derived by students, while the promotion of better understanding and creating of emotional balance to teaching and learning physiology in the least advantage to the student in the use of audio-visual materials. Consequently the availability of audio-visual materials in the university of Benin has a mean of 3.4 which is greater than the criterion X of 2.5. Been a negatively warded item, there are very few audio-visual materials available for teaching and learning physiology.

Discussion of Results

Research Question what type of audio-visual materials are available at the university of Benin for teaching and learning physiology of special education students.

From table 1 above magnetic boards, chalkboard and few audio-visual materials with means of 3.35 and 3.47 respectively are above the criterion mean of 2.5, which implies that these materials are available in the university of Benin. However few audio-visual materials with the highest mean of 3.47 is more available compared to others. Magazines and newspapers, slides, projectors and specimens are not available.

Popoola and Haliso (2009) defined library information resources as those information bearing materials that are in both printed and non-print formats, such as textbooks, journals, indexes, abstracts, newspapers and magazines reports, CD-ROM databases, internet/E-mail, video tapes tapes/cassettes, diskettes magnetic disks, computers, micro forms, e.t.c. These information materials are the raw materials that libraries acquire, catalogue, stock, and make available to their users, as well as use to provide various other services. Librarians, as information providers, should

be concerned with the provision of information in the formats most suited to the differing needs of various types of users, each of which must be clearly differentiated. A library exists to serve its community and consequently the needs of all members of that community must be accommodated, the old and the young, the able and the disabled, the gifted and the backward members of the society.

Research Question 2: What types of audio-visual materials are used by lecturers?

From table 2 above posters and pictures and charts with means of 2.59 and 2.96 respectively been greater than the criterion X of 2.5 in an indication that these materials are used by lecturers in the University of Benin, while television, filmstrips, DVD and radio with means of 2.26 and 2.86 are not used by by lecturers in the university of Benin. However the extent of use of these audio-visual materials in 2.74 which is a slight increase above the criterion mean of 2.5. This implies that university of Benin lecturers often use these audio-visual materials. Although with charts been more in used compared to posters and pictures.

(Alokunm 2004) Audio-visual in this context refers to technology that is employed in the resource centres like the academic libraries, and classrooms for the purpose of student's instruction which when properly used by teachers can revolutionize the teaching profession and promote services.

Research question 3:

Learners attention are all advantages derived by students in the use of audio-visual materials with means of 3.49, 3.27, 3.42 and 3.31 been greater than the criterion mean of 2.5. Audio-visual materials as a source of information has the highest mean of 3.49 which implies that in the highest advantage derived by students, while the promotion of better understanding and creating of emotional balance to teaching and learning physiology in the least advantage to the student in the use of audio-visual materials. Consequently the availability of audio-visual materials in the university of Benin has a mean of 3.4 which is greater than the criterion X of 2.5. Been a

negatively warded item, there are very few audio-visual materials available for teaching and learning physiology.

(Ngozi, B.O., et al 2012) in their article emphasize the significance of audio-visual materials in education. They contend that this is because the average learner comprehends in terms of multiple impressions recorded through the eye, ear, touch, and other series. Any preceptor mechanism that is triggered by outside events carries out this function cooperatively rather than autonomously.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of the findings and conclusion reached. It also presents recommendations and suggestions for further studies.

Summary

The aim of this study was to determine the extent of use of audio-visual materials in the teaching and learning of integrated science in Faculty of Education, University of Benin. To direct the study, five (5) research questions were posed. The research design for the study was a descriptive survey. The study included 60 integrated science students as its sample. A questionnaire is the research tool used to gather the data. Frequency, simple percentage, mean, and standard deviation were used to examine the data. Results showed the finding as follows:

1. The availability of audio-visual materials is in fairly adequate. With the intuition having very few audio-visual materials for teaching and learning and audio visual materials are not readily available for usage. It is found worth-wile to conclude that the audio-viusal materials availability in the institution is fairly encouraging.

2. White magnetic boards, chalkboards, slides, projectors, specimens, posters, pictures and maps were materials that were moderately used by lectures. Television, filmstrip, DVD and radio were audio materials that were almost never used by lectures.

3. Lecturers do not often use audio-visual materials in teaching and they are also not strongly committed to the use of audio-visual materials.

4. Inadequate funding of the institution highly affects the availability of audio-visual materials. High maintenance cost, power supply and inadequate storage facilities also affects the availability of the audio-visual materials.

5. Assimilating faster is a great advantage for students while learning with audio-visual materials. Also recollecting quickly and being enthusiastic and aroused to learn were also very common advatanges. It was also shown that lecturers are not entirely boring while using audio-visual materials to teach.

Conclusion

The results of this study may be used to determine how much audio-visual materials is used in integrated science instruction. While determining the specifications for integrated science teaching and learning, the findings of the present study may be taken into account. Giving students access to sufficient audio-visual materials can also help them succeed academically. It can be argued that this study gives researchers and educators useful insight into how to best meet the usage of audio-visual resources in both teaching and learning when the analyses' conclusions are taken into account.

Recommendation

Based on the results from the findings of this study, the following recommendations are given:

1. The inclusion of audio-visual elements in the educational syllabus at all levels of school should be promoted by curriculum planners.
2. That school management boards should make provisions for effective funding of audio-visual materials.

3. As necessary, both students and teachers should participate in their various roles in the improvisation and use of audio-visual materials.

Suggestion for Further Studies

1. An intervention to strengthen the use of audio-visual materials.
2. An evaluation of the use of audio-visual materials in the various faculties of the University of Benin.

REFERENCES

Al Mamun, M. (2014). Effectiveness of audio-visual aids in language teaching in tertiary level ` (Doctoral dissertation, BRAC University).

Aladejana, F. O., & Owoeye, J. S. (2018). Effects of audio-visual materials on senior secondary school students' academic performance in physics in Ibadan metropolis, Nigeria. Journal of Education and Practice, 9(14), 110-117.

Ashaver, D., & Igyuve, S. M. (2013). The use of audio-visual materials in the teaching and learning processes in colleges of education in Benue State-Nigeria. IOSR Journal of Research & Method in Education,1(6), 44-55.

Aina, M.E and Olutade, S.A (2006). General Teaching Methods:nSchoolofEducationNational Open University, Nigeria.

Anzaku Francis (2011). Library Experts Speaks on Audio-Visual Material. A paperpresentedat the United Nations Educational, Scientific and Cultured Organization (UNESCO)World Day for Audio-Visual Heritage. Lafia.

Anueleonue, N.C. (2008) Using Information Communication Technology (ICT) in Secondary Schools: Prospects and Challenges for 21st Century. Multidisciplinary Journal of Research Development. National Association for Research Devloptment (NARD) 10(1)178-182 July.

Daramola, S. A. (2017). Effectiveness of Audio-Visual Materials in Teaching and Learning of English Language among Secondary School Students in Ilorin Metropolis. Journal of Education and Practice, 8(5), 117-122.

Dike , V.W (1993). Library Resources in Education , Enugu: ABIC Publisher.

Eze, E.U. (2005). Effect of Instructional Materials on the Acadmic Performance of Junior Secondary School Students in Social Studies. Unpublished PGDE Thesis. Imo State

University-Nigeria.

Egwunyenga, R. N., & Okoye, V. E. (2018). Effectiveness of Audio-Visual Materials in Enhancing the Learning and Retention of Chemistry Concepts among Senior Secondary School Students. Journal of Education and Practice, 9(9), 6-11.

Fayemi T.A (1991). The Effect of Instructional Materials on Learning of History in Selected Primary Schools in Ogbomosho Local Government Area: Unpublished B.ED Thesis. Federal Republic of Nigeria (2008), National Policy on Education. Revises Federal Government Press.

GopalVinayakPatil.(2010).ImportanceofAudio-Visualinteachingmethodology.Mahourastra, India.

Hallett, T.L and Faria, G (2006), Teaching with Multimedia: Do Bells and Wishtles Help Students Learn . Journal of Technology and Human Services 24(2/3): 167-79

Ibezim, E. C., & Ogunniyi, M. B. (2017). Influence of audio-visual materials on secondary school students' performance and interest in integrated science. International Journal of Science and Research, 6(6), 1396-1404.

Ibezim, E. C., & Ogunniyi, M. B. (2017). Utilization of audio-visual materials in the teaching and learning of integrated science in secondary schools in Oyo State, Nigeria. Journal of Education and Practice, 8(5), 66-73.

International Federation of Library Associations and Institutions IFLA, (2004). Guidelines for Audio-Visual and Multimedia Materials in Libraries and other Institutions archive.infla.org/vll/535/pubs/avm-guidelines04.htm.

Idris, A. T., Shamsuddin, I. M., Arome,A.T.,&Aminu,I.(2018).Useofaudio-visualmaterials in teaching and learning of classification of living things among secondary school students in Sabon Gari LGA of Kaduna State. Plant,6(2), 34.

Idris, A. T., Shamsuddin, I. M., Arome,A.T.,&Aminu,I.(2018).Useofaudio-visualmaterials in teaching and learning of classification of living things among secondary school students in Sabon Gari LGA of Kaduna State. Plant,6(2), 34.

Katherine Martin (2009) Audio-Visual Materials: Collection Development Policy, Rod Library University of Northern lowa.

Lazaros, E. J. (2009). Integrating Audio-Visual Materials in Collaborative Learning Environments. In Handbook of Research on Collaborative Learning Using Concept Mapping (pp. 359-374). IGI Global.

Lestage. Andre (1959). The use of Audio-Visual Aids in Education: Extracted from UNESCO Chronicles, Regional Seminar on the use of Audio-Visual Aids in Adult and School Educatin in Latin America at Mexico City from 28 September to 17 October 1959.

Mcnaught, A (2007), Moving Images and Sound : Inclusive and Accessible. Moving Images Knowledge and access: The BUFVC Handbook edited by C. Grant and I. Mekere London: British Universities Film and Video Council pp. 29-33.

Natoli, Carol (2011). The Importance of Audio-Visual Materials in Teaching and Learning. wwwhelium.com/channels/224-earlychildhood-ed.

Ngozi, B.O, Samuel A.O, Ameh O.I, (2012) , Motivating use of Audio-Visual in a Nigeria Technological University Library. Journal of Edcation and Social Research Vol. 2(1) Jan.

Ode, E. O. (2014). Impact of audio-visual (AVS) resources on teaching and learning in some selected private secondary schools in Makurdi. International journal of Research in humanities, arts and literature,2(5), 195-202.

Özmen, K. S., & Şenocak, E. (2018). The effect of audio-visual materials on motivation and success in science and technology education. Journal of Education and Practice, 9(6), 98-

105.

Oketunji I (2000), Application for Information Technologies in Nigerian Libraries: Probles and Prospects in I.K : Nwalo (ed); Information Technology in Library and Information Technology Education in Nigeria. National Association of Library and Information Sceience Education NALISE.

Rasul, S., Bukhsh, Q., & Batool, S. (2011). A study to analyze the effectiveness ofaudiovisual aids in teaching learning process at uvniversity level. Procedia-Social and Behavioral Sciences,28, 78-81.

Rahayu, A. R., & Santoso, H. B. (2019). The Effectiveness of Audio-Visual Media on Science Learning in the 21st Century. Journal of Physics: Conference Series, 1185(1), 012067. doi: 10.1088/1742-6596/1185/1/012067

APPENDIX I

UNIVERSITY OF BENIN

FACULTY OF EDUCATION

DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL TECHNOLOGY

INTEGRATED SCIENCE USE OF AUDIO-VISUAL MATERIALS QUESTIONNAIRE

Dear Respondent,

The researcher is an undergraduate of the above-named institution and is currently researching **Influence Of Audio-Visual Materials In The Teaching And Learning Of Integrated Science A Case Study Of Special Education Students In The University Of Benin, Benin City**

This research is purely for academic purposes, as such providing genuine and honest responses by assisting to provide answers to the question below. The information obtained will be treated as confidential.

Thank you.

Section A (Demographics)

Please tick where appropriate.

1. Sex: Male [ ] Female [ ]

2. Academic level 100 [ ] 200 [ ] 300 [ ] 400 [ ]

3. Age 15 - 19 [ ] 20 - 24 [ ] 25 - 29 [ ] 30 and above [ ]

Section B (Use of Audio-visual Materials)

Please tick where appropriate.

S/N	ITEMS	SA	A	D	SD
	What types of audio-visual materials are available at the University of Benin for teaching and learning Integrated Science of Special Education Students				
1.	White magnetic boards/chalkboards are often used by lecturers in class.				
2.	Slides/Projectors are mostly used by lecturers during lectures.				
3.	Magazines and newspapers are never used by lecturers as visual aids.				
4.	Specimens are readily available in the labs or are also brought to the classroom as visual aids.				
5.	The Institution has very few audio-visual materials available for teaching and learning.				
	What types of audio-visual materials are used by lecturers?				
6	Posters and pictures are sometimes used during teaching and learning.				
7	Television, filmstrips and DVD are readily available to aid illustrative purposes during lectures.				
8	Radios are never used as audio materials during teaching and learning.				
9	Maps are available and regularly used as visual aids in the classroom.				
10	Lecturers very often use audio-visual materials in teaching.				

	Slides/Projectors are mostly used by lecturers duringlectures				
11	Audio-visual materials are not readily available forusage.				
12	Inadequate funding of the institution affects the availability of the materials.				
13	High maintenance cost affects the availability ofaudio-visual materials.				
14	Inadequate storage facilities to keep the audio-visualusage.				
15	Power supply is a key to audio-visual materials.				
	What are the obstacles the use of audio-visual materials in the institution?				
16	Lecturers are not committed to the use of audio-visual materials.				
17	Learning with audio-visual aids makes the students recollect quickly.				
18	I assimilate faster while learning with audio-visual aids.				
19	The use of audio-visual student to easily remember the lesson taught				
20	The students are enthusiastic and aroused to learn whenaudio-visual materials are used.				

	What advantages do students see in the use of audio-visual materials?				
21	Provide source of information and remove abstraction in teaching and learning				
22	audio-visual aids promote better understanding and create emotional balance to teaching and learning social Studies				
23	The use of audio-visual aids help learners develop interest in learning social studies				
24	audio-visual Aids attracts learners attentions				
25	The Institution has very few audio-visual materials available for Student				

RESEARCH QUESTION 1

Reliability Statistics

Cronbach's Alpha	N of Items
.874	5

RESEARCH QUESTION 2

Reliability Statistics

Cronbach's Alpha	N of Items
.792	5

RESEARCH QUESTION 3

Reliability Statistics

Cronbach's Alpha	N of Items
.812	5

RESEARCH QUESTION4

Reliability Statistics

Cronbach's Alpha	N of Items
.833	5