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USE OF VISUAL AIDS AS A COMMUNICATION CHANNEL IN THE FIELD OF LEARNING IN SECONDARY SCHOOLS

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Abstract

Visual learning aids that involve the use of photographs, drawings or interactive video are typically intended to promote learning and have a positive impact on learning for the students. Visual aids have become the very instrument in effective academic learning in the modern century. It is pertinent to understand and know the psychological manifestations of the use of visual aids in imparting knowledge in the children especially those in the formative stage; the secondary school students. However, this study, sought to investigate the use of visual aids as a communication channel in the field of learning in secondary schools. The quantitative approach was used on a multi-stage sampling of the population. The population was composed of all students of Emmanuel Anglican Secondary School and Union Secondary School, Awkunanaw. The paper was anchored on Gestalt and Constructivism theories. Findings from the study show that majority of the respondents are aware of visual aids in teaching and are in support of the use of visual aids for teaching in secondary schools. Also findings from the study indicated that majority of the respondents affirmed the use of power points slides in class rooms while teaching although other visual aids were revealed such as mnemonics, audio or video clips, and use of mind pictures/mind maps as it enable them to retain what they have learnt in their long term memory. The recommendations suggest that Teachers should make greater and more consistent use of appropriate visual aids such as charts, diagrams, pictures, maps, models, posters, videos, and PowerPoint presentations during classroom instruction and proprietors and school management should provide adequate and functional visual aid facilities.

Keywords: Visual learning Aids, Communication channel, Learning, Teachers, Secondary schools

Introduction

Visual aids have become the very instrument in effective academic learning in the modern century. Children are being drawn to the colourful sights of knowledge which are embedded right in the use of video tapes, projectors, images, PowerPoint presentation slides, mnemonics and whatnot. Its influence is being felt on a greater expansion. It is pertinent to understand and know the psychological manifestations of the use of visual aids in imparting knowledge in the children especially those in the formative stage; the secondary school students.

Great pundits in respective fields have appended their definitions of visual aids. However, visual aids are those instructional devices which are used in the classroom to encourage learning and make it easier and motivating for the students to partake and fully acknowledge all that has been taught.

To bring growth in the lives of the children who are the target for this academic innovation, the paths that are necessary to take are of creativity, adaptability, authenticity and individual responsibility towards the very essence of what is found in the book, what they are going to do with it and how they are going about with it.

And one of the common ways to ensure understanding and creativity in the children is to engage the service of visual aids, to build good relationship between the information passed down in a written text and that which adds colour to it.

BACKGROUND TO THE STUDY

Education plays a role in the development of a country and it is through education that a country's economy will develop to a stable level. In order words, education is an essential human right. It involves learning, speaking, reading and writing. It is through teaching that academic excellence is procured. Listening and speaking skills invariably contribute to humans academic development. Teaching requires a lot of skills for easy assimilation on the people that are involved in the learning of which visual aids could be of vital importance when added to the learning. However, these learning materials are essential as it is a base of reminder and clarity. Visual learning aids that involve the use of photographs, drawings or interactive video are typically intended to promote learning and have a positive impact on learning for the students (Jepkorir, Kisaka, Ongefi, 2024).

As the cliché goes, “a picture tells a thousand words”, but there is real value in using images to promote scientific content. Images help us learn, images grab attention, images explain tough concepts, and inspire. Visual aids are vital learning facilities for teaching. Visual aids make learning easier for users and and learning is more effective when visual aids are utilized. Visual learning aids such as pictures and real objects should be attractive and portable so that to encourage learners to participate fully during the learning process. This is due to the fact that the presence of such physical qualities of visual learning aids provides knowledge acquisition and skills adaptation, hence the achievement of quality education to the students. It could be seen from our analysis that a large percentage of the human brain dedicates itself to visual processing. People affinity for images lies with their cognition and ability to pay attention. Images are able to grab ones attention easily, once it is drawn to them immediately.

In this course, the use of visual communication cannot be overlooked because it is part of our everyday lives. Visual communication is the use of visual elements to convey ideas and information which include but are not limited to, signs, typographies, drawings, graphic designs, illustrations, industrial designs, advertisings, animations and electronic resources.

Visual communication is the use of graphics to represent information for the purpose of communication. Visual communication is mainly used to add more meaning to the information communicated (Ntara & White, 2026). Different types of teaching and learning processes demand different types of visual learning aids. Some are useful in teaching skills, presenting facts, showing relationship or changing behaviour or attitudes, while others are more effective in giving back ground information summarizing a unit of work.

Humans have used visual communication since prehistoric times. Within modern culture, there are several types of characteristics when it comes to visual elements, they consist of objects, models, graphs, diagrams, maps and photographs (Rawson, Thomas & Jacoby 2016). Outside the different types of characteristics and elements, there are seven components of visual communication: colour, shape, tones, texture, figure-ground, balance, and hierarchy. Consider how memorable the visual graphics are in logos, for example. One can recognize the brand by seeing the visual graphic, even before reading the name of the brand. Logos like Apple, Nike, MacDonalds, etc., have stood tall in the cognitive faculty of humans as they do not need to explain further who they are and what they do.

Each of these characteristics, elements, and components play an important role in daily lives. Visual communication holds a specific purpose in aspects such as social media, culture, politics, economics, science and above all, education. In considering these different aspects, visual elements present various uses and how they convey information. Whether it is advertisements, teaching and learning, or speeches and presentations, they all involve visual aids that communicate a message. In a world where we are bombarded by stimuli, we often seek the easiest and most fluent way of acquiring and learning information. Reading can be a slow and time-consuming activity. It takes a lot longer to read a long sentence than to analyze a visual scene.

At school we are expected to scour our textbooks and memorize sentences word-for-word. Memorization plays a major role in education, especially throughout primary and secondary schools. Despite this, many teachers support studying for memorization based tests by only repeating the information needed until it is stuck in the student's brain. However, visual aids are important in learning as they encourage students in the learning process, make the lesson to be understandable, arose interest to the subject presented, leads to permanent retention of materials learnt, students increase vocabulary as well as providing direct experience to the students (Dalali & Mwila, 2022). In learning, making use of infographics is so vital as they they crunch down data and findings and present them in an easy-to-digest manner. The images, diagrams, and figures in infographics make the learning process more fluid.

In African education, especially Nigeria, the most common reference to the visual aids is chalkboard or whiteboard. More of these like poster board, pictorial handouts and textbooks, video excerpts, projection equipment, and computer-assisted presentations are missing in the curriculum and their absenteeism deteriorate and disorientate the cognitive skills of students in secondary schools.

According to Bobek & Tversky, 2016, visual cues help students to better retrieve and remember information. The research outcomes on visual learning make complete sense when considering the brain as an image processor (much of our sensory cortex is devoted to vision), not a word processor. In fact, the part of the brain used to process words is quite small in comparison to the part that processes visual images.Words are abstract and rather difficult for the brain to retain, whereas visuals are concrete and, as such, more easily remembered.

Statement of Problem

Despite the recognized importance of visual aids as effective instructional tools in the teaching and learning process, their adequate utilization in classrooms remains limited. Visual aids facilitate easier understanding, improve students' retention, and enhance active participation by enabling learners to observe, identify, interpret, and relate new concepts to their prior knowledge. Through the use of models, charts, pictures, and other instructional materials, students become more engaged and motivated, thereby promoting meaningful learning experiences. However, many teachers do not sufficiently incorporate appropriate visual aids into their instructional practices. This inadequacy creates barriers to effective teaching and learning, reduces students' level of comprehension and participation, and ultimately affects academic performance and learning outcomes. Therefore, against this backdrop, there is a need to examine the use of visual learning aids as communication channel in the field of learning in secondary schools.

Objective of the study

The primary aim of this study is to examine the use of visual learning aids as communication channel in the field of learning. The specific objectives of this study seek to:

1. To examine students' perceptions of the use of visual aids for teaching in secondary schools.
2. To identify the visual aids used in secondary schools
3. To assess students' interest in the use of visual aids in secondary schools.
4. To evaluate the effectiveness of visual aids in enhancing students' learning processes.

Research question

1. What are students' perceptions of the use of visual aids for teaching in secondary schools?
2. What are the visual aids used in secondary schools?
3. What is the level of students' interest in the use of visual aids in secondary schools?
4. How effective are visual aids in enhancing students' learning processes in secondary schools?

Literature Review

Concept of Learning

Learning is a complex process. It can be defined as a change in disposition; a relatively permanent change in behaviour over time and this is brought about partly by knowledge. Learning can happen as an outcome of afresh attained skills, principles, perception, knowledge, facts, and new information at hand (Uwa, 2018). Learning is a relatively lasting change in behaviour resulting from observation and experience. It is the acquisition of information, knowledge and problem solving skills (Cherry, 2026).

According to Lu, T. and Yang, X. (2018), the advent of technology in the classroom starts when a teacher prepare lesson notes aided by technology in a meaningful and impactful ways. Technology has really transformed life as we know it, and the classroom looks much different than it did 50 or even 10 years ago. Traditional chalkboards have been replaced with digital whiteboards, and classrooms have a surplus of iPads.

Learning can be reinforced with different teaching/learning resources because they stimulate, motivate as well as focus learners' attention for a while during the instructional process. Visual aids arouse the interest of learners and help the teachers to explain the concepts easily.

Visual aids are those instructional devices which are used in the classroom to encourage learning and make it easier and motivating. Materials like models, charts, film strip, projectors, radio, television, maps etc. are called instructional aids. Visual aids distribute the learners with true knowledge, which attracts their devotion to unfamiliar contents which are commonly engaged by thereby increasing their retentiveness to them. They demand to the mind through the visual auditory senses. There is a famous proverb that says “one sighted is worth, a hundred words” it is fact that we take knowledge through our intellects. There is another maxim that "if we hear, we forget, if we see, we remember, and if we do something, we know it” so it means that use of visual aids makes teaching learning process more effective.

According to Kishore (2013), “visual aids stimulate thinking and cognizance." The use of visual aids in teaching learning process has multifarious values. It gives chance to speakers to make a more professional and consistent performance. The teaching career is full with limitless opportunities to enrich the academic survives of students, while some ideas and educational goals will be easy for students to hold, other will need you to think productively to ensure that important learning aims are met. By visual aids in teaching is one mode to enhance lesson plans and give students additional ways to process subject information. They concretize the information to be obtainable and help in making learning practice appear real, active and vital. They supplement the work of the teacher and help in the research of the text books.

Learning resources is infused for clarification between material objects and the concepts to understand. In the learning process, instructional aids are of less value if they cannot be heard or seen (Lehman 2015). Visual aids must be visible to the whole class. All calligraphy and illustration must be large adequate to be seen easily by the students farthest from the aids'. Colours, when used, should provide clear contrast and easily be visible. The efficacy of aids can be enhanced by proper sequencing to build on former knowledge. Often, good institute and natural patterns of logic command the sequence. (Cherry, 2026).

Concept of Visual Aids

Visual aids are defined as tools used in presentation and teaching in order to enhance communication, which can include flip charts, transparencies, slides, filmstrips, video tapes and handouts, designed to present information clearly and succinctly (Davis, 2017). As other symbolic images, visual aids can complement or supplement words in both written and spoken tests. In order words, their basic function is to clarify points beyond what the spoken or written word alone can do.

Visual aids are used in all aspects of people’s lives and are often universal. For example traffic signs, symbols on clothing labels, icons on television controls. For students, they are a great ally when it comes to communicating. Visual aids is seen as tools used to enhance communication, comprehension and retention in presentations by complementing spoken words with visual elements. They boost engagement, clarify complex data and act as memory aids.

Functions of Visual Aids in Academic Learning Process

According to Owens (2014), outlined the functions of visual aids in academic learning process as follows:

a. **Visuals Stick in Long-Term Memory**

One of the easiest ways to ensure that learners store information in their long-term memory is to pair concepts with meaningful images. Visuals help students make sense out of the content and direct attention, increasing the possibilities that the learners will remember the material.

According to Dr. Lynell Burmark, education consultant who writes and speaks about visual literacy:

"…unless our words, concepts, ideas are hooked onto an image, they will go in one ear, sail through the brain, and go out the other ear. Words are processed by our short-term memory where we can only retain about seven bits of information (plus or minus 2) […]. Images, on the other hand, go directly into long-term memory where they are indelibly etched."

b They Transmit Messages Faster

According to the Visual Teaching Alliance: The brain can see images that last for just 13 milliseconds, our eyes can register 36,000 visual messages per hour, we can get the sense of a visual scene in less than 1/10 of a second. 90% of information transmitted to the brain is visual. Visuals are processed 60,000 times faster in the brain than text and 40 percent of nerve fibers are linked to the retina. All this indicates human beings process visual information more efficiently than text.

c Improve Comprehension

Visuals have been found to improve learning. Also, they affect learners on a cognitive level and stimulate imagination, therefore, enabling users to process the information faster. Stanford University's Robert E. Horn, explained this relationship clearly:

"When words and visual elements are closely entwined, we create something new and we augment our communal intelligence ... visual language has the potential for increasing 'human bandwidth'—the capacity to take in, comprehend, and more efficiently synthesize large amounts of new information."

Mahathir (2024), found that visuals such as graphic organizers improve performance in areas including:

(i.) Reading comprehension

(ii.) Student achievement

(iii.) Organizing and communicating ideas

(iv.) Finding patterns and relationships

d Visual Cues Trigger Emotions

Visuals cause a faster and stronger reaction than words. They help users engage with the content, and such emotional reactions influence information retention. This is because the visual memory is encoded in the medial temporal lobe of the brain, the same place where emotions are processed. The brain is set up in a way that visual stimuli and emotional response is easily linked, and together the two form memories. Negative visual depictions are particularly useful for leaving a strong emotional impression.

e They Also Motivate Learners

A handful of learners respond better to visual information than text alone. Simply seeing a picture allows users to recreate the experience in their mind. Visual aids help teachers establish, explain, connect, and associate ideas and concepts to make the process of learning more interesting, enjoyable, and effective. This is so because most people retain what they see more than retaining what they hear. Classroom learning can be enhanced significantly through the time-tested use of visual aid posters that teach information and concepts. These educational posters can hang on a classroom wall, serving as a convenient point of reference for students and also enhance the visual appeal of the classroom.

With the use of creative presentation templates, teachers can effectively capture the attention of students. These templates can include various colours and fonts to create engaging slides that present information for illustrative learning, including photos, charts, and icons.

Tools for Visual Learners

Professional teachers have been using different kinds of visual aids, both old and new, to make their presentation easier to understand and deliver their message clearly. Visual aids not help the speaker but also the audience. Following are some commonly used visual aids:

a. PowerPoint

Microsoft PowerPoint is probably the most commonly used visual aid for presentations as one can easily create attractive and professional presentations with it. The advantage of being able to insert a wide range of videos, audios animations and other things into the slides helps in catching the audience's attention better.

b. Whiteboards

Whiteboards work great when the teachers have to give further explanations like explaining difficult words, explaining the order of a process, creating diagrams etc.

c. Video Clips

Teachers can engage students really well by using an appropriate audio or video. This also adds variety to teachings.

d. Charts and Graphs

A variety of charts and graphs are available to assist the teachers and students in various purposes like pie charts, line graphs, bar charts, flow charts and organizational charts.

e. Props

A prop can be either an object or a model. An object is the actual item you are talking about whereas a model is a representation of the item you are talking about. Whichever prop used, the purpose is to clarify the message and maximize understanding. They can make a dull topic really interesting.

Visual Learning Techniques and Strategies

To expand the advantages of visual learning in the educational context, teachers can employ different types of visual learning techniques and strategies that cater to the unique needs and

preferences of visual students and learners. Thus, these approaches leverage the power of visual aids, and interactive tools to aid comprehension, engagement, and overall learning outcomes (Alabi, 2024). To help visual learners thrive in the classroom. It is important to incorporate techniques on how they process and retain information.

According to Chelsea, 2026, outlined strategies that can best support students learning needs and create more engaging lessons for them

Introducing the visualizing strategy to students

The concept of visualizing is typically easy for students to understand. Introducing visualizing can be done through a simple drawing activity. Give students a specific thing to draw, but do not offer any specific details about what it should look like. For example, you may ask students to draw a clown, a landscape scene, or a house. Allow students to draw the object or scene as they imagine it in their mind. In overall, experiences inform mental images.

Using pictures in teaching

Visuals of various kinds - photographs, paintings, diagrams, illustrations - are essential to a good lesson program. Their purpose is to enhance and hone the visual perception of children. Generally speaking, pictures, paintings, and other visuals constitute the most effective, most plentiful, and least expensive teaching medium. It is also the medium that is least utilized. There are good school-useful pictures in abundance, almost anywhere you look. Yet, teachers under-utilize this eminently useful resource.

Sometimes, teachers might say that they have difficulty finding appropriate pictures. This may be the situation if a picture is looked for when one is needed to fit a particular concept or lesson. The "secret" is to collect pictures, whenever and wherever they can be found, regardless of whether they fit an immediately perceived need.

In a study conducted by Adeyinga, Akpan, Mkhize & Ojakovo, (2024) on the effectiveness of audio-visual aids in the teaching of listening comprehension in Government Day Secondary Schools, Gwagwalada, Abuja. The population comprised all the 630 SS2 students in Government Day Secondary School, Gwagwalada, Abuja, Nigeria. One hundred (100) students were sampled for the study. The Students' Listening Comprehension Test (SLICOT) was used as the instrument . The research revealed that there is significant difference between the performance of students taught with audio-visual aids and those taught without the aids in the three levels of listening comprehension: literal, inferential, and critical. The study concluded that audio visual aids help in the teaching and performance of students in listening comprehension.

Melor, Hadi & Dexter (2024) , investigated the teachers' perceptions on the use of visual aids (e.g., animation videos, pictures, films and projectors) as a motivational tool in enhancing students' interest in reading literary texts. 52 English teachers from seven national secondary schools in Kapit, Sarawak, Malaysia were selected. Five of the respondents were also randomly selected for the interview. Findings from the study shows that the majority of the teachers had positive perceptions of the use of visual aids. The use of visual aids enable the teachers to engage their students closely with the literary texts despite of being able to facilitate students of different English proficiency level in reading the texts with interest. This aspect is vital as literature helps to generate students' creative and critical thinking skills.

Ibe & Abamuche, (2019) conducted a study on Effects of audio visual technological aids on students' achievement and interest in secondary school biology in Nigeria . the study employed quasi experiment of the non equivalent control group design. 150 senior secondary two (SS2) students of two intact classes randomly selected from two schools were assigned one to experimental and other to control. Based from the results from the study, revealed that group exposed to lessons with Audio visual technological contents integrated achieved higher in test scores than the group not exposed to. It was recommended that classroom teachers keep pace with development trend by learning and using new technologies (Audio-visual) in instructional delivery.

Another study conducted by Agwu & Mbah (2019), examined the effect of visual aids in the teaching and learning of the English Language in Senior Secondary Schools in Agbani Education Zone, of Enugu State-Nigeria. Quasi-experimental research design was adopted in the study and Phonetic Assessment Test (PAT) instrument was used to determine students' entry level. The target population of the study was all the SS two students in Agbani Education Zone, of Enugu state. A sample of 200 students was drawn from the population of 850 through simple random sampling. Findings from the study revealed that students taught with visual aids performed better than those taught with the traditional method

Theoretical Framework

This study is situated within the basic assumptions of the Gestalt theory and Constructivism theory . The rational for using these theoretical approaches is contingent on the focus of these study which hovers on Use of Visual aids as a Communication Channel in the field of learning in secondary schools.

Gestalt Theory was developed in the early 20th century by German psychologists, particularly Max Wertheimer, together with Wolfgang Köhler and Kurt Koffka. The word *Gestalt* is a German word meaning **"whole," "pattern," or "organized structure."**

The theory proposes that people perceive objects as complete, organized wholes rather than as separate parts. In learning situations, students naturally organize visual information into meaningful patterns, making it easier to understand and remember.

According to Gestalt Theory, learning occurs when learners perceive relationships among ideas instead of viewing information as isolated pieces. This means that instructional materials should be presented in a well-organized and meaningful manner.

Gestalt psychologists believe that **"the whole is greater than the sum of its parts."** Therefore, when visual aids such as charts, diagrams, maps, graphs, pictures, videos, and models are properly designed, students understand the overall concept more easily than when information is presented only verbally.

Gestalt Theory fits into this study because visual aids are primarily designed to improve learners' perception and understanding. Specifically, the theory explains that: Visual aids help students organize information into meaningful patterns. Charts, graphs, diagrams, pictures, and videos improve students' comprehension by presenting concepts as complete wholes. Proper arrangement of instructional materials reduces confusion during classroom teaching. Students understand difficult concepts more easily when teachers use organized visual materials.

In other words, the theory supports the idea that effective communication in the classroom depends not only on the information presented but also on how it is visually organized.

Therefore, Gestalt Theory provides a strong theoretical foundation for explaining why visual aids enhance communication and facilitate learning in secondary schools.

Constructivism Theory explains that learners actively construct knowledge through experience rather than simply receiving information from the teacher.

The theory was developed mainly through the works of Jean Piaget and later expanded by Lev Vygotsky and Jerome Bruner.

Constructivism argues that learning is an active process in which students build new knowledge based on what they already know.

Instead of memorizing facts, learners interpret information, ask questions, solve problems, and relate new ideas to previous experiences.

Visual aids play an important role because they help learners interact with concepts, making learning more meaningful.

Constructivism Theory is applicable to this study because visual aids encourage active learning rather than passive listening.. The theory fits the study in the following ways: Visual aids enable students to construct knowledge by observing, analysing, and interpreting information. Pictures, charts, diagrams, videos, and models make abstract concepts concrete and meaningful. Visual instructional materials encourage classroom participation and interaction. Students retain information better because they are actively involved in the learning process. Teachers become facilitators who use visual communication to guide students toward independent understanding.

However, the theory supports learner-centred teaching methods where visual aids improve comprehension, critical thinking, and long-term retention.

Thus, Constructivism Theory provides a strong explanation of how visual aids function as an effective communication channel that promotes meaningful learning in secondary schools.

Methodology

The research design adopted for this study was survey. The population of the study entailed all students of Emmanuel Anglican Secondary School and Union Secondary School, Awkunanaw, Enugu, has a projected population of 3884.

A sample size of 400 was statistically determined for this study using Taro Yamani formula Multi-stage procedure was employed for sample selection. In the first stage the participants were selected using a probability sampling, that is, random selection of 4 classes from the 6 classes in the school. 4 classes were selected to prevent bias. The classes selected include JSS2, SS3, JSS1, and SS1 respectively.

The second stage entailed the random selection of divisions from the classes in the school.

JSS2 class: JSS2D and JSS2B were chosen

SS3 class: SS3A and SS3B were chosen;

JSS1 class: JSS1E and JSS1C were chosen;

SS1 class: SS1A and SS1D were chosen.

In the third stage, 50 students were selected from each divisions and the questionnaires distributed to them. In all, 400 students were given copies of the questionnaires to fill.

Distribution of Units for Union Secondary School, and Emmanuel Anglican Secondary School, Enugu.

Stages	**Numbers selected**	**Total**
First stage	4 classes from the schools (Emmanuel Anglican Secondary School and Union Secondary School, Awkunanaw, Enugu respectively).	4 x 1 = 4
Second stage	2 class divisions from the selected classes	2 x 4 = 8
Third stage	50 students were selected in each class divisions of the selected classes	50 x 8 = 400
Total		**400**

Data Presentation and Analysis

Findings from this study were drawn from data obtained from 400 respondents in the selected secondary schools. In terms of gender of the respondents, results from the study indicated that majority 59% from the sample were males indicating high male dominance than females 41%. In terms of age, 44% of the respondent are between the age range of 10-12, 35% are within the age range of 13-15, and 21% are within the age range of are 16 and above.

In terms of distribution by class 36% of the respondents were in JSS1 class, 28% were in JSS2, 19% were in SS1 and 17% were in SS3. This shows that JSS1 had the highest respondents in both schools.

Research question one: What are students perceptions of the use of visual aids in secondary schools?

Table 1: Students perception on the use of visual aids

Variables	**Response**	**Frequency**	**Percentage %**
Are you aware that visual aids can be used in teaching?	Yes	300	75%
	No	100	25%
Do you support using visuals aids in teaching?	Yes	400	100%
	No	0	
Does your school make use of visual aids in teaching?	Yes	20	5%
	No	380	95%
	Total	**400**	**100%**

Response from table 1 showed that majority of the respondents 75% are aware that visual aids can be used in teaching also 0% of the respondents do not support visual aids in teaching. This shows that the majority of the respondents 100% affirmed that visual aids is paramount in teaching. Surprisingly, the use of visual aids in teaching in secondary schools is very low at a response rate of 20%.

Research question two: What are the visual aids used in secondary schools?

Table 2: Visual aids used in secondary schools/the most used visual aids used in schools

Variables	**Frequency**	**Percentage**
Videos	113	28%
Pictures	136	34%
Mnemonics	109	27%
None of the above	2	1%
All of the above	40	10%
Total	**400**	**100%**
PowerPoint slide	0	0%
Videos	72	18%
Pictorial diagrams	290	72%
Mnemonics	38	10%
Images	0	0%
None of the above	0	0%
All of the above	0%	0
Total	**400**	**100%**

Table 2 shows that majority of the respondents attested that pictures help 34% of the respondents to remember what they read, videos help 28% of the respondents, mnemonics help 27% of respondents, only 1% of the respondents fall under the 'none of the above' category and 10% of the respondents fall under the 'all of the above'. Based on the response rate, pictures as visual aid in learning is very high in schools followed by mnemonics.

Research question three: What is the level of students' interest in the use of visual aids in secondary schools?

Table 3; Students interest in the use of visual aids in learning

Variables	Response rate	Frequency	Percentage
Do you think that visual aids increased your interest in reading?	Yes	317	79%
	No	83	21%
Which of these techniques of visual learning do you consider more acceptable?			
Weekly organization of documentary shows in school hall		24	5%
Use PowerPoint slides in classrooms while teaching		106	27%
Use of playful words, songs, acronyms, phrases to remember large amount of information		40	10%
(mnemonic)			
Engagement of students with appropriate audio or video clips in relation to the topic		95	24%
Use of mind pictures or mind maps		51	13%
None of them		37	9%
All of them		47	12%
Total		400	**100%**

Table 3 shows that 79% of the respondents agree that visual aids increase one's interest in reading while 21% of the respondents disagree. Also 5% of the respondents consider weekly organization of documentary shows in school hall, 27% of the respondents consider PowerPoint, 10% consider the use of mnemonics, 24% support engagement of students with audio or video clips, 13% of the respondents consider the use of mind pictures/mind maps, 9% supported for none, 12% supported for all of them. This shows that majority of the respondents affirmed the use of power points slides in class rooms while teaching. Also majority of the respondents 79% reported that visual aids increase their interest in reading.

Research question 4: How effective are visual aids in enhancing students' learning processes in secondary schools?

Table 4 Effects of visual aids in learning

Variables	Frequency	Percentage (%)
What do you think is the benefit of using visual aids in learning?		
Visuals aids stick in long-term memory	110	27%
They transmit messages faster	100	25%
Improve comprehension	55	14%
They also motivate learners	20	5%
All of the above	115	29%
Total	**400**	**100%**

Table 4 shows that majority of the respondents 29% reported all of the above in enhancing students learning process. While 27% reported that visual aids in learning stick to long term memory.

Discussion of Findings

The first research question sought to find out student's perception on the use of visual aids for teaching in schools. Findings from the study show that majority of the respondents are aware of visual aids in teaching and are in support of the use of visual aids for teaching in secondary schools. This findings agree with the findings of Melor, Hadi & Dexter (2024) , that investigated the teachers' perceptions on the use of visual aids (e.g., animation videos, pictures, films and projectors) as a motivational tool in enhancing students' interest in reading literary texts that majority of the teachers had positive perceptions of the use of visual aids. Stating that the use of visual aids enable the teachers to engage their students closely with the literary texts despite of being able to facilitate students of different English proficiency level in reading the texts with interest. Findings in table 1 aligns with (Alabi, 2024) which stated that to expand the advantages of visual learning in the educational context, teachers can employ different types of visual learning techniques and strategies that cater to the unique needs and preferences of visual students and learners. Thus, these approaches leverage the power of visual aids, and interactive tools to aid comprehension, engagement, and overall learning outcomes. Another finding in this work revealed as presented in table 1 revealed that majority of secondary schools do not make use of visual aids in schools this finding is in disagreement with the Constructivism Theory which provides a strong explanation of how visual aids function as an effective communication channel that promotes meaningful learning in schools.

Findings from table 2 revealed that majority of the respondents attested that pictures, videos, mnemonics help them remember what they read which aligns with Ibe & Abamuche, (2019) that group exposed to pictures and videos with Audio visual technological contents integrated achieved higher in test scores than the group not exposed to it. Findings from this study, support the constructivism theory which posits that visual aids enable students to construct knowledge by observing, analysing, and interpreting information. Pictures, charts, diagrams, videos, and models make abstract concepts concrete and meaningful. Visual instructional materials encourage classroom participation and interaction. Students retain information better because they are actively involved in the learning process. This finding aligns with

(Davis, 2017) who defines visual aids as tools used in presentation and teaching in order to enhance communication, which can include flip charts, pictures, transparencies, slides, filmstrips, video tapes and handouts, designed to present information clearly and succinctly.

Findings from this study in table 3 reveal that majority of the respondents affirmed the use of power points slides in class rooms while teaching although other visual aids were revealed such as mnemonics, audio or video clips, and use of mind pictures/mind maps. Findings from this study align with Agwu & Mbah (2019), that examined the effect of visual aids in the teaching and learning of the English Language in Senior Secondary Schools, the study revealed that students taught with visual aids performed better than those taught with the traditional method. This shows that the use of visual aids in teaching is beneficial to students in schools. This study supports Gestalt theory which posits that visual aids are primarily designed to improve learners' perception and understanding. The implication is that visual aids help students organize information into meaningful patterns. Charts, graphs, diagrams, pictures, and videos improve students' comprehension. Proper arrangement of instructional materials reduces confusion during classroom teaching also students understand difficult concepts more easily when teachers use organized visual materials.

Based on the findings in table 4 reveal that majority of the respondents reported that visual aids stick to long term memory, improve comprehension, transmit messages faster and motivate learners. The findings in this study is in support with the findings by Adeyinga, Akpan, Mkhize & Ojakovo, (2024) on the effectiveness of audio-visual aids in the teaching of listening comprehension in Government Day Secondary Schools, Gwagwalada, Abuja. The research revealed that there is significant difference between the performance of students taught with audio-visual aids and those taught without the aids in the three levels of listening comprehension: literal, inferential, and critical. This study aligns with Lu, T. and Yang, X. (2018), which stated that learning can be reinforced with different teaching/learning resources because they stimulate, motivate as well as focus learners' attention for a while during the instructional process. Visual aids arouse the interest of learners and help the teachers to explain the concepts easily and encourage learning to be easier and motivating.

Conclusion

In conclusion, this research therefore concludes that learning cannot be fun without the implementation of visual aids and teachers should not take it with levity hands. It is of importance to express the need to increase the intellectual acumen of students and foster creativity by inviting the visual cues that triggers and inspires the reading culture. It can be devastating how one could memorize without having a visual cue to hold on to. It is evident in this century that students embrace more the art of visual psychology than just fantasizing on letters and numbers. It is a proven fact that visual aids have contributed in creating mutual relationship between the readers/learners and the story. Because of the influence, they play a vital role in education as they help reduce the burden of shoving down verbatim what is given to them by the teachers. Nowadays, the 'give me what I gave you' syndrome has rendered the capability of students who are geniuses to think less of themselves.

Visual aids are therefore, a necessity in every school and should be made compulsory in order to enhance the reading pattern of students in secondary schools as that is a formative stage which would mould their intellectual quotients when communicating. The study also highlighted the influence of visual aids in enhancing communication in academic learning in secondary schools. It makes us realize that visual aids are tools for the progressiveness of every student in school.

Recommendation

The study recommends the following:

1. **For Secondary School Teachers:** Teachers should make greater and more consistent use of appropriate visual aids such as charts, diagrams, pictures, maps, models, posters, videos, and PowerPoint presentations during classroom instruction. Teachers should also receive regular training and workshops on how to select, prepare, and effectively integrate visual aids into their lessons.
2. **For Secondary School Students:** Students should be encouraged to actively participate in lessons involving visual aids and to use visual materials as supplementary learning resources. Schools should also encourage students to develop simple educational visual materials, such as diagrams, concept maps, charts, and presentations, to improve their understanding, retention, and participation in classroom activities.
3. **For School Administrators and Proprietors:** School management should provide adequate and functional visual-aid facilities, including projectors, computers, television screens, charts, models, maps, and other instructional materials. Adequate funding should also be allocated for the procurement, maintenance, and regular updating of these materials to ensure effective teaching and learning.
4. **For Government and Educational Authorities:** Government agencies and educational authorities should formulate policies that promote the integration of visual aids and other instructional technologies into secondary school education. They should also provide funding, infrastructure, teacher-training programmes, and monitoring mechanisms to ensure that schools have the necessary resources and capacity to use visual aids effectively in teaching and learning.

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