Policy Research Journal
ISSN (E): 3006-7030 ISSN (P) : 3006-7022 Volume 3, Issue 11, 2025

THE IMPACT OF DIGITAL AUDIO-VISUAL AIDS ON ENHANCING STUDENTS' LEARNING SKILLS AT THE SECONDARY LEVEL

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DOI: https://doi.org/10.5281/zenodo.18183346

Keywords
Audio-visual aids, digital learning, secondary education, learning skills

Article History
Received: 01 October 2025
Accepted: 19 November 2025
Published: 29 November 2025

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Abstract

The rapid integration of digital technologies into education has transformed traditional teaching practices, particularly through the use of audio-visual aids. This study aimed to investigate the impact of digital audio-visual aids on enhancing students' learning skills at the secondary level. A quantitative descriptive research design was employed to examine teachers' and students' perceptions regarding the effectiveness of audio-visual instructional tools. Data were collected through two structured, closed ended questionnaires administered to a sample of 250 respondents, including 50 teachers and 200 students from five selected secondary schools in Narowal district. The collected data were analyzed using descriptive statistics and inferential techniques, including correlation analysis, through SPSS software. The findings revealed that the frequent use of digital audio-visual aids significantly enhances students' academic performance, comprehension, motivation, and classroom engagement. Both teachers and students demonstrated positive attitudes toward the integration of visual learning tools in the teaching-learning process. The study concludes that digital audio-visual aids play a vital role in improving learning outcomes at the secondary level and recommends their systematic integration into classroom instruction.

Introduction

Audio-visual aids are educational materials that teachers employ in the classroom to enhance and support students' learning skills. Use these resources to conduct the educational session in a conceptually sound and successful manner. The effectiveness of learning after advancements in the use of audio visual materials such as recordings, charts, graphs, and multimedia, as well as visuals with pictures. It comes out that the media utilized can inspire pupils to learn in addition to being more successful in enhancing their learning skills. Youngsters would rather study through interactive media. Videos and other interactive media can help prevent kids from becoming disinterested in their education. These tools helped students grasp the history, provided them with useful information, and held their interest. As stated in the well-known saying, "One's seen is worth hundred words." It is a fact that when we see something, we remember it; when we merely hear it and don't see it, we forget it; but when we act, we comprehend. The utilization of audiovisual materials to teach role playing to third grade primary school pupils. The findings demonstrated that studying role playing through audio visual

medium improved learning abilities. When students are allowed to voice their opinions and make judgments during class, they change. (Istiqomah et al., 2020; Mashudi et al., 2021).

In actuality, a variety of activities may be carried out during the learning process, and a variety of media can be utilized to offer educational activities that will improve their capacity to learn. The teacher center technique, which is rote learning, will give way to the more creative and richer"child center method" when audio visual materials are used in the classroom. One strategy for overcoming the drawbacks of the conventional teaching approach is the child center Technique. The child center technique involves children to be engaged learners in the classroom by encouraging fun learning via the application of audiovisual resources and other teaching aids. According to Rosdiana (2018), using audiovisuals as media can improve students' ability to study. The term "learning media" describes the tools that students use to communicate or acquire knowledge. It is anticipated that the usage of media in the classroom would help educators enhance the learning outcomes of their students.

Statement of Problem

According to research, audio visual materials are essential to a successful teaching and learning process at the elementary school level. It is impossible to overstate the materials' many benefits to the teaching and learning process. The child's curiosity is piqued, learning is sustained, imagination is expanded, and the abstractive nature of the subjects being discussed is simplified, all of which facilitate teachers' ability to teach students important information. Additionally, it personalizes education and fosters the growth of critical thinking, problem solving, and teamwork skills. However, most schools in the research region have not yet benefited from the potential of audio visual resources, despite their benefits to the teaching and learning process. This is likely because of a lack of funding, as well as inadequacy and incompetence in using the resources. Students' academic performance and enthusiasm for higher education suffer as a result of insufficient use of audiovisual materials, which discourages effective teaching and learning at the secondary level. The nation's labor force will be impacted in the long run, and the entire country would experience poor socio political and economic growth, if nothing is done to raise awareness of the need of using audio visual resources in primary school teaching and learning. The aim of this study is to examine the use of audiovisual resources in the process of learning as an enrichment tool for effective instruction and learning in secondary schools, as no research of this type has been conducted in the study location.

Objectives of the study

1. To investigate how pupils in secondary school are affected by digital audio visual aids.
2. To explore the effect of digital audio visual aids on students' communication skills at the secondary level.
3. To investigate the impact of digital audio visual aids on students' learning outcomes at the secondary level.

Research Questions

1. How do digital audio visual aids affect secondary school students' learning skills?
2. What is the effect of using digital audio video aids on students' communication skills at secondary school Students?
3. What is the impact of digital audio video aids on secondary level students' learning outcomes?

Significance of the Research

The phrase "audiovisual aids" describes the tools, materials, and equipment that integrate visual and auditory elements to enhance learning skills. These resources offer a multimodal learning environment that reinforces and supports material by fusing text, music, and images. It is impossible to overestimate the significance of teaching and learning in the educational process. The instructor uses a range of techniques to instruct their students and promote active learning. Teachers today employ a range of tools to assist pupils learn more efficiently as a result of new methods and strategies that have emerged in

the area of education over time. Teachers can more easily teach subjects and pique students' attention with the use of audiovisual aids. One type of educational tool used in classrooms to help pupils learn is audiovisual aids. Thus, audiovisual aids have a beneficial effect on the process of teaching and learning. In order to make learning more tangible, dynamic, inspiring, motivating, meaningful, and radiant, teachers use visual aids to assist them build, correlate, and coordinate exact conceptions, understandings, and appreciations. Many of them may not be fully aware of the usefulness of audio visual aids, even though their usage in the learning process has become Ineffective. Nonetheless, this article will provide an overview of how audio visual aids might be used to support the learning process. It is anticipated that the study's conclusions would advance our understanding of how beneficial audio visual aids are for learning. This study will thus serve as a future guidance for educators on the matter.

Review of Literature

An essential teaching technique for enhancing students' learning abilities and inspiring them to learn is the word "audiovisual." It can also be viewed as an educational system that gives students real-world experiences by utilizing scientific and technology apparatuses to combine sound and visual projections. Audiovisual media technologies may be used by educators at all levels and in all subject areas to engage students' senses and create a dynamic learning environment, or they can be used by students to link concepts with abilities to produce more innovative and successful outcomes. (Nicolaou, Heraklion, Greece, 5 ,7 April 2019). Visual media are essential components of the educational process because they can improve the efficiency of instruction using charts, graphs, and other visual aids. This is because the effectiveness of teaching is largely dependent on how the message is presented and the receiver's ability to decode it (Nicolaou, April 2019). Additionally, Visual media provide an intangible or virtual presence of the knowledge mentioned in the text as material or structure, emphasizing concepts, improving understanding, and expanding perception. (Nicolaou, March 2019) (Nicolaou, October 2018). In most of the world's less developed countries, including Pakistan During the course of instruction, educational institutions do not make efficient use of their instructional resources. They discovered that there are numerous reasons why these materials are misused and improperly used, and they also described how the lack of instructional resources results in very low educational standards, which negatively affects students' academic performance, particularly at the secondary school level. Teachers in less developed countries are also said to lack proper training regarding the effective use of these aids.

Multimedia, projectors, and computers are examples of modern technology that makes instructional activities simple, engaging, and successful. A V aids are employed as very useful resources in schools and universities. Additionally, it was mentioned that kids may learn more and more when they use the materials properly. He clarified that if these resources are misused, the program is flawed and the children may lose their bravery and motivation. Students who utilized Av aids during their lessons performed better in terms of their academic scores, according to an investigation. Who doesn't make advantage of the classroom materials during their lesson? Van et al. (2021) assert that The utilization of media in education has The capacity to improve students' learning abilities and advance the learning process Four key components are required for academic success, in addition to the stark lack of learning resources, which he believed prevented the educational system from fully adapting to the demands of innovation. According to him, the educational system requires real resources to halt the educational catastrophe. This can be achieved with an increase in educational funding, and the full support of the national workforce is required to improve the quality, efficacy, and results of education in addition to taking on the current workload He explained that they require appropriate physical infrastructure, such as a school building and instructional materials (Coombs, P.H. 1970). Resources like as charts,

models, experiments, and doing a presentation throughout a class lecture can enhance students' understanding and inspire them. Additionally, they explained how to use instructional resources to save teachers' and students' time and energy while making learning simple, engaging, quick, and efficient. Utilizing AV aids effectively during instruction can enhance learning by encouraging creativity in the learner.

Theoretical framework

Dale's experience cone Edgar Dale created the of Dale's experience with the cone paradigm in the 1960s. His model integrates a number of theories that are closely related to the learning process and instructional design. According to Edgar Dale Learners are more likely to remember what they do compared to what they read, hear, or see. His creation of the cone of experience was based on this. The least effective way to learn, according to Dale's scientific study, is by hearing words uttered to you. But he hypothesized that one must really accomplish something in order for learning to be most effective. To put it another way, active participation in the learning process leads to successful learning. For example, participating in role playing, dramatization, and field trips are examples of active learning The retention rate for every method of instruction may be seen by taking a quick look at the cone.

A person moves farther down the cone the greater or stronger their learning or memory rate. Therefore, it can be concluded that teachers should consider using tactics that include students in the learning process when selecting their teaching methods because this will increase the students' retention rate. Dale believes that educators should create lessons that are based on the real world experiences of their pupils. This hypothesis is important for this study because it shows that in order for students to retain 90% of what they are taught, they need to be actively participating in the educational process. With the advent of audio visual aids in the educational process, most students' senses are now included, and their learning is even realized. Thus, this way of Thinking makes it possible to employ audiovisual tools in the teaching process. Thus, it helps the researcher or teacher to understand how students' academic performance is impacted by audiovisuals.

Wazeema (2017) looked at the impact of multimedia visual aids in English language schools.The goal of this study was to show how beneficial it is to use audiovisual resources in South Eastern University of Sri Lanka offers English language education. With a total of 80 individuals, the study used a deliberate sampling method. The main information sources were in person observations and interviews. For secondary data.We looked through documents, diaries, records, yearly reports, and websites. A descriptive overview of the data collected was created using both quantitative and qualitative data analysis methodologies. The findings showed that facilitators are still using the same tried and true teaching techniques. Every student, with the exception of one, concurred that using multimedia audin visual aids is a good method to inspire students, engage them in language lessons, maintain their enthusiasm for learning, and increase their attendance and academic success. Lack of technological resources and a lack of teacher training, experience, and skill have been blamed for the poor utilization of multimedia audio visual aids, which creates a poor environment for English language learners. López (2022) found that using audio visual resources and assistance to teach English is beneficial. The study also revealed a lack of enthusiasm for administering these tools properly. What and how audio visual aids should be used can be inferred from this debate. Given this, more research is required to determine the causes behind the school administration's lack of interest in utilizing information technology and audio visual aids as they need to be used.

According to Jiménez Escobar (2021), using audio visual aids and technology in the classroom mediates the gap between pupils who learn quickly and those who learn slowly. When it comes to understanding what is being taught to them in the classroom, these technicians go above and beyond. As a result, these tools helps in creating a consistent class. Students can accomplish learning goals and improve the

standard of education when they are sufficiently taught to employ a range of abilities. Therefore, the employment of instructional visual aids may make all of this feasible. When audio visual materials are not used Students' understanding rates are delayed in the classroom, which results in poor skill recruitment and retention. Students do less in school and are less inclined to seek further education as a result. The utilization of video media to enhance second-grade students' learning abilities at Sman two Grabag of senior high school is published by Fatma Riftiningsih (2018).

The screen needs to be sufficiently broad for pupils at the back to view well. Students will become irritated when professors pause and resume movies after a little interval. The author intends to evaluate the method, which includes using media in the teaching process, giving students time to ask questions, and providing certain questions so that students may assess their own abilities. Teachers ask students to retain what they have taught them in order to observe how they listen to learning skills, learn how to assist with teaching, and conduct research. Teachers greet students and make an effort to get to know them. Good morning, classmates. How are you? After that, teachers explain to the class what they will be learning that day. For example, "Today we will learn about pollution."Other consequences of inadequate use of audio visual as pointed out are: a high unemployment rate, a severe drop in academic achievement and practical expertise, and an increase in social disorders. Students' performance and practical knowledge will significantly deteriorate if they do not acquire the foundational information necessary to develop the necessary skills early in life. High unemployment rate: It is difficult for a student to start anything for themselves if they are unable to complete their education He is unable to find a suitable employment and is hence unemployed as he lacks the abilities required to pursue higher education. Growth in the Rate of Societal Illness: acquiring skills can allow a youngster advance academically from a lower level to a higher level, which will open up a variety of career options for him. However, because "an ideal mind is devil's workshop," a youngster who is unable to learn the fundamentals at his lower level of school and is also unable to pursue higher education may wind up engaging in prostitution, arm rubbers, and other societal problems.

Methodology

This quantitative study aims to investigate the effects of audio visual assistance on the learning process. The researcher created a methodology that was tailored to the nature and goal of the study before beginning any investigation.' This study employed a quantitative descriptive research design, in line with the study's goals and the specifics of the problem under investigation. This study examines how student achievement is impacted by learning digital media and delivery. The study was quantitative in nature, and information from secondary school pupils at Narowal district was gathered using the survey technique. To gather the relevant data, the researcher adopted closed ended questionnaire. The study's population includes the Teachers and students from secondary schools of Narowal Descriptive survey was adopted for the study. Narowal has a total of 1,293 registered schools. Five secondary educational institution of Narowal city was selected randomly. Ten (10) teachers and forty (40) students from each institute were selected. Total Two hundred and fifty (250) people were included in the sample population of the study.

Sampling techniques

The researcher employed the random sampling approach in this study. Students as well as teachers from five Narowal secondary schools participated in this study. Two hundred and fifty persons were chosen randomly for the data gathering process, including | Fifty (50) professors and two hundred (200) pupils. The research tool used to collect data was questionnaires. Teachers were receiving a questionnaire, and pupils also received one. The technique of random sampling was employed. Close ended questionnaire was used to collect the data for this research. Two questionnaires were adopted. One for the teachers and second one for the students. The

questionnaire is a tool for gathering data that enables us to quickly and efficiently gather the most precise information.

Data Analysis:

Analysis of Variance percentage formula was performed to investigate responses depending on program selection and gender, enabling us to determine whether these groups differed significantly in their responses. Two correlation techniques were used to investigate correlations between variables because the data included variables with various distribution characteristics. For variables with a normal distribution, Pearson's correlation coefficient was employed, which provides information on the linear correlations between continuous variables. Spearman's rank-order correlation was used as a non-parametric substitute to evaluate the monotonic correlations between variables that did not satisfy the normality requirement.

Correlation of variables teachers

Table 4.20 Correlations

			Learning skills	communication skills	Learning outcomes	Teacher engagement
Spearman's rho	Learning skills	Correlation Coefficient	1.000	.893**	.908**	.908**
		Sig. (2-tailed)	.	.000	.000	.000
		N	50	50	50	50
	communication skills	Correlation Coefficient	.893**	1.000	.852**	.870**
		Sig. (2-tailed)	.000	.	.000	.000
		N	50	50	50	50
	Learning outcomes	Correlation Coefficient	.908**	.852**	1.000	.893**
		Sig. (2-tailed)	.000	.000	.	.000
		N	50	50	50	50
	Teacher engagement with digital aids	Correlation Coefficient	.908**	.870**	.893**	1.000
		Sig. (2-tailed)	.000	.000	.000	.

	N	50	50	50	50

**. Correlation is significant at the 0.01 level (2-tailed).

Learning skills, communication skills, learning outcomes, and teacher involvement with digital aids are the four main variables whose Spearman's rank order correlation values are shown in Table 4.20. Because of the ordinal nature of the data or the assumptions of a non-normal distribution, the analysis was performed using a non-parametric technique. At the 0.01 level (2-tailed), all correlation coefficients are positive and statistically significant, suggesting that the variables have strong relationships:

- Communication skills (r = 0.893), learning outcomes (r = 0.908), and teacher use of digital aids (r = 0.908) are all strongly positively correlated with learning skills.
- Additionally, there is a substantial correlation between communication skills and teacher engagement with digital aids (r = 0.87) and learning results (r = 0.852).
- Teacher engagement and learning outcomes are strongly correlated (r = 0.893).

These findings imply that teacher use of digital tools appears to improve students' communication and learning abilities in addition to having a favorable relationship with learning outcomes.

Correlation of variables students

Correlation Matrix Among Learning Skills, Communication Skills, and Learning Outcomes

Table 4.2.24

Correlations

		Learningskills	communicationskills	Learningoutcomes
Learningskills	Pearson Correlation	1	.745**	.682**
	Sig. (2-tailed)		.000	.000
	N	200	200	200
communicationskills	Pearson Correlation	.745**	1	.597**
	Sig. (2-tailed)	.000		.000
	N	200	200	200
Learningoutcomes	Pearson Correlation	.682**	.597**	1
	Sig. (2-tailed)	.000	.000	
	N	200	200	200

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.2.24 displays the findings of the Pearson correlation analysis, which was done to look at the connections between learning outcomes, communication abilities, and learning skills. All correlations are found to be positive and statistically significant at the 0.01 level (2-tailed), suggesting that the variables under study have substantial relationships with one another.

- There is a significant positive association (r = 0.745) between communication and learning abilities. This suggests that people who are better learners also typically have superior communication abilities.
- There is also a significant correlation (r = 0.682) between learning outcomes and learning skills. This implies that better learning outcomes are linked to greater learning skills.
- There is a moderate to high correlation (r = 0.597) between communication skills and learning outcomes. This indicates that learning results are positively impacted by proficient communication abilities.

In the context of this investigation, the results are dependable and generalizable because the sample size (N) for all correlations is 200. All things considered, these results lend support to the idea

that communication and learning abilities are significant predictors of learning results.

Results

The results concludes that audio visual aids improve the learning environment by increasing student motivation, enhancing instructional interactivity, and raising academic achievement. However, systematic efforts are needed to guarantee regular use, appropriate alignment with curriculum goals, and sufficient support for teachers if their promise is to be fully realized. By taking into account these elements, digital and audio visual aids can be extremely useful in forming efficient and student focused secondary schools.

Strong favorable correlations between learning skills, communication skills, teacher use of digital tools, and overall learning outcomes were further supported by the correlation analysis. Specifically, the substantial correlations (varying from 0.852 to 0.908) demonstrate that students' academic performance, confidence, and communication all improve when teachers actively incorporate audio visual aids. This implies that digital tools are essential for developing 21st century abilities like teamwork, creativity, and critical thinking rather than only being supplemental tools. This was also seen in the current study, where the utilization of digital tools increased students' attention and engagement.

Discussion

The study's findings demonstrate that digital audio visual aids significantly enhance secondary school students' learning abilities. When teachers used digital resources like slideshows, animations, and videos, students were able to participate more actively in class activities, retain material longer, and comprehend lessons better. This demonstrates that, in contrast to conventional lecture techniques, audio visual resources are highly beneficial for increasing learning effectiveness. These results are consistent with research by Nicolaou (Heraklion, Greece, 2019), who discovered that technology based learning makes the classroom more engaging and aids students in grasping the material more deeply. Similarly, this study demonstrates that the usage of digital aids improved secondary students' learning outcomes. The research results also support the representations made by Van et al. (2021) that digital media fosters critical thinking and teamwork. Similar findings were obtained in this study, which demonstrated that audio visual aids promote interactive learning by increasing students' engagement in group projects and conversations.

These findings are also supported by McLaughlin and Byrne's (2020) research. They clarified that abstract concepts are easier to relate to actual circumstances when presented in digital graphic form. The similar effect was seen in this study, when students found it easy to connect classroom theories with real world situations through visual aids. Jimenez Escobar (2021) also emphasized how digital tools enhance memory and lessen confusion. The current study also found that using films and visual aids improved students' ability to remember material.

The study backs up Dale's Cone of Experience (1946), which holds that students retain information better when they combine visual and auditory experiences rather than only listening to professors. Students in this study improved their comprehension, communication, and problem solving abilities with the use of digital audio visual assistance. All things considered, this conversation demonstrates how successful digital audio-visual aids are in secondary education. They enhance comprehension and memory, keep students motivated, and make learning more participatory. In order to improve students' learning abilities and better prepare them for their future studies, teachers should make regular use of these resources. The results of this study clearly show that digital and visual audio visual aids significantly and favorably influence the secondary school educational system. Both educators and learners had complete confidence that these resources improve student motivation, simplify difficult ideas, and foster a more stimulating learning environment. For instance, over 80% of the students said that their engagement and understanding were enhanced by films, animations, and multimedia materials.

Teachers also said that these tools improved time efficiency, classroom management, and lesson delivery. These findings are in line with other research that indicates incorporating multimedia into lessons improves student attention, motivation, and retention.

Conclusion

The purpose of this study was to investigate how digital audio visual aids can improve learning for secondary school students in Narowal. The findings unequivocally demonstrate the critical role these tools play in enhancing the teaching learning process. Visual aids improve student motivation, make difficult subjects easier to understand, and foster an interesting learning environment, according to both teachers and students. The correlation data further demonstrated the substantial relationship between the usage of digital aids and learning outcomes, communication skills, and learning skill, it is clear that audio visual aids are not only beneficial but also necessary in today's classroom. They support teachers in delivering lessons more successfully while also assisting students in developing critical thinking skills, confidence, and improved knowledge retention. However, numerous obstacles that can limit their full potential were also mentioned, including a lack of training, technical difficulties, and limited finances.The study highlights how digital audio visual aids can greatly improve students' learning results and give them critical 21st century abilities when they are appropriately incorporated and supported. Therefore, in order make sure that these tools are utilized consistently and successfully in classrooms, educational institutions must concentrate on offering sufficient resources, training, and assistance.

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