



# A STUDY OF ATTITUDE OF USING MODERN AUDIO VISUAL EQUIPMENTS IN PEDAGOGY OF PHYSICAL SCIENCE STUDENTS

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## ABSTRACT

The study sought to investigate the impact of audio-visual assisted instruction on Physical Science students' attitudes towards their pedagogy. The collected data were connected with the kids' science equipment. The purpose of this article was to conduct a survey of the usage of current audiovisual aids in the learning of physical science pedagogy at certain chosen upper secondary schools in Tiruchirappalli. To address the issues raised by the survey, questionnaires were distributed to students to assess the availability, use, and attitudes towards modern audiovisual aids in the pedagogy of physical science teaching in selected higher secondary schools in the local government areas of study. According to the data, there is a significant variation in students' attitudes towards contemporary audiovisual aids based on gender and location. As a result, recommendations were made to the relevant authorities to offer and maintain current audiovisual aids in the study of pedagogy of physical scientific studies in order to promote learning among students and increase yearly performance and daily usage.

## 1. INTRODUCTION

Audiovisual media exposes students to real-world settings, encourages simulations, and creates interactive content to improve students' practical comprehension of the subject matter. This process will aid students in the Pedagogical of Physical Science Teacher. All sorts of contemporary progress require basic scientific understanding.

Education is essential for everyone. Education is extremely vital; without it, no one can live a decent life. Education relies heavily on teaching and learning. Audio-visual aids are educational technologies used in the classroom to promote learning and make it more entertaining. Material such as charts, maps, models, film strips, projectors, radios, televisions, and so on.

It is vital for the instructor to employ current audiovisual assistance material as instructional tools in order to make their teaching more attractive, that is, to excite the learners' interest and sustain their attention for successful learning. However, many higher secondary schools lack teaching materials such as audio/visuals, and even when they have, teachers do not use them effectively.

This attitude might be attributed to instructors' involvement in a wide range of relevant and irrelevant activities. Some teachers' eagerness and hurry to cover the syllabus or program of work, rather than making their instruction more relevant and conveying.

Often time some teaching goals depend on material for planning and utilization of instructional material for some teacher the production of instructional material is only for passing their examination the training college and not for actual use in the classroom. There is also the issue of audio/visual inaccessibility, which cannot be placed only on teachers. Heads frequently fail to inspire teachers to provide educational resources.

Furthermore, most schools lack cash, making it impossible to obtain the necessary audiovisual aid. In general, failing to integrate audio/visual material in the teaching of social studies results in a lack of interest among students in learning activities, which affects academic performance and prevents students from absorbing lessons at their own rate and speed.

## 2. REVIEW OF RELATED LITERATURE:

**Idris (2018)** defines audio-visual as the combination of various digital media type such as the text, images, sound and video into integrated multi-sensory interactive application of presentations of convey the message and information audience.

**Lukman (2021)** explain that the Impact of audio-visual resources can be significant in teaching, thus making learning permanent. Audio-visual methods seem to facilitate the acquisition, retention, and recall of lessons learned. However, it is a reality that if a teacher needs to learn how to utilize audio-visual materials, learning still does not take place.

**Rasul, et. al (2011)** This study designed to analyse the effectiveness of audio-visual aids in teaching learning process of the university levels. By probing into this relationship, educator, researchers, and polymakers can clean valuable potential of the science instructions.

**Chijioke and Ekwueme (2022)** The students taught with audio-visual aids were better than the equivalents taught matching with the printed material, while much research has focused on students learning outcome.

**Labinska et. al (2020)** Students showed an increase in their performance in learning and using the English language using audio-visual material. The result demonstrate that when teachers use authentic audio and video performance professional material affect of students sensory system of Science Education.

## 3. PURPOSE OF THE STUDY

The purpose of this present research work is to identify the following.

- ❖ Making teaching and learning more interesting and giving student opportunity to participate.
- ❖ Examining the effect of modern audio visual aid material in student's performance.

## 4. OBJECTIVES OF THE STUDY

- To find out the significance difference between Male and Female students in their Attitude of Using AV Equipments.
- To find out the significance difference between Rural and Urban students in their Attitude of Using AV Equipments.

## 5. HYPOTHESIS OF THE STUDY

- There is no significance difference between Male and Female students in their Attitude of Using AV Equipments.
- There is no significance difference between Rural and Urban students in their Attitude of Using AV Equipments.

## 6. DESIGN OF THE STUDY

The present study is mostly a descriptive survey approach. It is descriptive because it seeks to characterise the nature and current state of the phenomena, with the goal of using facts to justify current circumstances and practices or to devise more intelligent strategies for changing them.

## 7. SAMPLE OF THE STUDY

In the current study, the population was also quite huge and spread throughout all higher secondary school pupils in the Tiruchirappalli districts of Tamil Nadu. As a result, the investigator researched random selection techniques in order to choose a representative sample from the whole Tiruchirappalli district.

## 8. TOOLS OF THE STUDY

The investigator made genuine attempts to select acceptable measures to test attitudes towards adopting current audiovisual aids. The tools were chosen for two reasons: their applicability to the population and their ability to fulfil the rigorous reliability and validity requirements required of psychometric instruments.

## 9. HYPOTHESIS TESTING

### Hypothesis – 1

There is no significance difference between Male and Female students in their Attitude of Using AV Equipments.

**Table.1 difference between Male and Female students in their Attitude of Using AV Equipments**

Gender	N	Mean	SD	t-Value	Sig. (p-value)
Male	395	110.86	10.376	0.926	0.356
Female	391	110.08	10.676		

The results indicate that there is a statistically not significant difference between the mean Attitude of Using AV Equipments score for males and females ( $t = 0.926$ ,  $p > 0.05$ ). In other words, females have a statistically significantly lower mean score on attitude (110.08) than males (110.86). Hence, the null hypothesis accepted.

**Hypothesis – 2**

There is no significance difference between Rural and Urban students in their Attitude of Using AV Equipments.

**Table.2 difference between Rural and Urban students in their Attitude of Using AV Equipments**

Locality	N	Mean	SD	t-Value	Sig. (p-value)
Rural	146	110.08	10.692	0.506	0.618
Urban	640	110.41	10.500		

The results indicate that there is a statistically not significant difference between the mean Attitude of Using AV Equipments score for rural and urban students ( $t = 0.506$ ,  $p > 0.05$ ). In other words, urban students have a statistically significantly higher mean score on attitude (110.41) than rural students (110.08). Hence, the null hypothesis accepted.

**10. CONCLUSION**

Classroom instruction is an integral part of the teaching and learning process. To be more effective in presenting the lesson, teachers employ audio-visual tools to provide interesting and relevant activities during class discussions. According to the data, there is no substantial difference in male and female students' attitudes towards using AV equipment. And there is no substantial difference between rural and urban students' attitudes towards using AV equipment. As a result, requests were made to the relevant authorities to offer and maintain current audiovisual aids in the study of pedagogy of physical scientific studies in order to promote learning among students and increase yearly performance and daily use.

**REFERENCES**

1. Tennant, R. (2008). On the move with Mobile Web: Library and Mobile Technology. Library Technology Reports, July, 44 (5).
2. Rismark, M., Solvbery, A. M., Stromme, A. and Hokstad, L. M. (2007). Using Mobile Phones to Prepare for University Lectures: Student's Experiences. The Turkish online Journal of Educational and Technology (JOJET), Volume (6), Issue(4) Article(9).
3. Roberts, T. G., Iran; T. A., Telg, W. & Lundy, L. K., (2005). The development of an instrument to evaluate distance education courses using student attitudes. The American Journal of Distance Education, 19 (1), 51-64.
4. Traxler, J. (2003), M-Learning – evaluating the effectiveness and the cost. Proceeding of Mlearn 2003 :
5. Dr. Balamurugan. R (2024), A Study on Attitude towards of Using Modern Audio Visual Equipment in Science Students. International Journals of current Research 16, (05), 28650 – 28622.
6. Salomon, G. (Ed.). (1993). *Distributed cognitions: Psychological and educational considerations*. Cambridge: Cambridge University Press.
7. Afolabi. A (2012). Effect of video on the teaching of library studies among undergraduate academic of education, onto. Retrieved from studies.
8. Donker. F (2010). The Comparative Instructional effectiveness of Print based and video-based Instructional material for teaching Practice Skills at a distance. Winneba, Ghana: University of Education.
9. MNHS Records, (2014) National achievement test result in Science of maypangdan National High School for sy (2013-2014) database.

10. Chijioke, O and Ekwueme. O (2022), Effect of audio-visual aids on students a Academic achievements in Mechanical Engineering Craft Practice in Technical Colleges in Reverse States. East Asian Journal of Multidisciplinary Research (EAJMR) vol.1, No: 11 2022; 2769-2778.
11. Labinska. B., et. al (2020), Enhancing learner's Communicative Skills through Audio-Visual means. Revista Romanesca Pentru Educative Multidimensionala 2(2), 220-236.
12. Sarchenko. A (2021), The Pros of Audio-Visual Learning in Education.
13. Street. E (2017), How laptops in classroom Improve Students Learning and Technology.

