

The Use of Instructional Technology in Private Schools and National Education Policy

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Abstract

Audio Visual Aids (A.V. Aids) are devices, which are used in teaching to make the learning experience more effective and dynamic. A.V. Aids have made improvements in learning process through involving the sense of hearing and/or sense of sight. The history of the A.V aids can be traced back to the Greek period, however, the technological advancement brought new innovations in the form of computer assisted programs and accessories. In comparison with developed countries, the developing countries including Pakistan experience the lack of modern A.V. Aids as well as the required technical know-how for their effective use. The aim of this paper is to explore the use of A.V. Aids, their type, teachers' training for their effective use, policy imperatives and role of private public schools in adoption of A.V. Aids in education in private schools in district Peshawar, KP province. To achieve objectives of the study, data was collected from teachers of private schools through close and open ended questionnaire. Information was also collected from books, government's reports, published research and internet. The findings show that A.V. Aids are used in all private schools in some form. However, there is no system to give formal training to teachers about the proper and effective use of A.V. Aids. The major A.V Aids used in schools are chalk board and white board, while about 60 % schools were found using pictures, maps, models charts and multimedia. The paper gives practicable suggestions to widen the use of A.V. Aids and enhance their effectiveness in education.

Keywords: A.V. Aids, Learning, Training, Education, Pakistan

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Introduction

The teaching profession is filled with countless opportunities to enrich the academic lives of students. A. V. Aids in teaching can enhance lesson plans and give additional learning ways to students. Bridge the gap between the different types of learners by adding audio visual aides to teaching techniques. Provide audio visual aides to demonstrate mathematical concepts to students. This will help students to think of complicated material in a practical way. It is believed that good instructor always used visual aids for making their instructions effective. Audiovisual education or multimedia-based education (MBE) is instruction where particular attention is paid to the audio and visual presentation of the material with the goal of improving comprehension and retention. After the use of films and other visual aids during World War II, audiovisual technology gradually developed in sophistication and its use became more widespread in educational establishments such as schools, colleges, universities, museums and galleries, as well as at tourist destinations, such as the purpose-built circular cinema.¹ Ancient Greek geometers were drawing diagrams of the earth. In order to enhance the interests of the learners, the Czech Comenius suggested the instructors to use pictorial explanations and models in teaching.

According to Kinder S. James,² Audio visual aid is any device which can be used to make the learning experience more concrete, more realistic and more dynamic. According to good's dictionary of education: A. V. 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 K. P. Neeraja: an audio visual aid is an instructional device in which the message can be heard as well as seen.³

By audio-visual aids, we usually mean the most modern or the most recently used of these methods (films, filmstrips, radio and television). Visual aids are far older. Plato himself took care to set the scenery of his dialogues, and he used concrete words and concrete comparisons (for example, the cave) as foundations for his most abstract ideas.

Classifications of A.V. Aids

Various classifications are given for A. V. Aids according to the type of projection,

- Audio aids: Audio materials are those which can be heard. Ex: - radio, tape recorder, walkman, Headphones.
- Visual aids: these are helpful to visualize the things. Ex:- graphic aids, 3d-aids, display boards, and print material.

- Audio visual aids: these aids can be heard and seen simultaneously. Ex:-projected aids, TV, films.

Private Schools

The private school is a school under financial and managerial control of a private or charitable trust accepting mostly fee paying students. Thus private school means those schools that are not financed by the state.⁴

The private schools are gaining recognition both in the developed and less developed countries. The different private schools are managed and run by foundations in US. In Ontario, (a province of Canada), the people prefer the private schools due to better facilities than that of public schools.⁵ Other studies were then released to demonstrate that charter schools produce greater gains in student learning.⁶

In Pakistan, the private schools are completely owned by a person or an organization and they take monthly / per semester or annual fee.⁷ According to Gilani,⁸ a survey carried out by Gallup Pakistan in 2009 more than half of the respondents (59%) claim to prefer private schools, a higher percentage of people (70%) have enrolled their children in government schools. One of the main reasons for sending children to government schools is affordability. In Pakistan the private sector is contributing up to greater extent. It helps both in the qualitative improvement and quantitative expansion. These private schools have been attracting parents much more as compared to the government schools for the last several years. They are successful in their aim and mission.⁹

There is a wide network of schools and colleges in the district Peshawar educating the public. The private schools are performing their role in educating public along with the government sector.

Private Schools Using A.V. Aids: The Global Perspective

Froebel Frederich (1782-1852) formulated the theory of play and activity as being the young child's most powerful learning tool in all areas. Most advanced countries and societies have incorporated this method in their educational curricula. The American started around 1856. The British, French, Russians and advanced countries of the world employ play-way system of teaching/learning for nursery and young children. The aids are very adequate for the younger learners, it is not as relevant to advance learners because their ability to create, construct, comprehend, make conclusion and make value judgment are required. To be able to make English language lessons enjoyable creativeness becomes necessary at this level.

According to Andre Lestage,¹⁰ in underdeveloped countries, the lack of qualified personnel and equipment is the most frequent obstacle to such an initiation. But it is not the only one because similar shortcomings are often found in more superior countries. Routine, lack of initiative and administrative delays are the main factors responsible for educational slowness. There is no doubt that audio-visual aids produce their best results when they are used in connection with active teaching methods.

According to Takeshi Ikeuchi,¹¹ in Japan many kinds of audio-visual aids are being manufactured and the quality of such instruments is improving in almost a regular six-month cycle. This is owing to the ongoing advancement of high technology. Actually various kinds of audio-visual aids are currently being used at schools to serve their educational purpose. However the present situations reveal that the time spent using audio-visual aids at school is rather limited and a drastic change to use more aids does not seem to be expected in the near future. We know for certain that almost all high school students either privately owns various electronic tools which could be used as audio-visual aids or can use them freely at home. Therefore using those instruments at home would extremely benefit students by improving their listening skills.

Asokhia,¹² stresses the need to make English language lessons easy and enjoyable through the use of instructional aid/improvisation in Nigeria. The poor performances in English language in most schools are the fact that the teaching of it is text book dominated. Teachers do not have regular supply of the teaching aids and where they are available they are so inadequate. The cost of purchasing of these visual aids is quite enormous. Though the Federal, States and schools private owners are aware of the importance of facilitating learning with teaching aids yet, they cannot do much because of high foreign exchange rate and the poorly monitored economy of the country. Besides the high foreign exchange rate, is the fact that some of the visual aids do not readily rate, fit into the cultural environment of the users.

English language programs in public and the ‘mushroom’ private schools today is textbook dominated. This theoretical thinking is too rigorous for the young children. The types of programs we need today are such that are very much alive, energetic, relevant and meaningful.¹³

In New Jersey, the County educational audiovisual aids centers authorized the boards of education of two or more school districts in any county may by resolution adopted by a majority vote of all of the members of each such board, determine to establish a county educational audiovisual aids center. County educational audiovisual aids commission supervises manage and control of such center. The commission shall provide, maintain and furnish educational audiovisual aids to the public

schools of the participating school districts and shall provide such facilities, but shall not make expenditures or commitments in any year in excess of the funds available for that year.

The commission may contract with nonprofit, private schools within the county to provide, maintain and furnish educational audiovisual aids to such private schools. Before contracting with any nonprofit, private school, the commission shall submit the terms of the contract to the member boards for review, which terms shall include a description of the educational audiovisual aid to be furnished, the amount of payment and the time for payment.

On or before September 30 of each year the commission shall prepare a tentative budget of the sums required by said commission in carrying on its activities for the following year so itemized as to make it readily understandable, together with a statement of the amount to be assessed against each participating school district for such year, and shall deliver the same to the board of education of each of the participating school districts before the date of the October meeting of such board. Every board is hereby authorized to make use of television as an educational aid by contracting for the services of any noncommercial, nonprofit educational television station located within or without the state but such contract shall not require the board to incur expenses in any one year period in excess of an amount equal to \$2.00 per pupil in resident enrollment in the district.¹⁴

Teaching at the higher levels may not easily be achieved through the meager use of teaching aids. At such level creativeness becomes very necessary. Improvisations are task-driven opportunities designed to stimulate spontaneous peer interaction in the target language.

Mohan, L et al.,¹⁵ studied that students favor teaching methods employing audiovisual aids over instructive lectures not using these aids. 41.1% were female students. 85.3% of the students preferred the use of audiovisual aids during didactic lectures. A mixture of audiovisual aids during instructive lectures was preferred (42.4%), especially for understanding a particular topic. Females were more likely to take notes during the class lecture. Males preferred handouts over self made notes. Students from government institutions preferred power point presentations for understanding the subject matter, while those from private schools preferred the blackboard. They concluded that their study demonstrates that lectures delivered by using a mixture of A. V. Aids are more appreciated by the students. Furthermore, the lecture should be constructed in a fashion so as to enable the students to gather factual information easily and in a concise manner. Teachers should note that the

students preferred a combination of visual aids and were interested in taking notes during lectures.

In Barbados the Education is based primarily on the British model. There are presently 20 registered private schools, 7 assisted private secondary schools. There are 2 departments, namely, A. V. Aids and School Meals Department and The Education Project Implementation Unit. In 2009, Ronald Jones as the Minister of Education and Human Resource Development said the Barbados government spent \$290 million to upgrade the schools with information technology.

Use of A.V. Aids in Pakistan

According to Dahar, M.A and F. A. Faize,¹⁶ the education system of Pakistan is still underdeveloped. Funds for education are very less and goals and targets are very large. These goals and targets can be achieved by multiplying the growth rate. The higher growth rate can be achieved only if the resource inputs are effectively used in the education process at all the levels of education in the country. Therefore, it is recommended that the efficient use of A.V. Aids should be ensured in the lesson plan for a school level class. The policy implication of the study is that the use of A.V. Aids can have an enormous effect on the academic performance of students if the standard quantity and quality of A.V. Aids are properly allocated, equalized per student and efficiently used.

The Ministry of Education, in consultation with Provincial/Area Education Departments, constituted a committee to design and recommend a Textbook Policy for improvement in Textbooks and Learning Materials (A.V. Aids). A comprehensive dialogue, involving all stakeholders, led to the notification of a 'National Textbooks and Learning Materials Policy and Plan of Action' in June 2007. The objective of the exercise were improvement in the quality of education at all levels through better quality textbooks at affordable prices and other learning materials for promoting Pakistan as a knowledge-based society. Choice and competition are major forces in achieving this objective. Choice on the part of the buyer promotes acquisition of knowledge, empowerment and participation. Competition on the part of the producer leads to a wider variety of products, improved quality, availability and better prices.¹⁷

Use of A.V. Aids in Khyber Pakhtunkhwa

According to S.M. Akhtar,¹⁸ in NWFP (Now Khyber Pakhtunkhwa) 20% principals of schools stated that the availability of A.V aids is in very less and more than 20% principals stated that the A.V aids are available in reasonable quantity. The study discovered that the educational

technology is not accessible for students, especially radio, television, video cassettes, CD's, audio cassettes, drama and documentaries. The majority of schools are not arranging the educational exhibition and study trips. It was found that the computer is ignored during science practical.

Objectives of the study

In order to achieve aim of the study, the following objectives were set for the study;

- To explore the existing tools used as A.V. Aids in private schools of Peshawar.
- To know the perception and techniques used by the teachers in private schools.
- To describe the basic facilities and problems faced by teachers and students of the private schools in the study area.

Methods and Materials

Data Collection

The research methodology used various sources and techniques to gather Primary and Secondary data as described below;

Primary Data

Primary data was collected through field surveys using questionnaire. Close end and open end types of questionnaire were used for the collection of primary data, from private school teachers. About 30 schools were selected using stratified random sampling method for the survey.

Secondary Data

Secondary data was collected from library, books, journals and internet.

Data Analysis

Data was analyzed and presented with the help of basic quantitative techniques and computer accessories (Microsoft Excel, Microsoft Word).

Results and Discussions

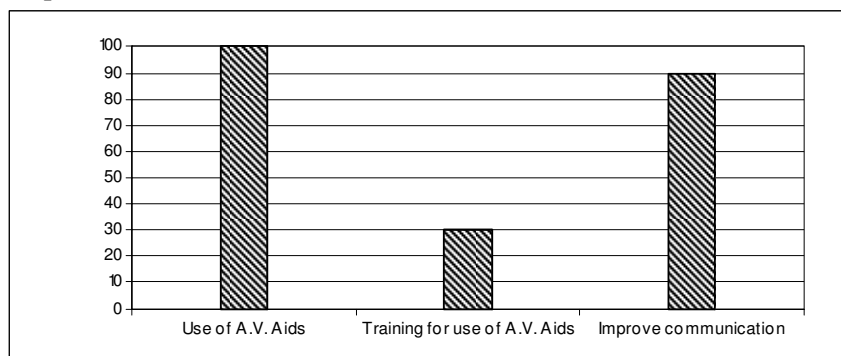
The study was carried out to determine the use of Audio and Visual teaching aids in lesson plans in private schools in Peshawar in term of use, availability, type of A.V. Aids and expertise of teachers in their use.

Table- 1 showing the trend of using of A.V. Aids in private schools.

Use of (A. V. Aids) in teaching	%age
Use of A.V. Aids	100
Training for use of A.V. Aids	30
Improve communication between teacher and Students	90
Type of tools used as A.V. Aids	
Chalk board and white board	100
Picture, Models, Chart and Maps	60
Computer and multimedia during teaching	30
Radio broadcast in teaching	0
Change due to use of A.V. Aids	
Change in use of A.V. Aids compared to past	100
Change in Quality of Education due to private sector involvement	100

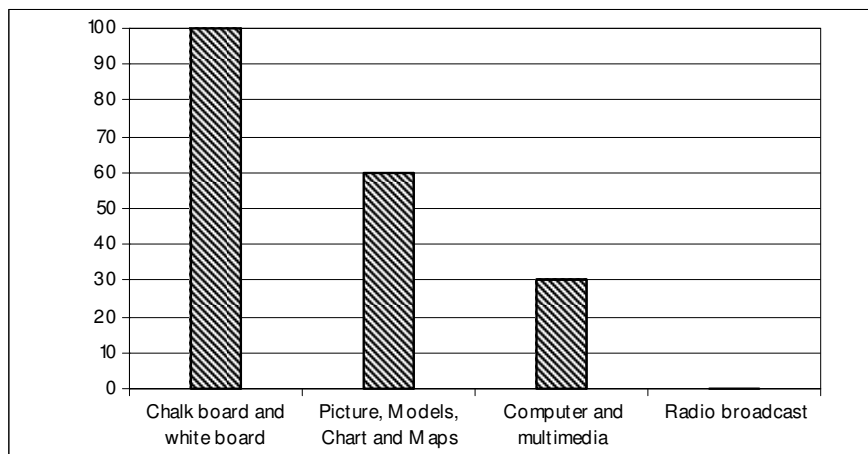
From this table, we can see the trend of using of A.V. Aids in private schools. In all of the private schools, the A.V. Aids are used in some form. The disappointing thing is that there is no system to give formal training to the teachers to use A.V. Aids. Use of chalk board and white board is use in 100 % schools. 90 % schools head believes that the use of A.V. Aids improve the communication between students and teachers. In 60 % schools the Pictures, maps, Models and charts are used as A.V. Aids and in 60% schools the multimedia is used. There is no use of Radio broadcast in visited private schools. 100 % teachers of the private schools believe that there is change in the use of A.V. Aids as compared to past and 100% of the teachers think that due to the private sector involvement, the quality of education has become better.

Graph 1: Use of Audio visual Aids



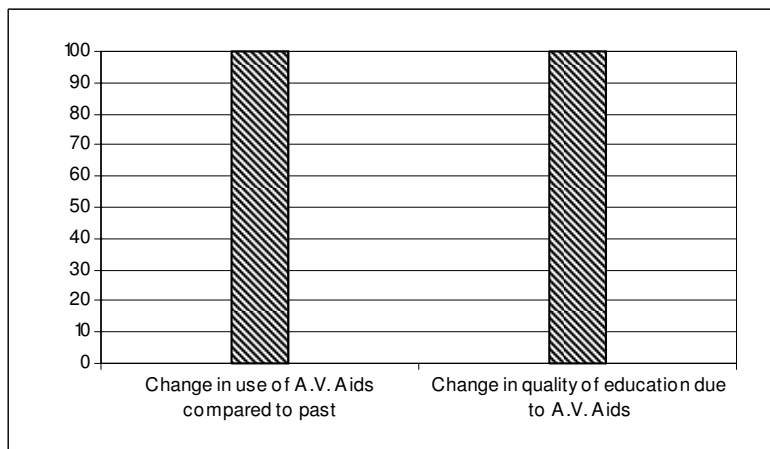
This table shows the use of A.V aids in %age. 100 % teachers use A.V. Aids during class room teaching. Satisfactory point is that about 30 % teacher were properly trained for the use of A.V. Aids.

Graph 2: Tools use as A.V. Aids



This Graph shows the objects and class room accessories used as A.V. Aids in Class room teaching.

Graph 3: Change due to use of A.V. Aids



This Graph shows the change in use of A.V. Aids and the quality of Education by private sector involvement.

A.V. Aids and National Education Policy Guidelines

There are several guidelines and policy actions in the National Education Policy 2009 of the government to improve the quality of textbooks and learning materials i.e. A.V. Aids. The objective is to bring improvement in the quality of education at all levels through better quality textbooks and other learning materials to transform the country into knowledge-based society.

The policy prescribes a well regulated system of competitive publishing of textbooks and learning materials. For that purpose the private companies shall be encouraged to produce learning materials and create competition for better output. This situation will lead to a wider variety of products of improved quality, their availability at affordable/better prices. The new system of regulated competitive preparation of learning materials shall be implemented with the introduction of revised National Curricula of the National Education Policy 2009. The online library libraries connected with internet shall be established in elementary, secondary and higher secondary schools in a phased manner. Moreover, the Federal as well as Provincial Governments shall enhance investments on teachers training and provision of learning materials (A.V. Aids).

Conclusion

The private schools are privately owned and continuously struggling to get distinction in the race of quality education. The private schools are gaining recognitions throughout the world because of better performance. There is proper system of training and monitoring in developed countries. Surveys and research proved that the students take more interest in class lecture equipped with A.V. Aids.

A.V. Aids are used in Pakistani private schools as per their standard. There is no proper program of formal training on use of A.V. Aids under the National Education Policy 2009. The major A.V aid used in entire private schools is the chalk board and white board. 90 % head of the private schools are agreed that teaching equipped with A.V. Aids can improve the communication among students and teachers. More than half of the teachers in private schools use the pictures, maps, models, charts and multimedia. The difference noted regarding use of A.V. Aids in private schools of developed countries and the private schools of Peshawar (KP) is no use of radio broadcasting and television. Over all we noted change in use of A.V. Aids and quality of education because of private sector involvement; the noticeable changes are use of modern and digital A.V. Aids and field study etc.

One of the policy actions of National Education Policy 2009 is to enhance investments on teachers training and introducing high quality different varieties of learning materials (A.V. Aids). However, analysis of the data shows that so far there has been no remarkable progress on such provisions of the National Education Policy.

Suggestions

In order to increase the use of A.V. Aids and their effectiveness in teaching at the school level, the suggestions are underlined below:

- *Availability of A.V. Aids in Schools:* Unavailability and deficiency is a barrier in effective use of A.V. Aids. According to National Education Policy 2009, a well regulated system of competitive manufacturing of A.V. Aids and their incorporation in the curricula shall be introduced. This policy provision should be implemented at the earliest to eliminate deficiency of A.V. Aids.
- *Effective Use:* Use of AV. Aids in right time can make teaching effective. It is an integral part of curriculum and should function as an essential part of the educational program. The teacher should use A.V. Aids in a proper situation to add visual clarity to concepts, ideas, and for focusing the attention of the target group on key points. Teacher should use the A.V. Aids to summarize or for sequencing of content, preparing charts and graphs for visual interpretation of statistical problems to illustrate his statement. The goals for using A.V. Aids in primary classes could be achieved by making the presentation interesting for the students.
- *A.V. Aids incorporation in curricula:* The use of A.V. Aids can be made assured by incorporating it in school curricula. Better results could be achieved by adopting it as a part of course or practical work.
- *Trainings for effective use of A.V. Aids:* Trained teachers can use the A.V. Aids effectively. Therefore, A.V. materials should be used in sequence to eliminate duplication. The Federal and Provincial Governments should increase investments in teachers' guides and teachers' training for effective and proper use of learning materials. The same is also required under the current National Education Policy 2009.

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