



INSTRUCTIONAL TELEVISION: ITS NEEDS AND POSSIBILITIES

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ABSTRACT

In the early days, an instructor used to deliver his speech live or via videotape to the audience. The students could get the lecture/class at home and ask questions for better clarifications. Instructional video is an important tool to enhance and strengthen the effectiveness of the teaching/learning process in the classroom. Television has made the communication system more and more facilitating and comfortable in all fields of the society. It has made broadcasting of cultural, educational and also commercial in the way to help and assist the people to get knowledge and information by which they can upgrade their occupations.

Of course, mass media in education may play a distinct role for facilitating the learners with more effectiveness. Radio, CD/DVD cassettes may give some opportunities to the students for self-learning. Television and education in the classroom are often thought to be the two things that don't mix all that well. Previously, television was thought to be a thing only for enjoyment and killing the spare time. It cannot enhance the capacity and productivity of the people. But, gradually, this concept has been changing day by day. The people can learn a lot of things by seeing the television. There are now, a variety of content and different types of programmes on the television like fictional dramas, soap operas, documentaries, news and lifestyle programs and besides this, there are educational programs that are meant for both the learners and the teachers in school and the people who are interested in a particular topic.

The best teachers realize and understand that even a perfect or good lesson plan won't help students learn if the students aren't engaged by themselves. If the students are actively involved in classroom activities then it may stimulate thinking, encourage interaction and support collaboration may excite the students to learn.

TVs in its initial stages primarily provided recorded lectures and educational television programs. But classroom technology has come in the last half century. Hence, today, the educators bring a new life to the classroom by integrating television with technology to create a more engaged classroom situation. Smart TVs, Apple TVs and Whiteboards are almost similar to play its own role in favour of the students in the classroom. TV is an excellent technological device for illustrating facts or themes, describing context, and generating interest. Since it is not a truly interactive medium, so care has to be taken in such way so that the students can have less chance to speak about their difficulties in going through the lesson presented by the TV. As there is no provision for interaction, so, the teacher should play his role in finding out the difficulty and complicity in terms of the lesson being presented by the TV and also to clarify very well. Hence, the teacher will have to be the middle person to help and assist the students. An especially effective use of video is engaging student to pay interest by providing an introduction and also presenting a lesson. After such a presentation, which generally lingers for five to fifteen minutes, the teacher has enough time remaining to teach the students with relevance to the lesson presented by the TV and to cooperate with the students individually to ensure that they have comprehended the lesson.

Keywords:

INTRODUCTION

In the early days, an instructor used to deliver his speech live or via videotape to the audience. The students could get the lecture/class at home and ask questions for better clarifications. The terms like 'distance education' and 'technology mediated instruction' both have been very popular in the field of higher education. It is seen that technology is a cost-effective way to increase enrolments and to attract the learners. Mediated instruction is related with electronic mail and web pages. Instructional technology (ITV) is the most common form of mediated instruction.

Instructional television has been in practice since the past few decades. Instructional television (ITV) has been generally used in the field of distance education. Instructional television programme may be less than one half hour long (generally 15 minutes in length) to cope with the teaching-learning situation of the classroom. Instructional video is an important tool to enhance and strengthen the effectiveness of the teaching/learning process in the classroom. Television has made the communication system more and more facilitating and comfortable in all fields of the society. It has made broadcasting of cultural, educational and also commercial in the way to help and assist the people to get knowledge and information by which they can upgrade their occupations.

Of course, mass media in education may play a distinct role for facilitating the learners with more effectiveness. Radio, CD/DVD cassettes may give some opportunities to the students for self-learning. In absence of the teachers, the students can listen to the lectures of the teachers. The students may set some probable questions for clarification and may consult with the teachers directly over telephone or directly meeting the teachers. Today the computer and internet has been playing significant role in supplying different educational analysis and descriptions for assisting the needy learners. E-mail or messenger system has also upgraded the system one step more.

However, it is seen that these mass media items have been playing more important roles in the field of distance education. In distance education, it is of course necessary to apply these mass media items as there is no direct communication in between the learners and the teachers. But, it should be taken with importance that whether there is any effectiveness of the mass media items in the traditional classrooms.

The **Satellite Instructional Television Experiment** or **SITE** was an experimental satellite communications project launched in India in 1975, designed jointly by NASA and the Indian Space Research Organization (ISRO). The project made available television programmes which offered different information to the rural people of India. The main purposes of this sort of experiment were to educate the poor people of India on various issues via satellite broadcasting so that they can be able to better apply their knowledge in their own occupation for extending good result. The experiment was handled for one year from 1 August 1975 to 31 July 1976, covering almost 2400 villages of 20 districts of six selected Indian states and territories. The six states are Andhra Pradesh, Bihar, Karnataka, Madhya Pradesh, Orissa, and Rajasthan. The All India Radio produced the television programmes which were broadcast by NASA's ATS-6 satellite stationed above India for the project. This project was supported and assisted by various international agencies like UNDP, UNESCO, UNICEF and ITU. The experiment became successful and it played an important role in the development of India's own satellite programme, INSAT. The project identified that India could use advanced technology to fulfill the socio-economic needs of the country. SITE was followed by similar experiments in a number of other countries, which also showed the important role of satellite TV which could provide education to a huge number of learners.

India was trying to launch its national space program under the leadership of Vikram Sarabhai. India was interested in the role of satellites for the purpose of communication and invited UNESCO to undergo a study for a project. Accordingly, UNESCO sent an expert mission to India to prepare a report on a pilot project for the use of satellite communication in between 18 November 1967 and 8 December 1967. However, on the basis of the positive report of the expert mission, a study team of three engineers from India visited USA and France in June 1967, and came to a decision that India could meet the technical requirements for the project. As a result, the Indian government set up the National Satellite Communications Group (SATCOM) in 1968 to look into the possible uses of a synchronous communications satellite for India. There were representatives from various cabinet ministries, ISRO and All India Radio (AIR) And Doordarshan centre in this group. This group recommended that India should use the ATS-6 satellite– a second generation satellite which is developed by NASA for an experiment on educational television.

The Department of Atomic Energy of India and NASA also signed an agreement in 1969 regarding SITE. The experiment was launched on 1 August 1975. The ISRO and NASA working group jointly studied about the possibility of using a communications satellite about TV broadcasting in India. Different review meetings were held in between NASA and ISRO scientists for this in 1969.

The United Nations Development Programme (UNDP) provided an amount of \$500,00 for setting up the Experimental Satellite Communications Earth Station (ESCES) at Ahmadabad and nominated the International Telecommunications Union (ITU) to be the executing agency for this project. Again another amount of \$1.5 million was offered by UNDP for setting up a TV studio at Ahmedabad and a TV transmitter at Pij in Kheda district. It also gave another assistance for establishing a TV Training Institute for giving training to the programme production staff of All India Radio to work on SITE. UNESCO was entrusted for being the executing agency for this project. UNICEF on the other hand contributed a lot to SITE by sponsoring 21 film modules which were produced by Shyam Benegal, a noted Indian filmmaker.

SITE showed that India could make use of advanced technology for fulfilling the socio-economic needs of the country. This made an increased focus on satellite broadcasting in India. ISRO began attempts for a country-wide satellite system. The Indian National Satellite System was launched by ISRO in 1982 after several technical experiments, The Indian space program was held using satellites for educational purposes. India launched EDUSAT in September 2004., which was the first satellite in the world built exclusively to serve the educational sector. EDUSAT is used to meet the need for an interactive satellite-based distance education system for India.

Television and education in the classroom are often thought to be the two things that don't mix all that well. Previously, television was thought to be a thing only for enjoyment and killing the spare time. It cannot enhance the capacity and productivity of the people. But, gradually, this concept has been changing day by day. The people can learn a lot of things by seeing the television. There are now, a variety of content and different types of programmes on the television like fictional dramas, soap operas, documentaries, news and lifestyle programs and besides this, there are educational programs that are meant for both the learners and the teachers in school and the people who are interested in a particular topic.

Daytime children's television programmes provide a lot of education-based content that aims to enhance interest in learning at an early age. Children, of course, may be watching these educational content, many cartoon and children's shows now involve an element of social education which teaches children for being a good person and to do contribute towards the society.

Of course, the television in the classroom should deal with the course contents in favour of the students. Many people prefer watching television to spending hours than reading textbooks and studying. The power of television in the classroom could potentially be exercised to consider both the teachers and the students to relate to their studies in an easier way, and have a more enjoyable and comfortable time doing it. Besides other activities, the teachers can benefit the students by making them interested through the means of educational and thought-creating television programmes which may be prepared on their course contents, in the classroom.

Television with the right content can do an impact with the study. The question of whether students will be able to watch educational and course-related content on the television during class times or not.

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TVs in its initial stages primarily provided recorded lectures and educational television programs. But classroom technology has come in the last half century. Hence, today, the educators bring a new life to the classroom by integrating television with technology to create a more engaged classroom situation. Smart TVs, Apple TVs and Whiteboards are almost similar to play its own role in favour of the students in the classroom.

Classroom Technology Ensures Learning By:

- **Allowing multiple teaching approaches:** Every student does not learn in the same way. Therefore, there is a need of applying multiple teaching techniques, so that each and every student of a classroom can be able to understand and learn in their own way of learning capacities.
- **Improving flexibility in classrooms:** Technology based learning like smart TVs etc. give students and teachers more flexibility in learning.
- **Providing access to current information:** Besides bookish knowledge, the learners should be given an opportunity to have touch of current information.
- **Increasing teacher engagement:** Technology does not teach by itself. Teachers are the ones who can provide both encouragement and excitement of learning.
- **Sparking creativity:** With numerous apps and add-ons, teachers can mix up their teaching approaches in the ways which keep the students involved.
- **Encouraging student collaboration and participation:** At the very beginning, classroom televisions provided only one-way communication. But today's technology-enabled TVs make it easy and more fun for the students to participate in the classroom teaching-learning atmosphere.

A successful lesson can get the kids excited about learning and it is the first step of a presentation of a lesson. TVs and other education technology give teachers opportunities to make the learning experience more relevant, interesting, and engaging. Lectures have been made more interesting by the educators to help students learn difficult concepts. Some educators use comedy to give relaxation in paying concentration towards the teaching of the teachers. Music has also been used as a means to help children memorizing facts. But, today, all this comedy, music, etc. are found in educational television programs that children watch at home. The most important task is to use educational television programs for making a connection between the television program and the concept or content to be studied in the class. When the teachers use relevant educational television programs in the classes the relationship between them and their students is improved.

Children spend about 28 hours per week (four hours a day) in watching television according to the University of Michigan Health System's study in 2010. Many households even "usually" have the TV on, during meal time. Television is normally thought to be as an anti-education tool because most children enjoy television content and spend less time in reading, doing homework, or interacting with others. (By Jordan Catapano)

The Changing Classroom Role of Instructional Television: Since its creation more than 50 years ago, instructional television (ITV) has been viewed by some people as a means of increasing the quality of teaching by replacing the traditional classroom teacher. Today, the concept is being changed and the teachers have been very much at the heart of the present educational system.

After many years of experimentation, instructional television came of age in January 1961 when a converted DC-6 airplane beamed programs to half a million students in 10,000 classes across six states in the mid-western United States organized by MPATI (Midwest Program on Airborne Television Instruction). This was heralded by some as a way to replace the classroom teacher, at least in specific areas of study (Skolnik & Smith, 1993).

An informal national distribution system for classroom television was developed, involving public broadcasting stations, school-based cable systems, educational media centers, and hundreds of thousands of teachers. This network includes nearly 190 licensed PBS stations as well as cable and network TV stations. Most ITV programming do functioning in the middle of the night, sometimes featuring a whole series at a time. As a result, hundreds of millions of students have had access to instructional television materials. The rapid advance of educational technology, the growth of the Internet, and the impending arrival of digital video transmission have all created new channels for ITV delivery. Instructional video resources will continue to be used to enrich teaching, the route that these resources follow to reach students may change dramatically.

ITV Categories

Over the years several forms of ITV have developed, each of which has been helpful in its own right. Before discussing the most recent developments, it will be worthwhile to review each of the broad categories of ITV. Distance Learning System is a direct descendant of the MAPI project. Here a teacher is imported via video or TV in time to arrange a class for distance mode of learning to conduct "live" instruction. Besides ensuring student attendance and discussion of content accordingly, the classroom teachers are not involved in the educational process. The developments like videoconferencing, email, and chat-room messaging technologies have introduced two-way

response, to improve the level of interaction between the teacher and the student. And hence, some successful applications of distance learning have evolved for remote locations, specialist training, and commercial settings. In the classroom, though, this form of ITV has limited application but it has been very effective in the aspect of distance learning. No matter how engaging the content, such programs routinely fail to hold the interest of the traditional class as a whole (Skolnik & Smith, 1993).

The second form of ITV makes existing programs in such manner that it brings this into the classroom for teaching purposes. Ken Burns' "Civil War" and the Nova series are some examples of programs which were produced originally for general TV programmes but later have been successfully applied in the classroom. This type of programming came to appear during the eighties due to the proliferation of the VCR. Teachers were able to exercise some control by choosing when to view programs, which programs to watch, or even what segments to showcase. Though this development increased the usefulness of ITV, but existing programming did not always perform well to an educational setting.

Like distance learning, the ITV often failed to hold classroom attention for long periods of time. Further, if teachers want to utilize some smaller portions of video series, they also face the challenge of finding the appropriate segment amongst with relevance to time management in a classroom. Hence, this ITV category has also been of limited value in education.

The advent of the VCR is newer type of material usually has the goal of supplementing the learning experience and hence, more and more programs have been produced specifically for a classroom audience. Before this, earlier efforts for distance learning attempted to provide a video version of a lesson in a traditional classroom. However, programs organized specifically for the students of a traditional classroom can focus on specific curriculum objectives.

TV is an excellent technological device for illustrating facts or themes, describing context, and generating interest. Since it is not a truly interactive medium, so care has to be taken in such way so that the students can have less chance to speak about their difficulties in going through the lesson presented by the TV. As there is no provision for interaction, so, the teacher should play his role in finding out the difficulty and complicacy in terms of the lesson being presented by the TV and also to clarify very well. Hence, the teacher will have to be the middle person to help and assist the students. An especially effective use of video is engaging student to pay interest by providing an introduction and also presenting a lesson. After such a presentation, which generally lingers for five to fifteen minutes, the teacher has enough time remaining to teach the students with relevance to the lesson presented by the TV and to cooperate with the students individually to ensure that they have comprehended the lesson.

A study conducted by Chen and Hodder (1997), dealing primarily with career education programming, helped underscore the elements of effective classroom television. This examined a ten-year track of formative and summative research conducted and managed by the Foundation for Advancements in Science and Education (FASE), which created "Futures" and "The Eddie Files," as well as other highly-regarded ITV programs (FASE, 1997). They viewed that shorter programming gave higher value and made a greater impact in a classroom and that video proved to be most useful when used to support, rather than replace, the teacher.

In the eighties, another important ITV development came in to support video presentation in a classroom. Some producers found that well-produced guidebooks can increase the video implementation. The arrival of the Internet gave another direction to the attempt of ITV programmes. Teachers can visit different relevant sites getting reference to the course content and select the necessary support materials, and hence use them to supplement the ITV programme presentation. However, 99% of teachers report that they have ready access to the Internet and only 39% say that they use these tools frequently to make instructional materials (National Center for Education Statistics, 2000).

Now it has been a common fact that the teachers deal with the internet in making lesson plans as they get guide from the internet very easily. So, certainly, the teachers must become interested in making some ITV programmes which can help them a lot in assisting them to perform better.

The Internet and ITV

Whatever are the current practices of the teachers may be, there is no doubt that the teachers will use the Internet to find and create lesson materials which will increase dramatically in the future. In using video programmes on a particular lesson in a class, the teachers should not partly present the lesson and should not interfere during the presentation of the programme. If it is done then the interest and motivation of the students may get hampered. And accordingly, the effectiveness of the ITV programme will be misused.

In future, the teachers will have access to the libraries of educational video and support materials with internet facilities. There will be digital libraries which will be fully equipped with all sorts of technology which will help and assist the teachers to get their reference and guides with an easy access for performing their activity in terms of lesson preparation. This course related materials will be catalogued according to grade level, subject, and the local, state, and national standards that exist.

After all, instructional television is finally finding its true classroom atmosphere, where it can be more and more effective and give results to satisfy both the students and the teachers. While teachers will be playing the most vital role in the whole educational process and the ITV will play a supporting role for enhancing the interest of the students, focusing their attention on a specific content or subject matter, and giving emphasis on key points. Hence, the further development of ITV programmes must have to be guided by the need to harness new resources in a manner which may best assist the classroom teachers in the performance of their duties.

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