A Critical Perspective on the Indian Experience

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Growth in the use of satellites for education has been phenomenal in India. Beginning in the 1970s with the SITE project (Satellite Instructional Television Experiment) using a borrowed US satellite, then in the 1980s having its own indigenous INSAT satellite for educational TV, to having a full fledged educational channel on national TV in the 1990s, to the potential of 72 educational channels on EDUSAT at the beginning of the 21st century, shows long-term interest and commitment to this sector.

This paper will tell the story of how technocrats, planners, bureaucrats, researchers, producers, students and teachers, all going their own ways in a seemingly chaotic and individualistic manner, yet in a uniquely Indian manner, used satellite TV for the benefit of higher education. We will try to unravel the threads of this complex and complicated tapestry, discussing the different aspects of the use of satellite TV for educational purposes. For this purpose, we will not address the parallel story of TV programming and telecasts for schools. Nor will we touch upon the distance education programmes for university degrees. Rather, the focus will be on a project of the University Grants Commission called the "Countrywide Classroom."

To illustrate the different aspects of educational television as it took shape in India, we will move back and forth, within what is essentially a historical perspective. Though the system has had a huge impact and can be claimed to be a success story, we will take a very critical view to learn from the mistakes rather than trumpeting the glory.

Program Production

From the days of the SITE Experiment in 1975-76 to 1983 when INSAT 2B was launched, there was a long enough incubation period to mull over and think about what could be done with a satellite and a TV transponder. India was not really prepared to take up the challenge of TV production for educational purposes. Within a few months after the launch of the INSAT satellite, the University Grants Commission (UGC) established four production centers in institutions of higher education in different parts of the country and productions started in earnest. The fact that Indian Television had just turned colourful and television production had moved from using black and white film to video tapes helped make such an ambitious project possible.
The primary target audience for the Countrywide Classroom was undergraduate students. India follows a 10+2+3 system of education: 10 years of school, 2 years of pre-university and 3 years for the bachelor's degree. Teachers and post-graduates were the secondary targets.

There was a need to formulate a programming strategy. Should we be producing syllabus-oriented courses, trying to replicate what the colleges and universities were doing? Or should we seek to complement and supplement the offerings of higher education? The decision was to use the concept of "satellite guru" to take higher education beyond the walls of universities and colleges, to give all those with access to TV a window to a larger world.

In the era of knowledge explosion, the higher education syllabus was always a few years behind. Therefore, the decision was to upgrade and update knowledge rather than repeat what was already being taught in institutions. The focus was on the reach and power of television to provide education in a broad sense. This was the credo of Countrywide Classroom, to use programmes to whet the appetite for knowledge and not necessarily to quench it. This was the backbone of its programming strategy.

Having an open programming strategy was a boon to producers. Although the decision to create programming not tied to a specific syllabus or curriculum was quite disconcerting for some academics and students, especially those who needed clear instructions as to what to do with the content viewed, the production staff loved the creative freedom it provided. Planners argued that not all television viewers were students. Viewers would like to see educational programmes on TV even without the promise of certificates and degrees, merely for the sake of increasing their knowledge.

When the demand for syllabus-oriented programmes arose, the decision was to produce video programmes specifically for colleges. These were not to be telecast, but used as transportable videos in VHS tape format for viewing by students who did not have access to good lecturers. The best professors from all over the country were called in to give lectures creating a series of model video lectures in various subjects. The original plan was to have 150 lectures in 15 subjects, but only nine different subject areas could be completed.

Scheduling of Programmes

Nearly one year after the launch of INSAT 2B, on August 15, 1983, Independence Day of India, University Grants Commission was occupying one hour of noontime telecast every day on Doordarshan, the national television broadcaster. The time was filled by three twenty-minute programmes. The issue of scheduling programmes came up naturally.
The academic world was quite comfortable with the notion of time-tables. Therefore, a time-table was drawn up without consideration for audience behaviour and preferences. If the three programmes were from three different subject areas, the whole slot could be interpreted as being interdisciplinary - the credo had that word. So each hour consisted of a mix of programmes from science arts and humanities. When one more hour was made available by Doordarshan, the same set of packaged programmes were repeated.

The time duration of even one hour could not, of course, be filled with the productions of the four production centres alone. Programmes from abroad - some free, some licensed, - were procured to fill up the time. It took nearly a decade and the expansion of the number of network production centres to 17 for Indian higher education to be completely self-sufficient in programming for the one-hour slot.

Production Centres: equipping and staffing

There were two types of production centres - commonly called UGC's media centres. These were the Audio-visual Research Centres (AVRC) and Educational Media Research Centres (EMRC). The 10 AVRCs were to have minimum equipment and a small number of staff whereas the EMRCs were to have larger production facilities and staff. To save on costs, less expensive production technologies were adopted. And only half the number of approved posts were filled.

All the production centres were to be established in institutions of higher learning so that the necessary expertise and scholarship were to be easily accessed. These production centres were distributed all over the country so that ecological, cultural and linguistic variety within the vast country could be reflected in the programming.

Although these were wise and logical decisions, at that time nobody knew what the future would bring. As for the production technology, to reduce the initial capital investment, U-matic low band recording systems were chosen. U-matic had been a reliable tool for industrial program production in the developed countries but was already on its way to obsolescence. Since the state broadcaster Doordarshan was using the technology for telecast, the U-matic equipment served the purpose. In fact, most of the production centres used the equipment for more than a decade.

While the three-tube cameras were slowly replaced by the more advanced CCD cameras, the jump to Betacam technology in the early 1990s was sudden. Even Doordarshan would have been happy with U-matic high band, but the decision to go for a better but costlier technology was informed by the experience of quick obsolescence of production equipment. This tendency to go for the best and the
latest production technologies continued into the era of non-linear editing and computer animation facilities. But the choice was costly.

Another problem was that of staffing the media centres. Since the centres were established in universities, the university system had the prerogative of appointments. Usually directors of centres were chosen from amongst the professors of the universities. Unfortunately, most had no previous exposure to production dynamics and some had no interest in it. But these posts had power and clout and some perks which were attractive. This often led to conflicts between the programme and production staff and centre directors.

A purely academic post was that of researcher. The researcher was intended to provide feedback from viewers and students and to give leadership to the production team in terms of ideas and programme content. But since in most production centres there was no real job description, the researchers were seen as an un-necessary appendage to the production set up. Some soon left the system and some others started producing programmes to integrate better into the team.

The demand for increased numbers of productions from the media centres to fill up the telecast time led to a situation where the production assistants and even camerapersons were themselves producing programmes. This often undermined the position of the producers. The stress on quantity sometimes meant lack of attention to quality.

There was no post of audio recordist, editor or graphic artist/animator. This meant that whoever was producing had to be good at multiple skills. Since there were no music composers, existing music had to be used. Thankfully, nobody pointed out the issue of copyright for many years.

Co-ordination of production

Since the telecasts improved the visibility of participating universities all over the country, there were pulls and pushes by universities demanding media centres of their own. Soon there were states that had more than one media centre, and quite a few that had none.

The scattered location of production centres all over India made it difficult to co-ordinate activities and productions. A Consortium of Educational Communication (CEC) was set up to provide leadership, vision and coherence. Attempts to come to an agreement between the University Grants Commission, the Universities and the CEC on the organization of media centres and how they should be run took quite a bit of effort, diplomacy and even some metaphorical arm-twisting. But by that time the organizational culture of most of the production centres was already set.
There were a few hundred media professionals within the university system in India without a coherent salary structure and promotional avenues. And quite often these people were not accepted by the academic community. With trouble brewing in the ranks, a staffing and promotion policy was quickly drawn up. But given the numbers, the complexity of already existing designations, years of service and the bureaucracy, it could not be implemented. Solutions to this complexity went through many committees and revisions and reformulations.

Audience surveys

One of the activities that CEC undertook in the early 1990's was a viewership survey. By that time there was an appreciation that audiences had preferences about the topics and subjects of programmes and would only watch those programmes they wanted to see. Those people who watched the Countrywide Classroom at least once a week were defined as viewers. The survey came up with a figure of 18 million estimated viewers.

Soon after the CEC audience survey was released, private satellite television networks came into India. There was an exodus of viewership from the national television broadcaster Doordarshan to these new channels, especially in the cities where cable operators had sprouted up in thousands. Competition had heated up and the public broadcaster, it seemed, had to change or lose its audience.

The changing media landscape also meant that there was a need for additional surveys. The survey in 1996 took a larger sample and used more rigorous methodology. It came up with a figure of 22 million viewers for Countrywide Classroom. In absolute figures, the viewership had gone up, but so had the total population and the number of TV sets. So in relative terms, there was a minor fall in viewership. In most countries, the sheer magnitude of such a viewership would have drawn kudos. But for a country of nearly one billion, a few million was not good enough.

During this time, Doordarshan, which had its own system for surveying audiences, found that there was a small peak of viewers at lunch-time. Without taking the trouble to understand that this viewership was because of Countrywide Classroom, Doordarshan concluded that money could be made by selling the noon slot to sponsored programming - in other words, entertainment. So the Countrywide Classroom slot was moved to breakfast time. And as an incentive for it to move from its prime position, a lot more time was given, including a slot at midnight.

To fill up the extra time, video lectures not intended for broadcast had to be used. These had been lying idle in the media library with no takers. They were thought to be useful for students willing to burn the 'midnight oil', when the general public would be fast asleep.
When again, the audiences at breakfast time slowly increased on Doordarshan, it was sufficient for the national broadcaster to make the early hour into a new slot for different categories of sponsored programmes. It was also easier for Doordarshan to take the slot away and assign it to a commercial purpose since, by that time, there was a full-fledged educational channel.

The reasoning is questionable. The viewership of Countrywide Classroom was primarily in the rural areas and the national educational channel was not accessible in rural areas where cable had not penetrated. Out of the 450 million homes with television, only about 70 million had access to cable. But the reasoning was good enough where there was money to be made. Doordarshan had to compete with private channels for the advertising pie.

A review and an evaluation

The entire University System in India in the 1990's had about 6 million students, faculty and staff. But the University Grants Commission programmes had more than three times that number of viewers. So was it a success story? If it were, why were the UGC staff feeling depressed and discouraged? Where did we go wrong? What could we do about it?

Discovery Channel started at the same time as the Countrywide Classroom, operating in the private sector. Its production facilities were not situated in Universities. It had a clear cut programming strategy of covering a few well chosen subject areas. Are those the factors that helped them expand their viewership worldwide while Countrywide Classroom could not expand beyond Indian borders?

Review and corrective steps were necessary, but neither Doordarshan nor the University Grants Commission could agree that there was a possibility of putting the best of Countrywide Classroom into a sponsored category. The question was asked, "How can you sell education?" To have done so could have lifted some of the financial burden from the UGC and given Countrywide Classroom a more stable presence on the national telecast.

The free and open for all strategy of programming initiated by the UGC was good while it lasted. But when the collection of programmes were reviewed from the past years, some glaring issues came to fore. For example, there were 32 programmes on remote sensing, but only 6 on agriculture. In a predominantly agricultural country like India, should the UGC not have focused on agriculture rather than remote sensing? A list of subjects that needed attention from the point of view of the target audience had been drawn up and circulated to the media centres.

We also came across a large number of cases where it had many programmes on the same topic. For example, there were four programmes on cactus. While
admitting that some amount of redundancy is useful in education, could not unwanted and un-intended redundancy been reduced by better co-ordination? A list of topics and subjects that had not yet been covered had been drawn up and circulated to the media centres.

By mid-1990's the productions originating with the media centres and back-up from the previous years were good enough to run the countrywide classroom. Out of the few thousand programmes available in the media library of the Consortium, about two thousand programmes were good programmes and were in Betacam broadcast-quality format. They were worth repeating. So we went in for a quality drive. Quality was the only way to survive when viewers had choice.

Out of the average of 60 programmes coming in from the media centres, about 4 percent were of excellent quality, internationally acceptable for broadcasting elsewhere. The quality drive - consisting of detailed feedback on every programme, request for changes and improvements and at times, outright rejections - slowly improved the quality of programming. Soon 50 percent of the programmes from the media centres were of excellent quality, although it meant a drop in quantity by about 50 percent.

The quality drive eventually had to come to halt, because there was need for quantity. The nation now had a channel to run. Gyan Darshan, the first educational channel was a co-operative endeavour. The school educational system, the distance educational system for schools and universities, the technological educational system, all had some amount of programmes that were put together to fill the educational channel.

Educational Channels

The school education system had a story more or less parallel to the one described above. Since school education was primarily in Indian languages, the programmes could not be put together as easily as those for higher education which were in English. The programmes for engineering and technology education was primarily lecture-based with powerpoint or slides thrown in where possible. The distance education systems for both school and college education did not have many programmes. So the programmes from Countrywide Classroom became the mainstay of the educational channel.

Co-ordination between different agencies with widely differing mandates was not easy. A formal content creation and production system was difficult to put into place and manage. So, soon there were five independent educational channels, named after characters from Hindu mythology. None had enough programmes to run a channel independently. None had resources to step up the production capability or capacity. The situation was more or less the same as when UGC started Countrywide Classroom.
For UGC staffers, there was an even more depressing success story. EDUSAT was launched in 2005 with the capacity to carry 72 educational channels.

Conclusion

Satellites and transponders can now be manufactured like cars, in an assembly line. From remote sensing to weather and hazards prediction, to education and communication, there are many wonderful uses that satellites can be put to. But the users have to be prepared to make effective use of these services. Such ventures, whether in service to education or other sectors, take time and effort among planners, producers and managers. There are many pitfalls on the way. This paper has put up a case study of mistakes as well as successes in behalf of education at a distance.

Additional link: http://www.cec-ugc.org/