

Educational Television in India: Evolution, Educational Impact, and Challenges in the Digital Era

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Abstract

Educational television in India has played an important role in extending educational access beyond traditional classrooms, particularly among geographically and economically marginalised communities. This article examines the evolution, educational significance, and contemporary challenges of educational television in India. It traces the development of educational broadcasting from early initiatives such as the Satellite Instructional Television Experiment (SITE) and Doordarshan's educational programmes to the present integration of digital and hybrid learning systems. The article discusses the role of educational television during the COVID-19 pandemic, when it became an alternative medium for continuing formal education during school closures. It also analyses the pedagogical advantages of educational television, including accessibility, flexibility, and audio-visual engagement, while critically examining limitations such as infrastructural inequalities, lack of interactivity, and concerns regarding educational effectiveness. The study argues that educational television continues to remain relevant within India's evolving digital education landscape.

Keywords: Educational Television, Educational Broadcasting, Hybrid Learning, Digital Education, Education in India

Introduction

Educational television has a longstanding history of bridging the gap between traditional classroom education and distance learning. According to Baggaley (2008), the origins of educational broadcasting can be traced back to the early 20th century, when public broadcasting systems in the United States and the United Kingdom began airing programmes aimed at educating specific demographic groups (Baggaley, 2008). The UNESCO initiative in the 1960s and 1970s emphasised the use of television in addressing literacy challenges and promoting education in underdeveloped regions. Over time, the role of television evolved with technological advancements, transforming from a supplementary tool into a primary mode of instruction in some contexts (Baggaley, 2008; UNESCO, 1992).

Much research has been done on educational television as a means of distributing educational content. Research indicates that when television is appropriately used, it can improve learning by offering auditory and visual cues that support learning objectives (Kozma, 1991). Individuals have greater flexibility and freedom in their educational path (Lauricella et al., 2011). Various instructional strategies that address different cognitive levels can be incorporated into television classes (Ramadhani & Talib, 2021; Uma et al., 2018). Research has indicated that the astute integration of educational television with cognitive objectives can enhance students' comprehension and involvement in intricate ideas. Programmes incorporating interactive elements and real-world applications can significantly improve students' capacity to apply and analyse knowledge, promoting higher-order thinking abilities (Erkek, 2022; Yildiz, 2015). It appears possible to create

more complex and helpful assessment frameworks by incorporating fuzzy logic into the cognitive skill evaluation process via educational television (Dam et al., 2022).

Development of Educational Broadcasting in India

India has a history of utilising television for educational purposes. Public and private channels contribute to this educational effort. Doordarshan, the public broadcaster, pioneered educational television in India (Devi, 2019). Private channels have also emerged gradually in the Indian television landscape (Khan et al., 2023)

The Satellite Instructional Television Experiment (SITE) marked a significant beginning for educational television in India, focusing on the feasibility of satellite transmission in a developing context. Launched in 1975, SITE aimed to enhance educational outreach through broadcasting (Karnik, 1986). This initiative laid the foundation for future government-supported educational broadcasting, including dedicated satellite channels and systems such as INSAT and EDUSAT, to expand educational access across diverse populations (Chitnis & Karnik, 1985; Raju & Gupta, 2012).

Over the years, educational television in India has grown with advancements in technology and increased government support, leading to the establishment of dedicated channels and content prepared for diverse audiences (Sharma, 2022). Countrywide Classroom Project, launched in 1984 by the University Grants Commission, aimed to provide higher education content through television. It started with one hour of daily telecasts on Doordarshan and expanded to 20 hours per week, utilising decentralised production to engage creative talent nationwide (Govindaraju & Banerjee, 1999). Today, educational television plays a significant role in education, especially in remote areas (Hawkrige & Robinson, 2023).

Growth and Expansion of Educational Television

Doordarshan has a crucial role in expanding educational television. It aired various educational programmes, including the prosocial soap opera *Hum Log*, which addressed social issues and promoted positive behaviours (Singhal & Rogers, 1989). Convergence with internet-based platforms and OTT services is ongoing. Challenges around content regulation, piracy, and equitable access in rural areas persist. Forward-looking perspectives focus on high-definition broadcasting, interactive TV, and the role of policy in guiding India's continued digital media transformation (*Doordarshan to Digital*, 2023).

The transition from Instructional Television Fixed Service (ITFS) to more flexible models allowed educational content to be accessed on any device, at any time, and from anywhere. This shift was driven by advancements in media technologies, enhancing the reach and effectiveness of educational television (Sripathy, 2015). From the invention of the computer, there has been a steady and progressive development in facilities, and it has reached today with the circle of online platforms and applications (Steve Hill, 2014).

Impact of Educational Television

Integrating educational television into the academic framework helps teachers and students be actively engaged. It involves the adoption of hybrid teaching-learning strategies. These strategies combined traditional pedagogical methods with digital and television-based instruction to create a more comprehensive and engaging learning experience (Gamage et al., 2022). For instance, the hybrid approach leveraged the strengths of each medium to enhance student engagement, comprehension, and retention (Agustin et al., 2024). This multifaceted strategy was particularly effective in addressing the diverse needs of students during the pandemic (Gopal et al., 2021).

In a digital learning environment, we must emphasise the content and learning processes (Gisbert & Bullen, 2015). As a part of this digital system, the influence of educational television continues in educational practices in the post-pandemic era (Okyere et al., 2024; Salway et al., 2023; Xu et al., 2024). The hybrid teaching-learning strategies have been successful recently, indicating the possibility of integrating them into the curriculum. Thus, educational television remains a vital component of blended learning systems that complement traditional classrooms and digital learning platforms (Liu & Chen, 2022).

The information explosion in education is visible clearly in the contemporary world. Despite all the difficulties, the education field has developed through various progressive steps. The COVID-19 pandemic affected the whole world, influencing every sector of life. To minimise interruptions to education during COVID-19 school closures, UNESCO recommended using online learning platforms and free educational apps. By receiving these directions, many schools and

educators adopted online classes (Godber & Atkins, 2021; Gopal et al., 2021). From primary to higher studies, education shifted from offline to online or hybrid. Online education and e-learning gained more importance (Shehzadi et al., 2020). As a part of this, online education is becoming more common, and people are looking for ways to have an interactive learning experience. The benefits of this type of education include convenience, flexibility, and affordability (Almahasees et al., 2021; Basar et al., 2021; Sun & Chen, 2016).

Recently, online educational platforms have become familiar to students universally; they are available online in free and paid versions, and their services vary accordingly. The educational materials are readily accessible, allowing people to pursue their learning objectives conveniently anytime and anywhere (Burgstahler, n.d.; Dash et al., 2021). Integrating new technologies will enrich online education's learning content and processes. Even though online education was a supplementary tool to face-to-face learning, during COVID-19, people began to use it as an alternative and primary platform. It is not just a technological transformation but a whole new teaching approach. It demands the careful management of preparing curriculum, course-study materials and evaluation methods (Dhawan, 2020; *Kerala Conducts over 6K Online Classes amid Covid Challenge*, 2021)

The schools that do not have enough facilities and structured arrangements for students to benefit from educational programmes should take the necessary efforts to access those resources. Also, it is recommended that school authorities integrate educational programmes into their traditional class timetables to maximise student exposure and learning (Yelkperi et al., 2011).

Educational television, in general, has the potential to be a powerful tool for education beyond traditional settings (Anderson et al., 2012). As part of the developed and highly used educational tools, educational television programmes were quickly developed and organised to continue educational engagement among students. Educational television programmes are accessible and affordable for learners from diverse socio-economic backgrounds. Many people think that understanding educational content from television is more accessible than the same from print or other platforms. Academic background is also an influential factor in understanding its content. Many researchers observe that higher education helps viewers more (Moeller, 1996; Stokes & Pankowski, 1988). The former studies show that educational television usage positively influences children's academic outcomes. Since learning through television is very cost-effective, it significantly impacts students from low-income countries (Watson & McIntyre, 2020).

Educational television improves students' learning experience and creates an exciting atmosphere by giving learning lessons through visual and audio elements. It reaches the students effectively to satisfy their diverse learning needs. A United Nations Educational Scientific and Cultural Organisation (UNESCO) study says that educational television is vital in providing education, especially in regions where advanced technologies are inaccessible. The history of educational television proved that it can be used effectively to deliver structured, curriculum-based content. (International Commission on the Futures of Education, 2020). Several examples of former experiments proved their efficiency. Educational television could be an optimal tool for educational content delivery, especially when we face interruptions in formal education.

Educational Television in the Contemporary Era

The integration of digital technologies has transformed educational media in India. Initiatives like SWAYAM and the rise of EdTech companies such as Byju's and Unacademy highlight the shift towards digital learning platforms (Pradhan, 2023). Despite technological progress, educational television in India faces challenges such as digital divides, quality assurance, and the need for effective teacher training. These issues must be addressed to maximise the potential of educational television (Pradhan, 2023; Shaw, 2008).

While educational television in India has made significant strides, it is important to consider the broader context of educational media. The integration of television with other forms of media, such as radio and digital platforms, has created a more comprehensive educational ecosystem (Arulchelvan & Viswanathan, 2008). However, the effectiveness of educational television is contingent upon addressing infrastructural and pedagogical challenges, ensuring that it remains a viable tool for learning in the future (Pradhan, 2023).

Scope and Challenges of Educational Television

For ITU, the United Nations specialised agency for information and communication technologies, during COVID-19, people began to use television frequently and extensively locally and globally. UNICEF says that 62 percent of students have access to television globally (*The Vital Role of Television amid COVID-19: Expanding Access for Uninterrupted Learning*, 2020). Television offers significant educational advantages by providing access to diverse and engaging educational content. Through educational programmes, documentaries, and instructional videos, television is a valuable supplementary learning tool that enhances classroom instruction and caters to various learning styles. It goes beyond the limitations of time and space of classroom education (Harris & Park, 2008).

In television, the audio-visual possibilities are well used. The potential of visual aids and multimedia contents help students grasp complex concepts more effectively, while educational broadcasts covering a wide range of study areas broaden their knowledge and arouse curiosity (Saglik, 2001). Television's convenience and accessibility make it a practical resource for formal education and lifelong learning (Garcia-Aretio, 2021). It empowers learners to access educational content anytime and anywhere, ultimately contributing to their academic success and intellectual development (Zimmerman & Christakis, 2005).

At the same time, previous research indicates certain adverse impacts of overusing media. COVID-19 severely affected the physical, health and psychological aspects of children's lives. It was a period of isolation, which led many of them into social phobia, distraction and depression (C.-Y. Chen et al., 2021; I.-H. Chen et al., 2021; Cost et al., 2022; Li et al., 2021). Another research states that educational television classes are less effective than offline classes (Babu, 2021). There are no possibilities for feedback and an interactive teaching-learning process. Another research conducted in Nepal pointed out that COVID-19 affected the school students' learning and well-being, creating a gap in quality education (Dawadi et al., 2020).

Due to the COVID-19 pandemic and lockdown, students stayed in their homes and continued learning from home. Thus, their homes became schools. Several studies carried out during and after the COVID-19 pandemic sought to assess the quality of education provided in schools

Conclusion

Educational television in India has evolved from a supplementary broadcasting initiative into an important component of the country's educational communication system. From the early experiments of SITE and Doordarshan to contemporary hybrid learning environments, educational television has consistently attempted to bridge inequalities in educational access and resource distribution. The COVID-19 pandemic further demonstrated its relevance by enabling continuity in learning during periods of institutional disruption. The audio-visual nature of television, its wider accessibility, and its capacity to deliver structured curriculum-based content have strengthened its role among diverse learner groups, particularly in rural and economically disadvantaged regions.

At the same time, the study identifies significant challenges that continue to limit the effectiveness of educational television, including infrastructural disparities, digital divides, limited interactivity, uneven quality of content, and concerns regarding prolonged media exposure. The rapid expansion of digital education platforms has transformed the educational landscape, yet educational television remains relevant because of its affordability and broad reach. Therefore, the future of educational television in India depends on its integration with digital technologies, teacher support systems, inclusive pedagogical approaches, and policy interventions that ensure equitable educational participation. Educational television should not be viewed merely as an emergency alternative but as a continuing educational resource within evolving blended learning frameworks.

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