

INTERNET FOR EDUCATIONAL TELEVISION: An opportunity or threat

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ABSTRACT

Among several uses, educational use of television is a prominent one. The public broadcasters of many countries routinely provide locally-relevant and useful educational television programs. In other side, there has been phenomenal growth in Internet use worldwide. The researchers are of the view that Internet has challenged the supremacy of television as an important medium to disseminate information to the learners. In this background, present paper attempts to answer the question, is Internet an opportunity or threat for educational television? To get the answer of this question, researcher presents an example of Germany where both television and Internet has been widely used for educational purposes.

The outcome of this study depicts that instead of threats, Internet offers more opportunities for educational television. This analysis also leads the researcher to propose promotional strategies to use Internet for creating more opportunities for educational television in global perspectives.

Keywords: Internet, Educational Television, Internet for Educational Television, Educational Television Promotional Strategies

BACKGROUND

Television became an important part of our life, so much that it is difficult to say whether it is a luxury or necessity. In present scenario, Hopp (2007) seems quite correct when he states that 'Family is the most important influence in a child's life, but television is not far behind'. Television, with its capabilities of video, audio and motion, is a strong, modern mass medium of transferring information to mass audience in current age. It is like a Trojan Horse with lots of surprises (Akyuruk, 2005). Similarly Lecate (1997) points out "Television can offer the best and worst of things. When received by the maximum number, television is a formidable tool in the transmission of knowledge and is therefore of public benefit". In less than a decade – from the mid-1980s to the mid-1990s – the numbers of television channels, television sets in households and hours spent watching television have more than doubled. Satellite television reaches all continents, trans-national satellite channels offer many times the previous numbers of channels, and numerous niche channels that target narrow segments of the population have been introduced—not least channels that target young viewers (Carlsson, 2002).

Among several uses, educational use of television is a prominent one. The public broadcasters of many countries routinely provide locally-relevant and explicitly educational television, often to support subjects such as mathematics or science in schools or the distance education courses of open universities and teacher training centres.

Films and documentaries produced for television are highly popular as teaching aids in the classroom, and television news and issues programmes are themselves educational (MacGregor, 2007).

Studies conducted all over the world have established that students learn as much from TV as from any other medium. Sargent (1997, p. 63) claims "Television continues to be the most important medium for conveying information, news and culture in its broadest sense. It is universal in its availability and it is still free at the point of use to its viewers". The researchers are of the view that like television, Internet can also play significant educational role. This is evident from the views of Johnsson et al (1998) 'Television now gives all people, especially children increased access to all areas. The internet offers young people even more possibilities. They may not only visit all places and sites on the internet, they may even get involved in specific actions there, such as ordering different services without telling who they are or how old they are. Thus, they have new possibilities, but also new responsibilities and new problems, and these they share with adults'. Similarly Jackson (2006) predicts that Internet can also be a good educational tool for hard-to-reach populations.

A report published in Times of India (2010) observes, "Blogs and social websites like Facebook and Twitter enable an online water-cooler conversation, encouraging people to split their time between the computer screen and big screen TV". The report further elaborates, "The Nielsen Company, which measures television viewership and webtraffic, noticed this month that one in seven people who were watching the Super Bowl and the Olympics opening ceremony were surfing the web at the same time". In background of these observations, it will be worthy to answer that whether Internet is an opportunity or threat for educational television.

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There has been phenomenal growth in Internet use worldwide. Usage reportedly grew by more than 200 percent between 2000 and 2007, and 1.1 billion people – a sixth of the world's population – now use the Internet. According to Internet Worls Stats (2009) till March 31, 2009 there were 1,596,270,108 internet users world over consisting 23.8% of world population. The continent wise distribution of internet users shows - 54,171,500 in Africa, 657,170,816 in Asia, 393,373,398 in Europe, 45,861,346 in Middle East, 251,290,489 in North America, 173,619,140 in Latin America/Caribbean, and 20,783,419 in Oceania/Australia.

According to MacGregor (2007) "the birth and rapid growth of the Internet has been the past decade's most dramatic media development. Increasingly, people are using the Internet to access everything from news coverage to shopping, dating services and entertainment.

The Internet is transforming ways in which people around the world – including in developing countries – are interacting with information, and offers new opportunities to deliver educational content that can, for instance, help to improve levels of literacy, to advance the quality of educational resources in poor communities, and enable access to an extraordinary repository of information".

Internet has challenged the supremacy of TV as an important medium to disseminate information to the students. Zechowski (2006) observes "the promise of the electronic superhighway will fundamentally change educational television. Subtle nuances continue to emerge as a result of new technologies and the combination of old ones. Satellite technology has already provided a more effective delivery system for programming. Interactivity has revitalized instructional television in particular.

Teleconferencing, for example, links classrooms globally. These services not only provide access to traditional learning but enhance the cultural literacy of students worldwide”.

Now-a-days new applications of internet related to audio and video are emerging. As David, Makofske & Almeroth (2001) reports “One of the new applications evolving in the Internet is streaming audio/video. A major reason for its growing popularity is interest in the compelling new services that become possible. Prototype services are being developed which are new to the Internet but offer the same look, feel, and functionality that have traditionally only been found in services delivered via other communication medium, e.g. broadcast television. In addition, the Internet is evolving to offer ‘value-added’ services, like streaming audio/video with VCR-style interactivity and embedded hyperlinks. We are poised both on seeing the development of new paradigms for interacting with audio/video, and on seeing the merging of broadcast television and Internet-based broadcasts”.

The Internet is offering new possibilities for educational tasks. Misra (2008) states ‘the educational television programs are getting tough competition from E-learning packages as 51.0% of the youths have given their verdict in favour of E-learning packages. Six of ten respondents favoured the idea of downloading of educational television programs on internet”. Commenting on this issue Matsuura (2007) observes “The Internet and e-learning are providing means for learners to access higher education in new ways, anywhere and at anytime. These technological developments have brought opportunities and challenges which must be navigated carefully at the national, regional and international levels in order to maximize the benefits and minimize the risks”.

Internet offers many opportunities for educational television. According to EBU (2007) “The opportunities for broadcasters are many: increased overall reach and consumption; increased television and audience share; if applicable, revenue potential (both domestic and international); increased awareness, access to better market information; promotion to audiences; promotion to international acquisitions markets; increased traffic to their own online properties; controlled investment. And PSBs can exploit the opportunities with clear advantages: quality, copyrighted content; a wealth of archive material; strong brand trust; professional editing and content packaging skills; and technical quality, including high-definition content”.

While some content providers reject YouTube, others see it as a way of reaching new audiences and choose to cooperate with this new platform for distribution of video programming. Most of these companies are commercial like MTV, Sony BMG and CBS Corp. but public broadcasters like the BBC, Swedish SVT, and Norwegian NRK have also made similar deals with YouTube. EBU Members have during the past year chosen to partner with YouTube to set up their own branded channels on their website.

The reasons are primarily: to build brand, to drive traffic to own websites, to gain new users, and to reach a wider audience with their content (EBU, 2007).

The EBU, 2007 further comments ‘The future of Public Service hangs in the balance: opportunities and threats As large players, the power of established media brands on the Internet has positive implications for Public Service Broadcasters (PSBs).

PSBs are simultaneously affecting and affected by these developments and are making overall strategic decisions balancing their distribution choices. 2008 will be a pivotal year for online video as all key players refine strategies and business models’.

The internet offers good opportunity for promoting educational television. According to Hills & Michalis (2000) "In terms of packaging, the web might be used for add-on content to existing channels or used to bring together offerings from a number of channels to focus on a specific market segment. An 'education channel' or a sports channel might be stronger on the net than off-air."

In terms of transmission and access, the broadcaster's site might become the gateway to other websites, an authoritative source where hyperlinks to other sites presume a vetting process. Interactivity with customers could be used for a variety of purposes: to increase customer loyalty; to increase sales of programme-related products; to strengthen feedback; and to increase its own accountability".

Similarly, Stewart (1998) also considers Internet an opportunity for television. According to him "Changes in Internet technology, particular towards video and audio streaming and downloading bring attractive new services and ways of using the television, as it becomes integrated as the centre of a 'home entertainment system' that includes the computer and music technology. He further suggests 'More 'TV-centric' technologies and services, such as video on demand, may become economic and relevant to the TV viewer, and other services will move to other terminals around the home, where they are more useful, or controlled by another service provider".

Whereas, David et al. (2001) considers Internet as a threat to television by observing "One of the reasons for the growing popularity of WWW-based broadcasting is the ability to offer traditional broadcast television services combined with compelling new services'. They further argue that 'As the Internet-based services become popular, and the true power of the Internet is realized, the *next*-generation of services will offer services far beyond what the broadcast television infrastructure can offer".

The educational television world-over is going through a transition phase. Zechowski (2006) explains this situation "The relationship between education and television in the changing telecommunications environment continues to evolve.

As television becomes more "individualized," providing, for example, "menus" of lessons, applications, and experiments, educational television may become the programming of choice. The synergisms between the significant players (broad/cablecasters, telephone, hard/software companies, educators and government) will ultimately determine new outlets for educational television across the globe, but audiences--students and users--will reap the ultimate benefits".

This situation motivates us to learn from those countries where television has been legally assigned to cater the educational needs of society. Germany is one such country.

The unique feature of public service broadcasting in Germany is that television channels must provide programming in the fields of information, entertainment and education for people of all ages and social groups and in any format (such as generalized channels, thematic channels, multimedia services, teletext or other content services, with or without interactivity).

Adopting this mandate, majority of public television channels in Germany broadcasts educational programs. In other side, the internet also has very good presence in Germany and has been widely used for educational purposes. Considering this, it will be worthy to investigate the internet versus educational television scenario in Germany. This investigation will help us to understand the impact of internet on educational television.

UNDERSTANDING THE IMPACT OF INTERNET ON EDUCATIONAL TELEVISION: Taking German example

Germany's television market is the largest in Europe, with some 34 million TV households. Around 90% of German households have cable or satellite TV, and viewers can choose from a variety of free-to-view public and commercial channels. Pay-TV services have not become popular or successful while public TV broadcasters [ZDF](#) and [ARD](#) offer a range of digital-only channels.

In 2007, some 54 % of all German households received television via cable, 4.1 % by means of terrestrial transmission and 41.8 % via satellite (Medien Basisdaten , 2007 a). So far, more than 60 % of all Germans use online-services (Medien Basisdaten, 2007 b). Surveys indicate that television is the most important source of political information: 51 percent of Germans rank television first, ahead of newspapers and magazines (22 percent), conversation (16 percent), and radio (6 percent) (Radio and Television in Germany, 2008).

The German Commission on Concentration in the Media (2006) reports that the number of nationwide television channels has grown steadily, in particular between the years 2003 to 2006, when it almost doubled. Towards the end of the first half of 2006, 37 free-TV channels (eight of which were general-interest channels), 50 pay-TV channels and two channels in mobile-TV format were broadcasted. Another 59 channels had a broadcasting license but were not broadcast, however.

There were 55,221,183 Internet users in Germany (representing 67.0% of the population) in December 2008. ([Internet World Stats](#), April 2009). 59% of individuals in Germany used the Internet regularly (i.e. at least once a week) in the first quarter of 2006, whether at home or at any other location. While 83% of individuals aged 16 to 24, and 69% of those aged 25 to 54 used the Internet regularly, only 30% of those aged 55 to 74 did so. ([Eurostat](#), November 2006).

New Media Review reports that ,Germans have made the Internet an integral part of school and work. One of the main reasons the future of the Internet looks bright in Germany is demographics. Offline young Germans are a rarity these days. Over 83% of 14 -29 year-old Germans use the Internet. Penetration is actually high for most age groups in the country, with more than half of those 59 and younger online across the board. Only those 60 and older are largely offline, with a mere 20% of that group using the Internet.

According to New Media Review 'Part of the reason for such high Internet usage by young people is the 'Schools on the Internet' initiative. 84% of all German pupils are online, with a further 9% lined up to begin use within the next twelve months. Higher education levels means still more Internet use. People who leave school early are largely offline; the penetration rate amounts to just 22% in that group. Similarly, more than two thirds of working people are online.

In fact, Internet usage is now a requirement for many jobs. At-work Internet users tend to be online at home, too. By the same token, private Internet users find a way to use it for their jobs. Just 38% of non-employed people surf the Internet'.

The Internet in particular has gained in importance as a news source. One of the more recent developments is the increasing circulation of content generated by Internet users or so-called "user-generated content (The German Commission on Concentration in the Media, 2006).

In case of television, around 90% of German households have cable or satellite TV, and viewers can choose from a variety of free-to-view public and commercial channels. The German Commission on Concentration in the Media (2006) reports, "With regard to nationwide television, the four broadcasting groups ARD, ZDF, RTL Group and ProSiebenSat.1 Media AG almost completely cover the demand for TV programs. In terms of average television viewing shares (viewing time), their offerings account for more than 90% of the viewers' television needs. In 2005, the programs of RTL Group achieved audience shares of 25.1% and those of ProSiebenSat.1 Media AG 22.2%, taken as an annual average, thus staying below the 30% threshold relevant to media concentration law. With an audience share of 43.8% on average, the programs of the public broadcasting stations counterbalance the channels of the two major private broadcasting groups". The interesting fact is that a large number of internet users are visiting the websites of public broadcasting stations. According to EBU (2007) on average, a fifth of all Internet users in Europe visit an EBU Member website at least once a month. In Aug'07, the majority of EBU Member websites achieved a reach of 15% or higher, and the average, calculated across all Members, is 20.8%. With an EBU Member average reach of more than 20% in Western Europe, it is clear that PSBs have established an important presence online. The websites of two popular public broadcasters of Germany, ARD and ZDF attracts 21.3 and 8.7 percent of national population on monthly basis.

The above discussion clearly reveals that both television and Internet have very good presence and reach in Germany. Taking benefit from this situation, public broadcasters are using internet to promote educational television. For example, Bavarian Broadcasting Corporation or Bayerischer Rundfunk (BR) a public service broadcasting station and leading educational television broadcaster in Germany uses internet to put details of educational programs like 'outline of content covered by program; main shots of program, methodology to use the program; exercises based on the program; and further readings' for benefits of users. The public broadcasters also use internet to provide information about their programs to viewers. The web site of BR TV (<http://www.br-online.de>) offers the details about the educational programs to be telecasted and already telecasted. One can even find out the details of programs telecasted during the last three years. The website of BR offers the title and telecast date of educational programs and also provides detailed information about it.

In other side, the copyright law in Germany prevents public broadcasters to broadcast educational programs on the internet. The channels are allowed to publish only a brief description and sample content of the programs online. The channels are further restricted to utilize their budget for online promotion of programs e.g. BR TV is allowed to only utilize 0.75% of its budget for this purpose.

The analysis of internet and educational television scenario in Germany clearly depicts that instead of threat internet offers more opportunities for educational television. In other words, we can claim that internet offers new possibilities for educational television. Hills& Michalis (2000) suggests "It is wrong to see the web as simply a means of transmission. In fact it stretches across the whole value chain of programming/ packaging/ transmission/ access. In terms of programming, it might be used simply as a web based listings service, detailing programmes for the week. Or at the other end of spectrum it might be used to meet the need of minority groups or geographical regions not adequately served by broadcasts. In other words, new online programming could help fulfil the public service remit. But equally it could be used to provide an outlet for the detailed research that goes into documentaries, adding value to the off air-programme. Or it could be used to recycle archival material of current interest".

USING INTERNET TO CREATE MORE OPPORTUNITIES AND NEW POSSIBILITIES FOR EDUCATIONAL TELEVISION: Promotional Strategies

Palmer (1999) observes, "The record of accomplishments is impressive, yet TV is drastically underutilized as a teaching tool in countries that have the highest prevalence of urgent and otherwise unmet education needs. The large gap that exists between the state of the art and the state of practice in the use of television for development has many causes, including a major lapse of international attention to national capacity building and application". The need of the hour is that we must look for new promotional strategies to make educational television popular at the times of internet.

The educational use of technologies demands specific criteria. According to Earle (2002) "Technologies must be pedagogically sound. They must go beyond information retrieval to problem solving; allow new instructional and learning experiences not possible without them; promote deep processing of ideas; increase student interaction with subject matter; promote faculty and student enthusiasm for teaching and learning; and free up time for quality classroom interaction—in sum, improve the pedagogy". Whereas Honey, Culp, & Carrigg (2000) observes, "If technologies are to be used to support real gains in educational outcomes, six factors must be in place: leadership, solid educational objectives, professional development, adequate technology resources, time, and evaluation".

Norris, Smolka and Soloway (2000) in a convergent analysis of technology studies, have identified their set of critical conditions as access to technology and time on task, adequate teacher preparation, effective curriculum, supportive school/district administration, and supportive family. In other words, they suggested for establishment of appropriate conditions by converting restraining forces to facilitating factors. These suggestions hold merit in context of making educational television popular at the times of internet.

These technologies specific suggestions, review of previous television researches and the analysis of internet versus educational television scenario in Germany motivated researcher to put forward following promotional strategies to use Internet for creating more opportunities for educational television in global perspectives.

Helping to create the need for watching educational television

At present the television producers and broadcasters are facing commercial challenge as reported by Calvert & Kotler (2003) "A remaining challenge is to create more academically oriented programs that attract a sufficiently large audience, including older boys, while delivering a comprehensible, interesting, yet challenging educational message". Similarly the words of Cassier (1960) still holds relevance, "If we really want to have good, quality, educative and potentially effective educational television programs we better think for programs which create the need for watching".

The program producers are required to design and develop such type of educational programs that create the need for watching among targeted group. Considering this approach, broadcasters are required to look for specific educational needs of students and offer such programs that have lot of hooking the viewers' components.

The Internet can help a lot for this cause by advertising about programmes and their main features on channel websites. Besides, the Internet will also help viewers to air their programme choices to the programme producers and television broadcasters.

Disseminating educational television researches

The research is very important to know about what works and what not for educational programs and can play a very important role in the promotion of Educational Television. As Fisch (2005) comments, "perhaps the most important impact of such research lies in its ability to inform the production of new programming."

By identifying what "works"- the approaches and production techniques that contribute to the effectiveness of existing programming. Research can help producers build on the most effective techniques as they create new material. When used well, research brings the voice of children into the production process, so that material can be tailored directly to the needs, interests, and abilities of the target audience. In this way, research can help to ensure that future educational television series will continue to be as appealing, age appropriate, and educationally powerful as possible".

The best strategy to make educational television popular and usable will be to conduct inward and outward educational television researches. The inward research means how students perceive, what they like and what impact they get from educational programs and outward research means whether they know about, how they receive and what is the role of educational programs in their lives. The Internet will serve as an appropriate platform to disseminate the results of educational television researches to the viewers and general public.

Acting as link between educational television and other emerging media

A major media trend in new technologies is towards interactive media in all its forms, writes Jim Cooper of Media Week (2007) "Search and mobile applications will continue to dominate media industry innovation and imagination. Web and mobile-based video will proliferate and companies and consumers will continue to recalibrate how content is distributed, viewed, measured and monetised. What's surprising is how widespread this proliferation is across both traditional media companies and cutting-edge digital outlets". Similarly, MacGregor (2007) comments "Wireless applications have emerged as a major new distribution channel over the past five years, and the cell phone has evolved from a wireless phone to a gadget that can send text messages, take photographs, play music and, increasingly, screen television and connect to the Internet".

The need of the hour is to look for the possibilities to collaborate with and use other emerging technologies like mobile telephony for the cause of educational television. The measures which use other media like providing educational program information on mobile, downloading and sharing educational programs, educational video on demand, etc. can help a lot to make educational television popular. The internet support is vital for establishing linkage between educational television and other emerging media.

Supporting educational television to make it more interactive

Hobbs argues that when television, video and other media are used 'with dynamic and vigorous interaction and engagement between students and teacher, significant learning experiences can result' and, research has shown, student performance can be enhanced.

Similarly Tiene (1997) comments that "Interactive television as a distance education medium appears to have considerable potential, as long as educators will strive to meet the challenges associated with teaching students at a distance". These arguments clearly point out that if we would like to make educational television popular then we must take efforts to make it more interactive where students have a chance to respond and react. The internet can help a lot to offer interactive educational television programs.

Helping educational television to prepare for change

The media world is facing a change. As Collins et al (2001) writes "If the past is a guide to the future, public service broadcasters will both need to meet the communications revolution by concentrating on core capacities as well as by seizing the opportunity to build new roles". Collins et al. (2001) further warns, "Public service and the market are often opposed. But this is a false choice. The real issue is the appropriate relationship between public service and the market - within broadcasting organizations and in terms of societies' overall media ecologies. There must be a place for public service broadcasting in this century. But that place will be different from the place public service broadcasters enjoyed last century. The nature of the place will depend on the choices made by public service broadcasters themselves, or which governments make for them, as much as on the forces exerted by technological change and commercial competition. The prospects are good if change is embraced rather than resisted".

The television medium is required to accept and embrace present socio-economic and technological changes. The Broadcasters are required to accept technological change and commercial competition for promotion of educational television. Instead of succumbing to the market force, they are required to face this change. The best way to face this change is to analyse their programs and modify them according to present situations and needs. The Internet being a popular mass medium offers lot of possibilities for educational television broadcasters to understand and assess present socio-economic and technological changes. This understanding will help them to make popular and need based educational television programmes for public.

Learning newer ideas to use internet for educational television

Fortunately, newer ideas are taking place to use Internet to popularize educational television. For example, we can learn from Uni TV Project (Holleczek, 2008) from Germany where universities of Berlin, Erlangen-Nuremberg and Munich are connected over a new high speed network for distributed production and distribution of teaching materials of high resolution. We can also get motivation from the Teachers TV which is a [free-to-air](#) television channel in the [UK](#). Teachers TV offers programmes aimed at both new and experienced primary and secondary teachers, as well as programmes and resources for heads, managers, governors, teaching assistants and support staff. Most programmes are also streamed and available for download via www.teachers.tv (Teachers TV, 2006). Internet based TV is another possibility which is getting enough attention from media experts. According to Loebbecke & Falkenberg (2002) "Internet-based TV still faced severe technical and legal constraints. The analysis suggests that once these constraints have been overcome, the Internet can be an attractive additional distribution channel for television". The current need is to welcome these efforts and look for other such efforts carried world-wide to use Internet for making television a better education tool. The broadcasters are required to learn from several creative ideas that have been devised and implemented worldwide about using Internet to make educational television more popular.

CONCLUSION

The above discussions clearly portray that internet offers more opportunities than threat for educational television. Although, we must keep in mind that internet has changed the educational television world-over and its impact is clearly visible. Teachers' TV Report (2006) observes, "The ways in which we watch television are changing. New technologies become available at a relentless pace. Those broadcasters not ready for these changes will be left behind". The television program producers and broadcasters are required to understand and accept these challenges and devise ways to use Internet for creating more opportunities for educational television in global perspectives.

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