

Cable Television in the Classroom

by Glen A. Holmes and Robert C. Branch

Imagine your lesson plan for tomorrow's class in government includes a discussion about the concept of democracy, and the evening before, it is televised that Nelson Mandela has been elected President of South Africa. What an instructional opportunity! Using cable television in the classroom as an integral part of instruction now makes it possible to include the latest news and current events in a classroom discussion of world happenings.

Cable television is already in the classroom ... or at least the potential exists for cable to be integrated into classroom instruction. Federal grants and local cable companies' access initiatives make televised programming available to school districts with even the most modest operating budgets. Major television companies such as Cable News Network (CNN) and Whittle Communications (Channel One) have pioneered cable television connections for classroom instruction since 1989. Prior to the advent of cable in the classroom, most television programming intended for instruction was delivered in one of three forms: Community Antenna Television (CATV), Public Television (PTV), and Instructional Television (ITV).

The potential for instruction provided by cable in the classroom is eclipsed, however, by the number of educational practitioners who remain uninformed about the concept or who lack proficiency in the use of protocols and strategies necessary to optimize the benefits of cable in the classroom as a form of instructional telecommunication. Teachers, trainers, and educational administrators nationwide would benefit from structured opportunities, rather than trial-and-error, to learn how to maximize the potential of the medium. This digest will briefly describe some common issues and some typical examples of how cable television can be integrated into American primary and secondary classroom instruction.

Systems that Link Schools with Cable Television

Cable television in the classroom is a form of distance education. The benefits of distance education have made converts out of many rural school administrators (Kober, 1990). Through communication satellites, rural schools are able to gain access to the most advanced courses for students and staff, while still maintaining their rural characteristics and personal touch. Regarding urban and suburban schools, Schlosser (1991) suggests that satellite television is globalizing classrooms by exposing students to world events and cultures other than their own.

The expenses associated with linking schools to cable television vary depending on mode of transmission and available resources. Instructional Television Fixed Services (ITFS) systems,

which provide terrestrial microwave (point-to-point) transmission, range in cost from \$200,000 - \$300,000 for service to five different locations (Johnson & Tully, 1989). A fiber optic system servicing five different locations in a moderately sized city could cost in excess of \$800,000 plus a monthly service charge of \$35,000 (1989). Microwave equipment to up-link and downlink-link programming costs from \$280,000 to \$600,000 per station. Additional hourly charges for connecting range from \$300 to \$500 (1989). Cable television systems are the most economical. Installation of coaxial cable cost about \$7,500 per mile. Thus 50 to 60 miles of cable for a group of schools, for example, would cost approximately \$450,000 (1989). School districts pay for the service.

Current Cable Network School Collaborations

Most cable network school collaborations are regional such as the Eastern Educational Television Network (EEN), the Southern Educational Telecommunications Association (SECA), the Central Educational Network (CEN), and the Pacific Mountain Network (PMN). These groups service member stations from Maine to Virginia, Maryland to Texas, Ohio to the Dakotas, and the Rookies to the West Coast respectively. Non-commercial syndicators such as the Agency for Instructional Technology (AIT), Great Plains National (GPN), and Western Instructional Television (WIT) develop innovative classroom programs as well (Eastman, 1993). However, a substantial portion of cable instructional television programming is done at the local level.

Fifteen percent of all instructional programming, for public television is produced locally, with PBS providing., 63.9% regional network providing 14%, ITV suppliers generating 6.1%, and commercial syndicators providing 4.4%. Other instructional television productions represent 5.2% of the total broadcast hours (Corporation for Public Broadcasting, 1988). Approximately 14.5% of all PTV broadcasting is devoted to instructional programming. News (16.4%), information (29.5%), cultural (20.5%), general children's (6.5%), Sesame Street & Electric Company, (11.4%), and other (1.2%) represent the balance (Eastman, 1993).

Instructional Cable Television Applications

A first year composition course was broadcast twice each week over a local cable television service. Despite technical problems and complicated record keeping procedures, the instructors found that students who watched the broadcasts improved their writing skills as much as their counterparts in traditional classes (Jewell. 1990).

A Spanish teacher interacted with 3,959 elementary students at nine different sites through the use of studio and classroom cameras and televisions. The instructional television programming was interactive (George, 1989). *Mathelps*, produced by the Logan City (Utah) School District, is an hour-long interactive tutoring program are on local cable television. Each concept is followed by a brain-teaser contest, to which students phone in their solutions (Peterson & Green, 1986).

In 1987, over 18 million students watched instructional television each week (Eastman, 1993). For example, four rural school districts used interactive cable television to link classrooms and teach advanced high school courses which would have been prohibitively expensive for any one system to offer alone (Robinson, 1985). The future success of cable television in the classroom is largely dependent upon continued congressional mandates which reserve a portion of the air-waves for non-commercial and educational uses. Additional revenues must also be allocated or identified from private sources to offset the rapidly rising costs associated with programming, production, and advances in technology.

Cable in the classroom can introduce real events into instruction by reporting the news from a perspective with which young people are familiar and are capable of understanding. Broadcasts transceived by television satellite can present issues as opportunities in which young people can play an active role, rather than as overwhelming problems no one can solve. By incorporating current events and televised symposia into instructional strategies, learners are exposed to perspectives beyond their teacher's own view and can explore truth without sensationalism or condescension. Thus cable television access to the classroom allows learners to make informed judgments about the content under study.

And now. . . Nelson Mandela rises from his chair, steps to the podium, and surveys the assembled crowd. He sips some cool water as he prepares to address his people... and your students hush in their chairs as they watch how democracy is born.

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Glen A. Holmes is Assistant Professor of Instructional Systems and Technology at Virginia Polytechnic Institute and State University. Robert C. Branch is Associate Director of the ERIC Clearinghouse on Information & Technology and Assistant Professor of Instructional Design, Development & Evaluation at the Syracuse University School of Education.

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