



THE IMPACT OF LEARNING MEDIA AND TECHNOLOGY IN SCHOOLS THE TELEVISION IN FOCUS

By

A. T. Omotayo

General Studies Department, (GST), Federal University of Technology
Minna, Niger State.

Abstract

This study looked into the impact of learning media and Technology in schools. The foundation for the use of media and technology as "Tutors" in schools education is a deliberate and intentional act of communication content to students with the assumption that they will learn something "from" these communications. A review of the research literature indicates that such training are largely based on subjective observations rather than theory guided investigation and there is no conclusive evidence that television increases or stultifies the mind that there is also no consistent evidence that television increases hyperactivity or passivity in children. Most research about learning "from" Television can be found in the classroom where 40 years of research show positive effect on learning from Television programmes that are explicitly produced and used for instructional purposes. Studies of the large-scale implementation of instructional television have shown mixed result. Three major forms of utilization have been investigated. 1. Instances where television is used to supplement teacher-centered instruction, either for enrichment or remedial

2. Instances where there is an integration of teacher-directed instruction with television programming.
3. Instances where the Instructional program is delivered via televised teacher.

Introduction

The foundation for the use of media and technology as "tutors" in schools education is "educational communication" i.e. the deliberate and intentional act of communication content to students with the assumption that they will learn something "from" these communications (Krendly, et al 1996) in educational communications information knowledge is encoded visually or verbally in the symbol systems (media) that are delivered by various technology for example animation is a form of media that can be delivered to students via a variety of technologies such as the world web. Within web based tutorial an animation of the movement of the moon around the earth might be used to inform students so that they can visualize and learn about the lunar phases.

- The instructional processes inherent in the "form" approach to using simple technology are:
1. Exposing students to messages encoded in media as delivered by technology.
 2. Assuming that students perceive and encode these messages
 3. Requiring a response to indicate that messages have been received
 4. Providing feedback as to the adequacy of the response.

Interaction in the "form" approach, if present, is normally operationalized in terms of students input via the technology such as clicking a house button to indicate a response to a multiple-choice question, some form of answer judging and feedback in the form of another messages previously encoded in the media instructional technologies (e.g. video).

and teaching machines) were first introduced early in this century in the belief that they could "teach" in a similar sense that teachers or tutors are said to teach (Cuban, 1986).

This paper focuses on the two mostly widely used forms of communication i.e. media and Technology as tutors today specially television and computers.

Learning From Television.

Since the first educational television broadcasts began in low a in 1933 there been decades of research focused on the educational effects of television, and yet controversies about the impact of television in schools and society as a whole persists example some well-known social critics (Postman, et al 1995) maintain that television viewing is cognitively debilitating. A review of the television research literature, however, indicates that such claims are largely based subjective observations rather than theory – guided investigations, and there is no conducive evidence that television stultifies the mind (Seels, et al 1996) there is also no consistent evidence that television increases either hyperactivity or passivity in children (Dorr, 1992).

Another popular belief is that television viewing is detrimental to the academic achievement of school-age children and teens. While some studies have reported in their research a negative correlation between the amount of television viewing and scholastic performance, such statistic are susceptible to misinterpretations because of intervening variables such as intelligence and socioeconomic status. Seels et. al (1996). In a book titled *Literacy in the Television Age: The myth of the Television effect*, Susan, (1995) provides an in-depth review of research examining the relationship between television and achievement. She concludes that displaces academic activities such as reading or homework add thereby has a negative impact on school achievement A competing analysis of the literature by Comstock and paik (1991) concluded that the relationship between the amount of time spent viewing television and achievement rest scores (Primarily reading rest) in curvilinear with achievement actually rising with 1-2 hours of television per day, but gradually failing with longer daily viewing periods.

Undoubtedly, the most wade spread belief about television in that it fosters violence and aggressive behaviors among children and adolescents (Winn 1985). A survey of the literature indicates that there have been nearly 20 books Published on this topic in the last decade alone most of them condemning television as causing aggression. In addition scores of research studies related to this topic one published around the world each year. There is little disagreement that in many, If not most countries television provides a steady flows of violence ranging to as many as 25 violent acts per hour in children's programming (Donner et al 1993). The prepondence of the quantitative research evidence indicate that viewing violence on television is moderately correlated with aggression in children and adolescents (National institutes of Mental Health 1982: seals et al 1996) but with all such correlation research. The evidence for direct causality is weaker. Alternative explanations for reported aggressions are possible e.g. those children with a tendency toward aggression may be more likely to watch violent television programs. Despite the weak evidence for causality, both the public in general and many politicians have come to accept the conclusion that television violence has negative effects on young children's. Elli (1991). As a result of this, legislation has recently been passed in the USA to compel television networks to provide violence rating for their progaemme and to require manufactures to install electronic blocking devices (such as the "V- Chip") in New Television sets similar laws are already in place in other countries.

Less publicized than hypotheses about the negative effects of television on cognitive development scholastic achievement and social behavior are research investigations into the positive effects of television viewing on factors such as interest,

creativity, and developmental psychologists at Harvard University, is a proportionate idea that certain kinds of television stimulate creativity and imagination in children. However the research results supporting these types of positive hypotheses are modest at best (Sells et al. 1996). There have been some television shows that have been subjected to more educational on television like work it out, "speak out" which is nationally in outlook and many more other and in some other country like USA "The Rogers" Neighborhood (Collins et al 1996). And Sesame Street (Mieike et al 1990) shown on the public television stations Example Sesame Street had been distributed in more than 90 countries, has been studied internationally (Gettas 1990).

The goals of these programmes on television stations are primarily affective. Research has demonstrated positive effects on the self-esteem of children and tendencies to value others with emphasis on both socialization and cognitive development, example Sesame Street has been shown to have positive outcomes in terms of school readiness as well as math, reading and social skills. Interestingly, researchers have focused on whether the slower-placed other educational programmes had on Sesame Street programme have differential effects on children's attention but such studies are inconclusive.

Research Evidence

Most research about learning "from" television can be found in the classroom where 40 years of research show positive effect on learning from television programmes that are explicitly produced and used for instructional purposes. In addition most studies indicate that there are no significant differences in effectiveness between live teacher presentations and video of teacher presentations of well programmed. More important there is strong evidence that television is used most effectively when it is intentionally designed for education and when teachers are involved in its selection, utilization and integration into the curriculum (Johnson, 1987). In the past the biggest barrier to the integration of television programmes into the classroom was the fixed time limit of instructional broadcast which till today is still one of the problems faced by this sector but with the wide spread availability of video cassette recorders (VCRs) has provided teachers with the ease of use and flexibility they require (Mieike, 1990). Interestingly television is coming to schools via cable or satellite transmissions and in some transmission some schools in the country now are connected to the internet in USA for instance Star Schools Consortium is one of the largest enterprises, providing scores of courses in thousands of schools across the nation Moore et al 1996). Most television programmes received via satellite dish or cable are recorded by media specialists or technology coordinators and subsequently made available for teachers when and where they choose. Flexibility of scheduling and ease of access to equipment and programmes are the biggest factors promoting classroom use of television (Dorr 1992 Seels et al 1992).

Historically, studies of the large-scale implementation of instructional television have shown mixed results. Three major forms of utilization have been investigated:

1. Instances where the total instructional program is delivered via television to teachers.
2. Instances where there is an integration of teachers -directed instruction with television programming and
3. Instances where television is used to supplement teacher-centered instruction either for enrichment or remedial purposes. Cuban 1986 in his research reported that total instructional television programs in countries such as American Samoa and El Salvador have met with initial enthusiasm but have since been decried in popularity after the novelty wore off and both students and teachers demanded less television and a return to regular classroom activities.

studies indicate that students in rural schools where quality teachers were less likely to be available could benefit from televised instruction.

Cuban (1986) however, advocated that television has been rarely used to totally replace teachers in any country but it is used in coordination with or to supplement the regular curriculum. Results are much more positive as a large-scale survey of teachers showed that "Instructional television is a firmly established teaching tool that is positively regarded by classroom teachers and increasingly well supported with equipment and programming". Writing in the encyclopedia of educational research "There is no doubt that television is an effective means of achieving traditional instructional goals" (Dorr, 1992 P1 398).

Findings Concerning the Impact of Television in Education.

- There is no conclusive evidence that television stultifies the minds of the children
- There is no consistent evidence that television increases either hyper activity or passivity in children.
- There is insufficient evidence that television viewing displaces academic activities such as reading or homework and thereby has a negative impact on school achievement. The relationship between the amount of time spent viewing television and achievement test scores is curvilinear with achievement rising with 1-2 hours of television per day, but falling with large viewing periods.
- The preponderance of the research evidence indicates that viewing violence on television is moderately correlated with aggression in children and adolescents.
- Four years of research showed positive effects on learning from television programs that are explicitly produced and used for instructional purposes.
- Most studies show that there are no significant differences in effectiveness between live teacher presentation and videos of teacher presentation.
- Television are not widely used in classroom because of the expenses incurred, the experiences of teachers having difficulty in previewing videos tapes, obtaining equipment, incorporating programs into the curriculum, and linking television programme to assessment activities.

References

- Anderson, D.R. & Collins P.A. (1988) The impact on children's education: Television influence on cognitive development (ERIC Document Reproduction service No. ED 295271) Washington, DC: office of educational research and improvement.
- Comstock, G, & Pail, H. (1991) Television and the American child San Diego, C.A.: Academic press.
- Cuban, L. (1986) Teachers and Machine: The classroom use of Technology Since 1920. New York: Teachers college Press.
- Krendly, Wane Raid and Warren, (1996) Educational communication information.
- Leonard J. (1997). *Smoke and mirrors: Violence, television and other American culture*. New York: New press.
- Mielke, K.W. (1990). Research and development at the children's Television Workshop. Educational Technology Research and Development, 38 (4), 7-16
- Postman, N. (1985) Amusing ourselves to death: Public discourse in the age of show business. New York: Renguin Books
- Seels, B., Berry, L. H.S Fullerton, K & Horn L.J (1996) research on Learning from Television. In D. H. Jonassan (ED) Handbook of research for educational communications and technology (pp.299-377). New York: Macmillan.Dorr, A

- (1992). Television. In M.C Alkin (Ed), Encyclopaedia of Educational Research (Ed) (pp.1397-1400). New York: Macmillan.
- Signorie Ili, N. (1991). A source book on children and television Westport
Greenwood Press.
- Susan Neumann (1995) The myth of the Television: New York Macmillan
- Winns M. (1989). Toward a rationale and theoretical basis for educational Technology
Educational Technology Research and Development 37(1), 35-46.