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ABSTRACT

A computerized search of the information file in the national ERIC system revealed hundreds of reports and papers concerning instructional television; the author chose the most relevant for inclusion in this bibliography. The material is divided into categories: general; bibliographies, literature guides and overviews; national issues; and project reports. In addition, the ten newest papers on instructional television are listed separately. For each document the author, title, abstract, and complete ordering information are provided. (JY)

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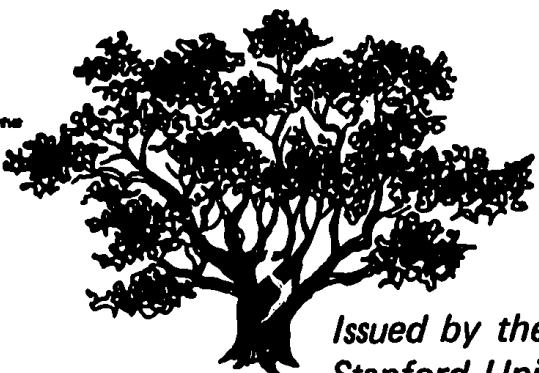
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## INSTRUCTIONAL TELEVISION: THE BEST OF ERIC

By Warren F. Seibert

Measurement and Research Center  
Purdue University  
Lafayette, Indiana

April 1972



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## FOREWORD

This collection of the best of ERIC documents on Instructional Television is presented to help you find more easily helpful information on this popular subject.

A computerized search of the information file in the national ERIC (Educational Resources Information Center) system reveals hundreds of reports and papers concerning Instructional Television. These hundreds were narrowed down by Warren Seibert to those presented here.

To facilitate your identification of documents, the listings have been categorized into: The Newest Documents; General; Bibliographies, Literature Guides and Overviews; National Issues; and Project Reports. Each section begins with the most recent documents (with the higher ED numbers) and progresses down to the more vintage documents (with the lower ED numbers). Most documents are available both in microfiche and hardcopy.

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In a few cases, non-ERIC sources are cited. In these instances, ordering information is given, if available.

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## THE NEWEST DOCUMENTS

The following documents are so new, they had not yet been assigned ED numbers when this list was published. If you wish to order any of these documents, write first to the ERIC Clearinghouse on Media and Technology, Stanford University, Stanford, California 94305, giving the EM number. We will furnish you with the ED number necessary for ordering the documents.

### **A Comparison of Parents' Attitudes Toward AEL's "Around the Bend" and Other Children's Television Programs**

Charles L. Bertram and Randolph MacDonald. 1971. 17 pages. EDRS price microfiche 65c, hardcopy \$3.29 (EM 009 827). Update of ED 052 842.

A survey was designed to determine how the Appalachia Educational Laboratory (AEL)-produced noncommercial television program "Around the Bend" compared in appeal with other children's programs. A questionnaire was sent to random samples of parents with three to five year old children in three groups: those children who saw the program every day, children who watched the program each day and were visited once a week by a paraprofessional home visitor, and children who watched the program, were visited once a week by the home visitor, and were exposed to a mobile classroom once a week. Results showed that "Around the Bend" was rated as good or better than two popular children's programs on commercial television and "Sesame Street."

The highest rating was given the program on every question and by every treatment group. It was somewhat surprising that "Around the Bend" should have received consistently higher ratings than "Sesame Street", since "Around the Bend" is a black and white 30-minute program. However, "Around the Bend" had been available in the community longer, and was probably perceived as more relevant to the Appalachian area.

### **Television and Social Behavior; Reports and Papers, Volume V: Television's Effects: Further Explorations**

George A. Comstock, editor, and others. Public Health Service, Washington, D.C., Committee on Television and Social Behavior, 1972. 382 pages. EDRS price

microfiche 65c, hardcopy \$13.16 (EM 009 668). Also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (DHEW Pub. No. HSM 72-9060).

The studies in this fifth volume of technical reports to the Scientific Advisory Committee on Television and Social Behavior explore the role of mediated aggression and violence on relevant human behaviors in some new and interesting ways. The volume begins with an overview of the studies, presenting a statement of the principal questions asked, an overview of the main variables and methods, a summary of each study, and conclusions.

The major research areas dealt with by the different investigators include facial expressions as indicators of emotional reactions while viewing televised violence, dream content as an index of certain viewer reactions to televised violence, familiarity with violence as a factor in predisposing the viewer to see violence more readily, emotional arousal and the mediation of the effects of communication messages, learning from messages manipulated in terms of violent content and color television, and black consciousness and identification in relation to perception of violence.

### **Television and Social Behavior; Reports and Papers, Volume IV: Television in Day-to-Day Life: Patterns of Use**

Eli A. Rubinstein, editor, and others. Public Health Service, Washington, D.C., Committee on Television and Social Behavior, 1972. 611 pages. EDRS price microfiche 65c, hardcopy \$23.03 (EM 009 667). Also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (DHEW Pub. No. 72-9059).

Any attempt to gain insight into the effects of television on the viewing public must also include an assessment of the amount and patterns of viewing by the various segments of the general population. This fourth volume of technical reports to the Scientific Advisory Committee on Television and Social Behavior attempts to provide a new picture of how much and what kind of television people watch in the 1970s. After an overview, eight research projects are reported. They range from general studies of national samples to studies which focus either on specific subpopulations or on audiences

for specific types of programs.

Findings of the several studies include that television has become more interwoven into our lives, but its hold on our attention has perhaps been reduced; that the public has become more critical of the medium, especially of commercials; that heavy versus light viewing of television per se no longer discriminates among children the way it did in the 1959 study of Schramm, Lyle, and Parker; that television is more likely to be used to fill time that would otherwise be used for generally "nonconstructive" activities; that there is learning from television; and that viewing of violent programs tends to increase according to the amount of viewing done in the company of parents.

#### **Television and Social Behavior; Reports and Papers, Volume III. Television and Adolescent Aggressiveness**

George A. Comstock and Eli A. Rubinstein, editors. Public Health Service, Washington, D.C., Committee on Television and Social Behavior, 1972. 443 pages. EDRS price microfiche 65c, hardcopy 16.45 (EM 009 666). Also available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (DHEW Pub. No. HSM 72-9058).

The question which guided the studies in this third volume of technical reports to the Scientific Advisory Committee on Television and Social Behavior is whether aggressive social behavior by adolescents can be attributed in some degree to violent television programming. After an overview which sets the studies in a comparative context, the studies are reported. They include a followup longitudinal study by Lefkowitz, Eron, Walder, and Huesmann with two comments on cross-lagged correlation. Also included are a study dealing with family influences by Chaffee and McLeod, "Adolescent Television Use in the Family Context"; two studies by McLeod, Atkin, and Chaffee which are concerned with self-report and other-report measures of television use and aggression; and a study by Dominick and Greenberg, "Attitudes Toward Violence: The Interaction of Television Exposure, Family Attitudes, and Social Class."

Other studies reported include Friedman and Johnson, "Mass Media Use and Aggression: A Pilot Study"; Johnson, Friedman, and Gross, "Four Masculine Styles in Television Programming: A Study of the Viewing Preferences of Adolescent Males"; Robinson

and Bachman, "Television Viewing Habits and Aggression"; and McIntyre and Teevan, "Television Violence and Deviant Behavior."

#### **Television and Social Behavior; Reports and Papers, Volume II: Television and Social Learning**

John P. Murray and George A. Comstock, editors. Public Health Service, Washington, D.C., Committee on Television and Social Behavior, 1972. 378 pages. EDRS price microfiche 65c, hardcopy \$13.16 (EM 009 665). Also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (Stock No. 1724-0195, \$1.50).

Concentrating on television and social learning, this second volume in the series of technical reports to the Surgeon General's Scientific Advisory Committee on Television and Social Behavior consists of an overview and the reports of five investigations. The studies included are: Leifer and Roberts, "Children's Responses to Television Violence"; Liebert and Baron, "Short-term Effects of Televised Aggression on Children's Aggressive Behavior"; Stein and Friedrich, "Television and Content and Young Children's Behavior"; Feshbach, "Reality and Fantasy in Filmed Violence"; and Stevenson, "Television and the Behavior of Preschool Children."

The overview reviews the field, points out agreements and inconsistencies among the studies, and concludes that "At least under some circumstances, exposure to televised aggression can lead children to accept what they have seen as a partial guide for their own actions. As a result, the present entertainment offerings of the television medium may be contributing, in some measure, to the aggressive behavior of many normal children. Such an effort has now been shown in a wide variety of situations."

#### **Television and Social Behavior; Reports and Papers, Volume I: Media Content and Control**

George A. Comstock, and Eli A. Rubinstein, editors. Public Health Service, Washington, D.C., Committee on Television and Social Behavior, 1972. 553 pages. EDRS price microfiche 65c, hardcopy \$19.74 (EM 009 664). Also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (DHEW Pub. No. HSM 72-9057).

Six studies and an overview focus on the amount and character of the violence portrayed on television, the

circumstances and milieu in which this violent fare is created, and the formal and informal influences which affect the selection and prohibition of TV content. The overview serves as an introduction to the six studies and summarizes their emphases and findings. In the first study, Gerbner analyzes and compares the programming of 1969 with that of 1967 and 1968, dealing with the quantity and quality of violence. In the second study, Clark and Blankenburg examine violence on TV and match their results against various measures of environmental violence.

Greenberg and Gordon obtained data on what is perceived as violence in the third study, and Cantor discusses the factors influencing the selection of content for children's programs for the fourth study. In the fifth study, Baldwin and Lewis report on how top professionals responsible for producing adult drama perceive their role in regard to violent content. The final study consists of reports of four social scientists on TV violence in the United States, Great Britain, Israel, and Sweden.

#### **Annotated Bibliography on the Educational Implications of Cable Television (CATV)**

Michael Molenda. North Carolina University, Greensboro, School of Education, 1972. 29 pages. EDRS price microfiche 65c, hardcopy \$3.29 (EM 009 603).

Brief annotations are provided to material on the educational implications of cable television (CATV). The material covered consists of articles, position papers, conference proceedings, government statements, and legal documents, published between 1967 and 1971. The material is divided into four sections: status and future of CATV (32 citations); regulation of CATV (55 citations); CATV and education (46 citations), and CATV and socio-cultural concerns (23 citations).

#### **Children's Television Behaviors as Perceived by Mother and Child**

Bradley Greenberg, and others. 1971. 24 pages. EDRS price microfiche 65c, hardcopy \$3.29 (EM 009 549).

A generally held hypothesis is that greater family interaction will increase agreement between mother and

child on reports of television viewing habits. This initial study sought to determine the extent of such agreement between mother and child, and to analyze the role of frequency of family interaction in their coorientation toward television and toward the use of violence. Interviews were conducted with 85 fourth and fifth grade children and their mothers about the child's exposure to television in general and to violence on television in particular, context of viewing, program selection, perceived reality of television, rules about television watching, perceptions about the amount of violence on television, family interaction, violence justification, and probable behavior in frustrating situations.

Results showed that there was relatively strong agreement on only three aspects of the child's television habits—the nonviolent shows he watched and his frequency of watching with either his parents or his friends. Also, there was more viewing of programs considered violent among children who did a significant amount of television watching with one or both of their parents present, and the child more often finds the use of violence justified when the parents watched a substantial frequency of violent programs.

#### **Girls' Attitudes Toward Violence as Related to TV Exposure, Family Attitudes, and Social Class**

Joseph R. Dominick and Bradley S. Greenberg. 1971. 19 pages. EDRS price microfiche 65c, hardcopy \$3.29 (EM 009 548).

A previous study (EM 009 547) found that the most favorable attitudes of boys toward aggression existed when there was high exposure to television violence, ambiguous family attitudes toward aggression, or low socio-economic status. This study sought to examine the same three variables with respect to girls. Subjects, who were 404 fourth through sixth grade girls, completed questionnaires on TV exposure, family attitudes toward violence, and social class. The questionnaire also included four paper-and-pencil indexes of aggression: willingness to use violence, use of violence in conflict situations, perceived effectiveness of violence, and approval of aggression.

The results for all four measures indicate that family attitudes toward aggression showed the most persistent relationship to the child's attitudes. However, exposure to television violence also made a consistent,



independent contribution to the child's notions about violence—the greater the level of exposure, the more the child was willing to use violence, to suggest it as a solution to conflict, and to perceive it as effective. There were no social class differences. Among the limitations of the study were that the data allow only associative, not causative, statements, and that much of the variance in attitudes is not explained by the three variables.

#### **Attitudes Toward Violence: The Interaction of TV Exposure, Family Attitudes and Social Class**

Joseph R. Dominick and Bradley S. Greenberg. 1970. 27 pages. EDRS price microfiche 65c, hardcopy \$3.29 (EM 009 547).

Three antecedent variables were examined to determine their effects on children's attitudes toward aggression—the child's exposure to television violence, his perceptions of his family's attitudes toward violence, and the family's socioeconomic status. Questionnaires which were completed by 434 fourth through sixth grade boys elicited responses about the above three variables and also about their attitudes toward aggression: approval of violence, willingness to use violence, perceived effectiveness of violence, and suggested solutions to conflict situations.

Results of a three-way analysis of variance on each of the aggression indexes suggested that perceived effectiveness of violence is directly affected by television exposure for both middle and lower class boys (with more exposure comes more approval of violence), while the other three indexes of aggressive attitudes were affected by exposure to television for middle class boys only. For all four measures, both family attitudes toward aggression as known to the child and the social environment of the family have a persistent impact.

## GENERAL

### **Television and Growing Up: The Impact of Televised Violence**

Public Health Service, Washington, D.C., Committee on Television and Social Behavior, 1972. 289 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 057 595). Also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (1972-0-453-851, \$2.25).

A request by Senator John O. Pastore for an inquiry into the effect of televised crime and violence and anti-social behavior by individuals resulted in the formation of the Scientific Advisory Committee on Television and Social Behavior. The committee report consists of the conclusions reached by 12 behavioral scientists after a review of 40 original research reports and of previously available literature on the effects of televised violence on the tendency of children toward aggressive behavior.

The committee considered two major sources of evidence on effects of viewing violence and aggression on TV: evidence from experimental studies, and evidence from surveys. The two sets of findings were found to converge in three respects: "a preliminary and tentative indication of a causal relation between viewing violence on TV and aggressive behavior; an indication that any such causal relation operates only on some children (who are predisposed to be aggressive); and an indication that it operates only in some environmental contexts." The committee also identified areas for future research.

### **Using Television for Teaching a Second Language Through Dramatized Every Day Situations: An Assessment of Effects on Active Speech and on Understanding Dialogues Presented by Other Media**

Hava Tidhar. Instructional TV Center, Tel Aviv, Israel, 1971. 25 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 053 578).

A series of experiments explored the use of television in Israel to teach English to Hebrew-speaking students. The emphasis of the experiments was on assessing the ways in which television can be used to fulfill specific tasks in language instruction that are not easily fulfilled by the classroom teachers. Ninth graders were divided into two groups: One group received the standard course of English-language instruction; a second group had English-language instruction supplemented by a

television program which presented the spoken language in natural context and in every day situations.

The ninth graders who had the television experience showed a better understanding of English-language films and audio tapes, as well as better achievement in active speech. The contribution of television to understanding from audio tapes proved to be particularly great in pupils whose IQ was less than 110. The greater amount of exposure to oral presentations did not have a negative effect on reading comprehension.

### **Summative Research of Sesame Street: Implications for the Study of Preschool-Aged Children**

Samuel Ball and Gerry Ann Bogatz. Educational Testing Service, Princeton, New Jersey, 1971. 27 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 053 197).

Sixty-six goals, mostly involving symbolic representation and cognitive processes, were evaluated to indicate those aspects of the summative research on Sesame Street that were bases for generalizing about research into the development of preschoolers. Unintended and intended outcomes were investigated as well as the program's effectiveness for various groups of preschoolers.

### **The Appalachia Preschool Education Program: A Home-Oriented Approach**

Appalachia Educational Lab., Charleston, West Virginia, 1970. 27 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 052 865).

The strategy for attaining the objectives of the Appalachia Preschool Education Program was the development of a child-centered, home-oriented program to be delivered by means of television broadcasts, home visitation, mobile classrooms, and other media. It involved building a curriculum based on behavioral objectives and preparing materials and methods particularly appropriate for 3-, 4-, and 5-year-olds living in rural Appalachia. A timetable was set up to carry the program through a 5-year period. The planning period was from October 1967 to August 1968; field-testing began in September 1968 and was completed in May 1971; and all final reporting is to be completed by May 1972.

The curriculum materials team set up natural

groupings of objectives and from them developed units of work and an allocation of the time to be devoted to the units. All curriculum materials (e.g. tapes, children's worksheets, parent guides, mobile classroom guides) were produced by the Curriculum Materials Team. "Around the Bend," the television element, was a 30-minute broadcast aired five days a week from the end of September until mid-May. The home visitors were 8 women recruited from the area in which they worked. Their effort was directed toward helping the parent help the child. The mobile classroom was staffed by a professional preschool teacher and an aide. Ten locations were visited each week by the mobile classroom. The document provides a program description and a summary of results of the research carried on by the project.

#### **A Comparison of Parents' Attitudes Toward AEL's "Around the Bend" and Other Children's Television Programs**

Charles L. Bertram. Appalachia Educational Lab., Charleston, West Virginia, 1970. 16 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 052 842).

This study compared the parental appeal of the Appalachia Educational Laboratory's television program, "Around the Bend," with "Captain Kangaroo" and "Romper Room." Data was solicited from 150 parents of children in each of the three treatment groups of the early childhood education program: (1) children who observed the television program only; (2) those who watched the program and were visited at home once weekly by a paraprofessional; and (3) those receiving the TV program and the home visits, who were also exposed once a week to a mobile classroom. The survey forms were designed to determine which programs were viewed by the children, if parents watched the programs with the children, if parents thought the children enjoyed and/or learned from the programs, and if parents thought the different programs were good for the children.

Parents were asked to rate the programs from the best to the very worst and give the program sponsors' names. Eighty-one percent of the 150 parents to whom forms were mailed responded. "Around the Bend" was rated best by 51 percent of the parents; "Captain Kangaroo," by 38 percent and "Romper Room," by 11 percent. The ratings varied among the parents of children in different

treatment groups. Many of the children watched two or more children's programs each day. Many parents watched the program with their children and felt that instructional television combined with home visits was an acceptable procedure for early childhood education.

#### **Analysis of Children's Reactions to AEL's Preschool Television Program**

George L. Miller. Appalachia Educational Lab., Charleston, West Virginia, 1970. 9 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 052 841).

This report describes a technique which can be used to provide both formative and summative evaluation of television programs designed to promote educational development in 3-, 4-, and 5-year-old children. The daily half-hour program evaluated is part of an Appalachia Educational Laboratory project, now in its second year. (Other project components are weekly visits in homes by paraprofessionals, and weekly visits by a mobile classroom.) Of the 170 TV programs transmitted in the first two years, observational data was collected on 133. The telecasts, designed to elicit overt responses from children, made possible a systematic observational evaluation of viewer responses. Each of eight paraprofessionals watched the program with a different child every morning so that, in a random fashion, all 270 children were observed an equal number of times.

The observer coded children's responses while viewing the TV program and rated them on a standard tally sheet. First year and second year programs were compared on (1) the ratio of responses to questions asked by the TV teacher, (2) the ratio of negative reactions to enthusiastic reactions, and (3) the average number of enthusiastic reactions. Results indicate that systematic observational systems can provide formative evaluation of preschool TV programs to guide changes in presentation techniques, content, and emphasis.

**Oral English Development Among Non-English Speaking, Spanish-Speaking American Adults Based on Thirty Innovative Video Programs and Related Paper/Pencil Lessons**

Atilano A. Valencia. Southwestern Cooperative Educational Lab., Albuquerque, New Mexico, 1971. 69 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 052 441).

The 1970-71 field testing of the adult basic education Empleen Ingles Video Programs and Paper and Pencil Lessons was undertaken to provide answers to several questions. These questions concerned; (1) the instructional effectiveness of the 30 video programs and pen and pencil lessons; (2) the two programs as single or dual instructional media; (3) target population attitudes toward English usage and video program characters; and (4) learning retention among program participants subsequent to a time period following the final program exposure. Findings of the field testing show: (1) the Empleen Ingles Video Program and Paper/Pencil Lessons produce dramatic and significant gains in English comprehension, usage, and vocabulary; (2) a combination of the programs produces greater learning effects than does a single instructional medium; (3) the target population perceived the video program in a favorable light; and (4) the degree of English proficiency 20 days after program exposure remained significantly higher as compared with pretest scores. It is recommended that; (1) a dissemination plan be conceptualized and implemented to provide the target population with these instructional programs; and (2) consideration be given to continuing the development of the Empleen Ingles series until 100 or 150 video programs have been completed.

**The Relative Effectiveness of Three Video Oral English Instructional Conditions for Illiterate or Undereducated Non-English Speaking Adults, Spanish Speaking Adults. A Report of Statistical Findings and Recommendations Based on a Field Testing Study**

Atilano A. Valencia. Southwestern Cooperative Educational Lab., Albuquerque, New Mexico, 1969. 65 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 050 615).

The instructional effectiveness of videotaped instruction in basic oral English to non-English speaking,

adult speakers of Spanish is the focus of this report. A field testing program involving subjects who had been exposed to the films developed by the Southwestern Cooperative Educational Laboratory ascertains the effectiveness of the lessons in each of the films in terms of predetermined behavioral objectives.

Three testing conditions were envisaged and are examined in this study: A classroom condition with video exposure only; a classroom condition with video exposure and followup drills by an instructor; and a home condition with video exposure only. This four-part report covers; (1) principal features of the field testing program, (2) criterion variables and statistical design, (3) statistical analysis and findings, and (4) summary, conclusions, and recommendations. Appendixes contain a sample field testing instrument and various statistical tables.

**One Week of Educational Television. Number Six. March 9-15, 1970**

Saul Rockman and Robert B. Hudson. National Instructional Television Center, Bloomington, Indiana, 1971. 83 pages. EDRS price microfiche 65c (ED 050 572). Regular printed form available from National Instructional Television Center, Box A, Bloomington, Indiana 47401 (\$2.50).

In this sixth survey of educational television in the United States, 187 UHF-VHF educational television (ETV) stations, 27 ITFS (Instructional Television Fixed Service) systems, and 35 CCTV (Closed Circuit Television) systems reported on their operating policies and on their programming during the week of March 9-15, 1970. The amount and kind of programming addressed to age-differentiated audiences was the primary focus of the survey. Some of the significant trends noted were an increase in the number of ETV stations on the air, an increase in the number of days per week these stations broadcast, and an increase in "public" programming (in contrast to instructional programming).

Some of this shift to public programming was caused by the great impact of the "Sesame Street" series, which was so-classified. The rest of the shift was probably caused by the increased use of programs produced by such national organizations as The Corporation for Public Broadcasting and the National Educational Television (NET) network. The material gathered in the

survey is presented in both expository and tabular form. Information is included about production patterns, program sources, audience levels, program subjects, and station ownership. A statistical profile of each ETV station is given.

#### **Survey and Study of Educational Broadcasts; 1960-1968**

Japan Broadcasting Company, Tokyo, 1969. 35 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 050 558).

Japan's educational television and radio network, NHK, conducted surveys and studies on the use and effects of its programs from 1960-1968. The major surveys, each of which is summarized in this booklet, cover four categories: The utilization of educational programs, analysis and evaluation of selected programs, the effect of educational programs, and the effect of non-educational broadcasting (entertainment and adult programs) on children. The first category includes surveys on the utilization of school broadcasts by schools, on school teachers' views of educational broadcasting, and on the daily life of high school students taking correspondence courses and their utilization of broadcasts.

The second group of studies analyzed a fourth-grade science class and a junior high school English class and also included a study on the function of audiovisual methods in concept formation. Studies in the third category looked at the effects of television programs in teaching English, in teaching moral guidance, and on children in isolated villages. Included in the fourth category are studies on the effects of violent scenes on children and on ways of changing children's choice of programs.

#### **Television: A Viable Channel for Educating Adults in Culturally Different Poverty Groups?—A Literature Review**

John A. Niemi and Darrell V. Anderson. Syracuse University, New York, ERIC Clearinghouse on Adult Education, 1971. 16 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 048 550).

Recent research on the effectiveness of educational television (ETV) with adults in culturally different poverty groups suggests, first of all, that ETV for these groups must be combined with techniques (like listening groups) using volunteer teachers, and that such planning requires close cooperation between adult educators and media specialists.

Moreover, a selective retrospective survey (1956-71) of 11 literacy programs, one in English as a second language, one community development project, and four on personal and social development, has revealed few suitable provisions for evaluating either the appropriateness of the ETV programs or the achievements of individuals. (The document includes program descriptions and 27 references, as well as tabular data on program content, sponsorship, publicity, scheduling and program length, teaching techniques, evaluation techniques, staffing, and instructional materials.)

#### **College Credit for Off-Campus Study**

Amiel T. Sharon. ERIC Clearinghouse on Higher Education, Washington, D.C., 1971. 18 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 048 520).

This paper summarizes some of the recent literature on unconventional college-level education gained outside the classroom. The first section reviews the major types of off-campus learning for which college credit is received, including correspondence instruction, educational television, military service experiences, and independent study. The second section discusses methods by which formal recognition is provided for this education, such as the college-level examination program, the New York State College Proficiency Examination Program, and the General Educational Development Testing Program. A list of references concludes the paper.

**Pre-Reading on Sesame Street. Final Report, Volume V of V Volumes**

Samuel Y. Gibbon, Jr. and Edward L. Palmer. Children's Television Workshop, New York, New York, 1970. 89 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 047 825).

This paper reviews the evolution and implementation of the Sesame Street curriculum relating to the development of language and prereading skills. The first section gives a brief history of the Children's Television Workshop, describes the operational model followed by the workshop in carrying out its initial experiment, and suggests application of the model to future workshop productions. The second section specifies the language and prereading goals represented in the Sesame Street curriculum and discusses the reasons for their inclusion. These goals include improving self-concept, general concept development, and the development of specific perceptual skills. Behavioral goals related to the learning of letters are listed and discussed in detail.

The third section describes many of the production techniques and teaching strategies used to implement these letter-learning goals. The problems of sequencing and scheduling instruction for broadcast television are considered. The fourth section provides some preliminary data on the ability of viewers to name certain letters. The evidence suggests that some success has been achieved in teaching letter identification. The final section is a summary. A statement of instructional goals for the 1970-1971 experimental season of Sesame Street is appended.

**The First Year of Sesame Street: A Summary of Audience Surveys. Final Report, Volume IV of V Volumes**

Bruce Samuels, compiler. Children's Television Workshop, New York, New York, 1970. 31 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 047 824).

Who watched Sesame Street and with what frequency at different socioeconomic levels? This utilization study provides answers to the question by compiling data from national ratings, special surveys

commissioned by the Children's Television Workshop, and unsolicited, independently conducted surveys which were brought to the Workshop's attention. Nine projects were reviewed and summarized into a viewing profile chart. The chart presents information on title and date of survey, surveyor, purposes of survey, character of sample, size of sample, availability on UHF, VHF, and cable TV and percent of penetration. The results of the projects showed a highly encouraging rate of viewing and supported the need for special efforts to promote wider viewing, especially in low income neighborhoods and in communities served only by UHF stations.

**The First Year of Sesame Street: An Evaluation, Final Report, Volume III of V Volumes**

Samuel Ball and others. Educational Testing Service, Princeton, New Jersey, 1970. 442 pages. EDRS price microfiche 65c, hardcopy \$16.45 (ED 047 823).

This study evaluates the impact of the first year of Sesame Street on preschool televiewing audiences in five sites (Boston, Massachusetts; Durham, North Carolina; Phoenix, Arizona; suburban Philadelphia, and northeastern California). Chapter I introduces evaluational questions and the research strategy. Chapter II presents sampling procedures for pretest and posttest data on 943 children, explains criteria for development and selection of measurement instruments assessing children's learning, program content, parent and teacher attitudes, and describes field operations.

Chapter III analyzes results in three parts: (1) a descriptive analysis of the viewing population (age, sex, advantaged children, Spanish-speaking children, rural children, and disadvantaged at-home and in-school viewers), (2) a probing analysis investigating in depth the characteristics of at-home, disadvantaged, high-viewing children in relation to home background and high or low learning, (3) an inferential analysis examining the overall effectiveness of the television series in achieving its goals. Chapter IV presents the summary, conclusions and recommendations. Extensive appendixes include detailed information on Sesame Street goals and evaluation instruments.

**The First Year of Sesame Street: The Formative Research. Final Report, Volume II of V Volumes**

Barbara Frengel Reeves. Children's Television Workshop, New York, New York, 1970. 200 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 047 822).

This paper reports the results of formative research conducted by the Children's Television Workshop from the time of the initial staffing of the Sesame Street project in 1968 until the end of the program's first broadcast season, two years later. Chapter 1 describes prebroadcast research, which was centered around three major problem areas: (1) establishing instructional goals, (2) testing for the determinants of appeal, and (3) testing for achievement.

A description of evaluation research on five one-hour pilot shows is included. Chapter II reports on progress testing conducted during the broadcast period with 200 three- to five-year-old viewers (experimental group) and nonviewers (control group) of Sesame Street in day care centers. Detailed appendixes, tables and figures are included.

**The First Year of Sesame Street: A History and Overview. Final Report, Volume I of V Volumes**

Joan Ganz Cooney. Children's Television Workshop, New York, New York, 1970. 25 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 047 821).

This paper describes the evolution of the Children's Television Workshop, which was originally suggested in a study made by Joan Ganz Cooney for the Carnegie Corporation, and which was responsible for the development and production of the daily, one-hour educational program, Sesame Street. As envisioned in the Carnegie proposal, the program was to combine entertainment value with solid educational matter.

The target audience was to be inner-city disadvantaged children from three to five years of age. Briefly outlined in this overview are instructional goals, pre-production research and planning, funding, methods of evaluation, future plans, and general conclusions of the first-year evaluation report submitted by the Educational Testing Service.

**Exploratory Studies in the Effectiveness of Visual Illustrations**

Francis M. Dwyer, Jr. Pennsylvania State University, University Park, Division of Instructional Services, 1969. 26 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 043 218).

Whether additional cues in visualized materials add to their instructional value is a question answered differently by various educational theorists. In the eight studies reviewed, experiments were designed to answer this question and other questions related to it. In three media studies using the same four treatments (oral presentation without visuals, with line drawings, with shaded drawings, and with color photographs), line drawings were most effective in the slide study, oral presentation in the videotape study, and realistic photographs in the programmed instruction study.

In another study, nine slide treatments having various types of visual illustrations were administered to 1054 high school students. Results indicated that at certain grade levels, color is an important instructional variable. Three later studies using a videotape of the nine slide presentations on 22-inch monitors, on a 5- by 3-foot front projection image, and on a 6- by 4-foot rear screen image found that students viewing the smaller images did better than those viewing images on the large screens. To summarize: Where time is unlimited, simple line drawings are preferable; where time is determined by the students, as in programmed instruction, more detailed presentations have greater learning value.

**The Effects of Television and Expert Feedback on Self Perception**

David R. Peters and Philip J. Schreiner. University of California, Los Angeles, Graduate School of Business Administration, 1970. 27 pages. Paper presented in part at the Western Psychological Association Annual Meeting, Los Angeles, California, April 1970. EDRS price microfiche 65c, hardcopy not available (ED 042 192).

This field experiment investigated the effects of confronting people with different types and timings of descriptive feedback on their presentations of self. The experimental subjects were 28 male graduate students. The subjects made three-minute informal presentations

on a personal topic and then received feedback on their individual performances. Feedback types and sequences were: (1) TV videotape replay; (2) expert description, and then delayed TV; and (3) no immediate feedback (control) followed by delayed TV. Semantic differential instruments, developed to assess the visual and vocal self, were administered before, during and one week after the experiment.

The results indicate that: (1) immediate TV feedback had a stronger effect upon the structures of the self-percepts than did expert feedback or no feedback, but the differential effects were not always significant; (2) subjects in all three group-conditions first shifted significantly toward self-attitudes which were more favorable; (3) both types of change were greater for subjects with less speaking ability; and (4) the revised self-assessments were not altered further by any delayed TV feedback and were maintained over a follow-up period of one week.

#### **Evaluation Report: Early Childhood Education Program, 1969 Field Test**

Appalachia Educational Lab., Charleston, West Virginia, 1970. 204 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 041 626).

Reported are findings from the first year's field test of the home-oriented Appalachia Educational Laboratory (AEL) early childhood education program for three-, four-, and five-year-olds. The program consists of a 30-minute daily television lesson, a weekly home visit by a paraprofessional, and group instruction once a week in a mobile classroom. The sample was made up of a total of 450 children divided into three groups. Group 1 received TV instruction and home visits and attended the mobile classroom. Group 2 had TV and home visits; group 3, only TV instruction. Thirty subjects from each group were tested for evaluation purposes. The data are presented in five categories: Program effort, program performance, program pervasiveness, program cost analysis, and evaluation synthesis.

Appendixes (one-sixth of this report) present detailed data analysis for (1) the program's evaluation plan, (2) interest level of project children, (3) IQ gain, (4) language development and behavior, (5) cognitive growth, (6) the parent attitude questionnaire and

checklist, (7) paraprofessional attitude data instrument and results, and (8) socioeconomic factors of treatment and control groups. It was found that TV lessons and home visitations (but not the mobile classroom) had a positive effect on children's cognitive development. Children in Group 1 scored highest on verbal expression.

#### **The Formative Evaluation of Patterns in Arithmetic Grade 6 Using Item Sampling, Phase 2: Analysis of Mathematics Instruction (Parts 1, 2 and 3)**

James Braswell. Wisconsin University, Madison, Research and Development Center for Cognitive Learning, 1970. 253 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 040 877).

Evaluated was grade 6 of a televised arithmetic program, Patterns in Arithmetic. The major goal was to determine whether or not the technique of item-sampling could be incorporated into a design effective for formative curriculum evaluation. Approximately 60 classes near Madison, Wisconsin, participated in the study. Tests were administered at four times during the year to a random sample of students to provide a profile of performance change.

As a result of these tests, changes were made in the television presentations. It was concluded that item-sampling had the following advantages over traditional achievement testing: (1) more detailed information is provided, (2) planning and review are more effective, (3) transient aspects become evident, (4) revision is more effectively accomplished, and (5) it is more economical of time and money.

#### **Discriminating Characteristics of Families Watching Sesame Street. Early Developmental Adversity Program: Phase III, EDAP Technical Note 15.1**

Thomas E. Jordan. 1970. 5 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 039 943).

Sesame Street is a television program aimed at stimulating young viewers. This study, a part of the early developmental adversity program, attempts to discover what demographic characteristics are associated with children who view or do not view Sesame Street. The



subjects of the study were 69 three-year-old children. Black and white, as well as middle class and lower class children, were represented in the sample. The data generated by this study indicate that Sesame Street is watched by a disproportionately small number of black children.

For every black child watching there are four or five who do not, while among whites there is an even split between watchers and nonwatchers. A predictably similar pattern of results is found when watchers and nonwatchers are compared on the basis of socioeconomic status. A significantly smaller percentage of lower class children than middle class children watch the program. Thus, viewers already belong to the group most prepared for the school, while non-viewers are those who most need the possible beneficial effects of Sesame Street.

#### **Evaluation of Closed Circuit Educational Television in Delaware: Emphasis on Utilization, Program Series Content, and Commitment. Preliminary Report**

Jeanne W. Mohrmann and Wilmer E. Wise. Delaware State Department of Public Instruction, Dover, Division of Research, Planning, and Evaluation, 1970. 264 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 038 033).

The basic aim of this study was to determine the effectiveness of closed circuit educational television in Delaware public elementary and secondary schools. At the time of the study the budget for educational television in the state had been eliminated. The major points for review were: program scheduling and selection, utilization of program series televised between September 15 and November 19, analysis of program series content, and the extent of local district commitment.

Four groups were studied—teachers, principals, other administrators, and pupils. Data were gathered by questionnaires and interviews. The findings were analyzed and the results are presented and discussed. A bibliography is provided. Appended to the report are a collection of background information on the research methodology of the study and tabulated questionnaires.

#### **Measurement of Listening Comprehension Via Television in Elementary School Spanish Instruction; Development of Programed Learning Materials for Use with Televised Spanish Instruction; Results in First, Second, and Third Year Research. Denver-Stanford Project on the Context of Instructional Television**

Manuel Andrade, and others. Denver County Public Schools, Colorado; Stanford University, California, Institute for Communication Research, 1964. 226 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 035 269).

The Stanford-Denver Project is a continuing study of elementary school Spanish instruction. These five documents report on various aspects of this study, especially the use of new technology to make instruction of Spanish more efficient. The first study details the construction of a listening comprehension test which could be given via television to students who can neither write nor read Spanish. The second discusses the development of programed learning materials for Spanish instruction and their effectiveness.

The third document presents the results from an experiment testing different utilizations of instructional television. The fourth reports on experiments done to determine the proper time to begin study of written Spanish, and along with the fifth study, compares teacher instruction with automated instruction. A combination of both techniques is found to be preferable to either alone. The fifth study examines the use of audio aids in earlier grades and finds them efficacious.

#### **Designing a Program for Broadcast Television**

Gerald S. Lesser. Harvard University, Cambridge, Massachusetts, 1969. 6 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 033 768).

Funded by both public and private agencies, Sesame Street, produced by the Children's Television Workshop, is an experimental series of television programs for three- to five-year-olds. The program is considered a complement and supplement to early education since four fifths of the nation's young children do not attend preschool, but do have television sets at home. Design and construction of the programs

are guided by a research staff responsible for child-watching to determine what the child actually sees, hears, and learns when watching Sesame Street. The information resulting from this formative evaluation is used by producers to improve programs. Some teaching approaches were altered because child-watching information indicated changes were needed.

#### **A Comparative Study of Current Educational Television Programs for Preschool Children. Final Report**

Edward L. Palmer and others. Oregon State System of Higher Education, Monmouth, Teaching Research Division, 1968. 100 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 032 123).

The purpose of this study was to identify the factors in preschool educational television that engage and sustain children's attention. The method used to measure the children's attention was decided on in a pilot study of three measurement techniques, and consisted of an observer rating scale with the periodic introduction of a kaleidoscopic distractor. There were three groups of children observed: two- and three-year-old middle class children, four- and five-year-old middle class children, and four- and five-year-old Mexican-American children from lower income families. Five television programs for preschool children and one set of animated cartoons were viewed.

To check for any possible correlation between language development and attentiveness, the children were given the Peabody Picture Vocabulary Test. The results of the between groups analyses revealed a very high degree of generality in terms of the type of program content that appealed to the age, sex, and social groups studied. Further, there was no correlation between Peabody scores and attention levels, once age was partialled out. Attention level was very low; analysis of the program content showed that children paid greater attention to the animated cartoons, introduction to novel objects, and initiation of novel action by the teacher-performer.

#### **The Effect of Different Television Utilization Procedures on Student Learning. Final Report**

Serena E. Wade. Santa Clara County Office of Education, San Jose, California, 1968. 42 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 031 958).

In a study designed to investigate the relative effectiveness of three methods of television utilization, 817 fifth grade students were exposed to 12 telelessons on a science unit about insects. With one group of students, the teachers were instructed to use a Socratic approach, ask questions and give immediate knowledge of correct responses. In another group the teachers explained that the students had no opportunity for a question-answer session. With the third control group the teachers were provided with a program guide and left to their own devices. Data collected included: Standardized pretest scores of science knowledge, intelligence scores, posttest scores of learning from the television lessons, and certain background information for each child. The data from this experiment suggest primarily that teachers be taught to use the Socratic method of instructional television utilization. Teachers should plan to create a classroom context beneficial to instructional television by involving their students in the lesson and encouraging them to respond actively to questions about the content. Data analysis of the primary and some of the secondary findings of the study is provided and some probable causes for the results are discussed. Appendices include three sets of teacher instructions, sample tests, and questionnaires.

#### **Studies in Televised Instruction: Individualizing Group Instruction. 4, A Summary Report**

Gerard C. Kress, Jr. and George L. Gropper. American Institutes for Research in Behavioral Science, Pittsburgh, Pennsylvania; Metropolitan Pittsburgh Educational TV Station, 1964. 22 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 025 157).

Programed instruction may be more efficient and effective when an individualized, fixed pace is chosen for the student. Three studies done in the Pittsburgh city schools attempted to determine the relative merits of instruction at a fixed pace versus a self-adopted pace. In the first experiment, one in which students paced

themselves, some chose a rate which produced more errors and a lower posttest score than was expected. Work rate and ability varied independently but showed a consistent pattern for each student from program to program. The second experiment investigated a variety of pacing techniques. The slow tempo, fixed-pace presentation resulted in higher group achievement scores but caused efficiency to suffer since some students apparently were forced to work more slowly than necessary.

In the third experiment, where external pacing was employed to help offset difficulties attendant on increased tempo, the cueing or pacing did lower error frequency but did not improve achievement. Results also provide some indication that multi-track programs with varying tempos, which are prescribed for students based on their characteristic work rate, might result in the most efficient and effective instruction. The studies may be particularly relevant when using a medium (e.g. television) which requires a fixed-pace presentation.

**Aptitudes and Instructional Media. Project on Individual Differences in Learning Ability as a Function of Instructional Variables, Technical Report Number 3**

Richard E. Snow and Gavriel Salomon, Stanford University, California School of Education, 1968. 28 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 023 295).

Little is known about the teaching effectiveness of instructional media, particularly film and television. Accumulated research evidence applies to a generalized "average student," and thus to no one. There has been little concern for individual differences in interaction with instructional-media variables. The problem lies with the design of experiments. In the animal lab, treatment averages are meaningful since deviations from the average are small and background variables are constant. In the case of a heterogeneous group, however, random division maintains heterogeneity, and treatment averages are therefore meaningless. Some improvement is brought to the situation if individuals are first separated into aptitude subgroups. Two major questions should be considered: (1) what aptitude variables are particularly relevant for filmed and/or televised instruction? and (2) what media attributes under what task requirements are

particularly likely to interact with aptitudes? Past research has pitted one instructional medium against another without concern for differing individual responses to those media. An alternative approach would consider aptitude interactions with media variables, thus pointing up appropriate treatments for different kinds of students.

**The Covariation of Achievement and Attitude Throughout a Learning Experience. Phase III, the Relationship of New Educational Media to Non-Intellective Factors in Learning. Final Report**

Charles O. Neidt. Colorado State University, Ft. Collins, 1967. 163 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 023 292).

Introductory psychology students were subjects in an investigation to determine the covariation among achievement, attitudes toward a course, and attitudes taught as part of a course. In addition, data obtained allowed for evaluation of two theoretical models of pretest sensitization, the first in terms of learner involvement and the second in terms of pretest position. A total of 1,324 subjects received from one to five repeated measurements of the three variables, achievement, attitude toward the course, and attitude toward psychology. Curves were fitted to each variable over time.

The resulting regression equations were compared as functions describing the variables under study. Partial correlation coefficients were used to assess the relationship between attitude scores and the final achievement score. Curves were fitted to high, medium, and low groups of each initial test distribution to assess pretest sensitization as a function of initial test distribution, while data on the three different variables were considered to represent three levels of involvement. Increase in achievement was best described by third and fourth degree equations. Attitude toward psychology did not change appreciably over the course of instruction. Attitude toward the course consistently declined. There was no evidence for either model of pretest sensitization.

**Development and Experiment in College Teaching, a Compendium of Reports on Educational Experiment and Development in the Disciplines and Professional Schools at 11 Midwestern Universities**

Stanford C. Ericksen. 1968. 39 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 020 133).

Provided is a compendium of reports which is the fourth in a series on educational experiment and development at eleven midwestern universities. Included is a collection of summaries of exploratory efforts by college professors to develop new and better ways of teaching. Usually these are local developments aimed at improving the conditions for learning in a specific subject-matter area, but many of the procedures can be generalized for application in other departments or may be used to stimulate the search for fresh alternatives. This document is also available for 50c from Stanford C. Ericksen, Center for Research on Learning and Teaching, 109 E. Madison Street, Ann Arbor, Michigan 48104.

**Audio-Lingual Results in the Second Year of Research—1961-62. Denver Stanford Project on the Context of Instructional Television, Report Number 8**

John L. Hayman, Jr. and James T. Johnson, Jr. Denver Board of Education, Colorado School District Number 1; Stanford University, California, Institute for Communication Research, 1963. 37 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 018 169).

This report, by means of numerous statistical tables analyzing the results of speaking and listening comprehension tests, explores the relative effectiveness of various instructional techniques used to supplement the basic televised instruction for fifth- and sixth-grade Spanish pupils, and the interaction existing among various combinations of techniques. For fifth-grade pupils, the basic 15 minutes each of televised instruction and eclectic classroom practice were supplemented in three research groups respectively by (1) electronic aids, (2) a second viewing at home, and (3) both methods.

By far the strongest factor influencing the effectiveness of each method was the prior training and experience of the classroom teacher. Sixth-grade results yielded the following conclusions—(1) the effectiveness of electronic aids depended on the teacher's experience, (2) for reading and writing, teacher direction proved far

superior to automated instruction, and also increased the value of electronic aids, (3) reading and writing the whole year is definitely superior to reading and writing the second semester only. For companion documents see also ED 018 153, ED 018 167, and ED 018 168.

**Causative Factors and Learning Related to Parent Participation. Denver-Stanford Project on the Context of Instructional Television, Report Number 13**

John L. Hayman, Jr. and others. Denver Board of Education, Colorado School District Number 1; Stanford University, California, Institute for Communication Research, 1964. 60 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 018 168).

During the first three years of the project, parents of the fifth-grade Spanish students were invited to participate by viewing the televised instruction with the child, practicing Spanish with him at home, and using the parent guidebook and phonograph record provided for the course. The superior performance of children of parent participants on listening comprehension tests clearly indicated that in this way parents can enhance their children's learning, but a precise understanding of the factors involved was lacking. Accordingly, a questionnaire administered in face-to-face interviews with 200 parent participants obtained information on the extent of involvement in each of the activities, attitudes toward the program and its effect on family relationships, and demographic data.

Numerous tables presented here explore the significance and interrelationships existing among all these factors, and yield the following general conclusions—(1) parent participation improved students' performance even when isolated from background factors, and produced a general motivational increase which affected their total school performance, (2) it tended to increase family unity, (3) parents' education and previous training in Spanish were the most important factors affecting participation. For companion documents see also ED 018 153, ED 018 167, and 018 169.

**A Further Search for Elements of Tomorrow's Classroom. Denver-Stanford Project on the Context of Instructional Television, Report Number 12**

John L. Hayman, Jr. and James T. Johnson, Jr. Denver Board of Education, Colorado School District Number 1; Stanford University, California, Institute for Communication Research, 1964. 38 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 018 167).

This final phase of the project (for the original study see ED 018 153) was an attempt to reach beyond the formal experimental design to answer a number of pedagogical questions not easily explored within its limitations. Seven teachers were given free rein to supplement the instructional methods already in use for sixth-grade Spanish pupils. These "Tomorrow's Classroom" (TC) Teachers proved most imaginative and productive, and demonstrated the value of the classroom teacher more dramatically than did any other phase of the project. The variety of instructional techniques and materials devised by each, and their teaching backgrounds, are presented in careful detail in the main section of this report.

Test results (a statistical analysis is given) show the value of this type of instruction—the TC pupils outperformed the regular groups in reading and writing by a factor of 25 percent. The project yielded detailed recommendations about (1) the need for variety in audio-lingual and reading-writing instruction, for an elimination of an artificial separation of the two, and (2) the value of tape recorders, programmed instruction, inter-pupil communication, and cultural study. For companion documents see also ED 018 168 and ED 018 169.

**A National Demonstration Project Utilizing Televised Materials for The Formal Education of Culturally Disadvantaged Preschool Children. Final Report**

Rose M. Kerji and others. United Planning Organization, Washington, D.C., 1966. 124 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 015 788).

To supply disadvantaged preschool children with culturally stimulating experiences, a TV series, Roundabout, was designed to be used in Washington, D.C. inner-city preschool and day care centers. The

15-minute programs were to introduce new experiences and supplement regular activities. It was hoped that the children would identify with a positive model, the male Negro star. Twice weekly for 28 weeks the programs were shown, and the reactions of 60 three- and four-year-olds in three selected schools were observed.

Teachers had a weekly, inservice training session. Both teachers' and observers' anecdotal records were coded into 13 categories and statistically described. It was found that the preschoolers identified only slightly with the TV performer, the teachers made insufficient use of the series, and the children had too little space to participate in the suggested motor activities. Further research might test the hypotheses that school activities reinforced at home provide more learning, low and middle income children react similarly to a TV curriculum if teaching abilities are held constant, and the more creative the teacher and the more "unrealistic" the TV characters, the more the children respond to TV. Appendices included in this report are (1) demographic description of the population, (2) in-service training questionnaire, (3) monitors form, (4) frequency of responses for schools, (5) coding categories, and (6) anecdotes.

**The Instructional Effectiveness of Color in Television—A Review of the Evidence. Using Educational Media—Guides to the Literature, Series I**

Joseph H. Kanner. Stanford University, California, Institute for Communication Research, 1968. 11 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 015 675).

This document reviews a number of studies conducted to determine the effect of color in television on human learning, as measured by objective tests. The findings reveal an apparent lack of color effectiveness upon learning.

**"This Business of Farming." 1964, A Study of Audience Reactions to a Televised Course of Instruction for Farmers in the Prairie Provinces of Canada**

Canadian Broadcasting Corporation, Ottawa, 1965. 355 pages. EDRS price microfiche 65c, hardcopy \$13.16 (ED 014 881).

Following extensive promotional campaigns, the Canadian Broadcasting Corporation cooperated with the extension services of the Canadian Department of Agriculture to present a televised course of five one-hour programs in modern farming methods. Four programs were alike for Manitoba, Saskatchewan and Alberta, but the fifth differed in each province. This study's purpose was to provide audience feedback information to assess the value of the course, and to aid planning of the future, with special focus on the utility of a single set of programs for the vast Canadian prairie region. Area probability sampling of farm households with TV and telephone yielded 4372 usable interviews in the three provinces.

In over 55 percent of the homes in the total coverage area the farmer himself viewed the programs. Factors that contributed to viewing differences in the three provinces are discussed. The course was particularly successful in reaching farmers with little previous knowledge of extension services activities. Except for some small farmers, audience reaction was overwhelmingly favorable, and emphasized the course's practical value and its appeal to diverse needs and interests. Many comparative graphs and charts are presented, along with sampling information and interview schedules. Further information is available from the Director of Research, Canadian Broadcasting Corporation, Ottawa.

**An Investigation of Closed-Circuit Television for Teaching University Courses. Instructional Television Research, Report Number Two**

C. R. Carpenter and L. P. Greenhill. Pennsylvania State University, University Park, 1958. 116 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 014 871).

While focusing on the potentialities and limitations of closed-circuit TV to improve both teaching and learning, the goal of this study is to provide factual evidence to aid educational institutions in decision-making.

Twelve specific project objectives, including study of class size, type of course, low cost TV systems, faculty acceptance of TV, and instructional methods are listed. Experiments comprehensively covering possible variables were conducted in over 70 courses whose teachers volunteered them for study. Four problem areas were investigated and students were randomly assigned to all treatment groups.

First, studies of the comparative effectiveness of conventional and televised instruction, even though carefully designed to control variables such as instructor, environment, technique and course type, yielded non-significant differences in students' achievement scores. Using the same statistical procedures (analysis of variance and covariance), experiments investigating distance from TV, class size, class composition, and classroom supervision also yielded non-significant differences. Problem area 2, appropriateness of TV for university teaching, emphasized the wide range of uses of closed-circuit TV. Studies of acceptance, area 3, probed faculty, student, and observer attitudes through behavior questionnaires and behavioral choice techniques. Finally, a section on feasibility concluded that it is practical to operate closed-circuit systems with regular university personnel.

**An Experimental Study of Television as a Medium of French Instruction**

Toronto Board of Education (Ontario), 1962. 67 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 014 242).

A five-month experiment in Toronto compared television as a medium of instruction in French for grades 7 and 8 with the same material presented by book and tape recordings. Analyses were made of the make-up of each group, student interests and future plans, and the length and frequency of instructional periods. While the students taught with book and tape recordings surpassed the others on both the oral proficiency and the comprehension test, especially if they received fewer but longer sessions, motivation proved superior to all interrelated factors. The report of the experiment describes the purposes, methods, and results of the study, and contains tables to support the findings, a copy of a questionnaire to students, and instructions and scoring sheets for the oral examination and the two comprehension tests.

**"Let's Speak English," An Experiment in Adult Educational TV Designed to Teach English to Beginners, with a Report on the Audience Reached and Its Reactions to the Program**

Canadian Broadcasting Corporation, Ottawa, Ontario, 1967. 100 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 014 234).

Three hundred sixty-eight interviews conducted in the home, by mail, and by telephone provided data for this audience study of the English course featuring a mimicry-memory technique. About 35 percent of an ideal target audience in the Toronto metropolitan area defined according to age and linguistic ability watched some of the program, and about half of these were considered regular viewers. Despite extensive publicity, about half of the target audience lacked awareness of the program, but of those who were aware, four out of five watched some part of it. The bulk of frequent viewers were post-war immigrants, many of whom spoke little or no English and most of whom had never had formal English instruction.

Those who viewed with others tended to be the more persistent students, and the larger the viewing group, the greater the tendency to watch regularly. Attitude of the regular viewers was favorable, especially to the mimicry-memory aspect. Least interesting were grammar drills. Visual aids to comprehension had little impact. Textbooks were criticized. Audience dropoff and heterogeneity are discussed, as is possible loss of motivation due to isolating effects of the TV medium. Percentage tables and frequency tables based on Chi Square, and experimental materials were included. Information on any aspect of this study is available from the Director of Research, Canadian Broadcasting Corporation, Ottawa.

**The Effect of TV School Broadcast on Children in Isolated Villages**

Isao Tsuji. NHK Radio and TV Culture Research Institute, Tokyo, Japan, 1964. 21 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 014 216).

From 1962 to 1963, the Japan Broadcasting Corporation conducted a study to measure the effects of instructional television on primary school children in isolated areas of Japan, who had scored below the

national average on nationwide achievement tests. Four primary schools were chosen for the experiment. The students were pretested for intelligence, achievement, and interest in learning. Tests used at the start and finish of the study were the Tanaka-B-Type intelligence test and the standard achievement test. The students were sorted for uniform intelligence and achievement levels, resulting in 130 children in the TV group and 84 in the control group. Two schools were then furnished with two TV sets each.

The other two schools were the control group. Fifth graders from the TV group regularly viewed a science and a social studies program. The same texts and teaching methods were used in all four schools. In each group, subgroups of higher and lower intelligence were set up. It was shown that, on intelligence and science achievement tests, both subgroups of the TV group scored higher than the control group after one year of instructional TV. The lower intelligence TV subgroup did particularly well on the social studies test, but both subgroups did better than the control groups. It is noted that televised instruction was particularly effective in subjects foreign to children in remote areas. Memory and alertness improved.

**Experimental Study in Instructional Procedures, Second Report**

F. G. Macomber. Miami University, Oxford, Ohio, 1957. 68 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 014 211).

The effectiveness and feasibility of using certain types of large group instruction at the college level were studied. Courses were taught (1) by television, (2) by lecture, (3) by a problem or case study approach, and (4) by graduate student assistants. Evaluations involved comparisons between these experimental methods and conventional instruction. For matching purposes, students took the cooperative test of English achievement, the Cooperative Mathematics Placement Test, and the American Council on Education Examination for College Freshmen. In general, no great difference was found between academic achievement in experimental and control classes. Student attitudes towards courses and instructors were measured on a C-scale. The instructor was a major determinant of student reaction. Generally, students preferred conventional (small) classes.

**An Investigation of Closed-Circuit Television for Teaching University Courses. Instructional Television Research, Project Number One**

C. R. Carpenter and L. P. Greenhill. Pennsylvania State University, University Park, 1955. 107 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 013 540).

This project compared the effectiveness of unmodified university courses taught via closed-circuit television with the effectiveness of the same courses conventionally taught for one semester. The acceptability of televised instruction to students, faculty, and administrators was measured, as was the feasibility of using moderate cost television equipment. General chemistry and general psychology were used for the experiment. Students were chosen for uniform ability, interest, and previous knowledge. Three groups were set up within each course—(1) receiving conventional instruction in television originating room, (2) receiving televised instruction, (3) control group receiving conventional instruction. Moderate cost vidicon equipment was used. Objective tests on course content measured student achievement.

Students and teachers recorded their reactions to televised instruction. Equipment condition was recorded. The difference between the effectiveness of televised instruction versus conventional instruction was not statistically significant, direct presentation proved slightly more effective. Student reactions to televised instruction were neutral or slightly negative. Faculty were skeptical but willing to experiment. Administrators were favorable. Moderate cost vidicon equipment proved adequate, though maintenance was a problem. Other applications and problems of instructional television are also discussed.

**Washington County Closed-Circuit Television Report**

David Lyle. Washington County Board of Education, Hagerstown, Maryland. 87 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 013 536).

The instructional potential of television was evaluated from 1956 to 1961 in the Washington County, Maryland, School System. All grades and all courses were involved. Televised instruction was made integral to the courses, but it did not occupy a major part of the

school day. Forty-five schools were linked in a closed-circuit television network. Six different lessons could be broadcast simultaneously to over 800 sets. Lessons were transmitted, mostly live, from a television center with five studios. A teaching team consisted of the studio teacher and the classroom teacher, who prepared students for the televised lesson and led discussion after it. A subjective and objective evaluation program was conducted by interview, questionnaire, and examination.

Student achievement in basic subject areas was measured, noting differences between achievement in urban and rural schools. After five years it was found that the curriculum had been improved and enlarged at a practicable cost. A majority of students and teachers liked televised instruction. Tabulated results of student achievement in mathematics, science, social studies, English, art, music and French generally favored students who had received televised instruction for a longer period over students receiving less or no televised instruction. The project was not conducted as a formal experiment.

**Adult Education and Television. A Comparative Study in Canada, Czechoslovakia, and Japan**

Brian Groombridge and others. United Nations Educational, Scientific, and Cultural Organization, Paris, France, 1966. 142 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 011 993).

Studies on the educational uses and potential of television in Canada, Czechoslovakia, and Japan outline and discuss (1) the social and educational context of ETV in each nation, (2) kinds of programs and their purposes, (3) exploitation of ETV by adults, (4) research on audience characteristics and needs, and (5) forms of cooperation between television broadcasters and adult education. The Canadian report stresses (1) cooperation with universities, educators, and adult education organizations, (2) Canadian Broadcasting Corporation (CBC) objectives (for example, greater understanding between French and English Canadians), (3) program production and scheduling, (4) staff training, (5) the impact of television on the "Farm Forum" and "Citizens Forum" series, and (6) research and planning needs.

The Czechoslovakia report emphasized (1) investigation of audience viewing patterns and reactions, (2) effective planning, production, and scheduling, and (3) cooperation with other educational bodies in



advisory, creative, and staff-training activities. The Japanese report seeks to relate adult education and television to social needs through formal and informal courses (correspondence and women's education, for example), general cultural and informational broadcasting, suitable production methods, and specific leadership training techniques. Case studies are given on (1) the CBC series, "Four Philosophers" (Canada), (2) health education (Czechoslovakia), and (3) women's classes (Japan). The document includes the editor's commentary, four tables and 71 references.

#### **An Experimental Evaluation of Methods for Improving "Conventional" Television Lessons. Studies in Televised Instruction. Final Report**

Zita Glasgow and George L. Gropper. American Institutes for Research in Behavioral Sciences, Pittsburgh, Pennsylvania, 1966. 90 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 011 077).

A number of procedures for improving the conventional television lesson were evaluated. Three versions of a television lesson on levers were compared—(1) a version of an existing, conventional lesson used as a control treatment, (2) a version intended to facilitate retention of science concepts and principles, and (3) a version intended to facilitate transfer of the concepts and principles learned to new contexts.

Revisions in the lesson incorporated many features of programmed instruction. Changes made revolved about the stimulus features of the presentation only. From the results it was concluded that concentration on the stimulus alone, while neglecting the response, produced improvements over the conventional lesson, but fell short of aiding the student to acquire, retain, and transfer large amounts of information.

#### **A Demonstration Project of Programed Television Instruction**

P. Kenneth Komoski. Columbia University, New York, New York, Institute for Educational Technology, 1966. 193 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 011 066).

A demonstration project was begun to create group-paced, programed television instruction in the

form of a short series of lessons designed to enable students within a given target population to learn a specific set of instructional objectives. Three geography lessons were developed through a process of testing, revising, and validating under normal classroom conditions in schools that regularly use instructional television. These lessons avoided the "teacher-on-camera" technique and used only the voice of the teacher to direct attention to certain aspects of the visual teaching displays.

Along with the three-lesson demonstration series, a 45-minute film was produced which contained excerpts from the final versions of the three lessons and which also summarized the final in-school testing of the lessons and the process by which they were developed. The test population included elementary students from 17 school districts in the District of Columbia vicinity. Although the investigator indicated a need for decision concerning the range of ability levels to be taught by any one lesson, he concluded that the use of television need not be limited to enrichment programing and that the lessons developed had demonstrated the efficacy of group-paced, programed television for direct instruction.

#### **A National Demonstration Project Utilizing Televised Materials for the Formal Education of Culturally Disadvantaged Preschool Children**

Rose Mukerji. Greater Washington Educational TV Association, Washington, D.C., 1966. 126 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 010 529).

Development and demonstration of televised educational programs for disadvantaged preschool children and their teachers was accomplished. A series of 56 children's programs and a series of 24 programs for inservice teachers were developed and evaluated. The programs for children, called Roundabout, provided experiences and guided activities in creative arts, science, mathematics, social studies, and social relations. Teacher's Roundabout, the programs for teachers, included previews of children's programs, suggestions for using the children's programs, and general inservice training.

The form of gathering evaluative data relied, primarily, on an extensive monitoring system in classrooms before, during, and after reception of the children's programs. Feedback proved extremely useful in providing guidance for future programing. One

promising result of the project was the extent to which the televised programs elicited interaction and creative responses from the viewing children, including aesthetic, intellectual, and social responses. In addition, the use of closeups and movement, whether of animals, people, or objects, seemed to elicit intensified interest and involvement on the part of the viewers. A teacher's guide was included in the report, consisting of (1) descriptions of the programs and (2) suggestions for preschool activities after the programs are presented.

**Television for Higher Technical Education of the Employed; A First Report on a Pilot Project in Poland. Reports and Papers in Mass Communication, 55**

United Nations Educational, Scientific, and Cultural Organization, Paris, France, 1969. 49 pages. Available from United Nations Educational, Scientific, and Cultural Organization, Place De Fontenoy, Paris 7-E, France (Com/MC/68.17, \$1.25). Document not available from EDRS.

Undertaken on a national scale in Poland, this 1966 pilot project provided lectures by television for those who, because of employment or location, could not attend intramural courses in higher technical education. The television lectures embraced subjects from the first two years of extramural technical studies together with aspects of general interest. Questionnaire surveys conducted during the preparatory pilot course centered on personal and socioeconomic characteristics of participants, reasons for pursuing external degree courses, student problems, students' opinions on the instructional value of the lectures, and the influence of the lectures on success in the entrance examination. A followup poll was taken six months after completion of the course. Benefits of the course were tentatively assessed, along with limitations of the study. (The document includes 44 tables.)

**Methods, Including CCTV, of Presenting Introductory Biology: Their "Affect" on College Freshmen**

Marland Leroy Madson. Minnesota University, Minneapolis, 1969. 224 pages. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Michigan 48106 (Order No. 70-5584, microfilm \$3, xerography \$10.15). Document not available from EDRS.

Reported is a study in which freshman students in biology with no prior experience of closed circuit television (CCTV) instruction were randomly assigned to three groups of 35 students each. All groups had one three-hour laboratory session weekly for one quarter. Additional weekly classes for group A were three one-hour CCTV lectures and one one-hour discussion; group B had three live lectures from the same professors who gave the CCTV programs and one one-hour discussion; Group C had the CCTV classes.

The relationship between opportunities for personal contact with instructors and achievement and attitudes toward aspects of the course were investigated using four course examinations, a semantic differential, and an attitude inventory. One way analysis of variance, Newman-Kuels means analysis, and Chi-Square tests were used. There was no difference in achievement between groups. Treatment C students, who only had contact with instructors in laboratory sessions, had a more positive attitude toward laboratories than the other groups. Group B students rated lecturers more positively than the other students did. The greater the opportunity for personal contact with the instructor the more positive the attitude towards different aspects of biology.

**Just Watch What I'm Saying: A Television Teaching Course for the Deaf and Hard of Hearing**

F. E. Wermer. EBU Review, European Broadcasting Union, 1, Rue de Varembe, CH-1211 Geneva 20, Switzerland, 1969. 4 pages. Document not available from EDRS.

The Netherlands Television Academy Foundation prepared a weekly television series intended to teach lip reading to the deaf and to the hard of hearing. This article outlines the scope of this project, referring to the format of the 18 half-hour lessons, to the supplementary

written materials employed, to the nature of the criticism received, and to the 40 study and discussion groups which were formed throughout the Netherlands as an extension of the course.

#### **An Experimental Study of the Effects of Different Combinations of Television Presentations and Classroom Teacher Follow-up on the Achievement and Interest in Science of Fifth Graders**

Ray Skinner, Jr. Ohio University, Athens, 1968. 178 pages. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Michigan 48106 (Order No. 67-9429, microfilm \$3, xerography \$8.20). Document not available from EDRS.

Four combinations of two types of television lessons and two methods of classroom teacher follow-up were studied in order to identify how combinations of treatment affected pupil achievement and interest in science and how television instruction motivated learning in elementary schools. Pupils who were presented with unanswered questions designed to arouse curiosity and interest in science regardless of type of teacher follow-up achieved significantly higher results on tests than pupils who viewed the same substantive material, presented in a direct expository manner giving explanations of phenomena.

This study involving 888 pupils indicated that television lessons and teacher follow-up, supported by teacher previews of lessons in advance and teacher guides, constituted an effective approach to teaching elementary school science. Pupil interest in viewing the lessons and participating in the follow-up remained high over the experimental period.

#### **Eleven Broadcasting Experiments**

Hilary D. Perraton. 1968. 7 pages. Document not available from EDRS.

A review is made of experimental courses combining the use of radio, television, and correspondence study and given by the National Extension College in England. Courses included English, mathematics, social work, physics, statistics, and computers. Two methods of linking correspondence

courses to broadcast were used—in mathematics and social work courses, each lesson and worksheet was related to a specific television lesson while in English, geography, and physics lessons a looser link existed since the lessons approached the subject concentrically. Difficulties met with included reproduction of materials, timing, and lack of flexibility in scheduling.

Students indicated that they wanted each lesson to be longer and broadcast at peak viewing hours. They felt it was wasteful to have pictorial visual material, practical application of physics, and student participation in lessons. Through correspondence, personal guidance was provided, also a detailed guide to subject matter and permanent record of the course. It was estimated that the combination courses were more expensive than traditional class methods. This article appeared in *Home-Study*, number 4, February 1968, distributed by the National Extension College, Shaftesbury Road, Cambridge, England.

#### **Instructional Television: Inquiry Method of Instruction in Fifth- and Sixth-Grade Science**

Mary Mitchell Beets, United States International University, San Diego, California, School of Education, 1968. 140 pages. Thesis presented to the School of Education of United States International University. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Michigan 48106 (Order No. 68-14,754, microfilm \$3, hardcopy \$6.60). Document not available from EDRS.

The primary purpose of this study was to evaluate television as an instructional medium for teaching creative thinking to fifth and sixth grade students by use of the "inquiry" method of instruction in the area of science. A secondary purpose was to determine the effect of student involvement in the live telecasts on their performance on a test for creative thinking. Four groups of children were used in this study. A pilot group was used to standardize scoring for the other groups. Experimental Group A viewed the telecasts and had a direct telephone connection with the studio.

Additionally, half the students in the group also took part in one of the live telecasts. Experimental Group B viewed the telecasts but did not participate further. Control Group C did not view the telecasts or

participate in any other way, other than taking the pretest and posttest. Analysis of data showed that the students who viewed the telecasts did better on a test for creative thinking than did those who did not. Students who were also involved in the telecasts (Group A) did significantly better than those who were not (Group B). A bibliography is provided. An appendix contains the test used to measure creative thinking.

## BIBLIOGRAPHIES, LITERATURE GUIDES AND OVERVIEWS

**Television as a Technical Aid in Education and in Educational and Psychological Research: A Bibliography (Continued). Didakometry**

B. Bierschenk. School of Education, Malmo, Sweden, Department of Educational and Psychological Research, 1971. 29 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 049 644).

A supplementary survey of dissertation abstracts and other periodicals in English has resulted in this updated bibliography which covers material published since the original survey in 1968 (ED 037 060). Unlike the original survey, however, no German dissertations are listed.

The works are divided into two categories: Dissertations or other published material. Each category is further divided into subsections according to topics: Instructional television (ITV) in elementary and high schools, ITV in colleges and universities, ITV in teacher training, television as a research instrument, attitudinal studies, educational television (ETV), television handbooks, and television surveys and bibliographies. Each entry provides the author, title, date of publication, and source. For documents available from University Microfilms or from ERIC, the appropriate ordering number is provided, although no further ordering information is given. An author index is included.

### **Research in Instructional Television and Film**

J. Christopher Reid and Donald W. MacLennan. Missouri University, Columbia, 1967. 224 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 041 183).

This document includes abstracts of 350 experiments in instructional television and instructional film since 1950. Each abstract describes the problem, sample, subject taught, key variables, and criterion instruments. Reliability and validity data, and statistics, when available, are also given. The introduction reviews research trends. Author and subject indexes are also included.

### **Selected Bibliography of Summarizing and Capstone Reports No. 1. The Conditions, Requirements and Variables Affecting the Quality of Complex Learning Mediated by Instructional Television Systems**

C. R. Carpenter. Pennsylvania State University, University Park, Department of Psychology, 1968. 7 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 037 100).

Forty-eight reports published between 1962 and 1969 are presented in this unannotated bibliography. These reports were selected for the use of the Commission on Instructional Technology in its examination of the conditions, requirements, and variables affecting the quality of complex learning mediated by instructional television systems. (ED 037 099, ED 037 101, and ED 037 102 are related documents.)

### **Television and Film in College English Instruction: A Bibliography of Research and Studies with Abstracts**

Dolly D. Svobodny, compiler. Modern Language Association of America, New York, New York, ERIC Clearinghouse on the Teaching of English in Higher Education, 1969. 29 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 035 674).

There are 62 abstracts in this compilation describing research and experimental teaching using television and film methods in college English instruction. The studies, most of them conducted since 1950, cover: (1) a comparison of televised instruction with face-to-face presentation, (2) a comparison of filmed or kinescoped courses with direct instruction, (3) other applications of television and film for instruction, (4) the significance of professor and student attitudes, and (5) the effects of production variables in television and films. Many of the documents are available through ERIC; prices and order numbers for purchase are given.

### **Readings in Educational Media Theory and Research: Volume II. Final Report**

William H. Allen. 1968. 236 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 031 953).

This compilation of readings in educational media and research makes accessible published and unpublished documents relevant to designers and users of educational media. Volume II includes Part 3, "Research on Media Types," Part 4, "Media Design and Production," and Part 5, "Media Content and Objectives."

"Research on Media Types" includes summaries of research and selected studies on instructional television, compressed speech, textbook design, pictorial illustration for use in underdeveloped countries, and graphic presentation. "Media Design and Production" translates theory and research into an instructional product, considering visuals, scientific knowledge of psychology, theories of information transmission to media design, and significant film production variables. "Media Content and Objectives" suggests a framework for studying the variables contributing to media effects and offers guidelines for selecting and developing particular types of media to accomplish specific instructional objectives, summarizing the research pertaining to the accomplishment of different educational objectives. The relationship of media to the learning of concepts is also treated. Extensive bibliographies follow these papers.

#### **Media and the Disadvantaged—A Review of the Literature**

Serena E. Wade. Stanford University, California, ERIC Clearinghouse on Educational Media and Technology, 1969. 26 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 027 741).

This review covers books, journal articles, and ERIC documents, 1966 and later. Much emphasis is placed on media program and project descriptions, rather than reports of completed research. The review points to trends of common media use and student performance and tries to shed some light on the general direction of future media efforts for the disadvantaged.

These propositions are supported in the review: (1) media are useful in extending frames of reference and providing models and motivation for the disadvantaged; (2) media can emphasize each individual's approach to learning (thereby de-emphasizing the learning disadvantages with which some children come to school); (3) media can teach basic skills, but seem to

be inadequate to teach assimilation skills to the disadvantaged; (4) projects that focus on older disadvantaged children or adults will have greater difficulty in achieving noticeable success in a short period of time, mainly because these individuals are more difficult to reach. Critique and marginal comments are provided by Adelaide Jablosky. Bibliography, including ERIC document numbers, is included.

#### **A Survey of Instructional Closed-Circuit Television 1967**

Harold E. Wigren and others. National Education Association, Washington, D.C., 1967. 203 pages. EDRS price microfiche 65c; hardcopy \$9.87 (ED 016 394).

A nationwide survey of the utilization of in-school closed-circuit television (CCTV) and instructional television fixed services resulted in the compilation of the attached directory of American educational institutions currently using CCTV. Also included are narrative and tabular data describing present patterns of CCTV utilization and possible future trends for growth and change in this field. Copies of this document may be ordered as stock number 071-02890 for \$3 each from the National Education Association, Publication Sales, 1201 16th Street, N.W., Washington, D.C. 20036.

#### **Learning From Television. What the Research Says**

Godwin C. Chu and Wilbur Schramm. Stanford University, California, Institute for Communication Research, 1967. 222 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 014 900).

Sixty propositions in six areas concerning the conditions of effective learning from television are developed from a survey of the research literature—(1) how most pupils learn from instructional television, (2) efficient use of the medium in a school system, (3) treatment, situation, and pupil variables, (4) attitudes toward instructional television, (5) television in developing regions, (6) learning from television compared with learning from other media.

Evidence for each proposition is briefly summarized. Literature search depended partly on abstracts, partly on complete documents, and included foreign as well as U.S. research. It is concluded from

overwhelming evidence that television can be an efficient tool of learning and teaching. When it is not efficient, the reason is usually in the way it is used. Evidence favors the integration of television into other instruction, simplicity rather than "fanciness," emphasis on the basic requirements of good teaching, introduction of the medium so as to minimize resistance, and testing and revision of programs. Whether the television medium is to be preferred, and whether it is feasible for developing regions, depends on objectives and conditions. A selected bibliography of 303 titles is included.

#### **Listening Groups, Mass Media in Adult Education**

John Ohliger. Center for the Study of Liberal Education for Adults, Brookline, Massachusetts, 1967. 84 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 014 038).

The author examines listening group projects in over 30 countries since the 1920s. The historical study and the review of research deal with purposes and outcomes of projects, clientele, broadcasts and supplemental printed materials, methods of group organization, methods of post-broadcast discussions, group leadership, and feedback. Direct and related research is evaluated in terms of the conclusion that such groups can spread the learning of factual material, help develop desired attitudes, increase interest in public affairs, affect motivation toward group and individual action, and contribute to more direct democracy.

Other research findings suggest that projects need a substantial staff of field organizers, and that listening groups attract clientele of lower economic and educational attainment than the typical participant in adult education. Special emphasis is placed on early efforts of the British Broadcasting Corporation, America's Town Meeting of the Air, Canada's National Farm Radio Forum, and the many projects of UNESCO in underdeveloped areas. (This document is a revision and adaptation of a doctoral dissertation presented to the University of California at Los Angeles.) This document is also available from Syracuse University Press, Box 8, University Station, Syracuse, New York 12210 (\$2).

#### **Educational Television, the Next Ten Years**

Lester Asheim and others. Office of Education, Washington, D.C., 1965. 399 pages. EDRS price microfiche 65c, hardcopy \$13.16 (ED 012 887).

Four studies of educational television were commissioned by the U.S. Office of Education. The first, contracted to the National Association of Educational Broadcasters, surveyed plans of educational institutions, estimated needs for channel allocations for these plans, and made engineering studies of how to meet these needs. The second study, made by the University of Nebraska, surveyed needs and plans of educational institutions for exchange of teaching materials and recommended ways of meeting these needs.

The third, contracted to the Institute for Communication Research at Stanford University, studies problems of finance, program quality, manpower training, and design and equipment of schools. The fourth study, made by National Educational Television, studies audiences of eight educational television stations in six different situations in the United States. This study was summarized in an appendix and the results were to be published separately. (Changes which had occurred since the first publication of this document—1962—were noted in the foreword. Also included were the recommendations of the Television Advisory Panel of the Office of Education. Appendixes include brief histories of both educational television and educational radio.) This document is available, for \$1.25, from the U.S. Government Printing Office, Washington, D.C. 20402.

#### **Learning by Television**

Ronald Gross and Judith Murphy. Fund for the Advancement of Education, New York, New York, 1966. 97 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 012 622).

In spite of its proved effectiveness, instructional television (ITV) has not realized its full potential as a teaching medium. The authors review the history of ITV, pointing out the reasons for its past failure and enumerating those factors which may lead to the

fulfillment of its promise. Free copies of this document are also available from the Ford Foundation, Office of Records, 320 E. 43rd Street, New York, New York 10017.

#### **Experimental Research on Educational Media**

A. A. Lumsdaine and S. M. Roshal. University of California, Los Angeles, 1963. 678 pages. EDRS price microfiche 65c, hardcopy \$23.03 (ED 003 855).

A "guidebook" was developed as a contribution to the improvement of experimental research on educational media. One of its main aims was to promote better understanding, among both sponsors and investigators, of the art in educational-media experimentation. The book guides the reader in two ways—(1) by providing a "primer" of some fundamental considerations useful for researchers and sponsors to keep in mind and (2) by guiding the reader to further information about relevant aspects of educational media research.

#### **Abstracts of Research on Instructional Television and Film, Volume II**

Wilbur Schramm. Stanford University, California, Institute for Communication Research, 1963. 222 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 003 806).

The experimental literature pertaining to instructional film research since 1950 has been abstracted. The abstracts are presented in two volumes. This is Volume Two. (See ED 003 805 for Volume One.)

#### **Abstracts of Research on Instructional Television and Film, Volume I**

Wilbur Schramm and others. Missouri University, Columbia, Stanford University, California, Institute for Communication Research, 1964. 240 pages. EDRS price microfiche 65c, hardcopy \$9.87 (ED 003 805).

MacLennan and Reid abstracted the experimental literature pertaining to instructional film research since 1950. Historical and descriptive studies, surveys, surveys of research, and other nonexperimental reports are omitted. Each abstract includes the number and description of subjects, criterion instruments, reliability and validity data, and statistics used (when given). All finished abstracts (except dissertations) were mailed to their authors, when they could be located, for comments before the final typing. Volume One includes an introductory section by Leslie P. Greenhill, who discusses the trends of instructional film research. (See ED 003 806 for Volume Two.)

#### **Educational Television. The Library of Education**

George N. Gordon. Center for Applied Research in Education, Inc., New York, New York, 1968. 126 pages. Currently out of print. Not available from EDRS.

Educational television represents the most comprehensive innovation in American education. Its history, financial bases, public service aspects, and the future of open-circuit instructional television are presented briefly.



## PROJECT REPORTS

### **Television and Educational Reform in El Salvador, Complete Report on the Second Year of Research**

Wilbur Schramm and others. Stanford University, Institute for Communication Research, 1971. 213 pages. Available from the Institute for Communication Research, Stanford University, Stanford, California 94305. Document not available from EDRS.

Research conducted on El Salvador's educational reform program during the 1970 school year is summarized. The primary focus is on the effect of instructional television on that reform. The administrative history of the 1970 school year is briefly reviewed. Learning patterns in the seventh- and eighth-grade television classes are compared with those in traditional classes. An attempt to isolate the contribution of television instruction to student learning and an analysis of the effect of television instruction on certain disadvantaged groups are described.

An attitude survey to determine the effect of the reform program on teachers shows a generally favorable attitude toward televised instruction. Surveys of student attitudes and of student aspirations are presented in terms of El Salvador's overall economic development. The longitudinal data obtained over the past two years, four different student surveys, and an interview study of parents are summarized. Two special projects—one to measure the changes in classroom teaching behavior and the other to obtain quick feedback on student learning in television classrooms—are reported. The text of the report is extensively supplemented by charts, graphs, and data tables.

### **Television and Educational Reform in El Salvador, Complete Report on the First Year of Research**

Emile G. McAnany and others. Stanford University, California, Institute for Communication Research, 1970. 193 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 040 596).

Research carried out on El Salvador's educational reform project in the first school year that used instructional television (February-November, 1969) is summarized in this report. Focusing on the 32 pilot classes using television, together with 16 other classes without television, chapters include the administrative history of the reform, studies of student abilities and learning, cognitive growth, attitudes and aspirations, and teachers' understanding and acceptance of the new technology of television.

### **The Peace Corps Educational Television (ETV) Project in Colombia—Two Years of Research. Overview of Research Reports No. 1-10**

George Comstock and others. Stanford University, California, Institute for Communication Research, 1966. 134 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 017 185).

This document summarizes a two year research project designed to evaluate introduction of educational television on Colombian schools by the Peace Corps. Many different studies of Peace Corps effectiveness were conducted, using field experiment and survey (mail questionnaire, panel, interview) techniques to measure attitudes and behaviors of Peace Corps volunteers, and Colombian teachers, pupils, and professional and technical personnel.

Statistical analysis of 15,000 tests given to pupils, 1550 given to teachers, six surveys of 5200 teachers, and 1000 hours of interviews with volunteers and teachers yielded feedback on the project's success and its many technical problems plus suggestions for improvement in both teaching techniques and measurement devices. Topics of the ten individual project reports summaries are—the project's organization, the first semester—pupil achievement, teacher attitudes and the volunteer, improving the effectiveness of the volunteer and the teacher, making educational TV work in developing country's schools, a volunteer's daily job, in-service teacher training by television, improving the effectiveness of volunteer efforts to change teacher behavior, the televised curriculum and the teacher, the volunteer, feedback to the Peace Corps.

## NATIONAL ISSUES

### **Docket Search. Part of a Planning Document for the Establishment of a Nationwide Educational Telecommunications System**

Synergetics, Inc., Washington, D.C., 1971. 154 pages. EDRS price microfiche 65c, hardcopy \$6.58 (ED 060 396).

A docket search reviews selected educational telecommunications issues brought to the attention of the Federal Communications Commission (FCC). The docket search was part of an effort to develop a planning document for the establishment of a nationwide educational telecommunications system. Key policy-making proceedings were identified which dealt with educational television on UHF-TV, ITFS (Instructional Fixed Service Television), CATV (cable television), common carriers, and domestic satellites.

For each docket a brief statement of the issue and a capsulized review of the position taken by each major participant in the proceeding is first presented; then a more detailed review describes the issues as seen by the FCC and the responses of the educational and other interests in a chronological order. Changes or modifications in position are included, particularly as they relate to the positions of educational interests. The educational implications of the FCC decisions for each medium are summarized.

### **A National Policy for Educational Television**

Cyril M. Braum and others. Office of Education, Washington, D.C., 1961. 14 pages. EDRS price microfiche 65c, hardcopy \$3.29 (ED 016 404).

The panel was asked to study new developments in communications and educational media and to make recommendations to the U.S. Commissioner of Education on national educational policy. The most significant national problem was found to concern educational television. The major questions raised by the panel concerned (1) the future growth curve of educational TV, (2) improvement of programs, (3) contributions of TV to education, (4) manpower for educational TV, (5) financing for educational TV, (6) channel allocations for educational TV, and (7) guidance for educational institutions regarding TV facilities.

### **Public Television, A Program for Action, Report and Recommendations of the Carnegie Commission on Educational Television**

James R. Killian, Jr. and others. Carnegie Corporation of New York, New York, 1967. Document not available from EDRS.

This report of the Carnegie Commission on educational television proposes a non-profit corporation for public television to receive and disburse private and government funds. It recommends increased government support of local and national program production, new facilities for live-broadcast interconnection, research and development in programing and production and in television technology, and recruitment and training of specialized talent. There should be additional enabling legislation and financing through excise taxes on television receivers.

The existing system (December 1966) is outlined—sponsorship (21 school, 27 state, 35 university, and 41 community stations), sources of general programing, distribution, and financial support. Characteristics of commercial and public television and their audiences are described, and the potentials of educational television discussed. Supplementary papers also discuss legal aspects, projected long-run operating costs, and the role of the Federal Communications Commission. Financial and operating reports of educational television stations, July 1965-June 1966, are presented together with data on audience sizes and occupational and educational characteristics of listeners. Document includes 35 tables, a map, and list of ETV stations. This document available from Bantam Books, New York, New York 10016.

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