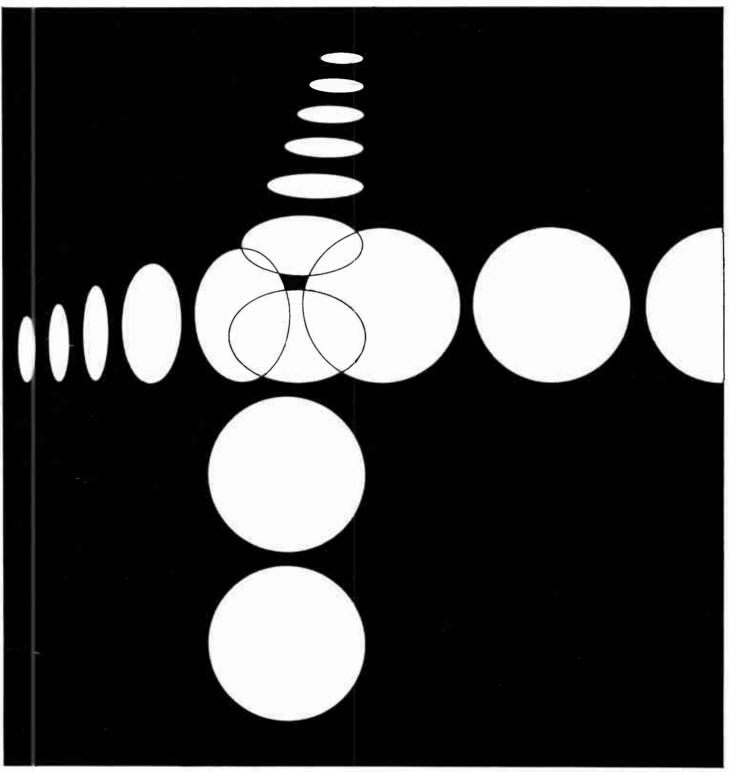
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Volume 4 Number 10 November 1971

EDUCATIONAL BROADCASTING

The International Journal of Audio and Visual Learning

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HE COVER

An illusion of three-dimensional solidity and linear expansion is created by varying the spatial alignment of a simple form, the circle, in "basic black" cover art by Tony Nourse.



NAB Radio Code Board Actions

A drive to increase the number of radio stations subscribing to the Radio Code of the National Association of Broadcasters has been approved by NAB's Radio Code Board. At a recent meeting in Denver, Colo., the Board approved plans submitted by a special task force which designated nine Code Board members as regional directors responsible for Code subscription offorts in the states their regions encompass.

In other actions, the Radio Code Board:

- Recommended acceptance of off-track betting advertising, for a one-year trial period, subject to stringent copy restriction, in those states where off-track betting is legal.
- Directed the Code Authority to list in its monthly Code News the call letters of Radio Code subscriber stations which withdraw or are dropped from the Radio Code.
- Reaffirmed the Radio Code standard which prohibits the advertising of fortune tellers and thereby rejected an appeal to relax the standard.
- Heard a report on the Code Authority's alcoholic beverage advertising guidelines and directed the Code Authority to review on a case by case basis, the use of such terms as "cocktail," "cocktail hour" in radio commercials for restaurants, airlines and like services.
- Discussed an appeal to allow some radio stations to pay less than the regular code subscription fees and agreed that no exception should be made to the established formula used to determine fees paid by Radio Code subscribers in support of the Code's public interest oriented activities.
- Heard a report on feminine deodorant spray advertising and directed the Code Authority to apply modified guidelines governing advertising for this category of products.
- Appointed a three-man subcommittee to review Code Authority procedures.

For further information, contact NAB, 1771 N St., N.W., Washington, D.C. 20036, or call (202) 293-3580.

Seven New Series

The University of Arizona's public television station, KUAT-TV (Channel 6) in Tucson, offers seven new series this fall. (oupled with the new series will be fresh entries from 13 continuing programs.

New series include: "The Special of the Week," a varied offering from the arts or public affairs; "Masquerade," 30 minutes of improvisational theater for children; "This Week," a public affairs cover story; "Hollywood Television Theatre," hour-long dramas; a collection of short series produced for PBS by public television stations around the country; "The Electric Company," a new reading series from the Children's Television Workshop; and "David Littlejohn: Critic-at-Large," commentary on the arts.

"Emphasis is on a very broad spectrum of programming

throughout the upcoming season with additional strong public affairs offerings," commented Frank Barreca, director of the UA Radio-TV Bureau.

Campus Radio Network

More than a dozen college stations have contracted for The Ron Britain Radio Programme, first Programming db package developed for its Campus Radio Network operation. The Britain show will air twice weekly, with the WIND, Chicago, personality presenting three hours of contemporary rock and progressive music each outing.

Stations signed to date, according to Programming db president Ken Draper, are: WDBS-FM, Duke University; KICR, University of Iowa; WLHA, University of Wisconsin; WOXR-FM, Miami University (Oxford, Ohio); KRWG, New Mexico State; WHUR, Eastern Michigan; KPGY, Iowa State; KUOK, University of Kansas; WNIU, Northern Illinois University; WIUS, Indiana University; WHEN, University of Delaware; WOFM, St. Bonaventure (N.Y.); and WAMU, American University.

The Britain program is the initial presentation in a network concept that Draper expects to have fully operational by fall, 1973. Potential listening audience on campus exceeds 5 million.

CPB Adult Learning Project

The Corporation for Public Broadcasting has completed the initial study of what could become a major adult learning project. The study sought to pinpoint the needs in adult education as a first step toward determining how public broadcasting might assist in the field. It entailed the commissioning of 30 research papers and meetings with 106 representatives from 68 organizations, culminating with a conference August 1-3, at Airlie House, Warrenton, Va.

As a result, CPB staff received approval from the Corporation's Board of Directors to enter Phase II of the project, which will include an in-depth survey of the potential audience, curriculum research, planning for utilization and information activities.

As now conceived, the project proposes to address itself to a primary audience of adults 25 to 44 years old who can read at a 6th grade level, as a minimum. The concept would accent reading and math presented in a context familiar to the individual's job experience, home and life-style. The materials would be generated with an adult in mind who probably left school behind at least ten years earlier. Throughout, efforts would be made to motivate him toward life-long learning. Interest in the project has been indicated by over 300 major American corporations.

NCTA vs. Telcos

The National Cable Television Association Inc., Washington, D.C., won a lengthy legal dispute with the telcos recently when a U.S. appeals court upheld FCC regulations denying telcos ownership of cable systems within a telephone company's service area.

The Fifth Circuit Court of Appeals in the case of General Telephone vs. USA, NCTA and CCTA, noted, "Since the telephone companies have a natural monopoly over the means required to conduct a CATV operation . . . they are in a position to preempt the market." The court therefore denied the telcos' appeal and upheld FCC regulations intended to mitigate such preemption.

Continued on page 22

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ITV Pictorialism: A Bibliography

PASCAL L. TROHANIS

Preface

Topical Explanation

In order to capitalize on and extend the inherent visual capability of television, many instructional programs utilize an assortment of still pictures or pictorial displays. Frequently these stylistically varied pictures as either photographs or illustrations are transmitted in the form of 2 X 2 slides, filmstrips, charts, posters, transparencies or mounted pictures. The facets* surrounding the preparation, employment, evaluation, and learning potential of these kinds of surrogates have given rise to the theme or topic known as ITV Pictorialism.

Rationale for the Bibliography

As designers of instructional messages, production agencies are keenly interested in arranging for learners those displays which are clear, efficient, legible, economical, understandable and unambiguous. Presumably, if these characteristics are artistically incorporated, more effective, transferable and permanent learning will take place. Unfortunately, the actual procedures for translating these generalized ITV pictorial characteristics into effective and predictable learning instruments are much more complicated and complex. This skepticism stems from an awareness of three factors which repeatedly interfere with the positive communicability of the intended messages. These include: a) elemental complexities of the stimulus configuration or picture - i.e., line thickness, color contrast, content, line directionality, etc.; b) idiosyncrasies of the individual viewer — i.e., eye search patterns, habituation levels, motivation, emotional state, I.Q., age, sex, information processing capabilities, etc.; c) socio-cultural environment elements - i.e., ethnic background, group membership, broadcast area, viewing locale, etc.

In order to adequately avoid the interfering effects from the interplay of these and other factors, many production teams (e.g. "Sesame Street") are looking toward and incorporating the findings of TV research and other correlative evaluation programs. In doing so, producers are setting aside their aesthetic or intuitive production techniques in favor of more scientific ones which seek to quantitatively and qualitatively improve the effectiveness and predictability of their instructional pictures.

Since the reliance on and partnership with research will continue to grow, ITV personnel must begin to familiarize themselves with the empirical as well as descriptive findings that pertain to ITV Pictorialism. To help facilitate this objective and perhaps stimulate further interest in the field, a collection of applicable readings was selected and assembled into the enclosed annotated bibliography.

Development of the Bibliography

Generally, numerous key questions were identified and used in constructing an idea framework for the putting together of this document. Several of the more prominent questions were: Are certain pictorial styles more effective than others for achieving specific learning objectives? For optimum learning, how many pictorial elements and which specific ones should a display contain? How do individuals respond to different types of illustration styles? Which do they prefer most or least? Are color pictures more effective than monochromatic ones? What type of research methodologies are available and employed? How effective are TV special effects? What kinds of paradigms are illustrative of visual information processing procedures and visual perception? How do ethnic groups react to various types of pictures?

By all means this bibliography is not exhaustive in its content coverage. Rather, its development reflects a partial listing of resources which deal with those questions regarding the main topic as well as those peripherally related ones.

Organizational Structure of the Bibliography

In an attempt to accommodate for difference in reader sophistication and interest about the topic of ITV Pictorialism, this bibliography is conveniently divided into three parts:

Part 1 — Experimental Research — Includes those sources with methodological research wherein statistical techniques are used.

Part 2 — Descriptive Research — Contains those materials which do not necessarily manipulate possible causative variables.

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Part 3 — Experimental-Descriptive Combination — Comprises those resources which encompass a mixture of both previous types of research.

Annotated Bibliography

Part 1 - Experimental Research

1. Aylward, T. "A Study of the Effect of Production Techniques on a Televised Lecture," dissertation, University of Wisconsin, 1960.

The independent variables of image size, editing and background were manipulated against information gain in an attempt to examine communication interference. Ss were public speaking students from the University of Maryland, results were mixed.

 Bourisseau, W. (et. al.) "Sense Impression Responses of Negro and White Children to Verbal and Pictorial Stimuli," AVCR, Vol. 15, No. 3, Fall 1967.

After viewing a series of 2 X 2 slides on different topics, black and white fourth and fifth and sixth grade children of Cleveland, Ohio, were tested to see whether they responded *more* to words or pictures. The results indicated that pictures generally restrict responses more than words.

3. Dwyer, F. "Adapting Visual Illustrations for Effective Learning," Harvard Education Review, Vol. 37, No. 2, Spring 1967.

Using an N of 108 Penn State University students, this experiment compared the effectiveness of real, line, and abstract pictorial displays which dealt with human heart instruction. Generally, the less realistic pictures were most effective.

4. Dwyer, F. "When Visuals are not the Message," EBR, Vol. 2, No. 5, 1968.

Five treatment groups of 269 Ss from Penn State University participated in 32 minutes of TV heart instruction which used 39 black and white slides and an audiotrack. F(NOVA) results suggested that visual effectiveness is best measured by a drawing test while the verbal showed up best with a terminology and identification question test.

5. Dwyer, F. "An Evaluation of Image Size on an Instructional Variable on TV," EBR Vol. 4, No. 1, 1970.

Three separate studies were undertaken with 580 Penn State University students to evaluate whether the same visuals presented in different sizes would be equally effective. Generally, the smaller IV screens were found to be more effective than the larger ones.

6. Fleming, M. "Classification and Analysis of Instructional Illustrations," AVCR, Vol. 15, No. 3, Fall 1967.

By using a mixture of judges, chi square and correlation analysis, the author analyzed 4th-8th grade texts to see if book illustrations are valuable aids to learning. Generally, positive effects were discovered.

I onesca, L. "Comprehension of Pictorial Symbols: An Experiment in Rural Brazil," Agricultural Bulletin, University of Wisconsin, No. 30, April 1960.

Ss, comprising 570 agricultural club members from Minas Gerais, Brazil, participated in a program that taught different farming skills via stylistically different still pictures. The most realistic pictures were found to be the most effective.

Glossary of terms:

E - Experimenter or Researcher

N = Total number of subjects or participants in the experiment

S or Ss-Implies subjects or participants in the experiment

F(NOVA) - A statistical routine called analysis of variance

8. Guba, E. (et. al.) "Eye Movements and TV Viewing in Children," AVCR, Vol. 12, No. 4, 1964.

Es calibrated the search behaviors of 5th graders for an ITV science demonstration. The general tendency was for Ss to fixate on the face of the science teacher and thereby miss objects being shown or demonstrated.

9. Hazard, W. "On the Impact of TV's Pictured News," Journal of Broadcasting, Vol. 7, No. 1, Winter 1962-63.

With an N of 198 from Cedar Rapids, the E examined S preferences and information gain from either filmed, still or non-pictorial versions of a newscast. F(NOVA) results showed no significant differences among these presentation modes.

10. Himmelweit, H. (et. al.) *Television and the Child*. London: Oxford University Press, 1961.

Over 1800 Ss from 5 English cities with an age range of 10-14 years participated in 11 different TV studies which examined displacement effects and content choices. A factorial design was utilized by inputting data from questionnaires, diaries, and personality ratings. A variety of results emerged.

11. Scanlon, J. "Color TV: New Language," Journalism Quarterly, Vol. 44, No. 2, Summer 1967.

According to 21 Ss in Canada, color TV appeared more absorbing to them than did monochromatic. F(NOVA) results affirmed their observation.

12. Schwarzwalder, J. An Investigation of the Relative Effectiveness of Certain Specific TV Techniques on Learning. St. Paul: KTCA ETV Corp., 1960.

In an attempt to assess the effectiveness of visual continuity, reinforcement, and manipulation, the E presented to 67 5th grade students nine different ITV science programs at different times. Results indicated that pictorial effectiveness was enhanced when at least two techniques were jointly used.

Severin, W. "Pictures as Relevant Cues in Multi-Channel Communication," *Journalism Quarterly*, Vol. 44, No. 1, Spring 1967.

Using 201 junior high school students in Madison, the E compared six message conditions — single to multichannel — which involved names in nature. In general, the multichannel situation was found best when the cues were summated across channels.

Part 2 - Descriptive Research

1. Allen, William. "Media Stimulus and Types of Learning," Audiovisual Instruction, Vol. 12, No. 1, January 1967.

The effectiveness of specific media like still pictures and TV is discussed in terms of variable learning objectives. Some of the goals involve: visual identifications, concept formation, and factual information..

 Arnheim, R. Visual Thinking. Berkeley: University of California Press, 1969.

The sense of vision is described as the most efficient and perhaps effective organ of human cognition. Past and present visual perception models are also canvassed.

3. Beeching, R. "Problem Solving in the Visual Arts," Visual Communications Instructor, Vol. 13, No. 1, January 1968.

This article maintains that the ITV specialist needs a visual artist as a member of the 'team approach' for improving pictorial communication.

 Bethers, R. From Eye to Camera. New York: Pitman Publishing Corp., 1951.

Definitions and descriptions of picture function, pictorial space,

EDUCATIONAL BROADCASTING, November 1971

distortion, line and pattern are offered. Also, the role and importance of subject matter are explained.

Chase, J. "The TV Editorial Cartoon," *Television Quarterly*, Vol. 6, No. 2, Spring 1967.

This pictorial style was found very effective in New Orleans broadcasting. Viewer involvement, during the newscast, was thought to increase.

 Diamond, R. (ed.) A Guide to Instructional IV. New York: McGraw Hill Co., 1964.

The applicable findings of Kumata, Holmes, and others are discussed (e.g., no statistical difference between males and females with respect to TV information gain). Also, TV application in schools is stressed.

 Fielding, R. The Technique of Special Effects Cinematography. New York: Hastings House Publishers, 1965.

Although primarily written in terms of film production, 11V producers can find the information on various methods advantageous.

8. Foshay, F. Interaction in Learning: Implications for TV. Washington, D.C.: DAVI, 1959.

This document reports on the possibilities of bringing 2 way communication between the ITV viewer and program. Live, quasi, and simulated interactions are suggested.

9. Gibson, J. Perception of the Visual World, Cambridge: Houghton-Mifflen Company, 1950.

This particular book is thought by many perception analysts to be one of the "classics." Visual field is distinguished from visual world; light and color are viewed as the raw materials of vision,

 Hanson, W. "How You See Color," Popular Photography, Vol. 64, No. 5, May 1969.

The physiology of color seeing is presented in this brief document. The topics of cones and visual purple are emphasized.

Klapper, J. "What We Know about the Effects of Mass Communication: The Brink of Hope," *Public Opinion Quarterly*, Vol. 21, No. 4, 1957-58.

This article suggests that a wider perspective (called Phenomenistics) be taken for future research to incorporate all possible interrelated factors of the communications process. Of extreme importance is the inclusion of those "mediating factors" (sex, IQ) which presently interfere with the transport of numerous messages.

 Knowlton, J. "Definition of Picture," AVCR, Vol. 14, No. 2, Summer 1966.

Realistic, analogical and logical pictures are defined in terms of their function and structure.

13. Lewis, C. "The Director Punctuates," *NAEB Journal*, Vol. 25, No. 5, 1966.

This paper proposed that TV action be divided into picture statements by pictorial punctuation — cuts, dissolves, etc. In this way, each program point could assert its character.

14. McVey, G. "Legibility and TV Display," Educational Felevision, Vol. 2, No. 11, November 1970.

Guidelines in both mathematical and descriptive form are presented for determining televised symbol size, form, shape, stroke width, contrast, and resolution.

 Norberg, K. "Visual Perception Theory and Instructional Comnunication," AVCR, Vol. 14, No. 3, Fall 1966.

The ideas of several perception theorists - Gibson, Travers, and

Knowlton – are reviewed. The conditions by which perceptual behavior derives its structure are particularized.

16. Perrin, D. "A Theory of Multiple-Image Communication," AVCR, Vol. 17, No. 4, Winter 1969.

The effects, functions, and structure of simultaneous and multivisual images are explored. Visual task factors coupled with large screen imagery seem to promote greater levels of information density, motivation and arousal.

 Skornia, H. "Commercial TV Teaches Too," NALB Journal, Vol. 25, No. 4, 1966.

Four major factors are characterized as affecting learning: teacher, production techniques, learner, and utilization. Specific production methods include: sequencing, program density and camera angles.

18. Spear, J. Creating Visuals for TV: A Guide for Educators. Washington, D.C.: DAVI, 1962.

The production techniques for preparing a wide range of still visuals for 1TV are delineated. Special effects, props, posters and projectuals are featured.

"1elevision and Social Behavior Program," Surgeon General's Advisory Committee on TV & Social Behavior Report, NIMH, December 1969.

The background and current status of research projects which are studying the behavioral effects of TV were explained. Of considerable interest was the grant to the University of Maryland for \$53,000 to study adolescents' overt deviant behavior.

 Television in Instruction: An Appraisal. Washington, D.C.: DAVI, 1958.

This publication urges that TIV preparations carefully consider learner characteristics as well as the potential contributions of the medium—provide motivation, demonstrate processes, provide information, etc.

21. Thomas, E. "Movements of the Eye," *Scientific American*, April 1968.

Eye movement (EM) studies are becoming more important in pictorial research. One device used to measure a subject's ocular movement, pursuit, and fixations is the Optiscan — a helmet like camera.

Iravers, R. Mun's Intermation System. Scranton: Chandler Publishing Company, 1970.

This text brings together ideas about perception, learning, information theory, and neurophysiology within the context of A-V materials planning and production.

 Williams, C. Learning from Pictures. Washington, D.C.: DAVI, 1963.

Although this book is intended for classroom teachers, it provides 11V personnel with a comprehensive listing of picture functions or capabilities as well as an outline of those characteristics that make up "good" pictures.

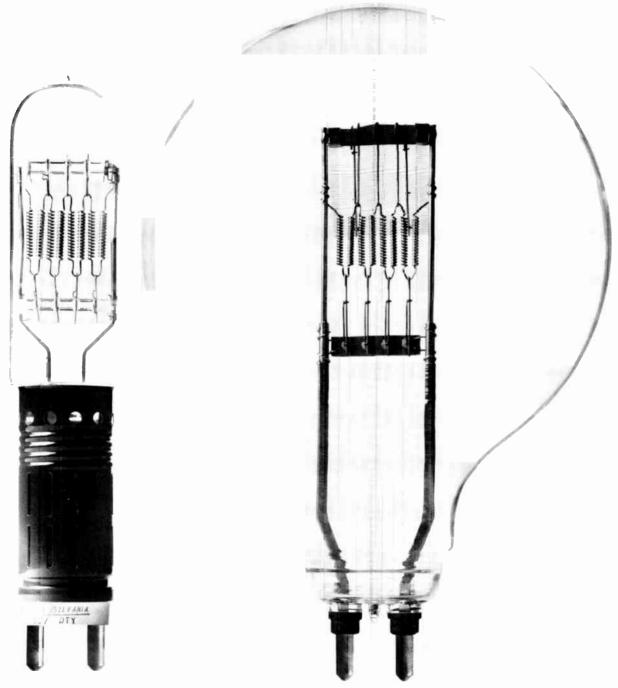
 Wolf, W. "Perception: Its Importance in ETV," AVCR, Vol. 10, No. 2, 1962.

In order to discover how meanings are communicated by TV, the author argues for more eye movement studies and scene analyses.

 Zettl, H. "The Study of TV Aesthetics," LBR, Vol. 2, No. 1, February 1968.

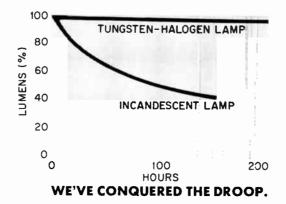
The author proposes that TV parctitioners discover television's vocabulary, language, and grammar. Light, space, time, motion, and sound provide some of the basic components.

Continued on page 20



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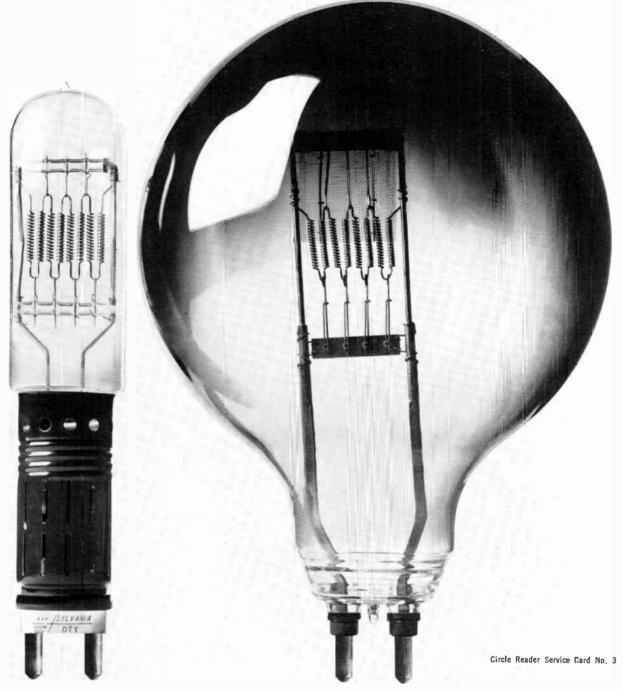
If you've ever watched those big, fat incandescents deteriorate, you know what a big, fat pain-in-the-neck that is. Their lumen output sinks and their color temperature drops, as the graph shows.

Now Sylvania tungsten-halogen lamps have come to the rescue.

They don't blacken with age, so light output and color temperature don't go into a slump.

That means you don't have to keep

70 HOURS LATER.



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fidd ing with the studio lights or camera settings. You get constant color rendition on color film and save money on print correction.

Tungsten-halogen lamps outlast the incandescents 2-to-1. (Or even 3-tc-1, since you may have to throw awaytheblackened lamps before they conk out.)

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lamps that are easy to handle and store?

We've developed two complete lines of Sylvania tungsten-halogen lamps.

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Ask us about both our lines. Right away.

Before another 70 hours go by.

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GII SYLVANIA

KPEC-TV:



Tacoma, Washington

View tooks from Studio A into Studio B, the larger of the two.



VIRGINIA TALBOT

"Owned and operated by the Clover Park School District" – a familiar phrase to viewers of KPEC-TV in the environs of Tacoma, Washington, but who in the wide, wide world has ever heard of the Clover Park School District?!!! The name alone suggests a pastoral setting far from the mainstream of television.

The school district is fairly small (15 thousand plus students) and it operates on a rather shaky budget when voters fail to pass school tax levies, but the educational channel "owned and operated" by this suburban school district is one of the most vigorous and creative ETV stations in the country.

KPEC broadcasts more than 28 hours a week of instructional programming for viewing by 20 school districts of Southwest Washington, or approximately 85,000 students. In addition, the station is a NET affiliate, broadcasting many of the network programs in the evenings, but increasing'v KPEC is originating its own community programming.

During the 1970 elections KPEC provided time for all candidates appearing on the county ballot to deliver their messages to the public via television, and the station's past record in public service programming is impressive.

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Cinematographer, Perry Olson, and KPEC Production Manager, Paul Herlinger, discuss the script for the program, "What Happens to Me If The Close It Down?" The smokestack of the Tacoma smelter is seen in the background. The smelter is the subject of a program financed by a grant from CPB which will be distributed nationwide upon completion. The film camera pictured is an Auricon Pro 600 Special with magnetic sound.

With an old laundry truck and remote equipment donated by Tacoma radio station, KLAY, and a later donation of more modern camera equipment by KOMO-TV, Seattle, KPEC has brought the public on-the-scene reports from state legislators on the 41st session of the Washington legislature, weekly press conferences with Washington governor, Dan Evans, and legislative hearings in the State Capitol on such topics as campus unlest at the University of Washington and proposed tax reform legislation.

KPEC is one of the 12 public television stations in the nation this year to win a production grant from the Corporation for Public Broadcasting The grant of \$38,400 will finance two television programs dealing with local ecology and pollution problems. When completed, these programs will be made available by CPB for national distribution.

Also available for national distribution are five half-hour programs in the humanities which KPEC produced last year with a \$57,000 grant from the National Endowment for the Humanities. These programs are intended for an audience of high school students and may be broadcast by any educational television station in the United States or used in any classroom on portable video tape equipment.

Another instructional program produced with the aid of a grant is a speech correction series for first grade and kindergarten children. The series, "Sounds Around," was financed in part by Title VI, ESEA funds, and is used by several other educational stations in the state of Washington. KPEC is currently seeking funds to produce more lessons on color film for cassette playback directly in classrooms.

But aside from its NET programs, community programming, and special grant-funded projects, KPEC's principal commitment is to its in-school programming. The station offers television lessons for grades 1 through 6 in science, art, and music, with a general program for kindergarten. Most of the



KPEC's tower still stands the day after the fire which destroyed most of the studio building in the summer of 1963.

programs are produced locally by KPEC; all are pre-recorded on video tape and several series have been used successfully for a number of years. Two of the KPEC science series have won "emmys" for excellence from the local chapter of the National Academy of Television Arts and Sciences.

The instructional program schedule of the station is formulated by the superintendents of the school districts that subscribe to the KPEC service. These superintendents are also responsible for establishing the programming philosophy of the station.

The organization of a particular television series is done by the individual television teacher who regularly consults with an advisory committee of teachers and supervisors. These "curriculum committees" help to outline goals and skills that are to be stressed in a particular series and may also become involved in the development of classroom materials or textbook adoptions for the viewing classrooms. Any major change in the philosophy of a television series recommended by a curriculum committee is brought before the Superintendents' Advisory Board for consideration and approval.

KPEC series are accompanied by a Teacher's Guide which outlines each television lesson in detail, explains the general and specific objectives of the course, and contains suggestions



A scene from the KPEC production of a song from the musical drama Hair, used in one of the humanities programs funded by the National Endowment for the Humanities.

for extending the lessons beyond the time limit of the television program. Classroom teachers may use the television lessons as the basis of their instruction in a given subject area or as enrichment for their own instruction.

Many of the KPEC television teachers are "old timers" with the station, having taught via television for a number of years. Station management feels (and classroom teachers seem to agree) that instruction and production improve markedly as teachers gain experience in the television medium.

Even in its early days of production, however, KPEC has never subscribed to the "talking face" type of ITV programming. The station has always considered the televised classroom lecture to be a poor and unimaginative use of the medium. Television teachers at KPEC have, since the station's beginning, employed a variety of visual aids, if only a series of pictures on camera cards or a live animal borrowed from the zoo to pick up interest on a science lesson. Now with the sophisticated production techniques available in the KPEC studios, it is a rare KPEC program in which the teacher remains upon the screen for more than a minute or two without film, slides, VTR inserts, props, or other visual gimmicks helping to put across the educational concept.

KPEC went on the air in the spring of 1960 with five weeks of experimental programming. The station is closely tied to the Clover Park School District's technical-vocational school, as KPEC was originally conceived as a training facility for would-be cameramen, directors, engineers, and so forth, with the in-school programming incidental to the main goal of training vocational students. However, the station's instructional programming soon came to be an integral part of the curriculum of the Clover Park schools and other districts. Today student crews still man the cameras and furnish manpower in Master Control, but the in-school programming has come to be equal in importance to the training function of the Clover Park television facility.

In September 1960, the station began a full schedule of educational programming. With the help of a \$96,000 grant from the Ford Foundation, the Clover Park School District footed most of the bill, but several other school districts in the area also contributed funds to bring the station into being. These districts and others still help to support the station at the present time, paying a fee of \$1.65 per student enrolled in their district.

Equipment List

1 production studio 29' X 39'equipped with Visual Electronics 20 X 6 custom fast-lap switcher and limited Riker special effects.

1 production studio 54' X 39' with 20 X 6 Custom Visual fast-lap switcher and complete Riker special effects.

Both production studios have:

18-foot ceilings Century lighting on pipe grid Individual audio booths Individual video control rooms Cyclorama Acoustic treatment

4 TK-15 RCA cameras and 1 Dage 520 are shared between the studios. All are mounted on Houston-Fearless pedestals.

1 master control room 20' X 27' equipped with:

20 X 6 Visual Production and routing switcher 20 X 3 Visual VTR input switcher

Film chain consisting of 2 Eastman 285 film projectors, RCA TP-7B slide projector, GE multiplexer, and GE-PE21A camera

Film chain consisting of 2 RCA TP-16 film projectors, TP 7-A slide projector, RCA T-P11 multiplexer, and RCA TK-21 camera

1 Air conditioned and filtered VTR and terminal room 20' X 27' equipped with:

Ampex 1100 VTR equipped with electronic editor
Ampex 1000-A VTR transport equipped with 1000-B electronics and Allen signal system

Ampex 1000-B VTR, with complete Allen solid state modification, including Amtec

Rack test equipment and other rack equipment associated with production equipment

All VTR and projector functions are remotely controlled from any studio control room or from master control.

All local programming is taped, with the exception of news; network programming is either released at time fed or tape delayed.

KPEC serves as a training facility for students of the Clover Park Vocational-Technical school.



Remote facilities consist of an International Truck containing 2 RCA TK31 I.O. cameras and 2 Dumont TA-124 I.O.'s with 2 X 8 switcher and Ball Bros. special effects; the Ampex 1100 VTR is used as the remote VTR.

The transmitter room contains:

RCA TTU-1B UHF transmitter together with associated monitoring and processing equipment

Workshop including drill press and sheet-metal shear and brake

The transmitter feeds an RCA TFU-27-D antenna for 21.4 kilowatt visual and 4.28 aural E.R.P.

The main transmitter activates 2 VHF and 3 UHF translators to provide off-air service as far away as Portland, Oregon, 125 miles south.

Film Equipment

16 mm cameras:

- 1 Auricon Pro 600 Special with magnetic sound
- 1 Arriflex 16S
- 1 Bolex Rex V
- 1 Bell and Howell 70 DL
- 1 Canon Scoopic 16

Other:

2 synchronous magnetic recorders

- a. Amega model M3
- b. Uher 1000 Report Pilot
- 1 Palmer Interlock projector, Model PGSS with record function
- 2 fluid head tripods
- 2 editing benches
- Set of 7 Colortran quartz lights

Audio Recording Equipment

- 2 PR 10 Ampex audiotape recorders
- 1 RCA TR 17 audiotape recorder
- 2 Gates "Gatesway" production consoles
- 1 modified Stromberg-Carlson master control distribution console
- 2 Spotmaster cartridge tape recorders





Judge Bertil Johnson of Tacoma narrates a program observing Law Day. As part of this program, KPEC staged a mock trial to point out some of the protections the law offers individual citizens.

KPEC studios are housed in an old Navy warehouse building which allows ample room for the two very adequate studios. (See equipment list for dimensions.) In the summer of 1963, fire destroyed most of the KPEC building, but superintendents of the participating school districts unanimously agreed that the cooperative television programs should continue. During the next year, programs originated from a very small radio studio which had survived the fire. The television teacher was backed up against one wall, the camera against the other. In September 1964, production began from the rebuilt studios.

As a direction for the future, public television aspects of KPEC will assume a larger role in the total production of the station. Greater explorations into the problems of the communities served by KPEC, as well as more offerings for adult education during evening hours are anticipated. Increased use of mobile equipment to bring community and governmental affairs directly to the homes of citizens will provide coverage nowhere else available.

The instructional television programs will continue at their present level, but KPEC will become more and more of a production center for educational films, or one-inch video tapes which can be played directly in the classroom at the teacher's convenence. The station will probably enter into more cooperative programming with the other ETV stations of the area, producing lesson series which can be used by all. KPEC has already taken steps in this direction, and at the present time, broadcasts art lessons for the fifth grade which are produced by KCTS, Channel 9 in Seattle, and furnishes the Seattle station with a KPEC Art 6 series.

The Clover Park School District is, indisputably, located in the far northwest corner of the continent, but it is, after all, only a few hours away from anywhere by Boeing 747, a high quality local product, known throughout the country.

Likewise, the high quality local product produced by Clover Park's ETV station, KPEC, is becoming more and more known to people outside the immediate area.

One Seattle TV critic has even referred to KPEC as the little KQED of the Northwest and the station means to live up to its reputation for vigorous and innovative programming.

Miss Virginia Talbot is affiliated with KPEC-TV, Tacoma, Washinaton.



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helps instruction grow broader, deeper, brighter

A closed-circuit television and video tape recording system designed and installed by TeleMation is expanding minds and multiplying instructors at Santa Clara University, California.

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The National Association of Educational Broadcasters held its 47th Annual Convention from October 17 to 20 in Miami Beach. The Convention featured: 60 general and special-topic sessions; Instructional Radio Task Force Hearings; ETS/ITV, ETS/CATV and FCC/ITFS committee meetings; EEN, NAEB and NPR/NER board meetings; NAEB business meeting; Radio and USOE Facilities Program; over 70 exhibits sponsored by leading producers of broadcasting equipment, accessories and services; and two special exhibits — one a photographic display honoring pioneers in educational broadcasting, and the other a display of member stations' art for on-air use and printed promotional materials and slides.

Session topics included: Graphics/Staging/Lighting; Overseas Instructional Technology; Instructional Radio; Helical Scan VTR Usage: Radio and Politics; Computers; Engineering; Broadcast Education; TV Teachers PEG; ETV Station Management; Vocabulary Development in the Inner City; Public Programming; The Open University; Non-Qualified Radio; CPB Adult Learning; Accountability; and Public Radio Audience.

William G. Harley, NAEB President, presided over the Opening General Session at which Lionel Monagas, Director, reported from his Office of Minority Affairs; Vernon Bronson, Executive Consultant, NAEB, was presented the Distinguished Service Award. General Session addresses were made by: the Honorable Dean Burch, Chairman, FCC; Dr. Sidney Marland, U.S. Commissioner of Education; and Dr. Clay T. Whitehead, Director, Office of Telecommunications Policy, Executive Office of the President.

Wednesday morning's General Session confronted the controversial topic, "Interaction: Minorities and Public Broadcasting." Lionel Monagas chaired the session and participants included: William Harley, NAEB President; Donald Quayle, President, National Public Radio; Howard Holst, Chairman, ETS Division Board; and Dr. James Loper, Chairman of the Board, Public Broadcasting Service.

Equipment displayed by convention exhibitors included: magnetic tape, cameras, lenses, frequency stabilization and measurement equipment, lighting equipment, cables, connectors, adaptors, recording systems, audio and FM equipment, sync generators, multiplexers, monitors, TV translators and transmitters, receivers, production equipment, terminal equipment, recorded instructional TV courses on tape and film, TV studio consultant services, large screen TV projectors, hot press and accessories, microwave links, prompting equipment, front projection systems, tape to film transfers, and production music and sound effects.

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BIBLIOGRAPHY-Continued from page 11

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The role of ITV is explored. The author believes that this medium can drastically help change and reshape the teaching and learning processes.

Part 3 - Experimental-Descriptive Combination

1. Abel, J. "TV and Children: A Selective Bibliography of Use and Effects," *Journal of Broadcasting*, Vol. 13, No. 1, Winter 1968-69.

Three main categories are outlines: use of TV; TV impact on children and society; and psychological effects - i.e., violence and aggression.

2. Barban, A. and Sandage, C. Readings in Advertising and Promotion Strategy. Homewood: Richard Irwin, Inc., 1968.

Topics like behavioristic advertising strategy, message design, media types and research methodology are surveyed by this volume. Of considerable interest should be the specific subjects of mediated learning and message credibility.

3. Debes, J. Visual Literacy Proceedings (First Conference). New York: Pitman Publishing Corporation, 1970.

While the first part of this document provides numerous descriptions about developing a picture language, the second concentrates on experiments which involve alpha rhythm and eye movement tests.

4. de Vera, J. Educational TV in Japan. Rutland: Charles E. Tuttle Company, 1967.

This book emphasizes that Japanese research does not focus on isolating TV effects-variables. Instead, it investigates those circumstances which relate to incidental learnings.

5. "Findings and Cognition on the TV Perception of Children and Young People," *Internationales Zentralinstitut fur das Jugend und Bildungsfernsehen*, No. 3, March, 1969.

The U.S. joined four European countries in executing a comparative research program on two puppet TV shows. Analyses encompass recognition and ordering of picture tasks as well as evaluation of reactions to pictorial stimuli.

 Gibson, E. Principles of Perceptual Learning and Development. New York: Appleton-Century-Crofts, 1969.

A theory of perception is described as a stimulus-oriented phenomenon whereby individuals develop the ability to extract information from the stimulus configuration. Experimental perceptual procedures, trends, and skill building are also discussed.

7. Griffith, B. and MacLennan, D. (eds.) *Improvement of Teaching by Television*. Columbia: University of Missouri Press, 1964.

The topic contributions range from research methodology by Greenhill to enhancing TV spatial properties with criterion visuals by Gropper.

8. Haber, R. (ed.) Contemporary Theory and Research in Visual Perception. New York: Holt, Rinehart, and Winston, 1968.

This complex publication incorporates 80 diverse articles which survey the topics of: methods in visual perception, movement, immediate processing and pattern recognition. Generally, the volume's philosophy of perception leans toward the inferential-process approach.

9. Hoban, C. and van Ormer, E. *Instructional Film Research* 1918-1960. Penn State College, December 1950.

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10. Myers, J. and Reynolds, W. Consumer Behavior and Marketing Management. Boston: Houghton Mifflen Company, 1967.

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11. Research, Principles, and Practices in Visual Communication. National Project in Agricultural Communications, DAVI, 1960.

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13. Skornia, H. "What We Know From New Media Research," NAEB fournal, Vol. 15, No. 2, 1966.

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This is a very comprehensive survey of A.V. research. It highlights Broadbent's single-channel information processing model, the relative efficiency of visual information transmissions, and the mechanics of the C.N.S.

 Travers, R. and Alvarado, V. "The Design of Pictures for Teaching Children in Elementary School," AVCR, Vol. 18, No. 1, Spring 1970.

Two major ideas emerge from this publication: the importance and effectiveness of realistic pictures are overestimated by instructors; retention seems best facilitated by attaching words to the pictorial surrogates.

 "Understanding Perception for Better Instructional Communication," Viewpoints, Bloomington: Indiana University School of Education, Vol. 46, No. 4, July 1970.

Two articles are found under this title. The first evaluates and discusses the experiment on perception of danger in illustrations while the second examines over 60 principles behind instructional materials design - i.e., selective perception, size, depth, channel capacity.

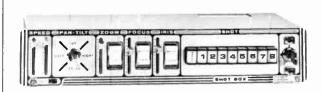
17. Wasson, C., Sturdivant, F. and McConaughy, D. Competition and Human Behavior. New York: Appleton-Century-Crofts, 1968.

Various themes – selective attention, cognition, thresholds – interpret and evaluate the implications of 1500 daily advertising messages that clamor for a typical American's attention and acceptance.

Lascal L. Trohanis is an instructor at the College of Education, Educational Technology Center, University of Maryland, College Park, Maryland.



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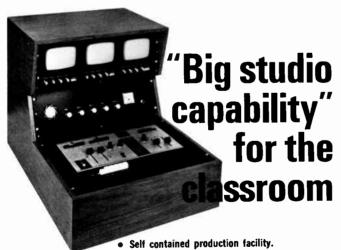
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All professional tools are included: complete step-by-step instruction book, storyboard pads, script forms, sequence sheets, acetate cropping guide for 35mm and 2½x2½ film, and professional field chart. **Project: Filmstrip** will also provide professional consultation and complete production facilities if needed.

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For more information on the Nasco program production console, write, Nasco Television Systems, Dept. PC-1.



947 Janesville Avenue, Fort Atkinson, Wisconsin 53538

PRESS CONFERENCE—Continued from page 7

The regulations, originally advocated by NCTA, prohibit telephone companies from furnishing cable service in the formers' service areas, either directly or through affiliates. The court also affirmed commission requirements that a telco must offer independent CATV operators the option of placing their own cable on the common carriers' poles before carriers can be allowed to construct cable facilities.

The court said, "Competition [is] in the public interest. Telephone companies should not be allowed to preempt the broadband cable market simply by virtue of their control of the means of distribution."

Health Care Hearings

National Public Radio recently sponsored and broadcasted six two-hour hearings on one of the nation's most crucial domestic issues — health care. The "NPR Health Care Hearings" took place prior to the hearings on national health insurance scheduled by the House Ways and Means Committee.

The NPR hearings originated from San Francisco, Boston, New York City, Ann Arbor (Mich.), Philadelphia and Atlanta. They provided a public forum for debate on various problems of health care and on proposed solutions such as the Nixon Administration health insurance plan and another proposed by Sen. Edward Kennedy (D-Mass.). Modeled after actual Congressional hearings, a panel of local Congressmen and Senators questioned witnesses drawn from such advocacy groups as the American Medical Association, Blue Cross and the Medical Committee for Human Rights, as well as representatives from local hospitals, labor unions, community clinics and insurance companies. Individual patients also testified.

Broadcast Industry Distributor

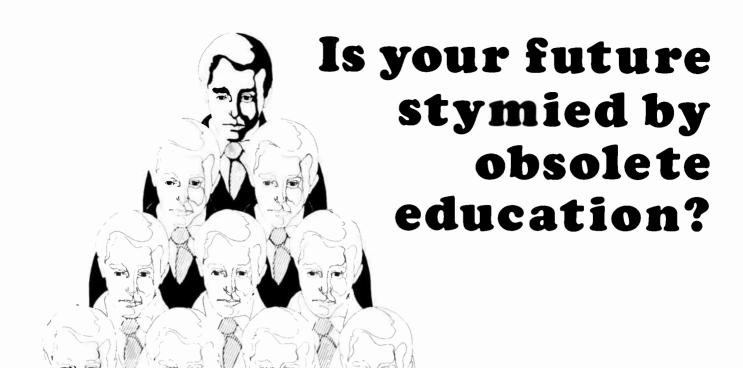
Camex Corp., Hollywood, Calif., has recently been formed to provide the broadcasting industry with services and automated equipment on a national level. Camex is a national broadcast industry distributor for both the Cybrix line of automation logging and broadcast cassette equipment and Alto Fonic Programming Inc., an AM and FM radio music programming service. Joining the executive staff as vice-president of marketing for Camex, is Ferry Bassett; in charge of sales administration is Constance Milne.

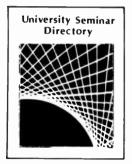
TV Production Seminars

Two and three day seminars in professional television production have been scheduled in 14 cities by TeleMation Inc., Salt Lake City, Utah. The courses cover camera operation, production switching, directing, lighting, staging, audio for television, visual materials, scripts, scenery and special effects. Instruction consists of both discussion and workshop sessions, and is supplemented by text and special reference materials.

Two-day seminars in basic production will be conducted on the following schedule: Boston, Nov. 15-16; Memphis, Nov. 30-Dec. 1; Cincinnati, Dec. 2-3; Tulsa, Dec. 7-8; and St. Louis, Dec. 13-14.

An Advanced seminar, which emphasizes directing and covers three days, is scheduled in St. Louis, Dec. 15-17. For further information, write Training Dept., TeleMation Inc., P.O. Box 15068, Salt Lake City, Utah 84115.





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SIR KENNETH CLARK: SCHOLAR? ENTERTAINER? ADULT EDUCATOR?

Upon hearing that Sir Kenneth Clark's film series "Civilisation" would appear on CBC in Canada and through the Public Broadcasting Service in the United States, I purchased copies of Clarks's books Civilisation: A Personal View and A Guide to Civilisation by the National Gallery of Art. From the BBC publication The Listener, I had gleaned information about Clark's role as a scholar and an entertainer (in the best sense of the word). Because this series was clearly directed to an adult audience, I found myself watching from the perspective of an adult educator interested in the mass media.

The task of integrating and condensing into thirteen programs a staggering volume of information about the culture of Western Europe made inevitable Clark's choice of the lecture technique. But Clark's lecture differed markedly from the usual television lecture directed to adults. Instead of merely dispensing infor-

mation, Clark sweeps the viewer along with him. Together, they explore an ancient French abbey, the fresh English countryside, the frescoes of St. Peter's in Rome, and other hallowed places. How does he do it? By melding his wisdom and knowledge with the technical skill of the BBC television personnel. According to Peter Quennell (*The Saturday Review*, August 28, 1971), Clark early recognized the potential of television for the "Civilisation" series. The resulting blend of color, music and other sounds, imagery, and narration has proved irresistible to large audiences.

Clark unerringly hit upon some important principles of adult learning. One has already been mentioned: the planning of vivid, variegated experiences which involve the viewer. Another principle is that of establishing rapport with him. Clark does so through an easy, informal manner of speech and dress. He greets the viewer

directly, often in everyday language salted with humor. He asks questions like "What is civilisation?" adding "I don't know. I can't define it in abstract terms—yet. But I think I can recognise it when I see it. . . ." A third principle relates to Clark's organization of his subject matter: he justifies his interpretations. For example, he cites Constable's painting "Willows by a Stream" and some of Wordsworth's poems to illustrate the naivete of the "cult of simplicity." Finally, he knows the importance of relating the old and the new, the past and the present; he tells us that medieval and Renaissance architecture surpassed our own because "the architects were artists."

However, as an adult learning experience, "Civilisation" has one drawback. The amount of information presented within each 50-minute program is overwhelming; Clark regularly surveys more than forty works of art. For the viewer to assimilate the material, it would be preferable to organize the series into smaller "packages," perhaps 26 programs of 25 minutes duration. Nevertheless, I, like many others, am indebted to Sir Kenneth Clark for his gentle, urbane, supremely knowledgeable interpretation of human achievements. His transforming touch helps us to appreciate anew the power of television as an educational medium.

by John A. Niemi

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Playback

Comments

Sirs: The advertisements in EB are always valuable.

> D Fife Heath Co. Benton Harbor, Mich.

Sirs: The Equipment Spectrum section of your iournal is informative and useful.

> G. H. Rogers Chico State College Chico, Calif.

Sirs: One of the things I don't like about the editorial content of EB is the general lack of material on public radio.

D. J. Talbot WILL AM-FM Urbana, III.

Sirs: I liked the KIXE-TV article in the September issue of EB.

> S. Kasper Merck Sharp & Dohme West Point, Pa.

Sirs: I'd like to see EB present more articles and features on industry's use of CCTV.

Frank C. Irvine ITT Gilfillan Inc. Van Nuys, Calif. Sirs: Those of us in the educational broadcasting field need to hear more about research supporting possible applications of ITV and its effectiveness.

> Lt. Albert J. Navarro Hq. Aerospace Audio-Visual Service Dayton, Ohio

[Our readers are, of course, invited to comment on the coverage in EB. But they can strike a blow for editorial scope and technical excellence by submitting appropriate papers! Send all articles and inquiries concerning editorial quidelines to: Editorial Coordinator, Educational Broadcasting, 825 So. Barrington Ave., Los Angeles, Calif. 90049 - Ed./

CCTV

Sirs: I liked the CCTV application article, (July/Aug, EB) "CCTV and Human Resources."

> H. J. Rutowski Detroit, Mich.

Sirs: "CCTV and Human Resources," July/Aug, EB, was a fine article.

R. Roderick Michigan Credit Union League Detroit, Mich.

National ITV Network

Sirs: Continue the "ice-breaking" regarding the pros and cons, not of a national curriculum but rather a national bank of curricular offerings utilizing the tool of television.

R. J. Rhein Burlington School Dept. Burlington, Vt. Sirs: "Is It Time for a National Instructional Network - And Will It Ever Be?" (EB, July/ Aug, 1971) was a good article.

> B. W. Crocker University of S.W. Louisiana Lafayette, La.

Sirs: I liked the article on a national instruction network.

M. C. Villecer New Haven, Conn.

Reprint Permission

Sirs: Permission is requested to reproduce the article entitled "Another Black Box - Another Revolution?" by Richard H. Bell which appeared in the June 1971 issue of EB.

> J. L. Gibson Institute for Business and Community Development University of Richmond Richmond Va.

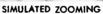
|Permission granted - Ed.|

Sirs: In the article, "Is It Time for a National Instructional Network - And Will It Ever Be?," (EB July/Aug), you made reference to a program Many Americans which might fill some of the educational needs of KTEH, San Jose. 1 would like to know the distributor or producer of this series.

> Tobe Snow KTEH-TV Channel 54

San Jose, Calif. [Contact David Davidson, Learning Corp. of America, a subsidiary of Columbia Pictures, 711 5th Ave., New York, N.Y. 10022. - Ed./





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EDUCATIONAL BROADCASTING, November 1971

Circle Reader Service Card No. 8

ITV PROBLEMS:

YUGOSLAVIAN AND AMERICAN SIMILARITIES

Contrary to common reaction, two weeks in a foreign country does not make one an expert in international affairs. To know that a number of our country's ITV problems are amazingly similar to those being experienced in Yugoslavia, however, may be of interest to a number of people who have not had an opportunity to visit there. These observations are the summation of recent visits to Zagreb and Beograd under the United States Information Agency to participate as a team which conducted ETV seminars in those cities. The several problems which are conspicuously shared by both Yugoslavia and the USA relate to the following:

1. Relationships between the Television Agency and schools are not firmly cemented. They exist as somewhat separate entities resulting too frequently in television not representing an integral part of the schools' attack on the several educational problems of the various Renublics.

2. The design and evaluation of educational objectives for television are usually inadequate and unclear. Stated objectives are most frequently subjective in nature. Little has been done to develop instruction based on behavioral objectives. The more affective areas received more emphasis than cognitive materials and are evaluated through teacher judgments based on subjective criteria.

3. Adequate technical production is too frequently lacking. Although much of Yugoslavia's work is being recorded on 16 mm film with magnetic stripe sound, and examples of excellent production were seen in the areas of geography, cultural history, biology, and children's literature; my impression is that much of the day-today materials is rather dull and lacking in impact.

4. Good equipment is too sparse for extensive school use. Several of the Republics do not even have functioning television systems just as numerous states in this country have not yet developed a state ETV network. Correspondingly, only a limited number of schools are adequately equipped these being predominately in the Republics of Croatia and Serbia. Sony VTR's and Vidicon cameras have recently been introduced for experimental purposes in a few schools and the aspirations of educators for expansion in this area are high.

5. ITV educators are conscious of a great need to prepare teachers to use adequate utilization techniques. In addition to course guides, a 1970 publication entitled "RTV - Pedagogya" is widely circulated and it is intended to help teachers who wish to use TV in their classrooms. The Yugoslavian government is seeking assistance from the USA in this area as evidenced by their arrangements for the USIA team and the subsequent consultant work of Mr. Jack McBride and Miss Margaret Thompson under the United States State Department for a subsequent period of three months duration.

6. Among other things, these consultants will be working with institutions responsible for the preparation of teachers. In addition to serious needs in the general education of teachers, Yugoslavian colleges like those in the USA have done too little to prepare teachers in preservice aspirants for the use of television. Hopefully, the barriers there will not be as unwieldy as those faced at most colleges of

education in this country.

7. The universal anathema which perpetuates all of these problems is a lack of financial resources. Yugoslavian education, including the use of TV, has been substantially delegated to the seven Republic governments. This decentralization is a great step away from the Russian form of Communism and is highly regarded as wholesome for the Yugoslavs and their relationships with the Western world. There are, however, serious inequities in the economic status of these Republics and equalization of educational opportunity among them promises to be a long and difficult struggle. Cooperative planning and production efforts were encouraged as a useful step in surmounting these limitations.

Since so many of the problems in the use of television for educational purposes are similar in that part of the world, and since ETV holds great potential for building stronger international relationships, it is my hope that the USA and our national ETV agencies will extend and intensify these relationships with the Socialist Federal Republic of Yugoslavia.

by John A. Montgomery

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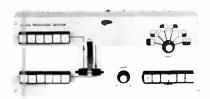
Who knows, you may have a use we haven't even thought of. Let's hear about it. Write or call: 2020 Oceanside Boulevard, Oceanside, California 92054 (714) 757-1200.



Equipment Spectrum

Production Switcher

Dynair Electronics Inc., San Diego, Calif., introduces VS-151A vertical-interval production switcher, a self-contained unit with full color



programming capability. According to Dynair, the unit is designed for use in CATV, broadcast, education and remote TV studio applications. It has ten video inputs with basic effects and mixing. Special effects capabilities include inserts from each of the four corners and full horizontal and vertical wipes. The inserts can be expanded diagonally, and illuminating pushbuttons and automatic preview are provided.

Circle Reader Service Card No. 11

Editor-Programmer

Dynasciences Corp., Video Products, Blue Bell, Pa., has introduced an Editor-Programmer for tape-to-tape assembly and insert editing on most 1 in. and ½ in. video tape recorders and 2 in. quad machines. The firm states that the unit provides the control and data storage capability required to program Start Insert and End Insert edit points on the record tape and Start Transfer edit point on the playback tape. Record and playback tape edit points may be edited independently or in combination.

Circle Reader Service Card No. 12

Filmstrip Kit

Project: Filmstrip, Woodland Hills, Calif., offers a kit designed for educators, businessmen, and sales executives and amateurs to produce their own filmstrips. The kit shows how to write, photograph and coordinate according to professional procedures. Tools include: instruction book, storyboard pads, script forms, sequence sheets, acetate cropping guide for 33 mm and 2½ x 2½ film and field chart. According to the firm, professional consultation and production facilities can be provided.

Circle Reader Service Card No. 13

CCTV Cameras

Panasonic, New York, has introduced a line of five CCTV cameras and 17 accessory items including a surveillance camera that takes pictures in 2 ft candles of illumination. The models are WV-200P, WV-240P, WV-340P, WV-340EN and WV-360P, which, according to the company,

can be used for industrial studio needs or surveillance requirements. Each has an optional zoom lens control and all have a built-in view-finder. Other features include a horizontal resolution of over 550 lines and a separate mesh vidicon, and integrated circuits. Accessories include: different lenses; multiconnector, extension and junction cables; rack mount frames; and blank panels.

Circle Reader Service Card No. 14

Turntable

LPB Inc., Frazer, Pa., announces model S-7 three-speed turntable with hysteresis synchronous motor and 6-lb platter. According to LPB,



the turntable is designed for radio, 1V, CATV, recording studios and other applications. The S-7 limits vertical and lateral rumble to $-36~\mathrm{dB}$ reference standard NAB level. Wow and flutter is less than $3/10~\mathrm{of}~1\%$. Instant start with minimum rumble is achieved by rim drive with full speed being attained in $1/16~\mathrm{revolution}$.

Circle Reader Service Card No. 15



Zoom Lens

Angenieux Corp. of America, Oceanside, N.Y., has introduced the 15x18E (f/2) zoom lens with a basic focal length capability of 18-270



mm, and a total focal length range of 18-675 mm using the range extender turret. According to the company, the aperture of f/2 remains constant throughout for focal lengths between 18 and 180 mm, thereafter dropping linearly to f/3 for the standard 1½ in. plumbicon. With a close-up adapter and range extender the lens is capable of full-screening an object of less than ½ in, in height.

Circle Reader Service Card No. 17

Lighting Fixture

Colortran-Berkey Inc., Burbank, Calif., announces the Mini-Pan 20, a lighting fixture for high intensity floodlight applications. Colortran states the unit provides enough intensity for direct or bounce light illumination and uses a

750-hour, 3200°K, 2000 watt lamp. The fixture is supplied with a 25-ft. cord with parallel blade u-ground cap, heavy-duty socket and weighs seven lbs.

Circle Reader Service Card No. 18

Console

Sparta Electronic Corp., Sacramento, Calif., announces the Model AS-40B Stereo Audio Console. The unit incorporates left and right program amplifiers in the audition and program outputs, Sparta claims, and an operator can, in addition, monitor audition and program sources by means of a selector switch under the vu meters. The unit features eight stereo mixing channels allowing 14 audio source inputs plus an auxiliary three station input push-button.

Circle Reader Service Card No. 19

Video Cameras

Audiotronics Corp., North Hollywood, Calif., announces two video cameras designed specifically for security and surveillance applications. Designated Models PVC828 and PVC829, the company claims the units feature a 2/3 in. vidicon, a 525-line random interlace scanning system, 450-line resolution, 10-step grey scale, and a signal-to-noise ratio of 40 dB. The Model PVC828 provides video output to feed TV monitors, and the Model PVC829 features a switchable RF/Video output which enables the camera to feed both video monitors and standard home TV receivers.

Circle Reader Service Card No. 20

Viewfinder Camera

Production of the 2830 series viewfinder camera has been announced by Cohu Electronics Inc., San Diego, Calif. Cohu states the camera



can be provided with Plumbicon, silicon-diode array, integral or separate mesh vidicons. Video output of the 2830 is compatible with ETV, ITV, CATV and broadcasting television signals. Synchronization can be from an external signal, requiring only composite video of sync, or from a choice of internal sync generators for random interlace to EIA RS-330 or 2:1 interlace to EIA RS-170.

Circle Reader Service Card No. 21

Video Tape

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eo tape. Designated Chroma 90, the unit features signal-to-noise; no-cinch mechanical properties; and audio sensitivity and uniformity which is kept to a minimum variation of one dB in order to permit splicing of tapes without changes in audio level, the firm states.

Circle Reader Service Card No. 23

Color Monitors

Ball Brothers Research Corp., Boulder, Colo., announces the availability of color broadcast monitors in 19-, 21- and 25-in, screen sizes. These units are designed for use in broadcast television and information-display systems. The company claims the 25-in, version is capable fo 600 TV lines center resolution at 20 ft-L of brightness, and better than 500 lines of 80 ft-L. Changes in color caused by time and temperature have almost been eliminated by tightly regulated power supplies and temperaturecommensated circuitry.

Circle Reader Service Card No. 24

Microphones

Shure Brothers Inc., Evanston, III., announces that four microphones, the Unidyne IV 548SD-CN, Unisphere I 565SD-CN, Unidyne III 545SD-CN and the Unisphere B 588SB-CN, are availabyle with three-pin audio connectors attached to the cable for each unit, thus making the microphones ready for use with most lowimpedance amplifiers. According to the company, the connector is designed to mate with Cannon KL Series, Switchcraft A3 Series or equivalent connectors.

Circle Reader Service Card No. 25

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Editorial

From Bad To Worse

Heat is no substitute for light, and all of the concerned talk about the lack of minority participation in educational broadcasting in the past decade hasn't solved the problem. There are, in fact, some indications the situation is getting worse.

As of Aug. 31, one of the few black news commentary programs on television, "Black Perspectives on the News," left the airwaves, along with all local programming of WHYY, Philadelphia. Decreased funding from school districts, governmental appropriations, and national agencies led to the cancellation of local WHYY programming, with the resultant dismissal of producers, directors, artists and production assistants for all local shows. Lionel Monagas, director of the National Association of Educational Broadcasters' Office of Minority Affairs, attacked the cutbacks as "an indication of decreasing commitment to minority needs and concerns."

Monagas feels "the death of another black program has significant meaning for minorities who are still struggling to get a piece of public broadcasting's action. It means the dismissal of producer Jimmy McDonald and his black staff from an industry that ought to be finding ways to employ more, not fewer, minority people. It means the elimination of an opportunity for black journalists to question newsmakers from a minority point of view in a minority-controlled program. Saddest of all, it means viewers in minority neighborhoods across the northeastern United States will have to do without this kind of programming."

Another jab at the continued inequalities in broadcasting, this time in cable TV, came during a recent Congressional speech by U.S. Rep. Thomas M. Reese (D.), of California. He printed in the Congressional Record the remarks of Geoffrey Nathanson, president of Optical Systems Corp., titled "On Minority Involvement in CATV." Nathanson notes that, at most, three out of 2,500 CATV systems in this country are minority-owned; while the CATV industry leaders "were busy making money hand over fist these past 15 years and building the so-called 'communication industry of tomorrow,' they had created what in this day and age is considered a sociological phenomenon" — an almost totally white industrial power structure.

The day may come when, as with commercial television, the exclusion is just about irreversible. "All the licenses have been allocated and short supply has skyrocketed the prices of existing (commercial) stations," Nathanson says. "Even if licenses were available, it would cost \$1.5 to \$2 million to get a station going, and attempts to program anything meaningful for minority communities would result in insupportable overhead." He notes that CATV (and other educational broadcasting alternatives) operate differently and offer at least some hope for involvement of minorities at this stage, but more than talk is necessary if this involvement is to come about. Unless every group and individual involved in educational broadcasting moves beyond the talk stage, the problem will only get worse.

- C.A.

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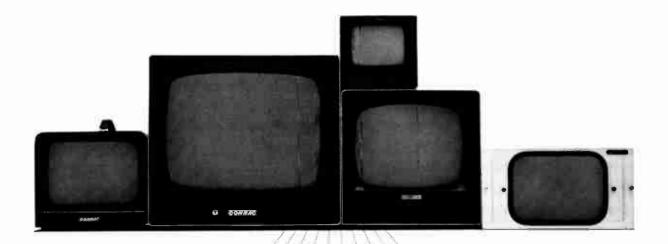
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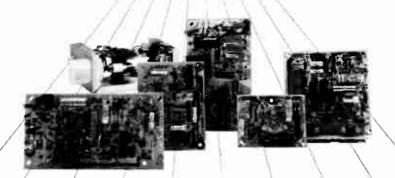
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