

This Website serves as a tribute to the
Pioneering and
Technological Visions of

Dr. William M. Brish

Superintendent of Public Schools 1947 –
1973

Washington County , Maryland



Once, a National leader of pioneering Instructional Television in K-12 school classrooms - now, the Washington County school district shows little evidence that a skilled staff of hundreds, operating five television studios, for a period of over forty years, created “live, and videotaped” television lessons, contributing to the education of thousands of students.

BIOGRAPHY:

Dr. William M. Brish

William M. Brish was born September 6, 1906 in Frederick, Maryland. He graduated from Frederick High School in 1924. He received an AB degree from Franklin and Marshall College in 1928, a master's degree for Teacher's College, Columbia University in 1932 and a doctor of Pedagogy degree from Franklin and Marshall in 1956. He did some additional graduate work at George Washington University.

Brish began his career as a history and science teacher at Thurmont and Frederick (MD) High Schools. He subsequently served as principal of Elm Street School in Frederick, Maryland. Prior to his time as superintendent in Washington County, he was the Assistant Superintendent of Schools for Prince George's County and then Superintendent of Schools in Kent County.

He served as the Superintendent of Schools for Washington County (MD) from 1947 to 1973. During his tenure, the Washington County closed-circuit television program was developed and instituted. Brish became known as an expert in using television for instructional purposes.

As a result of the closed-circuit program, Washington County was selected by the U.S. government to partner with Nigeria's education system in developing instructional television. Brish was the home base coordinator for the U.S.A.I.D. Modern Aids to Education Project for Nigeria from 1963 to 1969. Dr. Brish also served as a consultant in educational television for All India Radio as a part of a Ford Foundation project (1950-1961) and for several workshops at universities in the United States (1957-1960).

After his retirement from Washington County Schools, Brish was a cluster director (1973-1975) and then consultant for the Appalachian satellite project from 1976 to 1987 (AESP - Appalachian Educational Satellite Project, ACSN - Appalachian Community Service Network). An active member in his community, he served on the boards of the Hagerstown Chamber of Commerce, Washington County Free Library, Washington County Museum of Fine Arts, Mason-Dixon Council, and Boy Scouts of America.

Dr. Brish left a legacy in Washington County beyond his work as superintendent. As a result of his involvement in developing the Hagerstown Junior College which is now the Hagerstown Community College, the college library is named after him as well as the local planetarium.

William Brish died June 1, 1999.

In August 2006, a 50 th Year Reunion was held in Hagerstown , Maryland . More than two-hundred former employees attended -- including a number of pioneer employees who kicked-off the Educational Television Project in 1957.

Come join us again on September 27, 2008.

Contact us by telephone: Downs Hewitt – 301-582-2837 Nancy Bushey – 301-665-1312

Or E-mail: Jim Eckel: <mailto:eckel18335@aol.com>

**This Website is provided and mastered by
Mr. Greg Keefer, a 34+ years employee of the Publications Department
of Washington County , Maryland Public Schools.**

**Greg is also recognized as the professional Hagerstown Regional weather observer,
owning and publishing this website. You can check out his weather site at:**

<http://i4weather.net> E-Mail Greg: storm@i4weather.net

We are grateful that he has generously provided host space and invests his time to produce

**“A Tribute to Dr. William M. Brish –
Educational Television in Washington County , Maryland Public Schools.”**

Celebrate a 2nd Reunion of Former Employees of Educational Television in Washington County Public Schools.

The Reunion is planned for September 27, 2008 for all former employees of the Television Center . 1956 – 2000

When: September 27, 2008 (Saturday) 4:00 PM - Doors Open 6:30 PM - Dinner Buffet

Where: Elks Lodge No. 378, 11063 Robinwood Drive , Hagerstown , Maryland

Why: - To fellowship with former co-workers of The Washington County Educational Television System: TV Administrators; Teachers; Directors; A/V Engineers; Studio Crew; Artists; TV Maintenance; Clerical and Publications Technicians

- To recognize the contributions made by all who participated in this pioneering experiment.

- To share fond memories with old friends and memorabilia that you are welcome to bring with you.

Your reservation and check must be received by September 1st 2008

Print, Clip and Mail this Portion To:

Mr. Downs Hewitt - 11241 Marbern Road , Hagerstown , Maryland 21740

Make check payable to: "TVCRC" - or - TV Center Reunion Committee

Your Name _____

Guest: _____

What Job did you perform at the TV Center? _____

During what year(s) ? _____

Telephone _____ e-mail _____

\$25.00 Reservation for one (includes meal, tax and gratuity)

\$45.00 Reservation for two (Includes meal, tax and gratuity)

Questions please contact:

Nancy Bushey at 301-665-1312 -or- Downs Hewitt at 301-582-2837

A Message From Superintendent Brish- 1963

The use of instructional television in county schools began in September, 1956, and has continued as an integral part of the instructional program.

The results of a five-year study, The Washington County Closed-Circuit Educational Television Project (1956-61), are described in this report. The project was sponsored by the Electronic Industries Association and the Fund for the Advancement of Education of the Ford Foundation, assisted by the Chesapeake and Potomac Telephone Company.

Since our school system had the unique opportunity to work with television in major subject areas at all grade levels in successive years, we are often asked to point out the most significant achievement of the project. While we may seem to oversimplify the findings, we believe that the use of instructional television has stimulated teachers, supervisors, and administrators to examine more closely the teaching-learning process and to pursue curriculum development with a new interest.

Early in the project it became evident that the important issue was not whether television should be used for direct instruction but how it should be used and what it could contribute to the improvement of instruction.

As a result, the curriculum is being continually revised and extended, teaching procedure studied, and achievement evaluated. Instructional television is regarded not as a "substitute", but as a valuable addition to the school program.

While much has been accomplished and substantial progress made in using television in the schools of Washington County, there is need for further study, analysis, and evaluation.

Television has been accepted as an important educational resource. Instructional television is a regular part of the school program and is now being used on an even broader scale than during the project. School staffs feel that instruction has been strengthened, pupil educational opportunity broadened, and achievement improved. All this has been accomplished by regular school personnel with a minimum of outside technical assistance. Savings resulting from the redeployment of personnel, equipment, and facilities, rather than additional funds, are being used to meet the costs.

We in Washington County are, therefore, convinced that television has a definite place in the program, and, if properly used, can add a new dimension to education.

**Dr. William M. Brish -
Superintendent of Schools**

50 YEARS OF INSTRUCTIONAL TELEVISION IN WASHINGTON COUNTY, MARYLAND

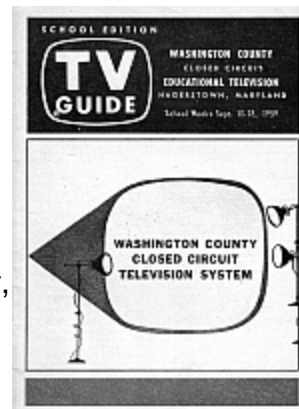
A HISTORICAL TIMELINE – 1956 – 2006

(I) WASHINGTON COUNTY CLOSED-CIRCUIT EDUCATIONAL TELEVISION SYSTEM

1956 –

Superintendent of Schools, William M. Brish has a vision to experiment with Televised Instruction.

- Ford Foundation sponsors the “Pioneering Experiment”- 2 million dollars, 6- year term.
- A Co-axial Cable system is designed by Bell Telephone Corp. and constructed connecting a few schools.
- First Telecasts are conducted “Live”– using remote trailer facilities.
- Five fully equipped (audio/video) TV Studios are constructed – each with two black and white cameras, two camera operators, one floor manager, two audio-video operators, and one television director.
- **Mr. T. Wilson Cahall** coordinates the television Instruction facilities.



1957 - 1958

Closed-Circuit Cable System is expanded to all Hagerstown area Schools – Employing 20+ Teachers

Mr. Stanley Johnson , and Mrs. Marjorie E. Hoachlander – Television Production Supervisors

- Triangle Publications (TV Guide) produces a weekly TV Guide for the school district.
- Students in all grade levels are receiving “Live”- televised instruction.
- Classroom teachers help to write curriculum and assist each student with the classroom lesson.
- Instructional graphics are designed by staff artists -- 16 mm films, photographs and slides enhance televised instruction.

Additional Televised Courses, Teachers, Television Directors, audio/video studio production Crewmembers are employed.

- Hagerstown Junior College Students, enrolled in the “Communications Course” are employed as part-time Crewmembers at the television studios.
- School students learning skills/abilities are evaluated.
- Ampex, Corp. donated a 2-inch VideoTape Machine to the TV Center. – some telecasts are videotaped for teachers to evaluate themselves, and for archival purposes – not for transmitting at this time.



Reading left to right from the back row: Mr. Mittel, Mr. Etchison, Mr. Davis, Mr/ Powell, Mr. Hewitt, Mrs. Robeson, Miss Nuce, Mrs. Snively, Mr. Kercheval, Mr. Lizer, Mrs. Schroyer, Mrs. Allison, Mr. Roberts, Mr. Brish, Mr. Hull, Miss Martin, Miss Cushen, Mrs. Clopper, Mrs. Davidsen, Mrs. Guyton, Miss Donnelly, Mrs. Heltzel, Mrs. Hesson.

1959 – 1963

The Closed-Circuit Television Network is completed – connecting all district schools.

Mr. Robert F. Leasure coordinates the television Instruction facilities

Mr. George Ropp is Principal of Television Teachers and supervises the Graphic Arts Support Staff of (3)

Mr. Sam Wagaman – Assistant Television Production Supervisor.

Mr. James Spear – joins the Production Supervisor Team.

To improve the professional quality of Televised Courses - skilled, full-time personnel are retained and hired

- Artists, Photographer, Television Directors and most A/V operators are full-time employed – other part-time college student crewmembers rotate in and out each year.
- **A Television maintenance and A/V services** department is established.
- **A Clerical staff** is added to facilitate the typing of television scripts and publications.
- School students - learning skills/abilities continue to be evaluated.
- Another 2-inch Ampex Tape machine was donated. – some courses are videotaped and lesson series televised.
- **Washington County School District now funds the full Educational Television budget.**
- Bell Telephone Corp. – charges an annual rental fee (\$156,000) for use of co-axial cable network connecting all district schools.
- Public Taxpayers begin to complain about “costs” of teaching with television.



1964 - 1967

New Facilities (Central Resource Center) are renovated and constructed for Television Teachers, Graphic Arts, Photography, and Printing/Publications personnel.

- Air Conditioning was added to all facilities.
- A Television maintenance and A/V services facility is constructed
- A new building is constructed for TV Teachers offices.
- A 16 mm and still Photography studio and darkroom is constructed.
- A Title III (Federal Government funded, 3-year, Project) began to produce 16 mm film productions for instructional purposes, and to produce and evaluate Televised Instruction.

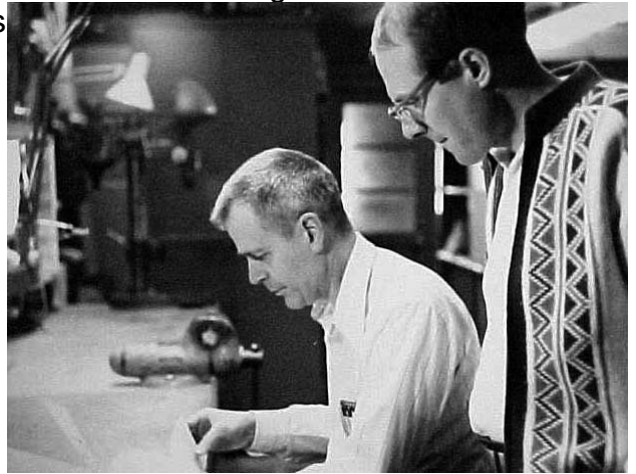


1968 - 1973

Dr. William Brish retires in 1973 after overseeing his successful Television Project for 17 years.

- **The Resource Center” concept is developed.** – Combining Television, Library, Graphic Arts, Photography, and Instructional Materials Departments.
- **A staff of 30 + Television Teachers continue** to produce live and videotaped, lessons for classroom instruction (in black and white format).
- **A videotape remote camera system is purchased** to supplement the productions.

- **The Title III project ends in 1970** after a thorough evaluation – finding that Television is a successful instructional tool for classroom teachers to use.
- The public (taxpayers) continue to complain about the growth and costs of “teaching with television.”



1973 - Dr. Claude Kitchens – new Superintendent of Schools, upgrades and restructures the Television Production System.

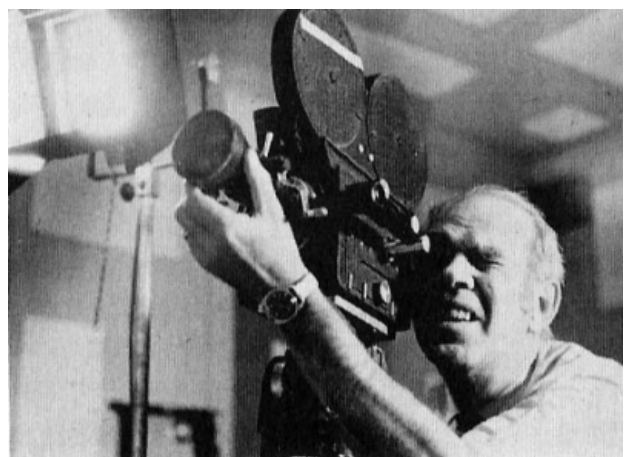
- Citizen Committees evaluate Educational Television System and make specific recommendations for improvements and cutting costs.
- **Robert Leasure, Coordinator of Television and George Ropp, Television Utilization Specialist retire.**

(II) WASHINGTON COUNTY INSTRUCTIONAL RESOURCE CENTER

1974 – 1979

Mr. Richard Predmore becomes Coordinator of Television and implements changes –

- Washington County Closed-Circuit Television becomes - **WASHINGTON COUNTY INSTRUCTIONAL RESOURCE CENTER (IRC).**
- **The IRC incorporated the following departments:** Instructional Television Production, Television Maintenance, Central Office Library, Graphic Arts, Photography, Instructional Materials Lab, and Printing/Publications Services.
- **A system of transporting Videotaped Lessons to and from schools was developed.**
- **1977 - The Closed-Circuit cable network was no longer needed and was eliminated.** – saving \$240,000 per year.
- **1977-1978 Studio Production Equipment was upgraded to “Color Productions.”** – a major improvement for instruction. – special effects switcher, Character Generator, color camcorder remote system.
- **Emphasis was placed on “professional quality productions”** and wages were compensated accordingly.
- A large number of Video Tape Recorders were purchased to produce and duplicate the instructional lessons.
- **1978 - Changes in the use of television have also taken place this year. No longer are programs produced live and no longer is television used in large, combined classes.** Programs are being produced in both color and black and white. Students today have the advantage of small-group or individual presentations. Television teacher visitations and a new concept - instant replay on a videocassette machine - are available. Programs developed in the television studios are recorded on videocassettes and sent to all schools. Teachers



utilize and control these cassettes in classrooms. Lessons are telecast to meet the school schedules, but teachers can request replay at any time.

- **A VideoTape Library** was established to catalog and retrieve for classroom teachers.
- **Professional quality** was such that local businesses and National Corporations contracted with Washington County to produce custom Videotapes for their use.
- **An agent was contracted to “Market/sell”** our Instructional Lessons Series to other School Districts.
- **The Library of videotaped Lessons grew** to the point that - certain Television Instructors, Administrators, support personnel and (3) Television Studios were no longer needed. – They were reduced each year.
- All of the “Predmore” changes seemed to satisfy the “Public Pressure” to reduce the Television budget – thereby, “extending the life” of television production services while improving their quality.

(III) WASHINGTON COUNTY INSTRUCTIONAL TELEVISION SERVICES

1980 – 1992

Mr. Richard Whisner – then - Dr. Wayne Gersen becomes Superintendent of Schools

- Due to the Department of Instructional reorganization, The IRC terminology is eliminated and each department is incorporated under various management

Mr. William Kercheval becomes Supervisor of Televised Instruction

- Television Studio Production, Television Maintenance, Videotape Room Operations, Graphic Arts Instructional Materials come under the “Division of Instructional Television.”
- **Two large television studios continue** to create professional Instructional Television Productions – Elementary Art, Music, Washington County Social Studies and History; Secondary Math, Science, Social Studies, Citizenship, and “Let’s View The News.”(a popular student production)
- **Television Videotape Remote Crews** were formed and used on a regular basis.
- **Business Contracts** were entered with: Washington County Extension Service; The Smithsonian Institute; Dr. Ted Brown, Entertainment Associates; ESOL (English Speakers of Other Languages) and others.
- **Product Sales increased** until - (20) school districts and (5) State-wide Networks across the nation repeatedly purchased Washington County School District Instructional Television Lesson Packages.
- **IATV- Interactive Television** (two-way televised communication between classroom students and teachers) is begun using microwave/antennas transmissions.
- Once again, The Library of videotaped Lessons grew to the point



NATIONAL UTILIZATION • WASHINGTON COUNTY ITV
PROVIDING INSTRUCTIONAL SUPPORT TO CLASSROOMS



- DEVELOPED BY INSTRUCTIONAL SPECIALISTS
- PROFESSIONALLY PRODUCED
- PILOTTED AND TESTED IN CLASSROOMS
- ACCOMPANIED BY CORRELATED GUIDES

that - certain Television Instructors and support personnel were no longer needed. – They were reduced each year.

- **1984-1985 A very small ITV staff remains** – Two Television Teachers, One TV Director remains. Lesson Series are produced this year and inserted into the curriculum the next year.
- **Classroom teachers continued to utilize the videotape library** on a daily basis but, they no longer requested “new productions.”
- The Elected Board of Education began a systematic reduction of television production services for budgetary reasons.
- **Satellite TV, Maryland ITV, and Cable TV Productions** were scheduled for receiving, videotaping and supplying to classroom teachers
- **William Kercheval retired** - thus ending the last of the Studio Television Supervisors.
- **1988 - Donald Zilch – Director of Instruction, assumes the responsibility of Instructional Television Services.**

(IV) ELIMINATION OF WASHINGTON COUNTY INSTRUCTIONAL TELEVISION SERVICES

1994 –

Dr. Herman Bartlet becomes Superintendent of Schools

1994 – 1997

Mr. Vincent Tantillo (Coordinator of Audio/Video Services) – assumes Coordinator of Television Services

There appears to be little support for televised instruction from Superintendent Bartlet, the Department of Instruction and the Elected Board of Education.

No updated equipment is purchased
No “new” televised instructional lessons are initiated.

IATV (interactive televised classroom instruction) continues to link all High Schools

Television Maintenance Service and technicians are moved to the “Maintenance Department.”

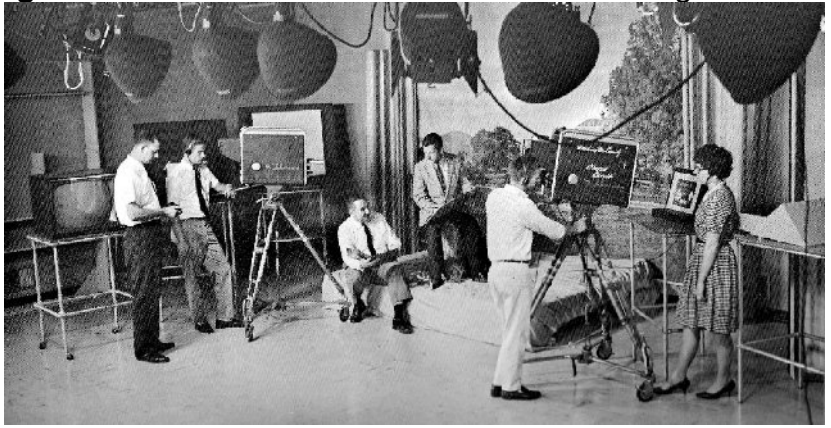
1997 – 2000

Mr. James Eckel – assumes what remains of Television Services.

- “Live” Telecasts of School Board Meetings were produced on a regular basis – using local Cable Television Co. Public access channel.
- A few remote telecasts and videotape services continue: - televised Annual Budget meetings, Orientations, Seminars, video yearbooks.
- **Studio Television Productions become almost non-existent.** – The Department of Instruction has little or no interest in producing televised Lessons of Instruction.
- **Television staff positions are eliminated** or transferred to IATV positions in the schools.
- **Commercial sales of Videotapes are terminated.**
- **Television Studios, Control Rooms and Videotape Rooms are dismantled.**



- **Videotape Library is severely damaged** due to the absence of staff -- and most original videotaped series are destroyed due to renovation and new construction in the area.
- 2000 – Last staff position is eliminated as Mr. Eckel retires.



2002 – 2006

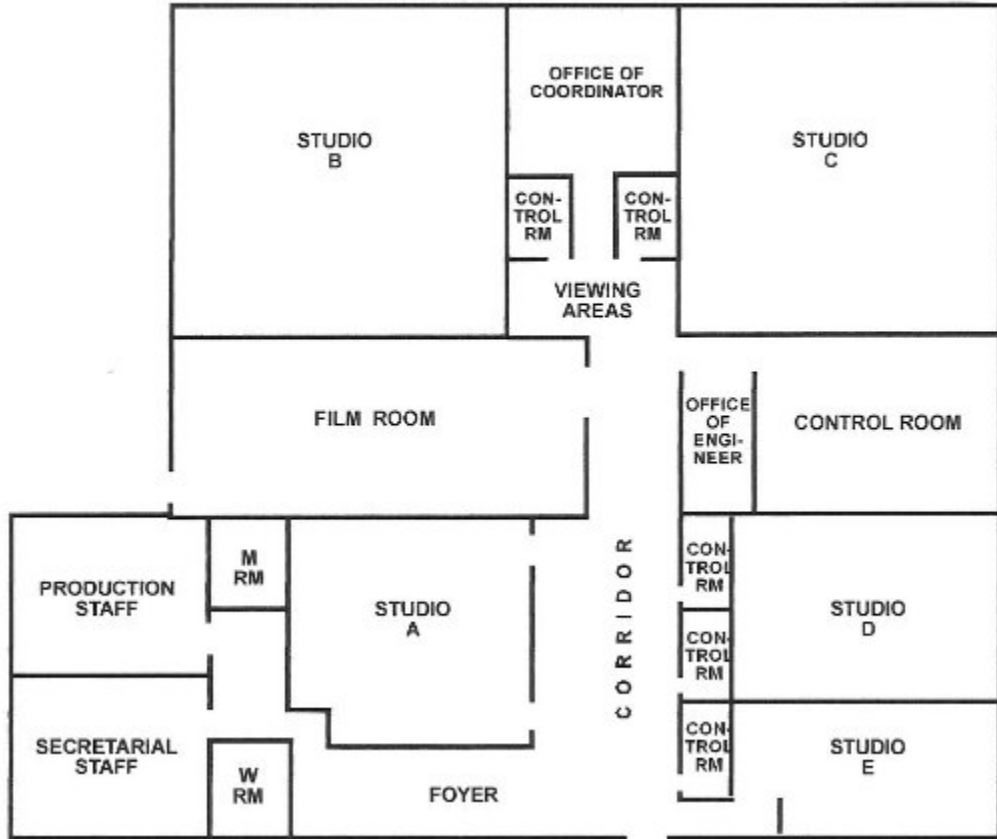
Dr. Elizabeth Morgan becomes Superintendent of Schools
Mr. Ronald Shirley (reassigned to Library Services) – assumes what remains of Television Videotape Services.

- Mr. Shirley, a 30-year Television audio/video operator/technician survives as the only person employed to provide archived and videotape duplications to classroom teachers.
- **IATV- Interactive Television** (two-way televised communication between classroom students and teachers) is now almost inactive. – An Instructional Assistant operates the camera and is assigned to the school principal.
- **“Live” Telecasts of School Board Meetings** continue on a monthly basis – using local Cable Television Co. Public access channel.

WHAT HAPPENED TO INSTRUCTIONAL TELEVISION?

- **A lack of continuity and understanding on the part of school district administrators and local elected officials failed to preserve former Superintendent William M. Brish’s “Successful Experiment.”**
- **Although numerous studies and evaluations concluded that students receiving televised instruction were consistently ahead of the learning curve, taxpayers in Washington County refused to support it. This forced Elected School Boards to underfund, thus eliminate, Instructional Television Production.**
- **Once, a National leader of pioneering Instructional Television in K-12 school classrooms - now, the Washington County school district shows no evidence that a skilled staff of hundreds, operating five television studios, for a period of over forty years, created “live, and videotaped” televised lessons, contributing to the education of “thousands” of students.**
- **Perhaps, this answers why many of us feel that we need to assemble together to honor the memory of the “Grand Experiment” and all of those who contributed so much to its success.**

TELEVISION STUDIOS AND FACILITIES
1957



**The following information is extracted from the 1958-59 Publication –
“Closed-Circuit Television, Teaching in Washington County.” – Progress Report.**

**Personnel for the Washington County Closed-Circuit Educational Television Project
1958-59**

Administrative Staff

- Superintendent of Schools, William M. Brish
- Assistant Superintendent of Schools, William C. Diehl
- Director of Instruction, William L. Donaldson
- Director of Public Relations, Robert F. Lesher

Television Staff

- Coordinator, T. Wilson Cahall
- Chief Engineer, John R. Brugger
- Supervisor of Instruction, George H. Ropp

Studio Teachers - Elementary:

Mrs., Barbara R. Allison, Mrs. Josephine B. Clopper, Mrs., M. Louise Davidsen, Dolores T. Donnelly, Bruce Etchison, Mrs. Mary D. Heltzel, Robert R. Hull, Dorothy I. Hussey, Barbara J. Maurer, Clyde H. Roberts, Mrs. Lorraine M. Robeson, Anna Louise Schroyer, Velora V. Swauger, Mrs. Mildred C. Vance

Studio Teachers - High Schools:

James K. Davis, Mrs. Jane S. Guyton, Downs E. Hewitt, Edward C. Kercheval, H. Jane Martin, M. Eugene Mittel, Alta F. Nuce, Allan R. Powell, Ralph N. Rohrbaugh, Mrs. Pearl C. Snively

Production Supervisor, Mrs. Marjorie E. Hoachlander

Tests and Measurement Veronica Maz, James D. Morgan

Assistant Engineer, John F. Wahlfeldt

***Operators:** W. Walter Rudisill, Paul R. Dowie, Tom Hefelfinger, Vincent W. Helmtoller, Jr., Eugene Lloyd Mitchell, Charles Ross

Assistant Production Supervisor: Stanley D. Johnson

Staff Directors: Robert Dudley, Terence P. Hourigan, D. Glenn Thomas, Harry Wagaman

***Assistant Directors:** Eddie Penn, Harry A. Swope, Jr.

***Crew Members:** Judy Cahill, Wayne Decker, Bruce Dick, Dean Fiery, Maureen Louise Galman, Alice Grove, Suzanne Guiney, Nancy Hanks, Carlton Harris, Hans Heinrich, William McClannahan, Frank Papa, John Rarnaciotti, Algene Sensenbaugh, William Slook, Gary Twigg, Bobby Whited.

Visual Aids: James Eckel, Phyllis Wolf

Clerical Department: Mrs. Hilda F. Newcomer

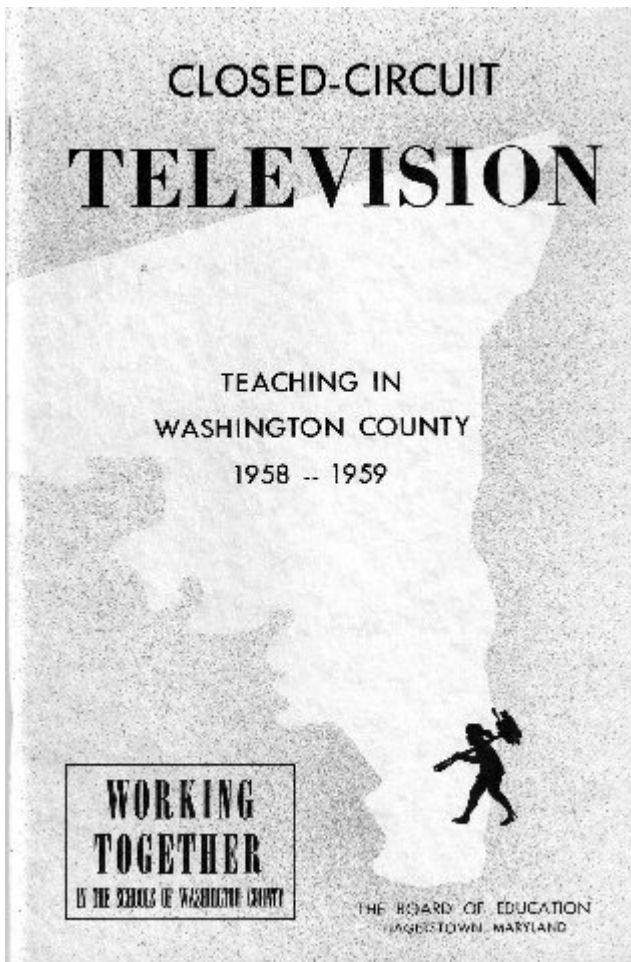
Mrs. Elizabeth V. Buckingham, Mrs. Viva C. French, Mrs. Ruth Grove, Mrs. Barbara Murray, D. Juanita Peters, Virgie Rudolph

- Junior college students who are employed part time

WASHINGTON COUNTY CLOSED CIRCUIT TELEVISION REPORT - 1963

NOTE:

This publication was produced by the School System. – A very informative Historical, six-year article.



The Board of Education first considered using television in the schools in 1954. The Board was then aware that the children of the 1950's came to school with a better background of information than earlier generations-and that a primary reason for this was exposure to new experiences via television in the home. This situation suggested a need for curriculum changes to avoid trying to teach children things they already knew. It also suggested that television might be even more valuable in the classroom than in the living room.

The Board was unaware of it then, but a movement was underway to set up a project which could explore the uses of television for instruction. Backing this project was a joint committee formed by the Electronic Industries Association and the Ford Foundation's Fund for the Advancement of Education, with a number of consultants representing various educational agencies. The committee wanted to start a large-scale project-something that would provide a comprehensive test of television. The emphasis was to be on regular, direct instruction by television rather than on occasional or supplemental uses of it.

Washington County was ultimately chosen as the site of this project on the basis of a proposal to use television for instruction at all grade levels and in basic subject

areas; to use it for teacher education and for improvement and enrichment of the curriculum. The county also proposed to test television's usefulness in relieving classroom and teacher shortages and in achieving better use of community and school resources. And finally, it proposed to find out whether instruction by television was economical.

This study, the Washington County Closed-Circuit Educational Television Project, was an exploratory and practical experience - not a formal research experiment. It extended over a period of five years, 1956-1961, and included the schools of an entire county school system. The project program developed as a natural outgrowth of the curriculum improvement program which had been evolving over a period of many years. Television lessons were scheduled regularly to make them integral parts of courses, but at no grade level did they occupy a major portion of a school day. The telecasts did not prevent pupils from having personal contacts with teachers and from engaging in the give and take of classroom discussions. The television experience was planned as only part of a total learning experience for the pupil.

The project got underway in the summer of 1956. One hundred teachers, principals, supervisors and community leaders gathered at a workshop in July and August to plan the new television instruction program. At the same time a team of Chesapeake and Potomac Telephone Company engineers under William C. Warman began stringing cable for the television network; and John R. Brugger left his post as chief radio and television engineer at the University of Illinois to design and install the transmission center. The installation was completed that fall in time for telecasting to eight schools. The system was expanded until by September 1963, every public school in the county was linked to the television circuit.

As the project developed, television came steadily into use at all grade levels and in most subject

areas. Television instruction was coordinated by staff members T. Wilson Cahall and Robert F. Leshner. Each summer and at times during the school year, teachers, principals, parents, supervisors and administrators gathered to assess progress and to restudy courses and teaching methods. New courses were added, old ones altered -until today



more than fifty courses are included in the television program. By the time the project's official life came to an end in 1961, the county not only had a new teaching aid in the classroom, but also was well on the way toward having a vastly improved curriculum and a new approach to teaching-by teams. The advantages of television were apparent and the cost low enough so that after outside financing had ended, the county was able to continue and even expand its use of television in the classroom.

Throughout the five years of the project, the county school system received support from two major sponsors-the Electronic Industries Association and the Fund for the Advancement of Education. Invaluable assistance also came from the Chesapeake and Potomac Telephone Company of Maryland.

The Electronic Industries Association, representing major electronics companies, provided free of charge the necessary television cameras; receivers; and studio, control room, projection and recording equipment. Seventy-five manufacturers donated the equipment valued at \$300,000.

The Fund for the Advancement of Education and the Ford Foundation underwrote other project expenses. These included the costs of designing the system, administering and supervising the project, providing secretarial help, paying cable rental fees, securing additional television sets, solving various production problems,



training technical personnel, and carrying out the evaluation program. The Fund and the Foundation together contributed about \$200,000 a year to the project over the five-year period.

The Chesapeake and Potomac Telephone Company, with technical advice from Bell Laboratories, developed the closed-circuit system for transmitting television to the classroom. This system included more than 115 miles of coaxial cable plus transmitting and amplifying equipment.

THE SYSTEM AND THE STAFF

To many educators, the most unfamiliar and perhaps worrisome aspect of classroom television is the system itself. It is a complex electronic affair, with strange devices and odd terms like "videcon," "zoom" and "dolly out." Yet the actual task of operating such a system is not as forbidding as it might sound. Washington County has found that it can operate an extensive closed-circuit system with a minimum of professional and technical assistance. Many other school systems are probably in a position to do the same.

In the completed system in Washington County, forty-five schools are linked by coaxial cable to form a closed-circuit television network. Six lessons can be sent simultaneously over this cable and picked up on more than 800 standard twenty-one-inch television sets in classrooms, school cafeterias and auditoriums throughout the county. Many classrooms are equipped with two sets, so that no pupil has to sit far from the screen. Auditoriums and other large viewing rooms are equipped with several sets, generally one for every twenty-five children. Large screens are now being used to replace small receiving sets in auditoriums and other large viewing areas

The lessons are transmitted from a Television Center adjacent to the Board of Education offices in Hagerstown. This center is a pre-fabricated metal building with a concrete block addition covering an area of 100 by 125 feet. A few years ago it had a dirt floor and housed farm equipment. Now it contains five television studios. Three of these are twenty-five by thirty feet, and two are forty feet square-large enough to permit the use of an automobile or truck for demonstrations. From these studios more than twenty-five lessons a day or 125 a week are transmitted to schools. These lessons are for the most part live telecasts. The Columbia Broadcasting System, operating day and night seven days a week, produces about 140 live programs, while National Broadcasting Corporation in the same period transmits about sixty.



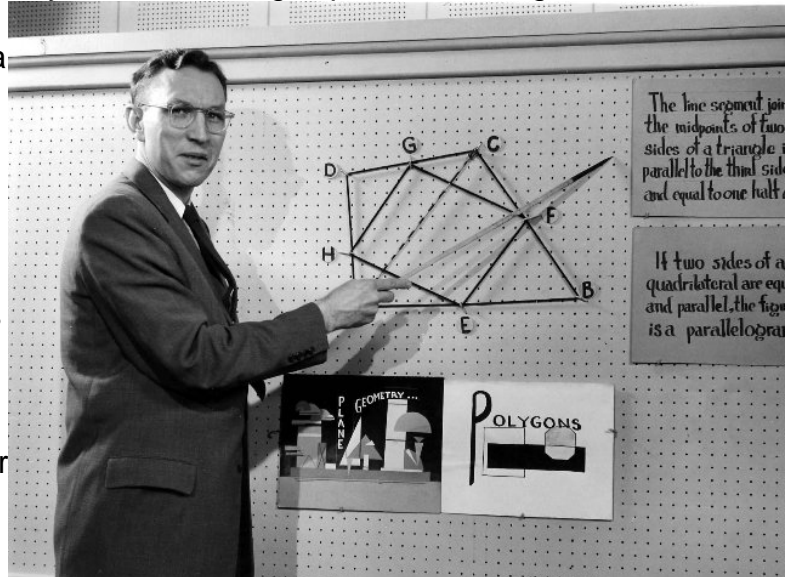
The center also contains offices for production, engineering, supervisory and clerical personnel, and a film projection room. Slides and films are stored, repaired and previewed in the film room from which they can be fed either into any of the five studios or directly to the schools over the closed-circuit system. Adjacent to the Television Center is another pre-fabricated metal building 100 by 40 feet, which contains office space for the studio teachers, plus a workroom for the art staff.

Before installing a television system for classroom instruction, it is first necessary to decide whether it shall be a closed- or open-circuit system. The open-circuit system requires no cable, thus eliminating cable rental costs. But this system provides a single transmission channel, so

that only one lesson can be telecast at a time. The closed-circuit system permits transmitting six or more lessons at a time and since Washington County wanted to make extensive use of television for teaching, it chose the closed circuit system.

At the time the Board of Education asked the Chesapeake and Potomac Telephone Company to install this system, in June of 1956, there was considerable question as to whether it could be done economically. One engineer, for example, made a guess that cable rental costs for such a system would amount to \$2,500,000 a year and capital costs to \$7,000,000 or \$8,000,000. His estimate made sense in terms of costs then being experienced by the major networks; and there was no other experience on which to base an estimate. No one had yet built an economical closed-circuit system of the size and quality needed in Washington County.

But whereas the major networks transmit over a system combining expensive underground cable and microwave relays, the Telephone Company ultimately worked out for Washington County a system using a simplified coaxial cable. The cable rental cost is about \$150,000 a year, or one-seventeenth of the \$2,500,000 estimate. This made all the difference between a practical and an impractical system. The completed network, in fact, represented an electronic engineering milestone, and systems built since have been modeled upon it. The Telephone Company used its Washington County experience to formulate the rate schedule that is now being used nationwide for its closed-circuit service.



The television network first reached 6,000 pupils in 1956, then 12,000 in 1957, 16,500 in 1958, 18,000 in 1961, and 20,500 in 1963. The quality of the system has been improved steadily, and while it is not without flaw, it is highly reliable and generally excellent. The chief engineer estimates the system's reliability at better than 99%, which means that breakdowns are extremely rare.

Operating this system requires a substantial staff. A precise figure is hard to give because there is no definite line between television personnel and non-television personnel. In all, there are about seventy people working most of the time in the television system-and this includes teachers, supervisors, technical and clerical personnel, as follows:

- **Coordinator 1**
-
- **Instructional Supervisor 1**
-
- **Teaching Staff 25 (10 part-time)**
-
- **Production Staff 30 (17 part-time)**
-
- **Engineering Staff 8 (4 part-time)**
-
- **Art Staff 3**
-



- **Clerical Staff 4**

A brief discussion of the duties of the coordinator and of the supervisory, production, engineering and art staffs follows. While these departments are discussed separately, in practice they work together very closely. The standard studio crew for telecasting a lesson includes the teacher, two technicians, a director, a floor manager and two cameramen. All are interdependent.

COORDINATOR

The coordinator works directly under the assistant superintendent in charge of instruction as chief-of-staff for television. His duties induced coordination of the work of the departments of engineering, production and instruction.

INSTRUCTIONAL SUPERVISORY STAFF

A supervisor of television instruction works as a member of the county staff of general instructional supervisors. His responsibilities to the studio faculty are similar to those of a principal in a conventional school. The entire group of instructional supervisors, however, provides assistance to studio teachers in the planning, teaching and evaluating of televised courses.

In addition to their other relationships with studio teachers, instructional supervisors arrange for them to meet with classroom teachers to discuss problems of mutual concern as members of a teaching team.

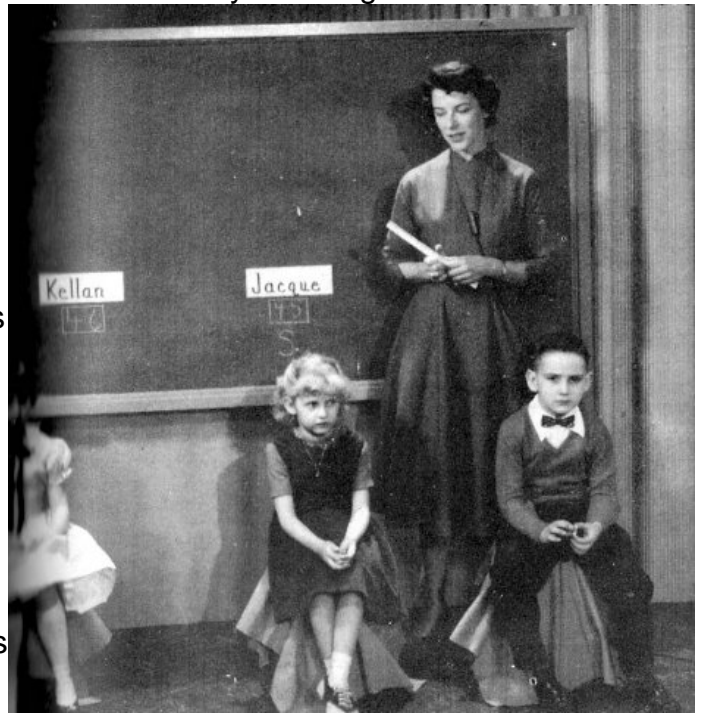
PRODUCTION STAFF

It is the teacher's responsibility to present the lesson and the engineer's job to transmit it, while it is the production staff's job to see that the lesson is presented as effectively as possible. The task of the production staff is not easily defined. The teacher is, essentially, the equivalent of the commercial station's producer. He decides what his lesson is to include, and no techniques of production are allowed to

violate the teacher's conception of the method and principles of teaching involved. The director is there to help the teacher work effectively -to help him use television's many capabilities. Production techniques are designed to implement the teacher's conception of the lesson.

The teacher new to television has much to learn about teaching in a studio situation. He must modify his habits of walking and talking. He must learn the skills of interviewing, working with a studio crew, using studio cues and signals and teaching with a variety of visual aids. This does not imply that the television teacher must become a professional actor. It means mastering simple techniques such as walking slowly enough for the camera to follow smoothly, and gesturing in such a way that the camera does not distort the arm or hand. The teacher must also learn how to prepare a script outline. The script is necessary not only as a guide for the teacher but also as a cue to let the director know what the teacher plans to do, and when. If the teacher intends to walk from one part of the studio to another, the director must know when, so that he can have the cameras in readiness. If films, slides or other kinds of visual aids are to be used, the script must indicate to the director when and where in the sequence of the lesson they are to come.

At the Television Center, two experienced supervisors head the production staff. They also teach communications courses for the Hagerstown Junior College. Most of their staff of thirty is made up of



junior college students, about half of whom are majoring in communications. In addition to the two supervisors, there are five full-time and three part-time directors. The rest of the staff is made up of cameramen and floor managers who assist the director. The fact that many of the students are studying communications at the junior college is a great advantage in training them for work at the Television Center.

About half of the production crewmen are new at the beginning of each school year. Many of them arrive at the Television Center less than two weeks before school opens, knowing only how to operate the family television set. In twelve days they are operating cameras with considerable skill. Ninety per cent of the television lessons are live. The rest are taped on occasions when the teacher must be absent at the usual lesson time, wishes to interview a resource person at his convenience or desires to evaluate his telecast as it is received in a classroom situation.



ENGINEERING STAFF

The Chesapeake and Potomac Telephone Company carries all responsibility for the maintenance and operation of the cable and the system amplifying equipment. All other equipment-television cameras, receivers, projection, recording, studio and control room equipment-is the responsibility of the chief engineer and his assistants. They maintain equipment and supervise the transmission of the audio and video signals.

The engineer and his assistant supervise the staff of technicians who have varied responsibilities. The Engineering Department, like the Production Department, trains its own personnel. With the exception of the chief engineer and his assistant, all are junior college students or recent high school graduates. Not infrequently these students go on to careers in electronics.

1. The film room operator

- maintains a library of films which he catalogues, deans, splices, and inspects.
- feeds the proper film into the studio, or directly to the schools.
- schedules film previews for teachers and helps teachers select parts of a film for use in their lessons.

2. The video-tape recorder technician

- records lessons or special demonstrations
- maintains a library of approximately 200 one-hour tapes of previously recorded materials
- operates the video-tape recorder
- schedules the replaying of tapes

3. The audio-video operators

- connect the studio to the proper channel
- control the equipment which determines the quality of the audio and video signal



- operate turn tables and recorders

4. The maintenance crewmen

- service the 800 television sets located in 45 schools
- test the 15,000 tubes in the television system
- install and maintain equipment at the Television Center

ART STAFF

The Art Department provides a number of important services. There are three full-time staff members in this department, all recent high school graduates talented in art. They prepare most of the maps, charts, diagrams, acetate overlays, special illustrations, models, and backgrounds for sets and similar material used by the teachers in more than fifty televised courses. While much commercially-produced illustrative material is available; often it is not suitable for television. Many maps are too detailed, and illustrations are not proportioned for the television screen, which requires a height /width ratio of three to four. Worthwhile illustrative material can often be produced much more cheaply than it can be purchased. Having the Art Department makes it possible for teachers to be much more flexible in planning graphic materials for their lessons—a vital advantage if the most effective use is to be made of television.



TELEVISION IN THE SCHOOLS

The "correct" way to fit television into the conventional school routine will probably be debated for years to come. The proper length of the television lesson, the optimum size for the television class opinions about these and other problems may ultimately fill volumes. No one now has had enough experience to know the best conclusions.

Nevertheless, a few things do seem clear. One is that television should not take up a major portion of any pupil's school day; television is best used as a specialized kind of learning experience or as an aid to classroom instruction. The other is that a television lesson should generally be followed as soon as possible by a session with the classroom teacher.



But there is now no easy answer to the question of how long a television lesson should be. The fact that the attention span of a first grader is shorter than that of a high school pupil has bearing on the question. So does the fact that pupils at the same grade level can profit by a longer television lesson

in a subject like art, than in others, such as conversational French, where more concentration is required.

At present elementary pupils spend 7.3 % to 13 % of their classroom time watching television lessons. These lessons, ranging in length from thirteen to twenty-five minutes, are followed by work in the subject with the classroom teacher. Junior high school pupils spend almost one-third of their time in television classes, while high school pupils seldom spend more than 10% of their time in television classes.

None of these time periods are recommended as the ideal. The staff is inclined to believe that the amount of television viewing time in the elementary schools is satisfactory. Junior high schools may have too much viewing time, while high school pupils might profitably spend more time than they now do.

The flexibility of the elementary school day makes it much easier to use television there than in the junior or senior high school. Since there are no rigidly defined periods in the elementary school, the classroom teacher can devote as much or as little time as he deems necessary to preparation for the television lesson, or to discussion and other follow-up work. The junior and senior high school schedules, on the other hand, are relatively inflexible. When the day is made up of six periods of equal length, both television and classroom teachers are more limited in what they can do.



In certain subjects, television is obviously very successful. In others, it is less so, although it appears that in no subject does television fail to produce results at least as good as those achieved when classroom instruction alone is used. There are many on the county staff now who believe that any well taught subject will be effective on television, and that failures are caused by unsatisfactory presentation, not by weaknesses inherent in television. It is certainly true that no one should judge hastily whether or not a course is suitable for television. Many teachers in Washington County who thought that arithmetic could not be taught successfully on television have changed their minds, because test results have made it quite clear that elementary pupils made much more rapid progress in arithmetic with television than they did without it.

TEACHERS AND TELEVISION

The impact of television on the Washington County school system has been far greater than anyone could have predicted in 1956. Nowhere has this impact been more obvious than in the area of teaching and teaching methods.

Television has made the talents of some of the county's teachers far more widely available than they were before. This benefits not only the pupils, but also many other teachers who, for the first time, have an opportunity to watch their colleagues at work. When this first happened, teachers with thirty

years' experience sometimes discovered, often to their surprise, that there were quite a few teaching techniques they had not known about. Before television, these teachers had to depend largely on theory and experience to guide them. Now they have a daily opportunity to watch and weigh the methods and theories of others, and to see how these work out in practice. For most teachers, this has been an enlightening experience. It has provided on-the-job training never before possible. An even more notable change brought by television has been the establishment of teaching teams. The teacher in the studio and the teachers in the classroom comprise the team.

Undoubtedly, Television has a place in the instructional program of the school. Television adds a new dimension to the instructional program. Through the use of visuals and other techniques unique to television, classroom television provides experiences for Washington County pupils that could not be achieved in other ways.

Additional Information:
(From Teachers Handbook - 1975)

Television Production Department -

Since 1956 pupils in Washington County have received by television selected courses in their program of education.

Telecasts originate in the Instructional Resource Center's studios located within the Central Office of the Board of Education. They are transmitted to schools by coaxial cable over a six-channel, closed-circuit system or distributed by video tape cassettes delivered to the individual schools for use within their established schedules.

Approximately twenty-five telecasts are produced each week on video tape. With repeat playbacks and program material received and distributed front the Maryland Public Television Network, there are approximately one hundred and twenty-five transmissions each week to the schools of Washington County over the TV cable system.

Instruction in the elementary schools is augmented by the use of eleven locally produced tele-lessons and eight telecasts available from the state ITV network. Areas of service are music, art, science, social studies, reading, nutrition and ecology. The middle schools instructional program is supplemented in science, mathematics, music and art. Four of these telecasts are provided by the state ITV network. A programmed series of social studies films is also available for integration into the curriculum.

At the high school level, televised instruction in English, business mathematics, biology and contemporary problems is provided by this school system. The state ITV network presents a series of calculus lessons. A sequenced program of social studies films is also available to the classroom teacher.

While the major part of television teaching is instruction of basic course content, there are some telecasts that are of the supplemental and enrichment nature. There are also special telecasts for in-service training and for the dissemination of information to the administrative staff, school principals, teachers, and students.

The role of tile TV Production Department is to translate each course's curriculum objective into educationally valid instructional television. This is accomplished through "production team" meetings for each TV course, involving the TV production managers, TV directors, TV teachers and other support instructional personnel. Within these "production team" meetings are developed interesting and stimulating methods for presenting the defined curriculum objectives, these

ideas became the framework for the television script which is then developed cooperatively by the television teacher and the television director.

The TV Production Department also works closely with school principals and instructional supervisors in the decisions as to the course offerings that will make up the television schedule for the coming school year. Television production managers work with the formulation of the schedule of regular telecasts so that the offerings stay within the parameters imposed by existing facilities and equipment. Once these decisions have been made, it is the responsibility of the production managers to assign the necessary facilities and personnel to the daily production schedule so telecasts are recorded in sufficient time for scheduled transmission to the schools.

Classroom and studio teachers also function as teams in curriculum planning, teaching and evaluating. Both have unique roles but each complements and supplements the work of the other. For each television course there is a committee of classroom teachers who meet with the studio teacher for planning and evaluation. The total learning experience for the pupil in courses employing television is planned as a two-part unit: learnings that are guided by the studio teacher and activities planned and initiated by the classroom teacher.

While television is a one-way medium of communication, the television teacher using effective teaching methods can draw upon the unique potentials of electronic tools and other aids in the studio to provide active mental, emotional and sometimes physical experiences for pupils during a telecast.

Resources not readily accessible in many classrooms, such as live or recorded current happenings, films, new information and data and guests who contribute to learning because of their special knowledge, talents or skills, become important elements of many television lessons.

Studio teachers need to keep in touch with those they teach and welcome invitations from classroom teachers to visit classes. Television is, in itself, a medium of communication. Its value in education is determined by the imagination, sincerity and skill of the instructional staff of Washington County who produce and utilize what is transmitted.

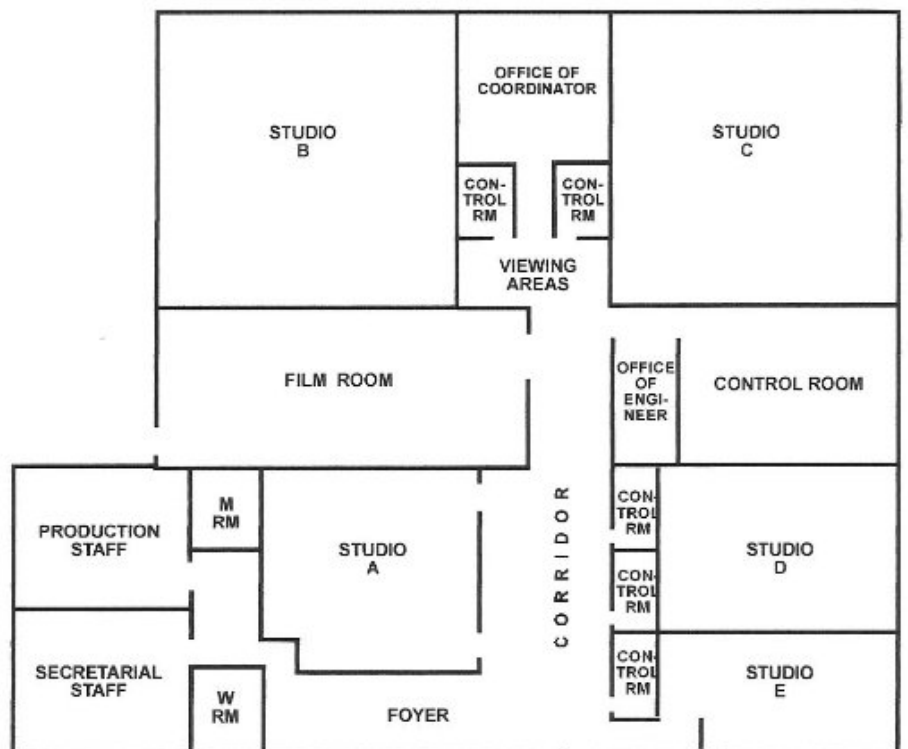
**Television Teachers –
1959-1960**

Mrs., Barbara R. Allison
 Mrs. Josephine B. Clopper
 Mrs., M. Louise Davidsen
 Dolores T. Donnelly
 Bruce Etchison
 Mrs. Mary D. Heltzel
 Robert R. Hull,
 Dorothy L. Hussey
 Barbara J. Maurer
 Clyde H. Roberts
 Mrs. Lorraine M. Robeson
 Anna Louise Schroyer
 Velora V. Swauger
 Mrs. Mildred C. Vance
 James K. Davis
 Mrs. Jane S. Guyton
 Downs E. Hewitt
 Edward C. Kercheval
 H. Jane Martin
 M. Eugene Mittel
 Alta F. Nuce
 Allan R. Powell
 Ralph N. Rohrbaugh
 Mrs. Pearl C. Snively



Reading left to right from the back row: Mr. Mittel, Mr. Etchison, Mr. Davis, Mr/ Powell, Mr. Hewitt, Mrs. Robeson, Miss Nuce, Mrs. Snively, Mr. Kercheval, Mr. Lizer, Mrs. Schroyer, Mrs. Allison, Mr. Roberts, Mr. Brish, Mr. Hull, Miss Martin, Miss Cushen, Mrs. Clopper, Mrs. Davidsen, Mrs. Guyton, Miss Donnelly, Mrs. Heltzel, Mrs. Hesson.

**TELEVISION STUDIOS AND FACILITIES
1957**



Television Teachers – 1970

Louise Hewitt
 Jane Guyton
 Clyde Ball
 J. Allen Martin
 Rick Wilson
 Darlene Smith
 Leonardo French
 Claude Sasse
 Rita Downs
 Nina Atherton
 Linda Rohrer
 Sandy Taylor

**Karen DeGrange
Vaughn Dullabaum
Mary Smith
Jon Cannon
Ralph Giffin
Dan McElrath
Eileen Whisner
Joe Sokol
Ralph Rohrbaugh
Ann Harris
Jane Martin
Maurice Johnson
Joe Gambino
Terry Mason
Jim Seibert
Alta Nuce
John Stouffer
Richard Munch
Thomas Prather**

Production Supervisors – 1970

**Stanley Johnson
Harry Wagaman
Television Directors – 1970
Glenn Thomas
Paul Pottenger
Joseph Sullivan
Thomas Klipp
Gerald Miller
Keith Schneider
Steve Grumbacher
Bronson Staley
Studio Crewmembers – 1970
Sheila Metzel
Allan Williams
Tony Calendrelle
Mike Steiner
Ron Shirley
Carl Reed
Donna Hunt
Sheryl Mullendore
Dan Stanton**



Television Teachers – 1973-74

**Charlene Perry
Joseph Gambino
Mary Smith
Alta Nuce
John Hoover
James Seibert
Nina Atherton
Dan McElrath
John Stouffer
Ralph Rohrbaugh
Richard Wilson
Vaughn Dullabaun
Sandra Gates
Joanne Berteaux
Terry Mason
Nancy Reedy
Ralph Giffin
Claude Sasse
Joseph Sokol
Rita Downs**



Television Teachers – 1974-75
(Teacher Subject Grade)

**Charlene Perry - Music 1,2
Laura Downin - Art 1,3,5
Richard Wilson - Art 2,4
Nancy Sullivan - Music 3,4
Mary Michael - Social Studies 3,4
Ronald Brown - Music 5
Richard McNew - Science 5
Ralph Rohrbaugh - Science 8
Joseph Gambino - Biology 9A
John Stouffer - Biology 9B
Ralph Giffin - Contemporary
Decisions 11
Richard Munch - Math – Metric 12
Thomas Prather - Math – Metric 12.**



Television Teachers – 1977

(6) Teachers

Television Teachers – 1984

(2) Teachers

Graphic Artists, & Photo Technicians

1956 - 2000

1957 - Phyllis Wolf, Jim Eckel

1960 - Phyllis Wolf, Jim Eckel, Jim Brown

1962 - Phyllis Wolf, Jim Eckel, Kathy Wills (Baker)

1964 - Phyllis Wolf -Art Supervisor, Kathy Wills, Tom Cunningham, Kristin Grice (Bowen)

1965 - Phyllis Wolf /Prather -Art Supervisor, Kathy Wills, Norm Grahl, John Glosser, Glenn Greathouse



1967 - Phyllis Wolf /Prather -Art Supervisor, Kathy Wills, Norm Grahl, John Glosser, Phil Grove, Pat Crist, Jim Eckel

1968 - Phyllis Wolf /Prather -Art Supervisor, Kathy Wills, Norm Grahl, John Glosser, Phil Grove, Pat Crist, Linda Wolford, Paulette Sprinkle, Donna, Doug, Dave Myers (student), Jim Eckel

1969 - Phyllis Wolf /Prather -Art Supervisor, Kathy Wills, Norm Grahl, John Glosser, Phil Grove, Pat Crist, Linda Wolford, Paulette Sprinkle, Dave Myers (student), Dottie Slieffer, Gail Beale, Sally Baker, Bonnie Orndorph, RayJean Ditterman, Jim Eckel

1970 - Phyllis Wolf -Art Supervisor, Norm Grahl, Phil Grove, Pat Crist, Linda Wolford, Paulette Sprinkle, Dave Myers (student), Dottie Slieffer, RayJean Ditterman, Coleen Werner, Jim Eckel, -Art Supervisor



1971 - Norm Grahl, Pat Crist, Linda Wolford, Paulette Sprinkle, Joy Hartle, Coleen Werner, Cindy Ryder (Stouffer), Jim Eckel - Art Supervisor

1972 - Norm Grahl, Pat Crist, Linda Wolford, Paulette Sprinkle, Joy Hartle, Coleen Werner, Cindy Ryder (Stouffer), Teresa Lewis, Jim Eckel -Art Supervisor

1973 - Norm Grahl, Pat Crist, Linda Wolford, Paulette Sprinkle, Joy Hartle, Ralph DeVore, Cindy Ryder (Stouffer), Teresa Lewis, Jim Eckel -Art Supervisor

1974 - Norm Grahl, Pat Crist, Linda Wolford, Paulette Sprinkle, Joy Hartle, Marla Stevens, Cindy Ryder (Stouffer), Teresa Lewis, Jim Eckel -Art Supervisor

1975 - Norm Grahl, Craig Gay, Pat Crist, Linda Wolford, Paulette Sprinkle, Joy Hartle, Mary Hammond, Mary Stanley, Cindy Ryder (Stouffer), Teresa Lewis, Dan Stanton, Dan Reily, Jim Eckel -Art Supervisor.

1976 - Norm Grahl, Craig Gay, Pat Crist, Linda Wolford, Paulette Sprinkle, Joy Hartle, Mary Hammond, Mary Stanley, Cindy Ryder (Stouffer), Teresa Lewis, Dan Stanton, Roy (Sam) Sampsel, Jim Eckel -Art Supervisor.

1977 - Pat Crist, Linda Wolford, Paulette Sprinkle, Mary Hammond, Mary Stanley, Cindy Ryder (Stouffer), Teresa Lewis, Dan Stanton, Tony Surranno, Eddie King, Roy (Sam) Sampsel, Jim Eckel -Art Supervisor.

1979 - Pat Crist, Linda Wolford, Paulette Sprinkle, Mary Hammond, Mary Stanley, Cindy Ryder (Stouffer), Teresa Lewis, Dave Myers (returns), Tony Surranno, Eddie King, Jim Eckel -Art Supervisor.

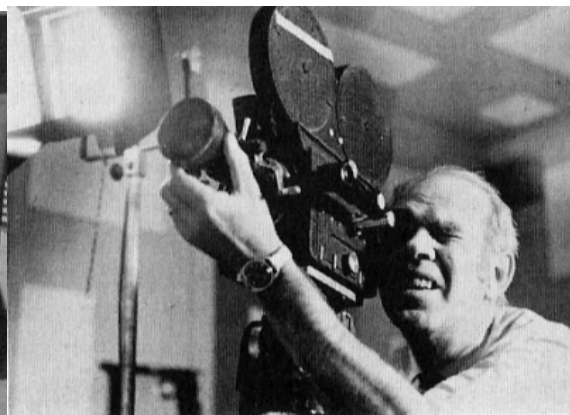
1981 - Pat Crist, Linda Wolford, Paulette Sprinkle, Mary Stanley, Dave Myers, Jim Eckel -Art Supervisor.

1985 - Pat Crist, Mary Stanley, Dave Myers, Jim Eckel -Art Supervisor.

1990 - Pat Crist, Linda Wolford, Shiela Metzler (PDC), Jim Eckel -Art Supervisor.

1995 - Pat Crist, Jim Eckel -Art Supervisor.

1996 - 2000 - Jim Eckel -Art Supervisor.



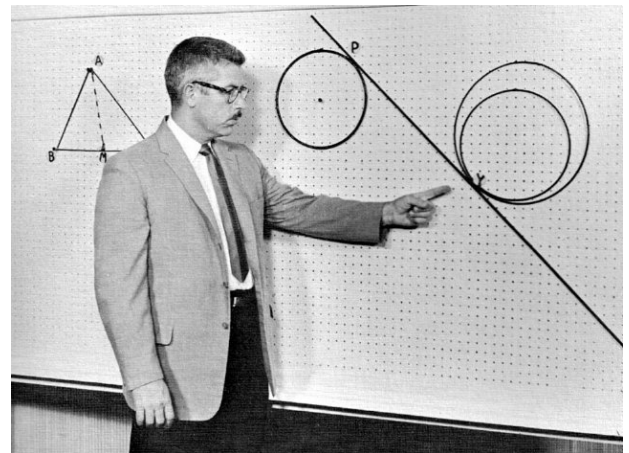
Washington County Closed Circuit Television System Directory of (472) Employees 1956-2000

Conrad (Bill) Ahalt	Custodian
Mary Ann Aiken	Federal– Title III ITV
Tessa Aldridge	Production
Barbara R. Allison	Teacher – Social Studies
W. Craig Angle	Production
John Angle	Engineering
Terry (Karn) Angle	Teacher - ESOL
David Arnett	Production
Deanna Babbs	Production
Gary D. Babbs	Production
Alice (Grove) Bair	Production
Jacqueline Baker	Teacher – French
Kathy Baker	Graphic Artist
Dawn (Strauss) Baker	Teacher - Music
Sally Baker	Graphic Artist & Production
Julie (Bliss) Barlup	Production
Lawrence C. Barton	Engineering
Deborah K. Barthlow	Production
William E. Bell	Production
Robert Bergstrom	Production
Michael S. Bequeath	Production
Mary S. Bledsoe	Production
Thomas H. Blocker	Production
Linda R. Bloyer	Production
Donald E. Bolyard	Production
Glenn Bond	Federal Programs
Inge N. Bonefas	Production
Dolf Bonenberger	Production
Harry Bottorff	Production & TV Director
Jill M. Boward	Production
Diane M. Boward	Production
Krissy (Rice) Bowen	Graphic Artist
Steven A/ Bowers	Production



The first studio teacher
Globe Theater Mr. Kercheval's creation

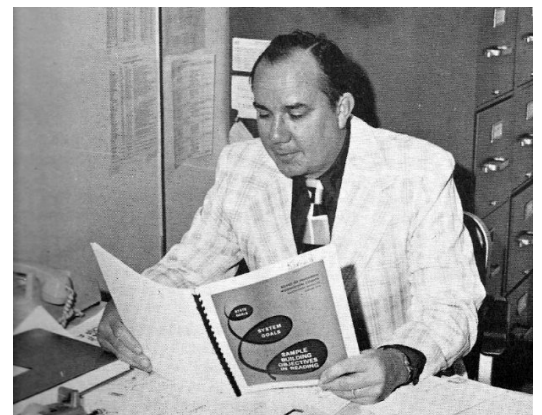
Harold Boyer	Production & Graphic Artist
Lorraine (Laurie) Boyne	Production
Bruce B. Brown	Production
James Brown	Graphic Artist
Ron Brown	Teacher – Music
John R. Brugger	Chief Engineer
Joseph Brumback	Production
Geisela Bullememer	Teacher
Bruce Buhrman	Teacher – Science
Patricia Burger	Federal
Craig C. Butcher	Production
Howard Bruneau	Production
Earl Burkett	Custodian
Nancy (Hanks/Henry/Reedy) Bushey	TV Director, Teacher–English
Joseph Byers	Teacher – Science
Vicki Byrd	Teacher –Art
Anthony (Tony) Calendrelle	Engineering Tape Operator
Peter (Pete) Callas	Supervisor – School News
Johnathan Cannon	Teacher –
Roberta (Ratliff) Carbaugh	Production
Dorothea (Carbaugh) Chatkin	Production
James R. Clark, Jr.	Production
Thomas G. Clark	Production
Roland Cline	Teacher – Math
Darryl N. Clopper	Production
Maryanne Coffey	Production
Sharon Cooper	Federal– Title III ITV
Felicia Cohill	Production
Barbara (DuBois) Cole	Teacher –French
Thomas R. Colvin	Engineering
Robert Coneley, Jr.	Production
Charlene (Perry) Connel	Teacher – Music
Jeanette M. Cooley	Clerical
John Corderman	Production
Lawrence K. Costanza	Production & Engineering
Peggy Costion	Production
John Cozzoli	Production



Bernard Cramer	Custodian
Patricia Crist	Graphic Artist
Nancy Crosley	Production – Puppets
Thomas Cunningham	Graphic Artist
Judy Curry	Production
Jane Cushen	Teacher
Robert (Bob) Dean	Engineering
Paul M. Datillio	Production
Al Davis, Jr.	Production
Marlin W. Davis	Production
Wilmer V. Davis	Custodian
Pat Decker	Production
Rebecca (Plummer/Miller) Decker	TV Director
Karen DeGrange	Teacher –French
Stephen E. Deitz	Production
Jeffrey Deschamps	Production
Ralph DeVore	Graphic Artist
Bruce Dick	Film Operator
Hugh A. Dilson	Graphic Arts
Theresa Dodson, Jr.	Clerical
Laura Downin	Teacher –Art
Rita (Salem) Downs	Teacher – Music
James T. Draper, Sr.	Custodian
Barbara DuBois	Teacher –French
Delores (Donnelly) Dudley	Teacher –Music
Laurie Dudley	Clerical
Bill Dukes	Production
Vaughn H. Dullabaun	Teacher – Math
Eileen Dux	Production
Judy Dwyer	Production
James Eckel	Supervisor Graphic Arts
Susan E. Edlund	Production
Susan C. Elgin	Production
Thomas M. Elgin	Engineering
Franklin S. Elliott.	Production
Jeffrey Elliott	Production
David Elsen	Production



Daniel I. Eshelman	Custodian
Bruce I. Etichison	Teacher – Art
Al Evans	C & P Telephone Engineer
Charlene (Perry) Fay	Teacher – Music
Coleen (Williams) Ferguson	Graphic Artist
Frank C. Fiery	Production
R. Dean Fiery	TV Director
Gregory J. Filiczak	Production
Donald L. Fink	Production
David L. Fitzwater	Production
Nelson Flint	Engineering
Dan Flotz	Engineering & TV Service
Dennis B. Flowers	Production
Nancy (Grove) Foltz	Production
Samuel M. Foltz	Production
Graeme Foster	Evaluator
James F. Fox	TV Director
Bill (Funk) Friend	Engineering
John C. Funk	Engineering
Sue Funk	Production
William D. (Bill) Funk	Engineering
Judy Funkhouiser	Production
Maureen L. Galman	Production
Joseph F. Gambino, III	Teacher – Science
Barbara Gardenhour	Production
Sandy Gates	Teacher – Art
Craig Gay	Production
Paul F. George	Production
David L. Gerber	Production
Ronald F. Gerber	Production
Ralph E. Giffin	Teacher – Social Studies
William E. Giffin, Jr.	Production
Cynthia Gist	Teacher – Science
John W. Gladhill	Engineering
John E. Glosser, Jr.	Graphic Artist
Cynthia L. Graph	Clerical
Glenn Greathouse	Graphic Artist/Photographer



Dick Griswald	Production & Engineering
Bill Grooms	Production
Kurt Grooms	Engineering
Samuel H. Gross	Production
Phillip Grove	Graphic Artist/Photographer
Phyllis (Wolf) Grove	Graphic Artist - Supervisor
Steven Grumbacher	TV Director
Mary jane Grumbine	Production
Roger L. Guptill	Production
Linda K, Guyer	Production
Jane Guyton	Teacher –English
John B. Haines	Production
Gary Hammond	Engineering
Roger “Gordy” Harbaugh	Engineering
Frank M. Harlacher	Public Relations
Robert (Bobby) Harmon	Production
Mary Louise Harr	Teacher
Linda Harrell	Clerical
Claude (Woody)Harrellson	Custodian
Carlton Harris	Production
Reed Harrison	C & P Telephone Intern
Angie (Tussio) Harsh	Production
Joe Ellen Harter	Production
Stephen E. Harwood	Production
Jo Hassler	Crew Member & Clerical
Mary Hawbecker	Teacher
Allan T. Healey	Production
Philip Healey	Production
Herman, Herr Heckmann	Production
Tom Hefelfinger	Engineering & A/V Engineer
Hans Heinrich	Production
Vincent (Vince) Helmtoller	Engineering Utility
Harry M. Hennesy	Production
Robert W. Hershey	TV Director
Downs Hewitt	Teacher- Math
William S. Higgins, Jr.	Engineering
Charles R. Hill	Engineering



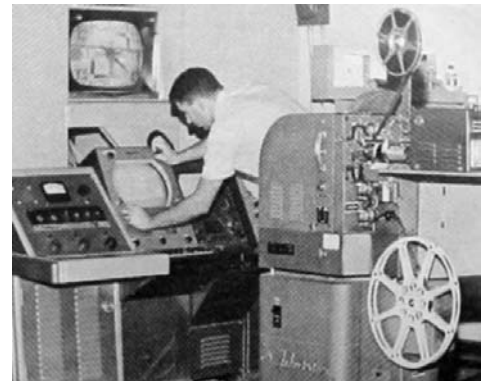
Phyllis S. Hill	Supervisor Library Media
Leslie Hobbs	Teacher - Math
Margery Hochlander	Production Supervisor
Charles R. Holder	Teacher – Social Studies
Linda (Rohrer) Hollar	Teacher –French
Kenny Hollar	Production
John Homan	Teacher – Science
Penny S. Hosapple	Production
Kenny Hose	TV Service Technician
Rae Jean Dinterman/Giffin/Howell	Graphic Arts
William V. Hovis	Production
Barbara (Babbs) Hull	Production
John J. Hull	Guidance
Kirby (Lorado) Hull	TV Service Technician
Robert R. Hull	Teacher – Math
Donna Hunt	Production
Christine L. Hurd	Supervisor - Printing
Dorothy Hussey	Teacher – Math
Robert (Bob) Ipoilito	Production
Tom (Maurice) Ireland	Production
Carol. J.(Itnyre) Izer	Media Aide
Walt Jenkins	Engineering
William L. Jenkins	Engineering
Charles E. Johnson	Teacher –Social Studies
Frederick Johnson, Jr.	Teacher – History
Kenneth (Kenny)Johnson	Production & Engineering
Stanley D. (Stan) Johnson	TV Production Supervisor
Dennis L. Johnston	Production
Willis W. Jones	Production
Carlton Kaler	Production
R. Lawrence Kayser, III	Engineering
Karen Keller	Federal
David Kelley	Federal– Title III ITV
Edward C. Kercheval	Admin., Teacher – English
William C. Kercheval	ITV Superv. – Teacher – Math
Nancy (Foltz) Kercheval	Production
Vincent R. Keys, Jr.	Production



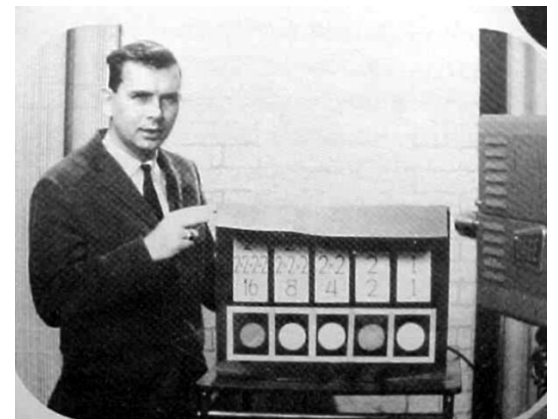
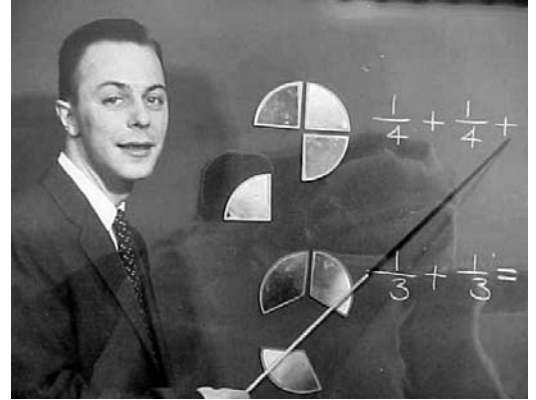
Dr. R. Thomas Kincaid	Admin., Teacher – Spanish
Joseph King	Production
James H. (Jim) Kiracofe	Engineering
Maureen (Galmen) Kline	Production
Ralph L. Kline	Teacher – Social Studies
Thomas T, Klipp	Production & TV Director
Narenda Kumar	Admin. ITV Evalu/Utilization
Doris Leasure	Federal Programs
Gerald (Jerry) Lapole	Production
Johnathan K. Leasure	Production
John W. (Jack) Leatherman	Production
Ed Lecrone	Production
Thomas M. Levens	Production
Alan J. Levin	Production
Teresa Lewis	Graphic Artist
Robert A. Lewis, Jr.	Production
Theodore (Ted) Light	Production
James H. Line	Federal
Fran Little	Production
Samuel A. Little	Production
David W. Livingood	Production
John Lizer	Teacher - Science
Thomas Longham	Production
Sue (Hammersla) Lopez	Production
Peggy K. Lumm	Production
Blair MacKenzie	Federal – Title III ITV
Chris Malott	Production
Catherine Marks	Clerical
Dale Martin	TV Service Technician
Richard L. Martin	Production
Susie (Potts) Martin	Production
Linda Marshall	Federal & Clerical
Ken Mason	Photographer/TV Production
Barbara Maurer	Teacher –Arithmetic
Frederick S. Mayer	Production
Patricia Maynard	Teacher - Social Studies
Dennis Mazingo	Production



Richard McCann	TV Director
William McClanahan	Production
Charles D.(Dan) McElrath	Teacher –Science
Richard McNew	Teacher –Science
Larry G. Mellott	Production
Keith Merchant	Production
Eric Merklein	Production
Hal Metcalf	TV Guide – Publisher
Phillip E. Metz	Production & TV Director
Trudy (Mackrell) Metz	Production
Sheila (Shobe) Metz	Chief Floor Director & CG
Pauline A. Miles	Production
F. Timothy Miller	Production
Gerry Miller, II	TV Director
Claire A. Minnich	Production
Eugene L. Mitchell	Assistant Engineer
Robert L. Mitchell	Production
William A. Mitchell	Production
Vernon T. Miskowich	Engineering
Eugene (Gene) Mittell	Teacher – Science
Lewis E. Monninger	Custodian
Dora Moore	Production
Richard G. Moore	Teacher – Social Studies
StepheMoore	Production
Carl J. Mose	Custodian
Karen Motern	Teacher - Art
Mark A. Mowen	Production
Barbara Mower	Teacher –Math
Fred S. Moyer	Production
Joanne D. Mullendore	Teacher - French
Sheryl Mullendore	Production & Remotes
Mary Mullins	Intern
Calvin Mumma	Production
Edward L. Mummert	Production & Engineering
Richard Munch	Production & Teacher -Math
Bennett G. Murray	Teacher –Math
Robert (Bob) Myers	Assistant Chief Engineer



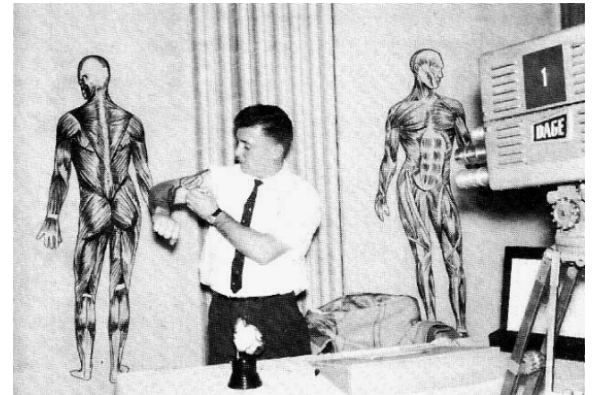
David M. Myers	Graphic Artist
Joseph E. Nalley	Production
Sue (Roulette) Nalley	Clerical
Earl Milton (Chip) Neal, Jr.	TV Director
Herman Niedzielski	Federal Programs
Hilda Newcomer	Clerical
Richard (Rick) Newman	Production & Engineering
Steven H. Northcraft	Production
Gary Nunamker	Production
Robert O. O'Brien	Production
JoAnn (Berteaux)Overington	Teacher – French
Donald O'Neal	Production
Ruth Orndoff	Helping Teacher – Title III TV
Barry Oxendine	Production
Frank A. Papa	Engineering, Video Tape Operator
Janice L. Peck	Graphic Artist
Sara K. Peifer	Graphic Artist
Edward (Eddie) Penn	TV Director
Sue (Guiney) Penn	Production
Kathy Phillips	Federal – Title III TV
Larry Plessinger	Engineering
Paul Pottenger	TV Director
Nina (Atherton) Pottenger	Teacher - Science
Allan Powell	Teacher –History
Thomas W. Prather	Teacher –Math
Joy (Hartle) Predmore	Instructional Materials
Gregory W. Price	Production
John Ramacotti	Production
Bob Ratliff, Jr.	Production
Roberta Ratliff	Production
Phillip G. Reaser	Federal Programs– Title III TV
Michael A. Reece	Production
Carl Reed	Production, Lighting TV Director
Otto James	Production
(Jack) Reeder	Engineering
Donald E. Reedy	TV Director
Linda N. Reid	Production



Daniel Reilly	Graphic Arts
Edward J. Remavege	Engineering
Robert N. Remavege	Engineering. Tape Operator
Kenneth D. Resh	Production
Harry C. Reynolds	Teacher – Math
Kenneth G. Ridenour	Production
David A. Rider	Production
Donald C. Rider	Production
Jimmie Riser	Engineering
Clyde H. Roberts	Supervisor & Teacher - Art
Louella D. Robertson	Teacher – Arithmetic
V. Lorraine Robeson	Teacher – Arithmetic
Joseph E. Rockwell	Teacher – Math
Quentin Roessner	Supervisor, TV Maintenance
Ruby (Hendershot) Roessner	Clerical - ITV
Barbara Rorhbaugh	Production
Ralph N. Rohrbaugh	Teacher – Science
Donna Rohrer	Production
William (Bill) Rohrer	Teacher – Science
Charlie Scott Ross	Engineering
Norman E. Rottler	Custodian
Charlene (Perry) Rowe	Teacher – Music
Walter (Rudy) Rudisill	TV Serviceman, Engineering
Maureen Ryan	Production
Cindy Ryder	Graphic Artist
Brenda JoAnn Sacratini	Production
Claude Sasse	Teacher – Social Studies
Joseph B. Sauder	Production
David Schaefer	Engineering
Joseph D. Schaefer	Engineering
Keith C, Schneider	TV Director
Anne L.(Schroyer) Harris	Teacher - Science
J. Clifford Schultz	Production
Karen (Mottern) Schulz	Teacher –Art
Carolyn Seburn	Teacher – Math, Supervisor
John W. (Jack) Seburn	Teacher – Social Studies, Supv.
Alvin B. See	Engineering



James Seibert	Teacher – Social Studies
Teresa (Renner) Semler	Production
Algene Sensenbaugh	Production
Cheryl D. Shank	Production
Juana L. Sheetz	Production
Walter H. Shield, Jr.	Production & Engineering
Ronald Shirley	Production, & Tape Rm Coordin.
Donna (Bock) Shives	Production
John Shives	Production & TV Director
Sally Shobe	Production
Earl Showalter	Production
John Showman	Production
Penelope A. Shropshire	Production
Lynn Shuman	Production
Terry Lee Slick	Production
Dorothy E. Slifer	Graphic Artist
William Slook	Production
Verlin Smaltz	Teacher – Chemistry
Howard E, Ph. D. Smead	Production
Darleen Smith	Teacher – Music
James L. Smith	Engineering
Donald Smith	Production
Marla Smith	Graphic Artist
Vergie L. (Rudolph) Smith	Clerical
Eddie Snapp	Production
Anne M. Snavely	Production
Lynn Snively	Production
Harry A. Snyder	Production
Richard W. Snyder	Production
Stephan Snyder	Production
Joseph (Joe) Sokol, Sr.	Teacher – Social Studies
Deanna (Knepper) Soulis	Teacher – English
William (Bill) Sonnicks, III	Engineering
James H. (Jim) Spears	Production Supervisor
Ian Grant Spong	Production
Howard Sprecher	Custodian
Phillip R. Sprecher, III	Production



Robert (Bob) Sprecher	Chief Cameraman
Thomas Sprecher	Production
Paulette Sprankle	Graphic Artist
Lawrence K. Springer	Engineering & Film
Bronson Staley	TV Director & Teacher
Mary Stanley	Graphics / Instructional Materials
Daniel Stanton	Graphic Artist –Studio Sets
Ronald C. Stark	Production
Kenneth Starliper	Engineering
Frederick (Freddy) Starr	Production
Daniel H. Steenburg	Production & Set Design
Mike Steiner	Production, TV Remote Director
Michael Stitley	Production
William O. Stottlemyer	Production
John J. Stouffer	Teacher –Science
John R. Stouffer, Jr.	Teacher – Biology
Lavora Stouffer	Graphic Artist
W. Wayne Stouffer	Production
Frederick Sullivan	Production
Nancy Sullivan	Teacher – Music
Tony Suranno	TV Remote & Photographer, CG
Judith M. Sweigert	Production
Harry (Beta) Swope	TV Director
Michael Thomas	TV Director
Charles Thompson	Production
Leonora (Polly) Timbrook	Clerical – TV Engineering
Paul Tompros	Teacher – Social Studies
Mildred B. Tresler	Production
Margo Lelani Trovinger	Teacher – ESOL
George D. Trump	Production
Thomas C. Trumpower	Production
Gary Twigg	Production
Richard (Dick) Veatch	TV Director
Lawrence P. Violet	Production & Engineering
Harry (Sam) Wagaman	Production Supervisor
John Wahfelt	Chief Engineer
Robert A. Wantz	Teacher –Science



Richard A. Warden	Production
E. Lee Weaver	Teacher – Art & Supervisor
Frederick C. Weibel, Jr.	Production
Eileen A. Whisner	Teacher – Mathematics
Bobby Whited	Production
Wallace Wibble	Production
Bruce Wibberly	Production
Michael (Mike) Wicklein	Production
Bruce A. Wilder	Production
Kathy (Wills) Baker	Graphic Artist
Larry Williams	TV Director, Engineering, TV Remotes
Janet L. Willias	Production
Richard (Rick) Wilson, Jr.	Teacher – Art
Pamela L. Wingern	Production
David (Dave) Wolfinger	C & P Telephone Company
Cindy (Nunamaker) Wolfinger	Production
William (Bill) Wolfinger	Production
Linda (Jennings) Wolford	Graphic Artist
Richard C. Woodring	Production
Jane Woods	Teacher – Music
Boyd Work	Production
Gregory J. Worthington	Production
Leonard Worthington	Production
Thompson Worthington	Production
Walter B. Wragga	Production
Terry (Mason) Young	Teacher – Social Studies
Princeton Young	Production, Engineering
Mike Younkins	Production
Sara Zenge	Teacher - English
Larry Zentmyer	Production
Donald Zilch	Supervisor – ITV

In Memorium

These friends and coworkers are fondly remembered for their skillful efforts that contributed to the successes of the Educational Television Project.

(Apologies for any errors in names omitted or included in this list)

Name	Position
William Ahalt, Sr.	Custodian - ITV
Dr. William M. Brish	Superintendent of Schools – Founder of Wash. Co. Educ. TV
Clyde Ball	Teacher - Math
Catherine Beachley	Teacher - Guidance
Robert (Malcolm) Binau	Cameraman - TV Production
Douglas Bivens	Administration – ITV Host
Loralei B. Bowers	Teacher - Math
Claude Brubeck	Supervisor – ITV Host
Alan T. Butler	Audio/Video, Tape Operator
Fred Buzzerd	Teacher – English, Title III ITV
T. Wilson Cahall	1st Coordinator, Closed Circuit TV
Ronald Crist	Supervisor of Federal Programs
Josephine Clopper	Teacher - Social Studies
James K. Davis	Teacher - Math Supervisor
Ruth Deavers	Floor Director- TV Production
Wayne Decker	Film Room Operator - TV Prod.
Sara Jane DeLauter	Clerical - TV Production
Brenda L. Divelbiss	TV Production
Paul Dowie	Audio/Video - TV Production
Robert (Bob) Dudley	TV Director
Michael P. Dwyer	Cameraman - TV Production
William J. Dwyer	TV Production
Alfred P. Fehl	Teacher - English
Leonardo French	Teacher - Math
Theodore W. Gossard	TV Production
Norman L. Grahl	Coordinator - Photography, Film
Paul Guptil	Teacher - Science
Mary Hammond	Secretary - ITV
Claude (Woody) Harmison	Custodian, ITV
Jack Harshman	C & P Telephone - Engineer
Mary (Penny) Heltzel	Teacher - Math & Science
Joan Hesson Lizer	Teacher - Arithmetic
Louise Davidsen Hewitt	Teacher - Music
Terry Horrigan	Director -TV Production
Herbert Howell	Night Watchman – TV Studios
Maurice Johnson	Teacher - U.S. History

Daniel Johnson	Teacher - Science
Ruth Jones	Teacher –Title III ITV
Wilbur G. Kelley	Chief Engineer - ITV
Edward C. Kercheval	Teacher – English, Director of Public Relations, Deputy Superintendent
Marvin R. Kershner	Video Tape TV Production
Robert Kinsley	Teacher - Art, Title III ITV
Lester Leggett, Jr.	TV Production
Robert F. Leshner	2nd Coordinator of Instructional TV
Brian Leiter	TV Production
David W. Livengood	TV Production
H. Jane Martin	Teacher - Core 8 - English & Hist.
J. Allen Martin	Teacher - Science
Loren E. (Mac) McCarthy	Assistant Chief Engineer
Mary Michael	Teacher – Washington County Social Studies
David M. Miles	Supervisor Title III ITV
John R. Miles	Coordinator- Instructional Mtls.
JoAnn Miller	Teacher - English
Russell G. (Chip) Miller	Engineering TV Production
Claire Minnich	Floor Director - TV Production
William Moore	Teacher - Social Studies
Barbara L. Murray	Secretary - ITV
Alta Nuce	Teacher – Special Education
John Pearl Summer	TV Service- Engineer
Eddie (King) Potts	Artist, Actor, & TV Makeup
Richard Predmore	Supv. Instr. Resource Ctr. & ITV
Melvin (Mel) Ritz	C & P Telephone – Engineer
Ralph Rohrbaugh	Teacher – Science
George Ropp	Supervisor - Principal TV Faculty
Roy (Sam) Sampsell	Illustrator – Federal Programs
Sarah Jane Shantz	Secretary - ITV
Gary Shields	Audio/Video TV Production
Mary Smith	Teacher - Social Studies
Pearl C. Snively	Teacher - Core 7
Kenneth (Kenny) Starliper	TV Service - Engineer
Joseph L. Sullivan, Jr.	Director - Television
Bernie Swope	Video Tape Operator
Vincent Tantillo	Chief Engineer ITV
D. Glenn Thomas	Director - Television
Margaret Towson	Teacher - Spanish, Supervisor
Fred Trovinger	Cameraman - TV Production
Louis Tuckerman	Teacher - History
Mildred Vance	Teacher - Science
William (Bill) Warman	C & P Telephone- Engineer
David K Zonis	TV Production

Additional Photos

