A Study to Determine the Feasibility of Offering a Vocational Education Course in Television Production at the Chesapeake Technical Center

Robert F. Head
Old Dominion University

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A STUDY TO DETERMINE THE FEASIBILITY OF OFFERING A VOCATIONAL EDUCATION COURSE IN TELEVISION PRODUCTION AT THE CHESAPEAKE TECHNICAL CENTER

A RESEARCH PAPER PRESENTED TO THE WRITERS ADVISOR AND THE FACULTY OF THE SCHOOL OF EDUCATION OLD DOMINION UNIVERSITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE CERTIFICATE OF ADVANCED STUDY IN ADMINISTRATION AND SUPERVISION

BY

ROBERT F. HEAD

NOVEMBER, 1981
This research paper was presented by Robert F. Head under the direction of this researcher's advisor in ELS 879, Field Research in School Administration and Supervision. It was submitted as partial fulfillment of the requirements for the degree of Certificate of Advanced Study in Administration and Supervision.

Date 12-1-81

Dr. Bruce J. Anderson
ELS Department Chairman

Approved by: Dr. David I. Joyner
VTE Graduate Program Director
Advisor
ACKNOWLEDGEMENTS

This researcher wishes to express his sincere appreciation to those people who assisted in the development of this paper. Dr. David I. Joyner, advisor, who gave of his time and advice. Mr. Jesse Thompkins, Principal of the Chesapeake Technical Center, and Mr. Herbert Harlow, Director of Vocational Education for their advice and guidance in conducting this study.

Finally, this writer would like to give special thanks to his wife, Barbara, for her patience and support while his research was in progress.
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A STUDY TO DETERMINE THE FEASIBILITY OF OFFERING
A VOCATIONAL EDUCATION COURSE IN TELEVISION
PRODUCTION AT THE CHESAPEAKE TECHNICAL CENTER

INTRODUCTION

In the 1940's the nation's public schools paid very little attention to television as a separate subject area. Television with its expensive equipment was thought of as only a passing fad. The study of television was informally introduced into the public high schools during the 1950's. Early television training programs found in the high schools were in the form of extra curricula clubs which met after school hours and had very little equipment. Most of the television training programs today are found in the colleges and universities, however most beginning jobs in television do not require college.

Many authorities have indicated that there are numerous job openings to those who are interested in television. Fitz stated as follows:

The job outlook for young people who want to go into television careers is extremely bright and will keep growing; one reason for this is the new cable industry. Entry level training maybe gained through on the job training or through vocational education courses.


---


out that jobs in television will increase by approximately 30%. This increase in job availability in television is due in part to the growth of the cable television industry. Despite its short history, cable television is already rich with opportunities for newcomers.

The television employment outlook in Tidewater, Virginia reflects the same bright outlook as the national employment outlook. According to the Virginia Employment Commission there are 91 job openings yearly in the area of television broadcasting.

Despite the bright employment outlook in the television broadcasting network, according to Bill Hahn, State Supervisor in Virginia for Vocational Education, there are no television training programs in the public schools in Tidewater and in fact there is only one television training program in the entire state of Virginia.

---


STATEMENT OF THE PROBLEM

The purpose of this study is to determine if it would be feasible to offer a vocational education course in Television Production at the Chesapeake Technical Center in Chesapeake, Virginia. The specific questions addressed by this study will be:

1. What is the employment outlook in the television industry?
2. What is the level of student interest in taking a course in television production?
3. What other programs currently exist in television production in Virginia and the United States?
4. What equipment would be required for teaching a course in television production?

DEFINITIONS

Television Production- The term, television production, will be considered to mean a study of the fields of television production, film production; closed-circuit, cable and broadcast engineering technology.

CATV- The letters CATV, will be considered to mean, Community antenna television, distributed to receivers via cable master antenna.

Cable- The term cable, will be considered to mean, the shielded wires through which television pictures and sound are transmitted.
LIMITATIONS

This feasibility study will be limited to the Chesapeake Technical Center located at 1617 Cedar Road, Chesapeake, Virginia.

A job-task analysis was not conducted due to time constraints.

SIGNIFICANCE OF THE STUDY

In September of 1981, the administrative staff of the Chesapeake Technical Center was given the authorization to begin research to determine if a need existed to expand the curriculum. Television production was selected as a possible new course offering based on the following:

1) The increased growth in the Cable Television in Tidewater (Hence new job opportunities).
2) Availability of public access channels to the school system.
3) No other public schools in Tidewater are offering a course in television production.

It is the contention here to determine if a course in television production should be taught at the Chesapeake Technical Center.
In the 1940's the nation's public schools paid very little attention to television as a separate subject area. Television with its expensive equipment was thought of as only a passing fad. The study of television was informally introduced into the public high schools during the 1950's in the form of extra curricula clubs which met after school and required little equipment.¹

One of the first programs in television broadcasting was located at Nova High School in Broward County Florida. The program began operation in 1966 under the direction of Mr. Dale Carls. Most of the early television production courses primarily, according to Carls, "were black and white productions and produced educational instruction programs for utilization in the other curriculum areas."² Students who completed the program gained the skills necessary for employment in the television industry. According to a follow-up study conducted in 1966 on students who were enrolled in the program, 70% of the students went directly to work in television careers or went on to pursue further study in television at the college level.³

There are television production courses which in addition to providing entry level employment skills also provide advanced placement in most college TV programs. One such program is the television production

---


³Ibid
course at Skyline Career Development Center in Dallas, Texas. According to Gene Brandenberger, Program Director for the center, the Television Production course was developed to give the students the opportunity to explore and gain the skills necessary to enter the world of work as a:

- Camera operator
- Audio Control Technician
- Video Control Technician
- Lighting Technician
- Recording Technician
- Videotape Recording Technician
- Script Writer
- Industrial Media Specialist
- Producer-Director
- Technician Director

or go on to further advanced training at the college level. When asked about the job placement of students who complete the program, Mr. Branderberger stated, "most students who want to go directly to work in television are able to do just that." The Skyline Program differs from the Nova High School Program in that Skyline's program was designed only to teach television production, not to produce usable instructional software.

---

5 Statement by Gene Brandenberger, Program Director, in personal interview, Skyline Career Development Center, Dallas, Texas, November 6, 1981

6 Ibid

Television Production courses have been developed to help supply the ever increasing job market. In 1972, a TV Broadcasting course was started at Dobyns-Bennett High School in Kingsport, Tennessee. The course was established according to Dr. Walter Timm, "to provide relevant and current job market skills in a high demand area." Television production programs have been successful in the area of job placement; Timms states that: "Several students have gone on to radio-TV broadcasting and have become quite successful. Timms states:

One former student is working in a local radio-TV station as production manager. Another is a sportscaster at a large urban station, and one is in TV news reporting.

The cable TV industry has emerged as a powerful new force in communications. This new rapid growing television industry will create new job opportunities. According to the editor of Careerism Newsletter, Jan Gardner states, "this cable growth will create a need for lots and lots of people to prepare and produce television materials."

---


9Ibid.

10Ibid.


The Arlington Career Center's television production course is now planning shows for distribution over the metrocable system in Arlington, Virginia. According to Ray Vanderbilt when the system is in full operation they will have at their disposal four cable channels. This opportunity for cable broadcasting provides the students with the experiences and skills and the schools with the greatest public relations tool imaginable. Vanderbilt explains how the four channels will be utilized -

One channel will present a 24 hour community bulletin board, listing events taking place in the county's schools and government. A second channel will carry educational programs. A third channel will carry shows broadcast and produced by pupils in Arlington schools. The fourth channel will be available to all county government agencies.\(^\text{13}\)

Television production programs can be established with a relatively low cost. According to Ronald W. Feedback, director of Audio Visual services at Mary Baldwin College in Staunton, Virginia, "they designed and built a broadcast-quality, black-and-white television studio for a mere $10,000."\(^\text{14}\)

Although there is rapid growth in the television industry and the employment outlook is very good, there is ironically only one high school television production course taught in the entire state of Virginia.\(^\text{15}\)


CHAPTER 3

RESEARCH METHODS

In an attempt to determine the feasibility of offering a vocational education course in television production at the Chesapeake Technical Center, this researcher will seek answers to the following questions;

1) What is the employment outlook in the television industry?
2) What is the level of student interest in taking a course in television production?
3) What other programs currently exist in television production in Virginia and the United States?
4) What equipment would be required for teaching a course in television production?

RESEARCH TECHNIQUES

The research techniques are described below, in that the research techniques are keyed into each research question.

1) What is the employment outlook in the television industry?

The employment outlook in the television industry was determined in the following manner.

A) A survey was conducted in October, 1981 of local area employers who would be perspective employers of graduates of a television production program. Results from the survey will be compiled in a summation report. A response level of 75% is expected.
(See appendix 1 survey form; appendix 2 list of employers).

B) The Virginia Employment Commission was contacted for advisement on the employment outlook in the Tidewater area in the area of television production. A statement will be obtained from an employment commission official summarizing the television production employment outlook.

C) Determine from the United States Department of Labor the national employment outlook in the area of television broadcasting production. The results will be shown in a graph.

2) What is the level of student interest in taking a course in television production?

The level of student interest in taking a course in television production was determined in the following manner.

An interest survey will be distributed to every tenth grader enrolled in Chesapeake Public Schools. The results will be compiled and a summation of student interest will be compiled according to each high school. In determining if a satisfactory level of student interest exists, there should be a minimum of 40 students needed to offer a course in television production. (See appendix 3 for sample copy of the student interest survey).

3) What other programs currently exist in television production in Virginia and the United States?

The following techniques were utilized to determine what other programs currently exist in television production in Virginia and the United States.

A) Investigate the Arlington Career Center, Arlington,
Virginia; Dallas Skyline Center, Dallas, Texas; Dobyns High School, Kingsport, Tennessee and Nova High School, Broward County, Florida television production programs which were identified as a result of the review of literature. This investigation will determine the differences and similarities in the following areas:

Course length in years
Credits awarded per year
Instructional period length in hours
Entry grade level
Date program began
Broadcast capability
Prepares instructional software
Color Capability

This information will be obtained through reviewing articles on each program and through personal contact with program leaders at each school where possible.

B) The findings will be presented in the form of a chart which summarizes the areas in question for each identified television production program.

4) What equipment would be required for teaching a course in television production?

The equipment needed for teaching a course in television production was determined in the following manner.

A) A list of approved equipment for teaching television production was obtained from the Virginia State Department of Education. (See appendix 4, list of equipment). Then determine what equipment is already in the Chesapeake school systems inventory
and what remaining equipment will be needed.

B) A list will be developed showing what equipment is required to teach a course in television production at the Chesapeake Technical Center. This will be accomplished by checking the state list versus the Chesapeake school system inventory.

In summary this chapter has dealt with the methods and research techniques which were utilized in this study. The next chapter will deal with the presentation of the findings.
CHAPTER 4

PRESENTATION OF FINDINGS

The presentation of findings are described below, in that the findings are keyed into each research question.

1) What is the employment outlook in the television industry?

A) A survey was conducted in October, 1981 of local area employers who would be perspective employers of graduates of a television production program. The results of the survey are shown below in a summation report.

SUMMARY OF EMPLOYERS SURVEY

14 surveys were sent out/11 were returned

(78.5% responded)

BREAKDOWN OF RESPONSES: (By Total/Percentage)

Would you consider employing a high school graduate, who had completed a two year technical program in Television Production?

YES 10 90.9%

NO 1 9.1%

B) The Virginia Employment Commission was contacted for advisement on the employment outlook in the Tidewater area in the area of television production. The following statement was obtained from an employment commission official summarizing the television production outlook.
VIRGINIA EMPLOYMENT COMMISSIONS

EMPLOYMENT PROJECTIONS

Television Occupational Outlook;

Through the year 1982 there will be approximately 91 positions open yearly in the various TV occupations, such as; News Reporters; News/Sports Announcers; News Writer; Set Decorators; Sound Technicians; Program Directors; Lighting Technicians; Camera Operators; Cable Technicians and Film Editors.

Source: Karen Sawtelle

Virginia Employment Commission

C) Determine from the United States Department of Labor the national employment outlook in the area of Television broadcasting production. The results are shown in the graph below;

EMPLOYMENT IN TELEVISION BROADCASTING

IS EXPECTED TO CONTINUE TO GROW

Source: Bureau of Labor Statistics
2) What is the level of student interest in taking a course in television production?

An interest survey was distributed to every tenth grader enrolled in Chesapeake Public Schools. A summation of the student interest survey is shown below: (summation is given according to each high school)

**SUMMARY OF STUDENT INTEREST**

**SURVEY BY HIGH SCHOOL**

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>NO. STUDENTS INTERESTED IN TAKING TV PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep Creek High School</td>
<td>29</td>
</tr>
<tr>
<td>Great Bridge High School</td>
<td>31</td>
</tr>
<tr>
<td>Indian River High School</td>
<td>41</td>
</tr>
<tr>
<td>Oscar Smith High School</td>
<td>23</td>
</tr>
<tr>
<td>Western Branch High School</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>134</strong></td>
</tr>
</tbody>
</table>
3) What other programs currently exist in television production in Virginia and the United States?

An investigation of the Arlington, Dallas, Dobyns and Nova programs (programs in television production identified through the review of literature) through reviewing articles on each program and through personal contact with the programs' leaders revealed the following findings in regards to the similarities and differences in the areas in question. The findings are presented in the chart shown below.

**SUMMARY OF TELEVISION PRODUCTION PROGRAMS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Course length in years</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Credits awarded per year</td>
<td>2</td>
<td>9 Qtr. Units</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Instructional period length in hours</td>
<td>1.5</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Entry grade level</td>
<td>10th</td>
<td>9th</td>
<td>11th</td>
<td>11th</td>
</tr>
<tr>
<td>Date program began</td>
<td>1975</td>
<td>1971</td>
<td>1972</td>
<td>1963</td>
</tr>
<tr>
<td>Broadcast capability</td>
<td>Closed circuit 4 channel cable</td>
<td>Closed circuit</td>
<td>Closed circuit</td>
<td>Closed circuit</td>
</tr>
<tr>
<td>Prepares instructional software</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Color capability</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
4) What equipment would be required for teaching a course in television production?

By obtaining a list of approved equipment for teaching television production from the Virginia State Department of Education. And determining what equipment items were already in the Chesapeake School systems inventory the following list of the equipment needed to teach television production was developed.

LIST OF EQUIPMENT TO
TEACH TELEVISION PRODUCTION

I. Large Equipment Items

*1. Video Cassette Recorder/Play Back Unit
++2. Monitors
*3. Receivers
*4. Color Camera (TV)
++5. Scopes
++6. Monitors
++7. Portable camera & Recording System
*8. Editing system
*9. Tuner
*10. Amplifier
*11. Record Changer
*12. RF Transmission Line
*13. Console
++14. Patch Panels
++15. Frequency Counter
++16. Dummy Load
*17. Emergency Broadcast System
++18. Equalizers
++19. Synthesizers
*20. Recorder/Playback
++21. Exciters
++22. Logging Equipment
++23. Measuring Sets
*24. Antenna
II. Small Equipment Items

*1. Speakers
*2. Receivers
*3. Recorders
++4. Gauges
*5. Turn Tables
++6. Analyzers

III. Hand Tools and Related Items

++1. Lighting Units
++2. Pick up Arms
*3. Tool Kits
++4. Jigs
*5. Screwdrivers
*6. Tripod
++7. Cables
++8. Connectors
*9. Headsets
++10. Light box

IV. Laboratory Type Furnishings

++1. Benches
*2. Stools

V. Safety Items

*1. Safety glasses/goggles
*2. Safety glass monitor
*3. Fire extinguisher--Type ABC
*4. First Aide Case, Industrial type--complete

VI. Audio-Visual Items

*1. Overhead Projector
*2. Projection Screen
++3. Wall Charts
++4. Commercially Prepared Filmstrip/Slide
    Transparency Instructional Series
*5. Portable Chalkboard
*6. Projector Table

VII. VICA Items

*1. Ceremonial Emblem

++ Indicates items needed
* Indicates items already on Chesapeake inventory

Source: Department of Education
Division of Vocational Education Program Services
Trade and Industrial Education Service
In summary this chapter has dealt with the presentation of the findings of this study. The next chapter will deal with the summary and conclusions.
CHAPTER 5

SUMMARY AND CONCLUSION

The summary and conclusion to this study are described below, in that the summary and conclusions are keyed into each research question.

1) What is the employment outlook in the television industry?

The results of the local area employers survey seem to indicate that there are job opportunities for students who complete a program in television production. The level of response sought on the survey was 75% the actual response rate was 78.5%. Of the 78.5% who responded to the survey 90.9% of the employers indicated that they would employ a student who completed a program in television production at the Chesapeake Technical Center.

The Virginia Employment Commission also indicated that there are 91 job openings annually in the area of television production.

Nation wide employment outlook for television production according to the United States Department of Labor is expected to grow (as indicated on the graph in Chapter 4). From 180 thousand workers in the year 1980 to 230 thousand workers in the year 1985.

2) What is the level of student interest in taking a course in television production?
The results of the student interest survey seem to indicate that there is sufficient interest among tenth grade Chesapeake Public School students to offer a course in television production. 134 students expressed an interest in taking a course in television production, the minimum level of interest necessary to offer the course was 40 students.

3) What other programs currently exist in television production in Virginia and the United States?

An investigation of the Arlington, Dallas, Dobyns, and Nova television production programs has provided some valuable information in regards to course length; credit awarded; period length; entry grade level; broadcast capability; ability to provide software and color capability which will assist in the development of the Chesapeake Technical Center's television production course.

4) What equipment would be required for teaching a course in television production?

In investigating to see what equipment would be required to teach a course in television production, it was discovered that the school system already has on inventory 56% of the equipment that would be needed to set up the television production program at the Chesapeake Technical Center. The equipment which is already on the school systems inventory can be transferred to the Chesapeake Technical Center.
Based on the answers found to the research questions it is this researcher's belief that it would be feasible to offer a vocational education course in television production at the Chesapeake Technical Center, Chesapeake, Virginia.

The results of this study will greatly aid the Chesapeake Technical Center administration and the Chesapeake City School System in making the decision of whether or not to offer a course in television production.

RECOMMENDATIONS FOR ADDITIONAL STUDY

Based on the researchers findings, it is recommended that a complete cost analysis be conducted to determine the actual implementation costs.

It is further recommended that, if the Chesapeake Technical Center is given approval to offer a course in television production, a job-task analysis be conducted to insure that the curriculum will be relevant.

It is also recommended that a visit be made to the Arlington Career Center, Arlington, Virginia to view their television production program facilities. This would provide valuable assistance in determining the laboratory design and equipment layout.
Would you consider employing a high school graduate who had completed a two-year technical program in television production which includes training in the following areas:

- Basic Principles of Radio and TV
- Closed-Circuit & Cable Broadcast Technology
- Writing for TV
- Directing
- Equipment Operation
- Programming
- Production
- Studio Operations
- Control Room Operations
- Projection Room Operations
- Lighting/Scenery/Graphics
- Film/Audio/Editing

YES

NO

ADDITIONAL COMMENTS: __________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________

Appendix 1
A LIST OF EMPLOYERS SURVEYED

Burnup & Sims Cable Communications Inc.
1641 Industrial Park Road
Virginia Beach, Virginia

CBN
Centerville Turnpike & Indian River Road
Virginia Beach, Virginia 23463

Casey Sound Studio
1005 Kecougtan Road
Hampton, Virginia

Cox Cable TV Inc.
5200 Cleveland Street
Virginia Beach, Virginia

Cross Country Cable
1007 Battlefield Blvd., North
Chesapeake, Virginia

Like Oak Studios
110 College Place
Norfolk, Virginia

Star-Norfolk Subscription TV
146 Rosemont Road South
Virginia Beach, Virginia 23452

Vision Cable of Morehead City
925 Arendell
Morehead City, North Carolina

WAVY Television Inc.
801 Middle Street
Portsmouth, Virginia
A LIST OF EMPLOYERS SURVEYED

WHRO-TV
5200 Hampton Blvd.
Norfolk, Virginia

WTJR Television
720 Boush Street
Norfolk, Virginia

WTVZ Television 33
416-424 Boush Street
Norfolk, Virginia

WVEC-TV
110 3rd Street
Hampton, Virginia

WYAH-TV
1318 Spratley Street
Portsmouth, Virginia
At the present time plans are being made to offer a course in television production. The course will be a two year program (11th and 12th grade - 3 credits per year) which upon completion should provide you with the skills necessary to obtain employment in the following areas of television:

- News Reporters
- News/Sports Announcers
- News Writers
- Set Decorators
- Sound Technicians
- Lighting Technicians
- Program Directors
- Camera Operators
- Film Editors
- Public Service Directors

If you are interested in taking this course, please fill in the information below.

STUDENTS' NAME

SCHOOL

DATE

PRESENT GRADE LEVEL

HOME PHONE NUMBER
NOTE: This list is representative of those items currently approvable for reimbursement in instructional program of TELEVISION COMMUNICATIONS.

<table>
<thead>
<tr>
<th>I. Large Equipment Items</th>
<th>IV. Laboratory Type Furnishings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Video Cassette Recorder/Play Back Unit</td>
<td>1. Benches</td>
</tr>
<tr>
<td>2. Monitors</td>
<td>2. Stools</td>
</tr>
<tr>
<td>3. Receivers</td>
<td></td>
</tr>
<tr>
<td>4. Color Camera (TV)</td>
<td></td>
</tr>
<tr>
<td>5. Scopes</td>
<td></td>
</tr>
<tr>
<td>6. Monitors</td>
<td></td>
</tr>
<tr>
<td>7. Portable Camera &amp; Recording System</td>
<td></td>
</tr>
<tr>
<td>8. Editing System</td>
<td></td>
</tr>
<tr>
<td>9. Tuner</td>
<td></td>
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<tr>
<td>10. Amplifier</td>
<td></td>
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<tr>
<td>11. Record Changer</td>
<td></td>
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<tr>
<td>12. RF Transmission Line</td>
<td></td>
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<tr>
<td>13. Console</td>
<td></td>
</tr>
<tr>
<td>14. Patch Panels</td>
<td></td>
</tr>
<tr>
<td>15. Frequency Counter</td>
<td></td>
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<tr>
<td>16. Dummy Load</td>
<td></td>
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<tr>
<td>17. Emergency Broadcast System</td>
<td></td>
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<tr>
<td>18. Equalizers</td>
<td></td>
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<tr>
<td>19. Synthesizers</td>
<td></td>
</tr>
<tr>
<td>20. Recorder/Playback</td>
<td></td>
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<tr>
<td>21. Exciters</td>
<td></td>
</tr>
<tr>
<td>22. Logging Equipment</td>
<td></td>
</tr>
<tr>
<td>23. Measuring Sets</td>
<td></td>
</tr>
<tr>
<td>24. Antenna</td>
<td></td>
</tr>
</tbody>
</table>

| II. Small Equipment Items | | |
|---------------------------|-------------------|
| 1. Speakers | 1. Overhead Projector |
| 2. Receivers | 2. Projection Screen |
| 3. Recorders | 3. Wall Charts |
| 5. Turn Tables | 5. Portable Chalkboard |
| 6. Analyzers | 6. Projector Table |

| III. Hand Tools and Related Items | | |
|-----------------------------------|-------------------|
| 1. Lighting Units | 1. Ceremonial Emblem |
| 2. Pick Up Arms | | |
| 3. Tool Kits | | |
| 4. Jigs | | |
| 5. Screwdrivers | | |
| 6. Tripod | | |
| 7. Cables | | |
| 8. Connectors | | |

V. Safety Items

1. Safety glasses/goggles
2. Safety glass monitor
3. Fire extinguisher—Type ABC
4. First Aid Case, Industrial Type—complete

VI. Audio-Visual Items

1. Overhead Projector
2. Projection Screen
3. Wall Charts
4. Commercially Prepared Filmstrip/Slip Transparency Instructional Series
5. Portable Chalkboard
6. Projector Table

VII. VICA Items

1. Ceremonial Emblem

Appendix 4


Koral, April. "Teens get into the TV act." *Seventeen* (February, 1980).


Weisman, Douglas, "These TV Students are Learning by Doing." Audiovisual Instruction (May, 1979).

