



CURRENT DEVELOPMENTS IN COMMUNICATION

THE FIRST YEAR OF TITLE VII

- KENNETH D. NORBERG
- THOMAS D. CLEMENS

The National Defense Education Act has been characterized as a bold, many-faceted assault on the educational problems of America. In many ways, Title VII is unique in its approach to achieving the over-all purpose of the Act. Not only is Title VII focused exclusively on the problems of instructional media, but also it provides for the exercise of initiative by individuals, institutions, and agencies concerned with education in a manner which is markedly in keeping with the traditions of public education in the United States.

THE PROVISIONS OF TITLE VII

The primary purpose of Title VII is to encourage more effective utilization of television, radio, motion pictures, and related media for educational purposes. Each of the first two Parts of the Title provides for different types of activities intended to achieve this purpose:

Part A provides for the conduct and fostering of research and experimentation in the educational uses of the new media of communication which may prove of value to State or local educational agencies in the operation of their public elementary or secondary schools, and to institutions of higher learning. The Title indicates three broad types of research to be undertaken:

Kenneth D. Norberg is professor of education at Sacramento State College; Thomas D. Clemens is with the Audio-Visual Center at San Jose State College, California. At the time this article was written, both were on leave from these posts to the U. S. Office of Education.

1. The development of techniques for using or adapting the new media for educational purposes;
2. The training of teachers to use the new media; and
3. The presentation of academic subject matter through these media.

Grants may be made to public or private nonprofit agencies, institutions, or individuals, and contracts may be made with public or private agencies, organizations, institutions, or groups.

Part B, exclusively a contract program, is concerned with the dissemination of information concerning the new educational media. Types of activities which may be undertaken include: (1) studies and surveys; (2) publications; and (3) advice, counsel, and technical assistance to educational agencies and institutions.

Title VII also provides for the appointment of an Advisory Committee of New Educational Media, consisting of 14 members, which advises and makes recommendations to the Commissioner of Education, reviews all proposals, and certifies approval to the Commissioner of all proposals which it considers appropriate for funding by grants-in-aid or contracts. The composition of the Advisory Committee is:

1. The Commissioner of Education;
2. A representative of the National Science Foundation;
3. Three individuals identified with the sciences, liberal arts, or modern foreign languages in institutions of higher education;
4. Three individuals actually engaged in teaching or the supervision of teaching in elementary or secondary schools;
5. Three individuals with demonstrated ability in the use or adaptation of the new media for educational purposes; and
6. Three individuals representative of the lay public who have demonstrated an interest in the problems of the communication media.

HOW TITLE VII IS ADMINISTERED

In order to carry out the provisions of Title VII of the National Defense Education Act, the Educational Media Branch, with the Division of Statistics and Research Services, has been set

up in the Office of Education. In addition to its responsibilities in Title VII, the Branch also conducts all the activities formerly carried on by the Visual Education and the Radio-TV Sections of the Division of State and Local School Systems. The inclusion of all personnel concerned with the educational uses of the new media within the one Branch provides a continuity of experience and depth of interest in the media which would not otherwise be possible.

The Educational Media Branch is divided into two Sections: *The Research Section*, which is primarily concerned with the processing and appraisal of applications for research grants and contracts, the negotiation of conditions for grants, and the general supervision of research projects supported under the provisions of Title VII.

The Dissemination and Services Section, which is charged with the collection, annotation, and dissemination of information relating to the new media, both within and outside the provisions of Title VII. This charge is carried out through studies and surveys, through the publication of printed, visual, and auditory materials, and through consultation, technical services, and demonstrations.

During its first year of operation, the Educational Media Branch has established a number of policies and procedures which have been intended to facilitate the goals of Title VII. These are summarized below.

Part A—Research and Experimentation

1. Evaluation of research proposals

By law, only the Advisory Committee can approve a project for support under the provisions of Title VII. However, the evaluation process is so complex and difficult that the Advisory Committee has requested technical and objective assistance in gathering necessary information for making its decisions. These decisions are based upon:

A. *Evaluative criteria*

All research proposals are evaluated on the basis of:

- (a) The pertinence of the proposed research to the intent of Title VII;
- (b) The nationwide educational significance of the proposal;

- (c) The appropriateness of the experimental design and research techniques to achieve the purposes of the study;
- (d) The competence of the personnel and institutional facilities to carry the proposed research to completion; and
- (e) The economic efficiency of the proposal, as compared with other possible approaches to the problem.

B. *Rating of proposals*

Each proposal is read and rated on the basis of these criteria by five experts from outside the Office of Education, one member of the Branch staff, and one Office of Education specialist from outside the Branch. These ratings are considered by the Advisory Committee as it reads the proposal and makes its recommendations to the Commissioner of Education.

2. Maximum research productivity

It was apparent to the Advisory Committee that the success of the Title VII program would be dependent on rapid collection of significant and reliable research information within the first year of operation. It was essential, therefore, to use available funds to support the largest possible number of significant research projects. Policies established with the intent of assuring maximum productivity were:

A. *Grants vs. Contracts*

The problem of whether to support research by grant or contract is essentially a matter of whether initiative in defining research projects should be taken by those with professional responsibilities in the field, or by the Office of Education. In the opinion of the Advisory Committee, the best immediate results and the greatest long-term benefit would result from reference to the field, rather than from an immediate (and arbitrary) identification of research areas by the Office of Education staff. For this reason, only the grant portion of Part A has been activated during the first year of Title VII. The activation of the contract portion of Part A has been delayed until staff analysis and classification of existing research indicate areas which can be more

appropriately supported by contract research rather than by grants.

B. *Programs of Research vs. Research Projects*

In many instances, broad programs of research, conducted by a small number of eminent persons or institutions, can provide results which cannot be achieved by the support of a large number of specific research grants. Two factors militate against the support of such programs of research under Title VII at present: first, such support implies a type of general theoretical agreement which, in the opinion of the Advisory Committee, is not now present in the media field; and second, the support of programs of research would, of necessity, make for a much narrower base of participation in the Title VII program than would be possible through the support of specific projects. The Advisory Committee decided, therefore, that at the present time no support will be provided for general programs of research, but only for specific research projects.

C. *Personnel vs. Capital Expenditures*

Media research requires more physical facilities and equipment than many other types of educational research. Yet, the essential element in all research is the creative and professional thought of people, however important hardware may be. The Advisory Committee was confronted with the problem of providing adequate support for all essential expenditures related to approved research projects, and at the same time initiating as many worthwhile projects as possible. Two policy statements were made in order to solve this problem equitably:

- (a) Federal funds may not be used for the acquisition or permanent modification of buildings or other permanent installations, such as transmitters.
- (b) Federal funds may not be used for the outright purchase of equipment with an expected lifespan greater than that of the research project. Instead, an equipment allowance is made amounting to 20 percent per year of the undepreciated value of essential equipment.

Part B—Dissemination

Since Part B of Title VII is exclusively a contract program, policy to support and implement dissemination activities has necessarily been phrased as a series of general guidelines, rather than as rulings on specific issues. These guidelines are:

1. All dissemination activities should be limited to those new educational media activities which have national significance.
2. All dissemination activities must further the accomplishment of one or more of the following five aims:
 - A. To provide information about research completed, in process, or projected.
 - B. To provide more information about significant programs and teaching practices.
 - C. To increase the accessibility and availability of the new media by bibliographic or direct means.
 - D. To directly improve educational use and the training of teachers for educational use of the new media.
 - E. To develop national goals, standards, and guidelines for improved educational use of the new media.

**THE STATUS OF TITLE VII PROJECTS
AND ACTIVITIES TO DATE**

The National Defense Education Act authorized the expenditure of no more than \$3,000,000 for Title VII research and dissemination activities during Fiscal Year 1959. The initial appropriation by Congress was for \$500,000, with a supplemental appropriation of \$1,000,000 in May 1959. An additional \$100,000 was made available for New Educational Media research and dissemination activities from funds originally allocated to Title X of the National Defense Education Act.

In all, then, a total of \$1,600,000 was available for expenditure on Title VII activities by June 30, 1959. Of this amount, \$1,349,985 was obligated or expended for Part A projects, and \$249,981 for Part B projects, making a total expenditure of \$1,599,966. Congress has, at the time of writing, appropriated \$3,000,000 for expenditure on Title VII projects during the current fiscal year.

Part A—Research and Experimentation

At its meetings on March 5-6, and May 11-12, the Advisory Committee considered 353 separate proposals for research projects

from 40 different States, and the District of Columbia. Sixty-nine of these proposals, from 25 different States were approved for negotiation by the Advisory Committee. One of the approved projects was withdrawn by the institution who submitted it, and negotiation has not yet been completed on 8 projects. At the present time, 60 approved research projects have received Title VII grants, with an additional 8 to be funded when negotiation is completed. A list of the 60 projects which have received grant awards at the time of writing is appended.

An examination of the list of approved projects permits some interesting generalizations about the problems recognized by media researchers. Of the 60 research proposals approved by the Advisory Committee, 19 are concerned with the types of academic content suitable to presentation via the new media, 22 with methods of utilizing the media, 17 with the quality of education resulting from use of the media, and 9 with direct comparisons between the effectiveness of the new media and traditional methods of instruction. Types of media involved in the approved projects include motion pictures, slides, filmstrips, magnetic recordings, broadcast and closed-circuit television, kinescope and video tape recordings, large transparencies, and teaching machines.

The average approved research proposal will have a duration of more than two years, and would cost its supporting institution \$83,581, if Federal funds were not available. Federal funds required to carry all projects approved thus far to completion total in excess of \$5,590,000.

Part B—Dissemination

The Advisory Committee has thus far approved for support 16 dissemination activities. To date, one of these has been supported by requisition, and 12 have received contracts. The remaining projects are still in the process of negotiation, and will be funded subject to the completion of negotiation and the availability of funds. A list of approved dissemination activities funded thus far is appended.

CONCLUSION

The wide response among educators and media specialists to Title VII is in itself a confirmation of the need for such legislation as the National Defense Education Act. It is evidence of extraordinary interest in the problems of using communication media in education that over 400 different proposals for research and dis-

semination activities should be forthcoming within a period of six months from the time of enactment of the enabling legislation. The status and quality of the profession is clearly attested by the fact that, within this same period of time, 85 of these projects should be deemed worthy of Federal support.

Undoubtedly, the evidence which will be collected and disseminated on the basis of current projects will generate more thought and study, which will lead to better instruction at all grade levels. Because of the professional level of communication specialists, Title VII has resulted in a year of solid progress. Congress may provide funds and enabling legislation, the Office of Education may provide coordination and administrative framework, but the success of Title VII in the future will rest upon those who were influential in bringing it into being, professional educators and communication specialists.

SUMMARY OF RESEARCH GRANTS UNDER
TITLE VII, PUBLIC LAW 85-864

State and Institution	Project Title	Principal Investigator
ARKANSAS		
Univ. of Arkansas	<i>A Study of Closed-Circuit TV as a Teaching Technique for Speech Improvement in the Public Schools</i>	Sara Ivey Norman DeMarco
CALIFORNIA		
John Tracy Clinic	<i>A Study of the Effectiveness of Using Selected Audio-Visual Techniques to Improve the Role of Parents in the Education of Deaf Children</i>	Edgar L. Lowell
Univ. of California Medical Center	<i>Experimentation and Development of New and More Effective Techniques and Methods for Training Teachers in, and Presenting Academic Subject-Matter Through, the Special Media of Television and Video Tapes in the Health Sciences</i>	Theodore S. Grant
San Jose State College	<i>Experimentation in the Utilization of Television for Classroom Observation of Practice Teachers</i>	William R. Rogers

FLORIDA

- Univ. of
Miami *A Summertime Field Experiment in Bridging the Gap Between High School and College Through the Use of Television Instruction* Sydney W. Head
- Pinellas County
Board of Public
Instruction *To Provide Pre-School Experiences, via Educational Television, for Orientation of Children Entering First Grade and to Facilitate Adjustment of Group Activities* Walter N. Durost
- Florida A & M
Univ. *An Exploratory Investigation of Perception Reactions of Southern Undergraduate Negroes to Visual Materials Depicting Various Groupings of Ethnic Subjects* Theodore B. Cooper

GEORGIA

- Univ. of
Georgia *A Study of Pre-Service Teacher Education in the Use of Media of Mass Communication for Classroom Instruction* Garland E. Oliver

ILLINOIS

- Univ. of Illinois *Illinois Studies in Inquiry Training* J. Richard Suchman
- National
Association of
Educational
Broadcasters *An Investigation of the Educational Characteristics of the New Media of Communication* Herbert M. McLuhan
- Univ. of Illinois *Development of Methods and Materials to Facilitate Foreign Language Instruction in Elementary Schools* Charles E. Johnson

INDIANA

- Indiana Univ. *Improving the Quality of Teacher Performance by the Use of the Video Tape Recorder* Henry A. Bern
- Indiana Univ. *Studies of Patterns of Influence in the School Situation as They Affect the Use of Audio-Visual Materials* James Q. Knowlton
- Purdue Univ. *Preparation and Evaluation of Use of a Series of Brief Films of Selected Demonstrations from the Introductory College Physics Course* D. J. Tendam

- Earlham College *New Instructional Media: Self-Instruction, Guided Instruction, and the Role of the Teacher* John A. Barlow
- KANSAS**
- Kansas State Teachers College at Pittsburg *A Study of the Effectiveness of Filmed Science Courses in Public Secondary Schools* William A. Black
- LOUISIANA**
- Grambling College *A Comparative Study of the Effectiveness of Three Techniques of Film Utilization in Teaching a Selected Group of Educable Mentally Retarded Children Enrolled in Louisiana Public Schools* Lamore J. Carter
Roy B. Moss
Mamie L. T. Wilson
- MAINE**
- Maine State Dept. of Education *To Identify and Evaluate an Economical and Practical Method of Televised Instruction to Stimulate Gifted Pupils in Small Secondary Schools* Joseph J. Devitt
- MASSACHUSETTS**
- Boston Univ. *Integration of Science Teaching by Television into the Elementary School Program* Ralph Garry
- Massachusetts Institute of Technology and WGBH-TV *The Out-of-Classroom Audience of WGBH-TV: A Study of the Relationship of Motivations in Viewing and Amount of Learning* Ithiel de Sola Pool
- Harvard Univ. *An Analysis of Behavioral Processes Involved in Self-Instruction with "Teaching Machines"* B. F. Skinner
- Massachusetts Council for the Public Schools *Massachusetts Council for the Public Schools—FLES TV and Film Project—Teacher Training Division* Gordon R. Silber
- MICHIGAN**
- Michigan State Univ. *An Analysis of the Ways in Which the Application of New Communications Media May Improve Teacher Preparation, Especially in Such Fields as Languages, Science, and Mathematics* James B. Tintera
- Wayne State Univ. *The Modern Language Audio-Visual Project: An Experiment* George Borglum

- | | | |
|--|---|-------------------|
| Wayne State Univ. | <i>tal Development of Materials and Techniques for the Improvement of Language Learning for Beginners</i> | George Borglum |
| National Educational Television and Radio Center | <i>A Study of the Relative Effectiveness of Using Filmed Demonstrations for Teacher Education, in a New High School Mathematics Curriculum</i> | Max Beberman |
| Wayne State Univ. | <i>Improvement of College Instruction in Biology, Through the Use of Recorded Lectures Designed to Increase Student-Instructor Contact</i> | John R. Jackson |
| Michigan State Univ. | <i>Development of Problem-Solving Ability, and Learning of Relevant-Irrelevant Information Through Film and TV Versions of a Strength of Materials Testing Laboratory</i> | Charles O. Harris |
| MINNESOTA | | |
| Univ. of Minnesota | <i>To Develop and Evaluate Sound Filmstrips for Use in Improving Teacher-Pupil Contacts in the Classroom</i> | Ned A. Flanders |
| Univ. of Minnesota | <i>To Study the Effectiveness of Closed-Circuit Television in a Program of Teacher Education</i> | Robert J. Keller |
| Twin Cities Area ETV Corporation | <i>To Investigate the Relationship Between Specific Television Production Techniques and Content Organization and Maximum Learning Experiences</i> | John Schwarzwald |
| MISSOURI | | |
| Stephens College | <i>An Experiment to Determine the Values of Using Amplified Telephone Interviews with Significant People, to Enrich Certain Collegiate Courses</i> | James Burkhart |
| NEW MEXICO | | |
| New Mexico Highlands | <i>Improving Language Arts of Bilinguals Through Audio-Visual Means</i> | Marion Cline, Jr. |
| NEW YORK | | |
| Hunter College | <i>To Determine Methods for Improving Teacher Education and Measures of Student-Teaching Performance Through the Uses of Television</i> | Herbert Schueler |

- Syracuse Univ. *An Experimental Study of the Influence of the Superior Teacher Using Television as a Transmission Facility* Lawrence Myers, Jr.
- Rensselaer Polytechnic Institute *The Development of Animated Films to Facilitate Creative Space Perception* Harold B. Howe
- New York State Education Department *New Media for the Improvement of Mathematics and Science Instruction* Loran C. Twyford, Jr.

NORTH CAROLINA

- Univ. of North Carolina *A Study to Determine Specific Sources of Resistance to Use of Audio-Visual Materials, by College and University Teachers, and the Development of Procedures for Overcoming the Barriers to Optimum Use* K. M. McIntyre

OHIO

- Univ. of Akron *Production and Use of Classroom on Film Versus Traditional Observations in Teacher Education* William I. Painter
- Ohio State Univ. *Experimental Development of a Mobile Laboratory of New Media of Instruction for Use in the In-Service Education of Teachers of Mathematics and Science* John Richardson
- Ohio State Univ. *Testing the Effectiveness of Two-Purpose Television Programs to Both Teacher and Pupil Learning in Elementary Science* Alexander Frazier

OKLAHOMA

- Univ. of Oklahoma *An Experiment in Basic Teacher Training Courses in Which Selected Audio-Visual Media Are Substituted for Actual Classroom Observation* W. R. Fulton
Omer J. Rupiper
- Univ. of Oklahoma *A Study of the Relative Effectiveness of Selected Approaches to the In-Service Education of Teachers in the Utilization of In-School Radio and Television Broadcasts* Jesse Burkett

OREGON

- Oregon State System of Higher Education *An Experiment in the Use of Educational Broadcasting to Meet Growing Needs of the Junior College Program for the Youth of Oregon* James M. Morris
- Oregon College of Education *A Study of the Effectiveness of Audio-Visual Teaching Materials When Prepared According to the Principles of Motivational Research* Walter E. Snyder
- Univ. of Oregon *A Study of the Resistance to Television for Educational Purposes: Its Nature, Purpose, and Control* Lionel Wishneff

PENNSYLVANIA

- Pennsylvania State Univ. *A Study of Patterns for Improving Teacher Education in the Uses of Audio-Visual Materials, and Effects Upon Pupil Learning of Optimal Teacher Use* G. M. Torkelson
- Pennsylvania State Univ. *Measuring the Effectiveness of Documentary Sound-Film as a Supplement to Teaching Methods to College Students Preparing to Teach in Secondary Schools* Robert B. Patrick
- Pennsylvania State Univ. *An Investigation of the Improvement of Informational Motion Pictures and Derivation of Principles Relating to the Effectiveness of These Media* A. W. VanderMeer
- Pennsylvania State Univ. *An Investigation of the Improvement of Informational Filmstrips and the Derivation of Principles Relating to the Effectiveness of These Media* A. W. VanderMeer
- Pennsylvania State Univ. *An Experimental Project for Appraising the Effectiveness of Televised Series on Reading Instruction Developed Through the Involvement of Teachers and Parents* Lyman C. Hunt, Jr.
- Drexel Institute of Technology *Magnetic Recording and Visual Displays as Aids in Teaching Introductory Psychology to College Students* Roland E. Johnston, Jr.

- Metropolitan
Pittsburgh Edu-
cational Tele-
vision Stations *Stimulating Pupil Participation
in the Learning Process by
Techniques of Suspense, An-
ticipation, and Competition in
Television Instruction* Arthur Lumsdaine
- American
Institute for
Research *Increased Learning from TV
Courses by Use of Integrated
Self-Scoring Instructional Quiz
Materials and "Practice Ma-
chines"* Arthur Lumsdaine
- TEXAS**
- Univ. of Houston *An Experiment with the Use of
a Video Tape Recorder in a
Program Designed to Improve
College Level Teaching Tech-
niques* Richard I. Evans
- Baylor Medical
College *Teaching Human Physiology via
a Data Broadcast System* William Spencer
- Univ. of Texas *Experimentation in the Adapta-
tion of the Vu-Graph Overhead
Projector, Utilizing 200 Trans-
parencies and 800 Overlays in
Teaching Engineering and De-
scriptive Geometry Curricula* Clayton W. Chance
- Univ. of Houston *The Effectiveness of Teaching
High School Physics by Tele-
vision, as Determined by Cer-
tain Varying Conditions* Lester Richardson
- UTAH**
- Univ. of Utah and
Salt Lake City
Public Schools *Challenging Superior Elemen-
tary Grade Students Through a
Study of Russian via Television* Keith M. Engar
- WASHINGTON**
- Univ. of
Washington *A Comparative Evaluation of
the Use of Two Modern Methods
—Audio-Visual and Dialogue—
for Teaching a Spoken Lan-
guage* Victor E. Hanzeli
- WISCONSIN**
- Univ. of
Wisconsin *An Investigation and Evalua-
tion of More Efficient Ways of
Appraising Teachers in Train-
ing and in Service of Ways of
Improving Their Day-to-Day
Classroom Learning Activities
and Procedures, Through the
Uses of Audio-Visual Media* Walter A. Wittich
-

SUMMARY OF DISSEMINATION ACTIVITIES BEING SUPPORTED
UNDER TITLE VII, PUBLIC LAW 85-864

State and Institution	Project Title	Principal Investigator
CALIFORNIA		
Institute for Communication Research, Stanford Univ.	<i>Education and the New Media (A Series of "Growing Edge" Conferences and a Summary Study)</i>	Wilbur Schramm
DISTRICT OF COLUMBIA		
Association for Supervision and Curriculum Development	<i>A Theoretical Framework for the Development and Utilization of Instructional Materials</i>	Rodney Tillman
National Academy of Sciences	<i>Fundamental Process in Educa- tion (A Summer Study)</i>	R. M. Whaley
National Education Association (DAVI)	<i>A Pilot Project Involving a Re- gional Conference and Work- shop Demonstrations of Educa- tional Use of the New Media</i>	Anna Hyer Rodney Tillman
Visual Aids Branch, Div. of General Services, Dept. of HEW	<i>A Four-Part Program of New Educational Media Exhibits</i>	Douglass Hayes
ILLINOIS		
National Association of Educational Broadcasters	<i>The Feasibility and Role of State and Regional Activities in Educational Broadcasting</i>	Harry Skornia
INDIANA		
Indiana Univ.	<i>A Study of Public School Audio- Visual Budgets</i>	K. C. Rugg
Indiana Univ.	<i>A Study to Determine a Feasi- ble Method of Establishing Bib- liographic Control of Educa- tional Audio-Visual Materials for the Purpose of Informing Teachers Concerning Available Materials and Their Educa- tional Utility</i>	Margaret Rufsvold Carolyn Guss
MARYLAND		
Board of Education of Washington County	<i>A Survey of Television Equip- ment and Facilities Used for Purposes of Instruction by Pub- lic Schools, Colleges, and Uni- versities</i>	John Brugger

MICHIGAN

- National Educational Television and Radio Center *A Proposal for the Planning and Production of Filmed Reports of Teaching Practices in the Use of New Media for Instructional Purposes in the Fields of Modern Foreign Languages, Mathematics, and General Science* Robert B. Hudson

NEBRASKA

- North Central Association of Colleges and Secondary Schools *A Seminar for the Identification and Dissemination of Effective Principles and Practices in the Use of Television for Educational Purposes* Donald G. Emery

NEW YORK

- Columbia Univ. *A Feasibility Study Regarding the Establishment of a New Educational Media Research Information Center* Maurice F. Tauber
Oliver L. Lilley
- Modern Language Association *Language Materials List for Use in Improved Foreign Language Teaching in Public Elementary and Secondary Schools* George W. Stone, Jr.