

DOCUMENT RESUME

ED 108 400

EC 072 933

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 TITLE Northeast Regional Media Center for the Deaf. Final Technical Report.  
 INSTITUTION Massachusetts Univ., Amherst. School of Education.  
 SPONS AGENCY Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.  
 BUREAU NO H32-2623C  
 PUB DATE Aug 74  
 GRANT OEG-0-0534B  
 NOTE 397p.

EDRS PRICE MF-\$0.76 HC-\$19.67 PLUS POSTAGE  
 DESCRIPTORS Aurally Handicapped; \*Deaf; Exceptional Child Services; \*Instructional Media; Program Descriptions; Program Evaluation; \*Regional Programs  
 IDENTIFIERS \*Northeast Regional Media Center for the Deaf

ABSTRACT

The final technical report details activities, events, products and procedures of the Northeast Regional Media Center for the Deaf from May, 1966 through August, 1974 in relation to the following goals: to carry out instructional materials development; to provide media, materials and educational technology training; to establish a media and materials information system; and to plan and implement regional-state program delivery. Major software products in the areas of visual communication, parent-child relationships, career education and the visual response system are described. Programs such as the Materials Exchange Program and field services are reviewed and recommendations for future activities are proposed. (Author/GW)

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**FINAL TECHNICAL REPORT**

**Project No. H32-3623 C**

**Grant No. OEG-O-0534 B**

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**August 31, 1974**

**U.S. Department of  
Health, Education and Welfare  
Office of Education  
Bureau of Education for the Handicapped**

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FINAL TECHNICAL REPORT

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Amherst, Massachusetts 01002

September 15, 1974

This project reported herein was performed pursuant to a grant, OEG-0-0534B, with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF  
HEALTH, EDUCATION AND WELFARE  
Office of Education  
Bureau of Education for the Handicapped

## ABSTRACT

This Final Technical Report details activities, events, products and procedures in relation to the goals set forth by the Bureau for the Education of the Handicapped, and as interpreted and stated by the Northeast Regional Media Center for the Deaf proposals and reports from May, 1966 through August 31, 1974.

Major software products in the areas of visual communication, parent-child relationships, career education and the visual response system are described. The Materials Exchange Program, INTERACT and extensive and varied field services demonstrate responses within major work areas. A review of these and other programs and recommendations for future directions is included in this Final Technical Report.

## List of Appendices

I. Bibliography and Resource Listings . . . . .	97
II. Articles and Papers . . . . .	214
III. INTERACT . . . . .	321
IV. New York State Response . . . . .	337
V. Testimonials . . . . .	350

**\*Supplementary Materials**

- I. Final Report, May, 1966 - December 31, 1972
- II. Annual Report, January 1, 1973 - September 30, 1973
- III. Dr. William Heward's Dissertation: "The Acquisition of Prenominal Adjectives and Adverbs to Sentence Composition by Deaf-Aphasic Children"
- IV. Dr. Jill Dardig's Dissertation: "The Design, Implementation and Evaluation of a Visual Communication Program for Deaf Students"
- V. Dr. Allison Rossett's Dissertation: "The Formative Evaluation of a Mediated Program to Facilitate Communication Between Hearing Parents and Deaf Children"
- VI. The Media Primer
- VII. Hearing Impaired - Formal In-Service Program
- VIII. Sex Educational Resources for the Hearing Impaired
- IX. A Field Test of Electronic Telecommunication Terminals for the deaf.

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\*The supplementary materials are included only in copies held by the U.S.O.E., Washington, D.C. and the National Media Center for the Deaf, Lincoln, Nebraska.

TABLE OF CONTENTS

Title Page . . . . .	i
Abstract . . . . .	ii
List of Appendices . . . . .	iii
List of Supplementary Materials . . . . .	iv
Introduction . . . . .	2
 Section I . . . . .	 3
IA. Statement of the Problem . . . . .	4
IB. Long Range Objectives . . . . .	5
IC. Principal Goals and Objectives . . . . .	6
 Section II . . . . .	 8
Introduction . . . . .	9
IIA. Procedures, Products and Activities Relating to Work Area I: To Carry Out Instructional Materials Development . . . . .	9
Program Development and Completion . . . . .	11
MIVR . . . . .	11
Visual Communications . . . . .	13
Parent-Child Communications . . . . .	14
Language Arts . . . . .	15
Vocational Education . . . . .	16
Overhead Projection . . . . .	17
Drug Education . . . . .	18
Materials Location . . . . .	20

201

7

Materials Adaptation . . . . .	22
Materials Evaluations . . . . .	24
IIB. Procedures, Products and Activities Relating to Work Area II: To Provide Media, Materials and Educational Tech- nology Training . . . . .	30
Materials Exchange Program . . . . .	36
IIC. Procedures, Products and Activities Relating to Work Area III: To Establish a Media and Materials Information System . . . . .	42
IID. Procedures, Products and Activities Relating to Work Area IV: To Plan and Implement Regional State Program Delivery . . .	46
State Reports . . . . .	49
Section III . . . . .	87
Introduction . . . . .	88
IIIA. Results . . . . .	88
IIIB. Conclusions . . . . .	92
IIIC. Recommendations . . . . .	93
Section IV . . . . .	96
Appendix I . . . . .	97
Appendix II . . . . .	214
Appendix III . . . . .	321
Appendix IV . . . . .	337
Appendix V . . . . .	350

## INTRODUCTION

This report is the Final Technical Report for the Northeast Regional Media Center for the Deaf operating under Grant No. OEG-0-73-0534-B during the period September 1, 1973 to August 31, 1974. The Final Report for the May, 1966 to August 31, 1972 period is included as Supplementary Materials I. The Final Report January 1, 1973 to September 30, 1973 is included as Supplementary Materials II. Data from these two earlier Final Reports is included in the text of this report as is appropriate.

Section I of this Final Technical Report details major work elements and objectives from which these work elements are derived. Section II provides a summary of Center procedures, products and activities for the work period September 1, 1973 to August 31, 1974. Section III provides a review and discussion of the results of the procedures, products and activities detailed in Section II. Related appendices are provided in Section IV.

SECTION I

1A.

Statement of the Problem

The education of the deaf represents a small, but critical, proportion of educational experience which children are receiving throughout the United States. The general need for federal programs to support the development and delivery of media and materials services for the education of deaf children was recognized several years ago. One of the outcomes of that recognition was the establishment of four regional media centers for the deaf. These centers provided media and materials services which otherwise would be unavailable due to the "thin market" nature of the population of deaf children. The Northeast Regional Media Center for the Deaf has been one of these four centers.

At its inception, the Northeast Media Center for the Deaf recognized the urgent and continuing need for research into the mediated curriculum needs of deaf students. The Northeast Regional Media Center for the Deaf also recognized the demand for products and programs utilizing the unique potential of instructional technology to educate deaf students.

Contacts with special educators and educators of the deaf further defined their concern over assuring information exchange between special education and the specific area, deaf education. They also reiterated federal commitment to the area of in-service and pre-service teacher training in the utilization of media within the education of the deaf. The long range objectives of the Northeast Regional Media Center for the Deaf reflected these concerns.

IB.

Long Range Objectives

Based on the needs identified by the Bureau of Education for the Handicapped and contacts with special educators, the following long range intentions were formulated:

- A) To conduct research and development in the area of educational and related media for the improvement of instruction and services to deaf individuals and those who come in contact with deaf individuals;
- B) To relate the knowledge and experience gained in the education of handicapped children (special education) to the education of deaf children;
- C) To cooperate with and to stimulate the several teacher-training centers in the region;
  - 1) To develop and utilize media in the professional preparation of teachers, supervisors, and others in the field;
  - 2) To establish new or expand existing training facilities to demonstrate media applications; and,
  - 3) To actively participate in the establishment and expansion of needed programs and services--incorporating media applications--throughout the region;
- D) To provide the means via in-service training programs, publications, and consultation for making available to all concerned the information resulting from the proposed activities.

IC.

Principal Goals and September 1, 1973 - August 31, 1974 Objectives

In order to respond to the needs articulated by educators of the deaf and statements of BEH priorities, the following goal of the Northeast Regional Media Center for the Deaf was determined: To contribute to the provision of equal educational opportunity for all hearing impaired children by insuring the effectiveness, availability, and utilization of instructional media, materials, and products which meet the educational needs of hearing impaired children in the region served.

This principal goal was to be addressed through functional strategies grouped under four work areas. The goals and objectives as stated by work area were as follows:

1. To Carry Out Instructional Materials Development (child-use materials). The identified deaf children in the NRMCD service area will have direct access on-site to individually effective instructional materials which have been distributed through appropriate intrastate delivery programs.
2. To Provide Media, Materials, and Educational Technology Training (teacher-use). Teachers of deaf in the NRMCD service area will have received information about and access to available media and materials training opportunities within the region in order to effectively meet the identified needs of deaf children. Media and materials training needs of teachers of the deaf in the NRMCD service area will have been examined; these media and materials training needs will be responded to by field service personnel and through communications to all agencies in the service area which provide training to teachers; many media and materials training programs, procedures and

materials will be identified, located, adapted, developed, tested, and in-  
for use by teacher trainers.

3. To Establish a Media and Materials Information System (child-use materials). Teachers of the deaf, related professionals; SEA officers, and LEA personnel will have access to media and materials information in a form which meets their decision-making requirements.

4. To Plan and Implement Regional-State Program Delivery.  
Development, training materials, information dissemination and materials delivery activities of the NRMCD will be compatible with and responsive to the needs expressed by the several State Education Agencies in the service region. Inter-lock with major agencies serving the deaf in our region will have been accomplished and documented. Joint negotiations between the twelve state education agencies and the District of Columbia, the New England Special Education Instructional Materials Center, the Mid-Atlantic Regional Special Education Instructional Materials Center, and the Pennsylvania National Regional Resource Center will have resulted in plans and procedures within each state for the provision of media and materials services by NRMCD which are responsive to identified educational needs within each state.

These work areas and the related objectives are a natural and specific extension of the long range objectives of NRMCD.

Section One has stated the clearly recognized, basic need for deaf children to receive educational experiences which overcome their handicap and enable them to develop their full potential on an equal basis with their hearing peers in all aspects of life. Section One has further delineated the basic goals and work areas for translating the instructional technology needs of educators of the deaf into the NRMCD program.

SECTION II

## II.

## Introduction

Section II provides specific information and documentation of procedures, products and activities in relation to the 4 major work areas. A detailed description of the functional activities within work elements and references to extensive appendices and supplementary materials is also included.

## IIA.

## PROCEDURES, PRODUCTS AND ACTIVITIES

## RELATING TO WORK AREA I:

## TO CARRY OUT INSTRUCTIONAL MATERIALS DEVELOPMENT

The development of materials and programs for use by hearing impaired children and by the personnel and individuals responsible for these children's growth has always been a major thrust of the Northeast Regional Media Center for the Deaf workscope. In the past, significant materials relating to language development, career education, and overhead projection have been developed and disseminated by this center. Additional information on these programs is available in the Supplementary Materials documents (I and II).

The efforts of the Northeast Regional Media Center for the Deaf during FY '74 have centered on development, location, adaptation, and testing of instructional materials. Emphasis has been placed on utilizing existing instructional materials and on adapting materials for use by deaf children, rather than on initiating the development of new materials. In prior years, Northeast Regional Media Center had developed and produced instructional materials which were not available from other sources and distributed them to educators of the deaf on a national basis. During this grant period, this

type of activity has been minimized in favor of determining the effectiveness of existing and adaptable materials, and making these available to educators. Materials in the final stages of development and field testing have been brought to successful completion.

## PROGRAM DEVELOPMENT AND COMPLETION

The major materials development programs concluded during this grant period are described below. They have been presented to the NCEMMH for their evaluation and decision as to dissemination procedures.

### The Mediated Interaction Visual Response System (MIVR) and

### The Optimum Interaction Learning Laboratory

During the last few years, the Northeast Regional Media Center for the Deaf has been involved with the development and research of the Mediated Interaction Visual Response System (MIVR) and the Optimum Interaction Learning Laboratory (OILL). Field tests conducted on these visual response systems have indicated that they are excellent environments for generating high levels of student performance.

In an effort to compile and disseminate the information and knowledge that has been acquired regarding visual response systems, NRMCD has produced a teacher's guide to use in conjunction with such a system. The Teacher's Handbook for Use With the Visual Response System is currently being duplicated and will be distributed to teachers and administrators in schools that presently possess a VRS and who are wondering about optimum usage.

The Handbook consists of seven sections:

#### I What Is A MIVR System, Anyhow

Describes the rationale behind the VRS, its history, results of research with the system, and various areas in which it can be set up.

#### II How To Make The System Work For You

Basic operation and maintenance of the equipment and hardware found in a VRS; orientation of teachers and students to the system.

### III Teaching In The Visual Response System

Describes the teacher-learning cycle and its operation in the VRS; presentation of stimulus materials; student response, reinforcement and remediation of student responses; the token economy; evaluation and record keeping; and a brief note on disruptive behavior.

### IV Materials For Teachers And Students

Materials best suited for VRS; existing commercial materials; local production of transparencies; other resources; student response materials; and markers for overhead projection.

### V Mini-Lessons

Ten sample lessons for the VRS.

### VI Bibliography

Print and nonprint resources pertaining to each of the previous five sections.

### VII Appendix

Masters on perforated sheets that can be torn out to make transparencies.

Additional information about this program is included in Supplementary Materials III; this document is Dr. William Heward's dissertation, "The Acquisition of Prenominal Adjectives and Adverbs To Sentence Composition by Deaf-aphasic Children."

### The Visual Communications Program

The Visual Communications Program is geared for use with ten to sixteen year olds. It is designed to teach deaf students how to communicate specific information to their peers using visual media such as graphics, photography and videotape.

Receptive and expressive visual communication skills are shaped using a set of 42 curricular objectives and activities described in a Teacher's Guide and supplemented by corresponding materials which include 70 transparencies, 20 photographs, 10 slides, and assorted commercial materials.

In addition to teaching specific visual communication skills, the program was designed to facilitate high levels of student interaction and participation and to function as a set of stimulus materials for language development.

A one semester formative evaluation was conducted in the Spring, 1974, in thirteen classes in twelve schools for the deaf. Both objective and subjective data were collected during the field test phase and the program was examined according to five evaluation goals. All sites but one (which involved moderately-severely multiply handicapped) showed consistently high records of successful completion of objectives by students, and teacher reactions to the program were strongly positive.

Data concerning recommendations made by teachers for modifications in the program were collected and analyzed and have been used as the basis for revision of the prototype program.

Additional information about this program is included in Supplementary Materials IV; this document is Dr. Jill Dardig's dissertation, "The Design,

Implementation and Evaluation of a Visual Communications Program for Deaf Students."

### The Parent-Child Communication Program

Conferences with deaf adolescents and adults, parents of deaf children and educators of the deaf pinpointed a major concern: The importance of communication between hearing parents and their deaf children.

The Northeast Regional Media Center for the Deaf developed a mediated program to improve this parent-child communication by encouraging parents to learn about the things they can do to improve their communication with their deaf children. The program stimulates discussions about familiar family situations and suggests specific communication behavior changes.

The parent-child communication program has three major components:

- (1) Open-ended visuals - These visuals, in transparency form, are designed to stimulate discussion. Their open-ended, non-prescriptive design evokes ambivalent reactions in the parents who view them. These varying reactions can be used to encourage both affective and cognitive interactions.
- (2) The facilitator's manual - This manual guides the group leader in the use of the visuals. Objectives, possible grouping techniques, sequencing, questioning strategies, etc. are included as guidance for using the materials with parent groups. The manual also includes an extensive bibliography and resource listing.
- (3) Parent groups - In order to use the transparencies, it is essential that parents and a group leader meet together as resources for each other.

The open-ended visuals and facilitator's manual deal with the emotional

and factual experiences of hearing parents and their deaf children. Some of the topics evoked by these materials are: sibling relationships; communication at the dinner table; realistic expectations for the deaf pre-schooler, child, adolescent and adult; the deaf child's social life; discipline; relationships with grandparents, etc. The visuals begin with the parents prior to the birth of their deaf child, go through their suspicions about deafness, to diagnoses, to choices about methods of communication and schooling, to parent-child communication over sports and friends and dating, sex and social education, to career planning, and graduation. Family communication interactions are highlighted throughout.

Additional information about this program is included in Supplementary Materials V; this document is Dr. Allison Rossett's dissertation "The Formative Evaluation of a Mediated Program to Facilitate Communication Between Hearing Parents and Deaf Children."

#### The Language Arts Program

The Language Arts Transparency series was originally disseminated in September of 1968. It consists of 200 transparencies designed to assist in teaching language to hearing impaired children. The majority of the transparencies deal with specific language principles. The remainder should be used as a stimulus for developing original language sentences, paragraphs, and stories.

A variety of exposure formats have been employed; including wheels, masks, insets, and overlays. Although specific suggestions for use are

provided in the teacher's guide, it is expected that many additional uses may be found.

In 1973, forty-eight of the transparencies were revised and a new teacher's guide was printed. The revised sets were then distributed to programs for the deaf through the Educational Media Distribution Center.

### The Vocational Education Program

During the past eight years the NRMCD has produced a variety of overhead projection transparency kits which were distributed to schools for the deaf and to agencies working with or for the deaf. These projects were supported by the US Office of Education, BEH. This summarizes the work that was done on one of these projects, the kit on Career Education.

The first step was to assemble an advisory committee. Personnel from the schools for the deaf in West Hartford, Rochester, Trenton, Philadelphia, Pittsburgh and Portland were asked to meet with us in the fall of 1971. These people decided that the range of job skills was too great to be summarized in a set of transparencies. They felt that it was far more important for young people to be able to adjust easily to the world of work, and to feel comfortable in their jobs.

The hearing impaired, due to the difficulty they often encounter in communication, are largely unaware of what goes on in the world of work, and so they are often unprepared for things that hearing people take for granted. With this in mind, the advisory committee came up with a tentative outline, which, after considerable revising by our staff, resulted in a list of the 27

topics which make up the kit of 200 visuals and the accompanying teacher's guide book.

Some of the areas covered include: Profit and Loss, Company Secrets, Sick Leave, The Coffee Break, Tact, Advancement, Practical Jokes, and so on. For example, in places where employees are on piecework, it would cause ill feeling if one were to keep on working while the others were taking a break. Also, a hearing impaired person who is not acquainted with the idea of horse play and practical jokes might take offense at being on the receiving end and the joke could very well result in a fight. These situations and many others are addressed within the program.

#### The Overhead Projection Kit

The Kit entitled "Overhead Projection: Classroom Presentation of Visual Information" is intended to serve as an introduction to the classroom presentation of visual information via the overhead projection system. It does not cover the operation of the projector nor the production of transparencies but rather focuses on the advantages of using this medium, types of visual materials which can be used, and techniques for presentation of these materials.

The Kit consists of 42 transparencies with accompanying narrative and a brief Teacher's Guide which includes guided notes and suggestions for follow-up activities.

## DRUG EDUCATION

Drug Education was considered a priority goal, by our Student Advisory Council. The finished drug education consists of some 70 transparencies and a teacher's manual.

When people talk about drugs, it is the so called "hard" drugs that usually come to mind, those like LSD and heroine. However, the task force decided that only the three most commonly used drugs which should be discussed in the kit; these are the drugs that are more readily available in schools: tobacco, alcohol and marijuana.

The first step was to examine already existing materials and programs. Much of the existing information was found to be confusing, and sometimes inaccurate. Some of it was too complicated, and most of it was too pedantic. For example, one film discussed injecting marijuana into the veins. It was decided that the drug education kit should just state facts in a simple way, and to let the students make their own decisions.

A good deal of research went into this project. Existing drug programs were studied and permission was obtained to use bits and pieces from some of them. The Poison Center of the Children's Hospital in Pittsburgh cooperated by providing distinctive stickers to attach to medicine bottles and to containers of hazardous household chemicals. These stickers were found to be more effective with children than the skull and crossbones symbol. Research continued throughout the development of the kit so as to keep the information as up to date as possible.

The resulting set of visuals was broken down into the following five categories:

1. An overview which presents some fact on drugs in general, and how they can help or harm the body;
2. Tobacco: giving a short history, its usage, and its cost in terms of money and health;
3. Alcohol: giving a short history, its different kinds, usage, cost, and how it affects the brain and other body organs;
4. Marijuana: giving a bit of history, usage, legal aspects, cost, and how it affects the user;
5. Open ended visuals which can be interpreted in various ways, thus stimulating discussions among the students.

A teacher's guide book was developed along with the visuals. This book has a plastic spiral binding along the short edge, allowing it to open up flat the long way, with the facing pages devoted to one visual. The pages are divided into columns which provide factual information for the teacher, a vocabulary column, an activities column, and questions to ask the students. All of these are flexible, and the teacher can adapt them to suit his/her class. There is also room for additional write-ins. The last column lists references. A six-page bibliography of reference material is also included.

## MATERIALS LOCATION

A literature search in educational technology, instructional media, special education, education of the deaf, training equipment, speech and hearing, software and hardware was undertaken. Directories of relevant materials, procedures and human resources were gathered. These resources were housed within the NRMCD Resource Index, INTERACT. Schools and centers serving deaf students were informed of the availability of these materials. An incoming Watts line was established to increase the accessibility of these resources.

Materials in existence which had relationship to on-going projects and priorities were sought and examined. The Resource Librarian and Staff Assistant in charge of Materials Adaptation reviewed incoming resources and related them to NRMCD needs.

In order to locate commercial and educational media/materials available in the area of Human Sexuality Education, a search of the literature was conducted in order to find producers and specific source references. Periodicals and various indices were also consulted to keep abreast of new publications. Rental, school and college libraries in the NRMCD region were reviewed to check for availability and cost of materials. Teachers, counselors, and school administrators were tapped for curricula, and suggestions.

Location of human sexuality education materials occurred on three levels: (1) materials users, (2) academic producers, and (3) commercial producers.

(1) Materials users consisted of teachers, counselors and administrators who attended NRMCD's sex education conference in April, 1973. Others expressing interest were included, as were those requesting information via INTERACT.

Each person was sent descriptions of materials previewed at the center, information on materials acquisition, and evaluation forms.

(2) Academic producers were groups devoted principally to production and dissemination of sex education materials: SIECUS (Sex Information and Education Council of the U.S.), AASEC (American Association of Sex Educators and Counselors), and Planned Parenthood/World Population. These groups and others were contacted in order to inquire what materials they would have available for use by deaf children and for the training of their teachers. Such contacts also served to acquaint these organizations with the needs of the deaf population.

(3) Commercial producers were approached to ascertain possibilities for direct, commercial adaptation of materials to fit the educational needs of the deaf in the area of sex education. Commercial groups responding were Educational Modules, Inc. (Rochester, NY) and Guidance Associates, Inc. (Pleasantville, NY).

The location of materials was also achieved through attending workshops, conferences and conventions in the fields of sex education, special education, media for the deaf and deaf education. Among them were:

American Association of Sex Educators and Counselors

Media Workshop: Western Maryland College

Council on Exceptional Children, New York City

Clarke School for the Deaf Annual Media Fair

The Sex Education Resource listing included in Appendix I is the result of this effort to locate and adapt materials to respond to the special needs of the deaf student. A similar procedure relating to the collection and review of teacher training resources was undertaken. This information is also gathered and presented in Appendix I.

## MATERIALS ADAPTATION

After location and review of available materials had been undertaken, material adaptation procedures were instituted. Materials judged available/usable were integrated into center efforts and field tested. The disposition of located materials within the human sexuality area provides an example.

After the described search-locate process, it was decided that adaptation of sound filmstrips in the "available/unusable" category would be most feasible. According to the high-priority needs gathered from participants in the Sex Education workshop (4/73), seven sound filmstrip programs were purchased from Guidance Associates. Purchase was based on evaluation-of-adaptability forms developed at NRMCD. (Filmstrips purchased were: "Everything But," "Pregnancy in High School," "Learning About Sex," "Beginning to Date," "Becoming a Man/Becoming a Woman," "Masculinity and Femininity," and "Love and Marriage.")

Several methods of sound filmstrip adaptation were identified, all of which involve mediating the verbal information on the sound cassette, and altering language to fit the reading levels of the intended group. The methods include: 1) distribution of rewritten "scripts" as accompaniment to the filmstrip; 2) simultaneous projection of caption slides either side-by-side or superimposed on filmstrip frame; 3) cutting up filmstrip into slide series with additional material; 4) reorganizing and shortening filmstrip programs into 3 to 5 minute units with accompanying teacher's guides.

Five of the seven filmstrip programs have been partially adapted by media specialist program students and the materials adaption staff assistant in an effort to discover techniques for filmstrip adaptation. Much time was devoted to experimenting with effective yet simple ways in which a classroom

teacher or school media specialist could adapt their own materials. Need for the development of procedural strategies in this area was identified. An article describing such generalized procedures is included in Appendix II.

## MATERIALS EVALUATION

A crucial stage in the delivery of effective materials and services to schools for the deaf is the field test procedure. The determination of the appropriate learners, the isolation of setting and facilities, the establishment of duration for testing, the determination of appropriate measures of effect and the obtaining of official clearance are all basic to this field test stage.

Four major programs underwent comprehensive field testing at the NRMCD. Several other programs and resource listings were submitted to schools and centers for their reactions and suggestions. Feedback from these formative evaluations has been utilized to make changes and adaptations in the programs. Results of these tests have been sent to NCEMH for use in their decision-making. Descriptions of the field testing procedures follow: (For additional information, please refer to Supplementary Materials III, IV and V.)

### Evaluation of the Visual Communications Program

This study concerned the design, implementation and evaluation of a Visual Communications Program for deaf students. This program, which is geared for use with ten to sixteen year olds, was designed to teach deaf students how to communicate specific information to their peers using visual media such as graphics, photography and videotape.

Receptive and expressive visual communication skills are shaped using a set of curricular objectives and activities described in a Teacher's Guide and supplemented by corresponding materials which include transparencies,

photographs, slides, and assorted commercial materials.

In addition to teaching specific visual communication skills, the program was designed to facilitate high levels of student interaction and participation and to function as a set of stimulus materials for language development.

A one semester formative evaluation was conducted in thirteen classes in twelve schools for the deaf. Both objective and subjective data were collected during the field test phase and the program was examined according to five evaluation goals. All sites but one (which involved moderately-severely multiply handicapped deaf students) showed consistently high records of successful completion of objectives by students, and teacher reactions made by teachers for modifications in the program were collected and analyzed and have been used as the basis for revision of the prototype program.

### Evaluation of the Parent-Child

#### Communication Program

The formative evaluation of the parent education program sought to examine the impact of the program on parent communication behavior change, and then to examine this change in light of the variables of facilitator type and communication methodology of the child's school. When the results were examined for significant interactions, no significant differences were found when the program was utilized in an oral or total setting, or when facilitated by a parent or an educator.

When parents exposed to NRMCD treatment were compared with control parents, there were no significant differences in change scores. The Communication Behavior Checklist demonstrated a more positive impact.

Results from this instrument showed that in two out of the three treatment groups, the majority of parents increased their frequency of selected communication behaviors.

When all parents who completed checklisting were examined, 63% showed frequency gains. The positive impact of the NRMCD program supported by these findings was reiterated by the subjective reactions of participating parents.

Based on analysis of variance data, checklist information and parent and educator suggestions, changes in the form and content of the NRMCD program were made. Four new visuals and several new instructions for facilitators have been added. The NCEMMH has reviewed this program and evaluation and decided to disseminate it to schools for the deaf.

#### Evaluation of the MIVR System

An experiment was conducted to assess the effects of token reinforcement and remediation on the rate, accuracy, and linguistic content of sentence composition by deaf-aphasic children. The eight subjects were 8-11 year-old deaf-aphasic students at a residential/day school for the deaf. Sixty-two experimental sessions were run in which subjects wrote sentences for a total of 10 minutes each session. The experiment was conducted in the visual response system, each subject utilizing an overhead projector so that his/her writing was directly visible to allow immediate consequence. The results indicate that effective control was established over the sentence writing behavior of the subjects. The instatement of reinforcement and remediation as consequences for grammati-

cally and conceptually appropriate composition resulted in response rates and levels of accuracy markedly higher than baseline level. These sentences, however, were largely simple subject-verb-object structures void of modifiers of any kind. When maximum reinforcement was contingent upon writing correct sentences including prenominal adjectives, the subjects quickly began to include correctly prenominal adjectives in their sentences.

A subsequent experimental phase made maximum reinforcement contingent upon writing correct sentences containing adverbs. Subjects then began to compose many correct sentences including adverbs. A final experimental phase made maximum reinforcement contingent upon writing correct sentences including both prenominal adjectives and adverbs. Subjects wrote a high frequency of sentences containing both prenominal adjectives and adverbs during the final phase while maintaining high levels of accuracy.

#### Evaluation of the Drug Education Program

Several schools in the northeast region were selected to evaluate the visuals and the guide. The schools were provided with evaluation forms which rated the visuals, the art work, and the factual information. The schools were also asked to rate the entire kit on a scale of 1 to 10, with 1 being the least effective, and 10 the most effective. The average rating of the eight participating schools was 9.

For the most part, the teachers praised the drug education kit. One letter said: "We found it to be most inspiring". Another commented on the open ended visuals, and how they provided stimulus for a great deal of

discussion. Still another complimented the clever art work and the "very good sequence".

The overall evaluation was very positive. Changes were made before the masters were forwarded to the National Center for duplication and distribution.

### Evaluation of the Career Education Program

During the development of the program, trips were made to each of the schools involved with samples of the art work and of the lesson guide. In this way, the career education committee was kept informed on the progress of the project.

A mediography was compiled as the work progressed. This included books, movies, film strips, and pictures, along with the addresses of the suppliers. The purpose of this mediography was to help the teachers locate material that would supplement the topics being discussed.

Users of these kits were asked to send in suggestions as to how the visuals and/or the guide book could be improved, but among the scores of letters that were received, not one offered any criticism. Letters poured in from all parts of the country asking for additional sets or for additional copies of the guide so that several teachers could share one set of visuals. Comments like the following were common:

"very useful, valuable and interesting";

" . . . material is most fitting."

" . . . excellent, we can use another set."

" . . . one set is not enough. We need another of this fine material."

"They are great. Useful in math, language, idioms, cooperation, understanding and sense of humor."

" . . . please send several extra copies of the guide for these transparencies."

" . . . could be used very effectively with vocational rehabilitation agencies and adult education classes."

These comments and many more were received. Our stock of 650 sets from the original printing was quickly depleted. Two more printings were ordered for a total of 850 sets. The results of field testing indicate that this project has been well accepted. Copies of the program have been forwarded to NCEMH.

#### Evaluation of Materials

#### Relating to Human Sexuality

As part of the information-dissemination process for teachers of sex education with the hearing impaired, recommendations for use were sent with an annotated mediography which each participant received. Criteria for evaluation were derived from a compilation of IMC/RMC and other evaluation forms. Evaluation was not performed at the Center, but was required on site of each of the participants who received sample forms. Response from the participants was poor, due in large part of the uncertain standing of Sex Education programs in most schools. Information that was received was incorporated into the program.

IIB.

PROCEDURES, PRODUCTS AND ACTIVITIES  
RELATING TO WORK AREA II ;  
TO PROVIDE MEDIA, MATERIALS  
AND EDUCATIONAL TECHNOLOGY TRAINING

A function which has been performed throughout the history of the NRMCD has been the presentation of media and materials demonstrations, workshops and conferences to teachers and administrators of educational programs serving the deaf. The NRMCD has provided short-term workshops to teachers on the preparation and utilization of instructional materials and many other topics. In prior years, NRMCD has concentrated large proportions of its efforts in conducting a series of summer media institutes. In 1971, another model of model of media training for teachers was developed and evaluated as significantly more effective than the earlier institute model.

During F4 '74, extensive training activities were carried out by the Center's Field Services Representatives. These individuals concentrated on familiarizing staff working with the deaf with materials and programs available to them and distributing these materials and programs directly to teachers and administrators. Another emphasis was to provide instructional materials for use by teachers to improve their needed educational technology skills and capabilities. A detailed listing of these materials and this training is included in this section.

Another major thrust of the NRMCD in response to this work area was the development of a prototype mediated program to serve as in-service training for teachers within states recently enacting mainstream legislation.

The kit consists of a series of transparencies and tape recordings to be used in conjunction with a manual. Presentation of In-service programs by speech and hearing therapists, media specialists for the deaf, teachers of hearing impaired children, special education teachers, resource personnel of school districts and state department of education specialists is facilitated by the use of the kit. It is designed to meet the extensive needs for In-service programs which are expected as a consequence of mainstream/integration legislation now being enacted in the northeast region across the country.

Extensive formative evaluation of this program had been undertaken by a team of professional educators of the deaf, audiologists and regular classroom teachers. This latter group, highly involved in the development and initial evaluation of the program, are the ultimate learners for whom this project was designed. The mediated teacher-training program has been transferred to NCEMMH for a decision as to implementation and dissemination.

NRMCD's field services personnel have provided workshops and seminars for teachers and administrators at schools and centers for the deaf. They have gone directly to the schools, teachers, administrators, and students in order to provide media, materials and educational technology training to the northeast region.

The list which follows demonstrates the priority that NRMCD has given to provision of this service.

LOCATION	TOPIC	DATE
Ladd School, Exeter, RI	Presentation of services Demonstration of equipment	9/14
Bloomsburgh State College Bloomsburgh, PA	Pre-service on media production, selection, utilization	9/23
Western Maryland College Westminster, MD	Pre-service on media production, selection, utilization	9/27
Amoskeag School Manchester, NH	Presentation of services; demonstration of equipment	9/27
Hogan Regional Center Danvers, MA	Presentation of services; Demonstration of equipment	10/1
Western Pennsylvania School for the Deaf, Pittsburgh, PA	Presentation of services and demonstration of equipment	10/2
Delinowisco Educational Coopera- tive, Norton, VA	Presentation of services	10/4
Norfolk Public Schools Norfolk, VA	Presentation of services	10/9
Horace Mann School Roxbury, MA.	Presentation of services	10/12
Cranston SEIMC Cranston, RI	Presentation of services Delivery of materials	10/16
Educational Readiness Program Framingham, MA	Presentation of services; delivery and demonstration of equipment	10/19
Rhode Island School for the Deaf Providence, RI	Demonstration of equipment	10/25
Learning Center for Deaf Children Framingham, MA	In-service workshop in media utilization and creation for Mass. day class teachers of the deaf	10/31
Austine School for the Deaf Brattleboro, VT	Materials Exchange Confer- ence involving 9 schools for the deaf in the Northeast Region	11/9 and 11/10

LOCATION	TOPIC	DATE
Horace Mann School for the Deaf Roxbury, MA	Delivery and demonstration of equipment	11/12
Grant School for the Deaf Washington, D.C.	In-service training on crea- tion and utilization of slides and videotapes	11/16
Richmond Area Special Education Materials Center, Richmond, VA	In-service training session for pre-school activities	11/17
Greenacres School, North Haven CT	In-service on use of over- head projector, creation of materials	11/19 and 11/26
Willie Ross School, Longmeadow, MA	In-service workshop on utili- zation and creation of media	11/27
Day Class Program, Leominster, MA	Delivery and demonstration of equipment	11/30
Booth Hill School, Trumbell, CT	Presentation of services	12/3
Arlington Public School Teachers of the Hearing Impaired, Arlington, VA	Presentation of services	12/3
DAC Center Portsmouth, VA	Presentation of services	12/4
Center for Effective Learning Virginia Beach, VA	Presentation of services	12/5
Virginia School for the Deaf and Blind, Hampton, VA	Presentation of services	12/6
Crystal Springs Program for Handicapped Children, Assonet, MA	Delivery and demonstration of equipment	12/11
Educational Improvement Center Pitman, NJ	In-service workshop on uti- lization and creation of media	12/13
Educational Improvement Center Cedar Knolls, NJ	In-service workshop on uti- lization and creation media	12/14
Upsala School, Worcester, MA	Delivery and demonstration of equipment	12/14

LOCATION	TOPIC	DATE
Project CHANGE, Greenfield, MA	Participation in slide program	1/8 1/18
Language Institute for Children Ludlow, MA	Presentation of services	1/21
Boston University Special Education Dept., Boston, MA	Presentation of services	1/29
Magrath School, Norwalk, CT	In-service workshop on "New Media"	2/6
Allegheny County Intermediate Unit, Pittsburgh, PA	In-service workshop on utilization and creation of media	2/12
Multi-media Services, Gorham, NH	Two In-service workshops on use the overhead projector and creation of materials	2/12 and 2/13
Edinborough College Erie, PA	In-service workshop on utilization and creation of media	2/22
Teaticket Day Class for the Deaf Teaticket, MA	In-service workshop on "new media"	3/2
Center for Effective Learning Virginia Beach, VA	In-service workshop on utilization and creation of media	3/4
Western Maryland College, Westminster, MD	Pre-service, etc.	3/6, 7, 8
Day Class Program for the Deaf Fall River, MA	Delivery and demonstration of equipment	3/7
Educational Improvement Center Cedar Knolls, NJ	In-service workshop on utilization and creation of media	3/26
Early Childhood Education Center Springfield, MA	In-service consultation and video-tape session	3/29
Center for Effective Learning Virginia Beach, VA	In-service workshop on utilization and creation of media	4/3
Virginia School for the Deaf Hampton, VA	Presentation of services	4/4
Central Pennsylvania Resource Center, Harrisburg, PA	Presentation of services	4/6

LOCATION	TOPIC	DATE
Chesapeake Day Classes for the Deaf, Chesapeake, VA	In-service workshop on utilization of media	4/8
Hancock County Education Cooperative Resource Center, Ellsworth Maine	In-service workshop on the use of the overhead projector and creation of materials	4/10
Language Institute fo. Children, Ludlow, MA	In-service workshop on "New Media" and the use of the overhead projector	4/10
Arlington Public Schools, Arlington, VA	In-service workshop on utilization and creation of media	5/1
Educational Readiness Center, Framingham, MA	In-service workshop on the use of the overhead projector and creation of materials	5/8
Madison College Special Educational Materials Center, Harrisonburg, VA	Presentation on career education for the hearing impaired	5/16
North County Multi-media Services Gorham, NH	In-service workshop on the use of the overhead projector and creation of materials	5/24

The NRMCD Materials Exchange Program has addressed a mandate to deliver materials and programs to educators of the deaf. By taking the best of teacher produced materials and programs, duplicating and disseminating these materials, NRMCD staff has increased sharing and cross-fertilization of educators' ideas. Over 300 copies of the various programs have been duplicated and distributed to classroom teachers, parents and resource personnel serving the hearing-impaired. (See Appendix I for catalogue of M.E.P.)

Media, materials and educational technology training were accomplished by NRMCD staff via presentations to major conferences, and publications in journals and magazines serving educators of the deaf and instructional technology personnel.

Dr. Raymond Wyman, Director of NRMCD, participated in the following major conferences and seminars:

1. In Budapest he participated in the International Council on Educational Media and visited two schools for the deaf.
2. He participated in a meeting of the Photographic Technical advisory Board in New York City.
3. He attended a meeting of Advisory Committee for IEC SC60C in New York City.
4. He participated in a task force of the Association for Educational Communication and Technology in Los Angeles to prepare a position paper on Standards for 8mm film in education.
5. He participated in a writing conference at Syracuse University to prepare handbook for integrating deaf students into public schools.
6. He participated in a writing conference in Denver on adopting educational materials for the handicapped.

7. He participated as American Delegate to International Standards Organization TC42 in Williamsburg, Virginia.
8. He made presentation to Educational Materials Producers Council in Miami, Florida.
9. He made presentation to Closed Circuit Television conference in West Springfield.
10. He participated in Certification and Accreditation Conference in Atlantic City.
11. He made presentation at Lincoln Symposium. Article, "The Ubiquitous Overhead" to be published.
12. He visited media program at White Plains School for the Deaf.
13. He visited media program at Florida School for the Deaf.
14. He participated in the Technical Advisory Board of American National Standards Institute.
15. He was honored as past president of Mass. AV Association in Waltham.
16. He was official representative of the Association of Education, Communication and Technology to Didacta in Brussels.
17. He was Chairman of IEC SC60 working group in Brussels.
18. He visited Belgium's national media center.

Dr. Wyman also had the following publications:

1. Second Meeting of IEC Technical Committee 60-Subcommittee SC60C (Educational and Training Equipment). Journal of the SMPTE (Society of Motion Picture and Television Engineers), October, 1973. pp. 852-853.

2. International Electrotechnical Commission ' 60C - Educational and Training Equipment. Audiovisual Instruction, November, 1973. pp. 33-34.
3. A Proposal for the 24 Volt Standard for Audio-Visual Equipment. Audio Visual, November, 1973. (Croydon, England). This is a reprint of article appearing in SMPTE Journal of June, 1973.
4. The Resourceteria Concept. Audiovisual Instruction, March, 1974. pp. 23-24.
5. The Unmet Promise of Telecommunications. Audiovisual Instruction, April, 1974. pp. 70 and 72 (Guest Editorial)
6. Wyman in Budapest. ASET Report, Spring, 1974 (Association for Special Education Technology)

Dr. H. Todd Eachus, Associate Director of the NRMCD, made the following presentations:

1. "Use of the Mediated Interaction Visual Response System (MIVR) in Classrooms for the Deaf" (Invited address to the 50th Annual Meeting of the Association for Educational Communications and Technology, Las Vegas, April 1973).
2. (with Allison Rossett) The development of discriminative stimulus materials to increase parent-child communications. Paper presented to the Sixth Banff International Conference on Behavior Modification. Banff, Alberta, Canada, 1974.
3. Technology development for the Deaf: 1. Parent/Child Communication, 2. Visual Communication, 3. Mediated Language Acquisition. Papers presented to the Council for Exceptional Children annual meeting New York City, 1974

Dr. Eachus published the following pieces during this reporting period:

1. A Radical Behaviorist's View of Humanistic Psychology: Do You See What I See?", chapter in Houts, P.S. and Server, M. (Eds.), After the Turn On, What?: Learning Perspectives on Humanistic Groups, Research Press, Champaign, Illinois, 1972, pp. 61-72.
2. "In-Service Training of Teachers as Behavior Modifiers: Review and Analysis" (100-page position paper submitted to Bureau of Educational Personnel Development (USOE) under Personal Services Order Number OEC-0-71-3317, 1971).
3. "Classroom Management of Disruptive Behavior" (Chapter in Allen, D.W., Hecht, J. (Eds.), Controversies in Education, W.B. Saunders, Philadelphia, 1974.

Dr. Jill Dardig, Research Assistant to NRMCD made the following presentations:

1. Council for Exceptional Children Conference, New York City, "Visual Communication."
2. National Conference on Visual Literacy, Toronto, "A Visual Literacy Program for Deaf Students."
3. Regional Council Conference of Parents without Partners, Chicopee, Mass., "Child Management."
4. Munson State Hospital, Palmer, Mass., "Using Behavioral Strategies with Autistic Children."

Dr. Allison Rossett, formerly Research Assistant and presently Staff Associate to the program, made the following presentations:

1. "The Formative Evaluation of a Parent Education Program," Conference on the Evaluation of Instructional Materials,

Berkeley, California, BEH/USOE; 1973.

2. "Facilitating Communication Between Hearing Parents and Deaf Children," Annual Conference, New York State Educators of the Deaf, Rochester, New York, 1973.
3. "Developing and Evaluating A Mediated Parent Education Program," Annual Conference: Council for Exceptional Children, New York City, April, 1974.
4. "The Development of Discriminative Stimulus Materials to Increase Parent-Child Communication", Sixth Banff International Conference on Behavior Modification, Alberta, Canada (with Todd Eachus).

Dr. Rossett has published the following works related to NRMCD materials and programs:

1. "Special Strategies for a Special Problem," The Volta Review, Alexander Graham Bell Association for the Deaf, Washington, D.C.
2. "A Parent Education Program for Parents of Exceptional Children." a funded proposal for ESEA Title III Funding, with Capitol Region Education Council, Hartford, Connecticut, 1974.
3. "The Development of a Discriminative Stimulus Program to Facilitate Parent-Child Communication," to be included in a forthcoming Research Press, Champaign, Illinois publication.

Dr. William Heward, Research Assistant to the NRMCD, made a presentation on his research into uses for the Mediated Interaction Visual Response System to the Council for Exceptional Children in April, 1974.

Dr. Linda Nober, Consultant to the NRMCD has been involved in the following conferences:

1. American Speech and Hearing Association, Detroit, Michigan.

2. Council for Exceptional Children, New York City.
3. Massachusetts Speech and Hearing Association, Springfield,  
Massachusetts.
4. Alexander Graham Bell Association, Atlanta, Georgia.

Dr. Nober has had the following article published:

Nober, Linda W., "Auditory Discrimination and Classroom Noise",

The Reading Teacher, December, 1973, pp. 283-91.

Drs. Nober, Heward, Dardig and Rossett presently have articles detailing NRMCD materials, procedures and programs submitted to scholarly journals and magazines.

Copies of articles and papers by NRMCD staff are included in Appendix II.

11C.

PROCEDURES, PRODUCTS AND ACTIVITIES  
RELATING TO WORK AREA III:  
TO ESTABLISH A MEDIA AND MATERIALS  
INFORMATION SYSTEM

During previous years, the efforts of regional media centers for the deaf to facilitate increased utilization of educational technology by educators of the deaf have centered on a hoped-for 'multiplier effect' from intensive training of a few teachers. The dilemma has been that regardless of the effectiveness of any training effort for media and materials utilization, information on instructional materials usage and availability has remained restricted. The population size of education of the handicapped in general and the education of the deaf, in particular, being a very small proportion of education as a whole, serves to increase the difficulty of the flow of information about media and materials. NRMCD, in prior years, has not expended a systematic effort to disseminate media and materials information. Its efforts have centered on face-to-face information exchange between staff and educators of the deaf and on notices and articles in various newsletters and other print media.

In response to national priorities and needs, NRMCD has developed strategies to identify, classify, evaluate, and describe instructional materials and to operate a telecommunications system for delivering such information to teachers on request. This system is called INTERACT. The strategies employed in this system were interim to the establishment of a national media and materials information system and are compatible with the national system

being developed. The information system established by NRMCD has provided a needed service to the education of the deaf in the service area. It was not intended to supplant or initiate any national efforts. The information search/retrieval facility utilized existing techniques of classifying and describing materials information which are compatible with those used by other projects. The INTERACT System has also facilitated the functioning of the Materials Exchange Program described in IIB.

Telephone, TV Phone, and mail information has provided this service within the Northeast Regional Media Center for the Deaf. This Resource Index INTERACT has provided instant information and/or referral to educators of the deaf in the Northeast region. Appendix IIIA provides sample requests and responses utilizing the INTERACT information system.

It was assumed that educators of the deaf in the 13 state northeast region lacked information concerning a variety of instructional materials, their sources and available services and programs designed for or adaptable to the needs of their deaf students. To respond to that need, the Resource Index was created to serve as a clearinghouse. Materials within the index included: extensive listings of commercially and noncommercially produced instructional materials, hardware and software, and their sources (e.g. NICEM indexes, Educator's Purchasing Master, Westinghouse Learning Directory, Audio-Visual Equipment Directory); individual producers' catalogues (e.g. Captioned Films for the Deaf); directories of all regional resource centers, special education instructional materials centers, and associate centers; directories of special education personnel and facilities throughout the region and country; files of current data on various new materials and programs; and information about various professional publications. Also

available was access to other sources of information (e.g. Educational Testing Service's Clearinghouse of Tests, Measurements and Evaluations, SEIMC/RMC Network Office computerized data bank, various libraries and institutions).

Notice of the establishment of the information resource index was accomplished through mailed flyers; information and flyers were dispensed at all workshops and conferences and to visitors to the center, and through word-of-mouth. Appendix III includes detailed information on the INTERACT System. Appendix IIIB is the flyer used to contact NRMCD service area personnel.

Requests for information were made to the index via in/out WATS line service, mail, and limited walk-in service. Users of the index include teachers in schools for the deaf and in public schools; students and teacher-trainers from other universities, speech and language therapists, media directors, program directors and various center staff.

Queries included requests for information about materials and programs for broad and specific curriculum areas for deaf and multi-handicapped deaf students (i.e. language arts to drug education to volcanoes); parent and community orientation materials; materials for inclusion in larger programs (e.g. a total communication unit put together by Gallaudet); other resources and facilities (e.g. special schools, camps, SEIMC's); and appropriate references and materials for setting up a similar service in a school or region. Responses also included brief immediate replies, extensive "mediographies", and referral to other personnel and/or resources. See Appendix IIIA.

While the primary service of INTERACT was for individuals in the classroom and curriculum areas, contact was established or maintained to the network materials information system task force (Task Force III) through meeting attendance and participation. This included the writing of policies

and procedures for acquiring information about instructional materials for the National Instructional Materials Information Service. Those policies and procedures were compatible with those of the information service of NRMCD. The paper submitted to the network is presently incorporated in the larger volumed sourcebook for NIMIS (See Appendix IIIC).

The organization of the INTERACT system was such as to enable NRMCD In/Out WATS service and telecopier capability to function effectively within the thirteen state region. All catalogs of software and hardware were acquired and organized so as to insure that information would be easily accessible (See Appendix IIID). Catalogues included those recognized by the National Audio-Visual Association, SEIMC's and RRC's throughout the U.S., and ASEIMC's within the region. This large array of materials and information was thus, immediately available to teachers and administrators in NRMCD service area.

IIID.

PROCEDURES, PRODUCTS AND ACTIVITIES  
RELATING TO WORK AREA IV:  
TO PLAN AND IMPLEMENT REGIONAL-  
STATE PROGRAM DELIVERY

In the past, cooperative efforts by NRMCD had been sporadic and incomplete. State directors of special education had identified several program requirements for the delivery of media and materials within each state. However, without a close and mutually derived working agreement between NRMCD and these several states, the services delivered could not assuredly be consistent with other, related and interconnected educational responsibilities of the states. In prior years, NRMCD had attempted to provide information concerning service activities to various SEA's in the service region, but without any formalized plan or readily identifiable positive effects on the programs.

In response to national agreements between BEH and the Association of State Directors of Special Education, NRMCD engaged in joint planning with each SEA and related IMC and RRC in the service area. Agreements and plans were reached between NRMCD and the several states based on and responsive to ESEA Title VIB Proposed Activities Documents.

During F4 '74, NRMCD has engaged in activities which resulted in improved delivery of media and materials services at the local level in each state. The additional personnel added to NRMCD staff provided necessary services for coordinating the activities of NRMCD, the three instructional materials centers, the regional resource center, and the state agencies.

It was deemed unwise and redundant to attempt the development of an associate center network exclusively for the needs of the deaf. Instead, NRMCD provided services through state offices and utilized the existing and expanding network of associate instructional materials centers to insure adequate and timely delivery of services.

NRMCD procedures, products and activities related to work area IV concentrated on continuous encouragement of contacts with state agencies and of closer working relationships between regional and state agencies and local schools. Close consultation with state directors of special education or their designated representatives was undertaken prior to the beginning of the academic year for the purpose of arranging these and other services to the states.

The stimulation of associate centers was accomplished by jointly sponsoring and conducting workshops with the centers, and by making materials and equipment available to the centers. Specific examples of these extensions of NRMCD services are listed within the following reports of activities within individual states.

Materials delivery was accomplished on a large scale as evidenced by these state reports.

Consultation was carried out at a programmatic rather than state level. Before traveling to a program for the purpose of consultation, prior notification and approval was provided by the state representative. Consultation services are described and listed for each state.

Section I in the following state reports indicates the workshops conducted within the state. As with consultation visits, the state representatives were aware of and approved of NRMCD activities in the states. Over 50 workshops or demonstrations were conducted within the thirteen state region over the past academic year. Section II lists equipment and agencies

in the service area.

Dissemination of information through state agencies was provided at the discretion of the states themselves. Information to the states was provided both on a continual and request basis through the field services department of NRMCD and the Resource Index Service, INTERACT.

The reinforcement of state staff was largely accomplished by including them whenever possible in workshops or consultations. The largest contribution in this area was the identification of programs within the states, and subsequently bringing these programs to the attention of the state special education staff.

Lists of contacts and services to states within the NRMCD region are included below. This liaison to state agencies and workers was enhanced and supplemented by visits to field test sites, design consulting and many other kinds of interactions carried out to NRMCD personnel, other than those specifically included within the field staff.

## State Reports

## CONNECTICUT

## Section I Personal Visits to the State

- Oct 25 Delivered equipment and materials to Greenfield School in Wethersfield, and Green Acres School in North Haven.
- Nov 9 Delivered equipment to Greenfield School, Wethersfield.
- Nov 19,26 Gave workshop for staff at Green Acres School, North Haven.
- Dec 3 Presentation of services and delivery of equipment to Booch Hill School, Trumbull.

## Section II Equipment and Materials Sent

- Instructional Materials--Green Acres School, North Haven
- Instructional Materials--Nancy Katy, American School for the Deaf
- Instructional Materials--Chris Taylor, Ellen Terryberry, Connie Colonia, American School for the Deaf
- Instructional Materials--Elliot Woolwich, Danbury

The number of additional correspondences within the state was nine.

## CONNECTICUT

## Section I Personal Visits to the State

- Jan. 15 Equipment retrieved from Green Acres School, North Haven and Greenfield School, Wethersfield.
- Feb. 4 Equipment retrieval and consultation at the Mystic Oral School, Mystic.
- Feb. 6 In-service workshop on "New Media" at the Magrath School, Norwalk.
- Feb. 8 Consultation at the American School, Hartford.

## Section III Equipment and Materials Sent

- Instructional Materials - Gail Young, Stratford.
- Instructional Materials - Joel Ziev, American School for the Deaf.
- Instructional Materials - Dorie Tirado, Speech and Language Clinician, Wallingford.
- Instructional Materials - Anne Kiselewich, Supervisor, Speech and Hearing, New Haven Rehabilitation Center.
- Instructional Materials - Mary Ann Costin, Teacher of the Hearing Impaired, Madison.
- Instructional Materials - Rochelle Friedman, Danbury.
- Instructional Materials - Barbara Mazur, Teacher of the Hearing Impaired, Stevens School, East Hartford.
- Instructional Materials - Barbara Williams, Medical Recreation Therapist, New Haven.
- Instructional Materials - Louise McAvoy, Sandy Hook School, Newtown.
- Instructional Materials - Mary Ann Key, Speech Pathologist, New Haven Board of Education.
- Instructional Materials - Anne E. Young, Speech and Hearing Clinician, Ridgefield.
- Instructional Materials - Roselyn Zackeu, Middlebury.
- Instructional Materials - Phyllis Buffa, Hawley School, Newtown.
- Instructional Materials - Carol Druckman, Head Speech Clinician, Windsor Board of Education.

- Instructional Materials - Martha Aman, Speech Clinician, So. Windsor.
- Instructional Materials - Cheryl E. Eckhardt, Speech Pathologist, Bridgeport.
- Instructional Materials - Betsy Cardone, Speech Therapist, Hartford.
- Instructional Materials - Dorothy Burness, Stratford.
- Instructional Materials - Miriam Goldin, Speech Pathologist, Bridgeport.
- Instructional Materials - Marsha Silver, Language and Speech Clinician, Hartford.
- Instructional Materials - George Porto, New Haven.
- Instructional Materials - Joanne Newman, Speech Pathologist, Regional School District #18, Old Lyme.
- Instructional Materials - Susan R. Breslau, Sr. Language, Speech & Hearing Clinician, Public Schools, Vernon.
- Instructional Materials - Kinne Hamilton, Speech Clinician, Hartford.
- Instructional Materials - D. Halberg, West Hartford.
- Instructional Materials - Debby Benggle, Speech Therapist, Brookfield.
- Instructional Materials - Lyn Lysobey, Speech Teacher of the Deaf, Bloomfield.
- Instructional Materials - Ruth Druckman, Speech Clinician, East Hartford.
- Instructional Materials - Judy Caspi, Speech and Hearing Clinician, Stamford.
- Instructional Materials - Sandra Feldman, North Haven.
- Instructional Materials - Beverly Butkus, Plainville.
- Instructional Materials - Karen Pearson, Speech Pathologist, Gaylord Hospital, Speech Pathology Dept., Wallingford.
- Instructional Materials - Mary Anne Ciccarone, Speech Therapist, DATAHR, Danbury.
- Instructional Materials - E. Weissman, Dept. of Special Education, Central Conn. State College, New Haven.
- Instructional Materials - Marianne Destro, Speech Clinician, New Haven.

- Instructional Materials - Janice Petamoritch, Newington.
- Instructional Materials - Fred Hirshfeld, Monroe.
- Instructional Materials - Nancy Smith, Speech Clinician, Stamford.
- Instructional Materials - Leila Dardick, Speech Pathologist, Naugatuck.
- Instructional Materials - Teri Silverman, Farmington.
- Instructional Materials - Frances Tyluki, Speech, Language & Hearing, Bethel.
- Instructional Materials - E. Cooke, Teacher of the Hearing Impaired, Consolidated School, New Fairfield.
- Instructional Materials - B. Bard, Dept. of Special Education, Central Connecticut State College, New Britain.
- Instructional Materials - Meryl Green, Language, Speech and Hearing Services, Hamden.
- Instructional Materials - Sandra Seen, Speech Therapist, Darien.
- Instructional Materials - Janice Orland, Speech and Language Clinician, Hartford Board of Education.
- Instructional Materials - Nancy Gollinger, New Haven.
- Instructional Materials - Susan Marks, Speech and Language Pathologist, Hartford.
- Instructional Materials - Sandra R. Ulrich, Clinical Supervisor, University of Conn. Speech and Hearing Clinic, Storrs.
- Instructional Materials - Thomas Caeso, Hamden.
- Instructional Materials - Mitchell Stachowicz, Language Clinician, Stafford Springs.
- Instructional Materials - Andy Esposito, Head Teacher, Learning Disabilities, Stevens School, East Hartford.
- Instructional Materials - Julie Beauregard, Enfield.
- Instructional Materials - Janet Tonkonow, Speech Pathologist, Meriden.
- Instructional Materials - Natalie Gaber, Speech Pathologist, New Haven.
- Instructional Materials - Margaret Smith, Beacon Falls.

- Instructional Materials - Betsy Low, Speech, Language & Hearing Therapist, Public Schools, Groton Long Point.
- Instructional Materials - Joy Nemergut, Language, Speech & Hearing Clinician, Ellington.
- Instructional Materials - Evie Guillen, Speech Pathologist, Storrs.
- Instructional Materials - Linda Zackin, Waterbury.
- Instructional Materials - Josephine E. Setterberg, Speech/Hearing Language Consultant, West Hartford.
- Instructional Materials - Suzanne Federspiel, Speech and Language Clinician, W. Willington.
- Instructional Materials - Edythe Burdick, Speech Pathologist, High Hill School, Madison.
- Instructional Materials - Norma C. Horwitch, Speech and Hearing Clinician, New Haven.
- Instructional Materials - Bruce L. Wigder, Speech Pathologist, Fairfield.
- Instructional Materials - Joan Stachowicz, Speech Clinician, Stafford Springs.
- Instructional Materials - Doria F. Simoneau, Speech Pathologist, Old Saybrook.
- Instructional Materials - Dr. Marvin Schaur, Speech Pathologist, New London Public Schools, New London.
- Instructional Materials - Florence Mendelsohn, Speech and Hearing Clinician, Milford.
- Instructional Materials - Dr. Lois Mayper, Coordinator, Speech, Language and Hearing Service, Osborn Hill School, Fairfield.
- Instructional Materials - Cathy Musson, Speech Pathologist, Collinsville.
- Instructional Materials - Evelyn Herman, Washington Depot.
- Instructional Materials - S. Friedman, Speech Therapist, Middle Gate School, Newtown.
- Instructional Materials - Ruth Laudow, Speech Clinician, New Haven.
- Instructional Materials - Sara M. Rosenfeld, Norwalk.

- Instructional Materials - Francine Kraus, Speech Pathologist, Stamford.
- Instructional Materials - Irma J. Cole, Dept. Chairman - Speech and Hearing Services, W. Hartford.
- Instructional Materials - Linda R. Nickerson, Speech and Hearing, Darien Board of Education, Darien.
- Instructional Materials - John DePola, Language, Speech and Hearing Clinician, Barnes School, East Hartford.
- Instructional Materials - Linda Toren, Speech and Language Clinician, Hamden.
- Instructional Materials - Mildred Lieff, Speech Pathologist, Stratford.
- Instructional Materials - Helene Ranard, Teacher of the Deaf, West Hartford.
- Instructional Materials - Betty-Lou Griffin, Speech Clinician, Hearing Resource Room, Vernon.
- Instructional Materials - Shelley Dinan, Language, Speech and Hearing Clinician, New Canaan.

The number of additional correspondence within the state was three.

## MAINE

## Section I Personal Visits to the State

December 11--Visit with Hancock County Associate Center, Ellsworth.  
Consulted with teachers from Steuben and Blue Hill.  
Delivered equipment and materials.

## Section II Materials or Equipment Sent

Instructional Materials--Prescriptive Learning Service, Augusta

Instructional Materials--Bill Brenton, Ellsworth County IMC, Ellsworth

The number of additional correspondences with the state was two.

## MAINE

## Section I Personal Visits to the State

Mar. 10 In-service workshop on the use of the overhead projector and creation of materials at the Hancock County Education Cooperation Resource Center, Ellsworth.

Mar. 11 Consultation at Bar Harbor

## Section II Equipment and Materials Sent

Instructional Materials - Karen McCall, Mary Snow School, Bangor.

The number of additional correspondences within the state was two.

## MARYLAND

## Section I Personal Visits to the State

Sept 28 Workshop at Western Maryland College, Westminster, for teachers in training.

Nov 15 Delivery of equipment to Maryland School for the Deaf.

## Section II Equipment or Materials Sent

Gateway Pre-School, Baltimore--1/2" videotape and monitor  
16mm movie projector

Maryland School for the Deaf--Diazo transparency maker

There were seven additional written correspondences to people within the state.

## MARYLAND

## Section I Personal Visits to the State

- Jan. 7 Delivery of equipment at the Gateway Pre-School, Baltimore.
- Mar. 6  
7  
8 Pre-service at the Western Maryland College, Westminster.
- May 2 Delivery of Project Life at the Hearing Resource Program, Edgewater.

## Section II Equipment and Materials Sent

Instructional Materials - William S. Baer School, Baltimore.

Instructional Materials - Angela Gray, Baltimore City Public Schools, Baltimore.

Instructional Materials - Janet Morgan, Gaithersburg.

Instructional Materials - Nancy Thompson, Silver Spring.

The number of additional correspondence within the state was five.

MASSACHUSETTS

Section I Personal Visits to the State

- Sept 20 Delivered and demonstrated equipment at the Willie Ross School for the Deaf, Longmeadow
- Sept 28 Delivered instructional materials to Willic Ross School
- Oct 1 Presentation of services and delivery of equipment to Hogan Regional Center, Danvers
- Oct 5 Presentation of services to staff at Learning Center for Deaf Children, Framingham
- Oct 8 Presentation of services to Clarke School for the Deaf, Northampton
- Oct 12 Presentation of services and delivery of equipment to Horace Mann School, Roxbury
- Oct 19 Workshop for Educational Readiness Program, Bethany Hill School, Framingham
- Oct 26 Delivered materials to Learning Center, Framingham
- Oct 30 Workshop for Massachusetts day class teachers of the deaf, Framingham
- Nov 12 Pick up and delivery of materials at Horace Mann and the Boston School for the Deaf, Randolph
- Nov 15 Delivery of equipment at Teaticket School, Teaticket
- Nov 26 Picked up equipment at Willie Ross School
- Nov 28 Delivery of equipment to New Bedford Day Classes
- Nov 29 Presentation of services and delivery of equipment to Day Classes for the Deaf, Wellfleet
- Nov 29 Consulted with deaf-retarded program, Wrentham State School
- Nov 30 Delivery of equipment to day classes in Reading and Leominster
- Dec 5 Workshop at Bethany Hill School, Framingham
- Dec 10 Delivery of equipment to Congdon School, New Bedford
- Dec 11 Delivery and demonstration of equipment to Crystal Springs Program, Assonet

655

## MASSACHUSETTS (CONT)

- Dec 12      Delivery of equipment to Upsala Street School, Worcester
- Dec 17      Visited Clarke School for the Deaf to discuss color  
cassette caption program

## Section II   Materials or Equipment Sent

## Instructional Materials---Wrentham State School

Lawrence Day Class  
 Bethany Educational Readiness Center  
 Fall River  
 Keefe High School  
 New Bedford  
 Franklin Day Class Program  
 Horace Mann, Boston  
 Concord Day Classes  
 Reading Day Class  
 Wellfleet Day Classes  
 Framingham Learning Center  
 Worcester Day Classes  
 Mr. Ron Loen, Clarke School for the Deaf  
 Mr. Bari O'Conner, Attleboro School Dept.  
 Mrs. Gloria Crotty, Lynnfield,

The number of additional correspondences within the state was twenty-four.

## MASSACHUSETTS

## Section I Personal Visits to the State

- Jan. 2 Delivery of equipment and consultation at the Clarke School for the Deaf, Northampton.
- Jan. 7 Delivery of equipment and consultation at the Lincoln School, Leominster.
- Jan. 8 Participation in slide program at Project CHANGE, Greenfield.
- Jan. 14 Delivery of equipment at the Educational Readiness Program, Framingham.
- Jan. 18 Delivery of equipment at the Willie Ross School, Longmeadow.
- Jan. 21 Presentation of services at the Language Institute for Children, Ludlow.
- Jan. 29 Presentation of services at the Boston University Special Education Dept., Boston.
- Jan. 31 Equipment retrieval from the Horace Mann School, Roxbury.
- Feb. 25 Delivery of equipment at the Educational Readiness Program, Framingham.
- Mar. 1 Delivery of equipment at the Day Class Program, Wellfleet.
- Mar. 2 In-service workshop on "New Media" at the Teaticket Day Class for the Deaf, Teaticket.
- Mar. 4 Delivery of equipment at Wrentham State School, Wrentham.
- Mar. 6 Delivery of equipment at Crystal Springs School, Assonet.
- Mar. 7 Delivery of equipment and demonstration at the Day Class Program, Fall River.
- Mar. 24 Equipment retrieval from the Learning Center for Children, Framingham.
- Mar. 26 Delivery of equipment at the Teaticket Day Class Program, Teaticket.
- Mar. 29 In-service consultation and video session at the Early childhood Education Center, Springfield.
- Apr. 10 In-service workshop on "New Media" and the use of the overhead projector at the Language Institute for Children, Ludlow.

## MASSACHUSETTS (cont.)

- Apr. 23 Participation in Media Fair at the Clarke School for the Deaf, Northampton.
- y 8 In-service workshop on the use of the overhead projector and creation of materials at the Educational Readiness Center, Framingham.
- May 10 Equipment delivery and retrieval at the Alden School, Duxbury.
- June 3 In-service workshop on behavior modification at the Beverly School for the Deaf, Beverly.

## Section II Equipment and Materials Sent

- Instructional Materials - Leone F. Lawless, Waltham Day Class Program, Waltham.
- Instructional Materials - Wellfleet Day Class Program, Wellfleet.
- Instructional Materials - Barbara Churchill, Attleboro High School, Attleboro.
- Instructional Materials - Language Institute for Children, Ludlow.
- Instructional Materials - Mr. Leonard Goldberg, Boston School for the Deaf, Randolph.
- Instructional Materials - Mr. Bart O'Connor, Attleboro School Dept., Attleboro.
- Instructional Materials - Jane Leveuson, Speech and Hearing Therapist, Brookline.
- Instructional Materials - Gladys Denvers, Resource Teacher, Northampton.
- Instructional Materials - Anne Capp, Speech Clinician, Amherst.
- Instructional Materials - Mary Dean Sorcinelli, Westfield High School, Westfield.
- Instructional Materials - Mildred O'Neil, Ludlow.
- Instructional Materials - Susan Bragdon, Speech Therapist, Crocker Fram School, Amherst.
- Instructional Materials - Beverly Woodson, Teacher of the Deaf, Chicopee.
- Instructional Materials - Arlene Talcove, Teacher of the Deaf.

- Instructional Materials - June Reynolds, Beverly School for the Deaf, Beverly.
- Instructional Materials - Donna Einfurer, Speech Clinician, Chicopee Falls.
- Instructional Materials - Denise Dolvin, Speech Clinician, Springfield.
- Instructional Materials - Alberta Atwater, Diagnostic Itinerant Teacher, Springfield.
- Instructional Materials - Nancy Harlow, Northampton.
- Instructional Materials - Daniel O. Gross, Remedial Programs, Winchendon School, Winchendon.
- Instructional Materials - Nancy Winter, Early Childhood Education Coordinator, Greenfield Community College, Greenfield.
- Instructional Materials - Ghislaine Jubrin, Speech Pathologist, Amherst.
- Instructional Materials - Ruth Kristek, Northampton.
- Instructional Materials - Sandy Chamberlain, Speech Pathologist, Westfield.
- Instructional Materials - Louise Goldberg, Audiologist, Holyoke.

The number of additional correspondences within the state was five.

## NEW HAMPSHIRE

## Section I Personal Visits to the State

Sept 24 Presentation of services and delivery of equipment to Amoskeag School, Manchester

October 23 Delivery of equipment to Amoskeag School

## Section II Equipment or Materials Sent

Videotapes on sign language--Crotched Mountain School for the Deaf, Greenfield

Instructional Materials--Dominick Bonura, Clairemont Vocational Technical College

Instructional Materials--Chris Nazarro, Amoskeag School

The number of additional correspondences to people within the state was four.

## NEW HAMPSHIRE

## Section I Personal Visits to the State

- Jan. 7 Delivery of equipment at the Amoskeag School, Manchester.
- Jan. 16 Equipment retrieval from the Amoskeag School, Manchester.
- Jan. 17 Delivery of equipment at the New Hampshire Vocational-  
Technical College, Claremont.
- Feb. 12  
13 Two in-service workshops on use of the overhead projector  
and creation of materials at Multi-media Services, Gorham.
- Mar. 3 Equipment retrieval from the Amoskeag School, Manchester.
- May 24 In-service workshop on the use of the overhead projector and  
creation of materials at the North County Multi-media Services,  
Gorham.

## Section II Equipment and Materials Sent

- Instructional Materials - Alice Wall, Portsmouth.
- Instructional Materials - Kris Nazzaro, Amoskeag School, Manchester.
- Instructional Materials - Michael Behrens, Amoskeag School, Manchester.
- Instructional Materials - David Barr, Crotched Mountain School, Green-  
field.

## NEW JERSEY

## Section I Personal Visits to the State

- Nov 7 Delivery of equipment and materials to Bruce Street School, Newark.
- Dec 13 Workshop for teachers of the deaf in cooperation with the educational Improvement Center, Pitman.
- Dec 14 Workshop for teachers of the deaf in cooperation with the Educational Improvement Center, Cedar Knowles.

## Section II Equipment or Materials Sent

## Instructional Materials--Deron School, Deron

Margaret Bitters, teacher of the deaf, Vineland  
 Elsie Frisch, Hard of Hearing Center, Mt. Lakes  
 Helen Barnett, Gibbstown School, Gibbstown  
 Winifred Heffron, North Hunterdon Regional High  
 School, North Hunterdon  
 Frederick Waldorf, John S. Hefmbold Educational  
 Center, Corbin Center  
 Ruth Ward, Special Services School District, Paramus

Instructional Materials and Opaque Projector--Gwen Smith, Training  
 Unit of the American Institute for Mental Studies, Vineland

Instructional Materials and Tutorgram--Laurel Celira, Kassuth Street  
 School, Haledon

Instructional Materials and Sound Page, Vito D'Alconzo, Millington

Instructional Materials and Cassette Tape Recorder--Dorothy Conover,  
 Eversham Township

Instructional Materials and Overhead Projector--Lola Buzash, Bridgeton  
 Public School

Instructional Materials and Project LIFE--Bruce Street School, Newark

There were four additional written correspondences to people in the state.

## NEW JERSEY

## Section I Personal Visits to the State

- Jan. 21 Delivery of equipment and instructional materials at the Walls School, Pitman.
- Jan. 22 Delivery of equipment at Hackensack Day Class Program, Hackensack.
- Jan. 23 Delivery of equipment and instructional materials at the Millington School, Millington.
- Feb. 18 Delivery of equipment at the Deron School, Orange.
- Mar. 26 In-service workshop on utilization and creation of media at the Educational Improvement Center.
- Apr. 1 Delivery of equipment at the Bergon Special Services School District, Paramus.
- Apr. 22 Delivery of equipment and instructional materials at the Hard of Hearing Center, Mt. Lakes.
- Apr. 22 Delivery of equipment and instructional materials at School #2, Patterson.
- May 5 Delivery of equipment at the Training School, AIMS, Vineland.
- May 5 Delivery of equipment at the Bruce St. School, Newark.
- May 5 Delivery of equipment at Kassuth St. School, Haledon.
- May 22-  
24 Participant in career education workshop at the New Jersey Department of Special Education Convention, McAfee.

## Section II Equipment and Materials Sent

- Instructional Materials - James Mangen, Hackensack Day Class Program, Hackensack.
- Instructional Materials - Richard Cook, Bruce Street School, Newark.
- Instructional Materials - Fred Cain, Cinnaminsen.
- Instructional Materials - Claire Kantor, Bruce Street School, Newark.
- Instructional Materials - Bethanie Millatein, Atlantic City.
- Instructional Materials - Linda Ferraro and Al Schielke, Marie Katzenback School for the Deaf, West Trenton.

- Instructional Materials - Barbara Pondelick, Patterson.
- Instructional Materials - Millington School, Millington.
- Instructional Materials - Sheila Schaeffer, Parsippany.
- Instructional Materials - Mary Ann Pitts, Mt. Lakes.
- Instructional Materials - Sharon Berry, D.A.C. Center, Portsmouth.
- Instructional Materials - Mary Jenkins, East Orange.
- Instructional Materials - Marcia Benson, Millburn Ave. School for the Deaf, Milburn.
- Instructional Materials - Shirley L. Lazekas, Kackettstown.
- Instructional Materials - Eugene Cioffi III, Oxford Central School, Oxford.
- Instructional Materials - Geraldine Jackson, Parsippany.
- Instructional Materials - Debbie Moufang, Millburn Ave. School for the Deaf, Milburn.
- Instructional Materials - Ronnie Bernhard, Passaic County Tech. & Voc. High School. Wayne.
- Instructional Materials - Vince Sadowski, Memorial Junior High School, Fair Lawn.
- Instructional Materials - Maria Paleologo, Montville.
- Instructional Materials - Denise Johnson, Stillman School, Plainfield.
- Instructional Materials - William Krihak, Roosevelt School, West Caldwell.
- Instructional Materials - Mary Walker, Stillman School, Plainfield.
- Instructional Materials - Marie Whidbee, Plainfield.
- Instructional Materials - Susan Epstein, Hampton.
- Instructional Materials - Susan Avery, Thomas Jefferson School, Rockaway.
- Instructional Materials - Martha Garrick, Kings Road School, Madison.
- Instructional Materials - Sue Maloney, Kings Road School, Madison.

- Instructional Materials - Ethelyn Lawson, Stillman School, Plainfield.
- Instructional Materials - Ron Grybowki, Mendham High School, Mendham.
- Instructional Materials - Sr. Angelina Mazzarella, Holy Spirit School, Pequannack.
- Instructional Materials - Carolyn Miller, Morristown.
- Instructional Materials - Mrs. David Borchard, Holy Spirit School, Pequannock.
- Instructional Materials - Nancy Patterson, Birchwood School, Dover.
- Instructional Materials - D. Guarino, Mendham Elementary School, Brookside.
- Instructional Materials - M. McKillop, Wildwood School, Mountain Lakes.
- Instructional Materials - Mary Alice Harvey, Plainfield.
- Instructional Materials - Ron Campesi, Education Specialist II, Office of County Supt. of Schools, Wood-Ridge.
- Instructional Materials - Joseph P. Bonelli, Upper Montclair.
- Instructional Materials - Noreen Gallagher, Morris Co. Dept. of Education, Morristown.
- Instructional Materials - Averil Toker, Westfield.
- Instructional Materials - William E. Cashman, Somerset Co. Dept. of Education, Somerville.
- Instructional Materials - Ed Baruffi, Atlantic Co. Supt's Office, Mays Landing.
- Instructional Materials - Leonard I. Sains, Regional Office of Special Education, Millburn.
- Instructional Materials - William D. Tyrrell, Arthur Shapiro, Jos. F. Cappello, Branch of Special Education, Trenton.
- Instructional Materials - Dave Doughty, Co. Supt. of Schools, Pennsauken.
- Instructional Materials - Charles Weening, County Supt. of Schools, Jersey City.
- Instructional Materials - Helena Bibko. County Supt. of Schools, Newton.

- Instructional Materials - Irene de Fay, County Supt of Schools,  
Belvidere.
- Instructional Materials - Sam Damore, County Supt. of Schools,  
Cape May.
- Instructional Materials - Carol Sceliza, Mt. Holly.
- Instructional Materials - Sophia Ghagan, Supr. of Child Study,  
Bridgeton.
- Instructional Materials - Margaret P. Whiting, Supr. of Child Study,  
Monmouth County Dept. of Education, Freehold.
- Instructional Materials - Fay Holmes, Supt. of Schools Office, Sewell.
- Instructional Materials - Bob Gray, County Supt. of Schools Office,  
Mount Holly.
- Instructional Materials - Hollis W. Wyks, Director Day Programs for the  
Deaf, Trenton.
- Instructional Materials - Bethanie Millstein, Atlantic City Public Schools,  
Atlantic City.
- Instructional Materials - Mary P. Merkle, Haddon Twp. Special Educ. Dept.,  
Westmont.
- Tutorgram, VTR System - Ruth Ward, Bergen Special Services School  
District, Paramus.
- Symbol Accentuation Film  
Loops - Paul Kaplan, Bergen Special Services School  
District, Hackensack.
- Tutorgram, Instructional  
Materials - Laurel Cebra, Kassuth St. School, Haledon.

The number of additional correspondences within the state was nine.

## NEW YORK STATE

The New York State Plan called for selection of a coordinator to plan and provide special services to this state. This was accomplished through the selection of Mr. Ben Birdsell.

Mr. Birdsell's report comprises Appendix IV of this document.

73

## PENNSYLVANIA

## Section I Personal Visits to the State

- Sept 10 Visit to the King of Prussia Regional Resource Center for presentation of services and delivery of materials.
- Sept 24 Workshop at Bloomberg State College for teachers in training and teachers of the deaf from the surrounding area.
- Oct 2 Presentation of services to staff at Western Pennsylvania School for the Deaf, Pittsburg.
- Oct 2 Meeting at Western Pennsylvania Regional Resource Center for consultation and delivery of materials, Gibsonia.
- Oct 18 Delivery of materials to Pennsylvania State Oral School, Scranton.
- Nov 8 Delivery of equipment to Montgomery County Intermediate Unit, Lansdale.

## Section II Materials or equipment sent

The number of additional correspondences to people within the state was ten.

## PENNSYLVANIA

## Section I Personal Visits to the State

- Jan. 7 Delivery of equipment at Bloomsburg State College, Dept. of Hearing & Speech, Bloomsburg.
- Feb. 12 In-service workshop on utilization and creation of media at the Allegheny County Intermediate Unit, Pittsburgh.
- Feb. 22 In-service workshop on utilization and creation of media at the Edinborough College, Erie.
- Apr. 6 Presentation of services at the Central Pennsylvania Resource Center, Harrisburg.
- Apr. 17 Delivery of equipment and instructional materials at the York County School for the Deaf, York.

## Section II Equipment and Materials Sent

- Instructional Materials - Larry Sexton, York Co. School for the Deaf, York.
- Instructional Materials - James Gaerin, Hearing Program, Philadelphia.
- Instructional Materials - Eleanor Brown, Western PA RRC, Gibsonia.
- Instructional Materials - Esther Schuster, Western PA School for the Deaf, Pittsburgh.
- Instructional Materials - Jean Kern and Nancy Hovland, Western PA School for the Deaf, Pittsburgh.
- Instructional Materials - Carol McCracken, Barland Elementary School, West Mifflin.
- Instructional Materials - Betty Ann Blinky, Eastern Area School, Pittsburgh.
- Instructional Materials - Ann Claxton, Memorial Elementary School, Oakmont - Pittsburgh.
- Instructional Materials - James E. Cochran, Allegheny Intermediate Unit, Pittsburgh.
- Instructional Materials - Derek Craig, Allegheny Co. Intermediate Unit, Pittsburgh.
- Instructional Materials - Margaret Doscher, Hoover School, Mt. Lebanon.

- Instructional Materials - Debbera Drake, Allegheny Intermediate Unit #3, Coraopolis.
- Instructional Materials - Mildred Ethridge, Pathfinder School, Pittsburgh.
- Instructional Materials - Mary Ferson, Mt. Lebanon High School, Pittsburgh.
- Instructional Materials - Linda Fields, Allegheny Intermediate Unit, Pittsburgh.
- Instructional Materials - Roberta Glessner, Eastern Area, Pittsburgh.
- Instructional Materials - Karen Kmetz, Allegheny Intermediate Unit #3, Pittsburgh.
- Instructional Materials - Becky Zebroski, Allegheny Intermediate Unit, Pittsburgh.
- Instructional Materials - Carol Zurst, Middle Rd. School, Allison Park.
- Instructional Materials - Joanne Vollmer, Allegheny Intermediate Unit #3, Pittsburgh.
- Instructional Materials - Patricia Smith, Allegheny Intermediate Unit Pittsburgh.
- Instructional Materials - Joan Nelms, Allegheny Intermediate Unit #2, Pittsburgh.
- Instructional Materials - Jenny Colville, Williamsport Area School District, Williamsport.
- Instructional Materials - Kathy Nuhfer, Lancaster-Lebanon IU, Lancaster.
- Instructional Materials - Richard Krieger, Speech & Hearing Center, Harrisburg.
- Instructional Materials - Donald Pedrow, Lancaster.
- Instructional Materials - Suzanne Murdza, Laurelton State School, Laurelton.
- Instructional Materials - Barbara Clouser, Central Intermediate Unit, Philipsburg.
- Instructional Materials - Ceraldine Donovan, Ebensburg State School & Hospital, Ebensburg.
- Instructional Materials - Mary Ann Bucceri, Ebensburg State School, Ebensburg.
- Instructional Materials - Jane Stultz, Ebensburg State School, Ebensburg.

- Instructional Materials - Michael Cushner, Capital Area Int. Unit, Camp Hill.
- Instructional Materials - Michele Moyer, IU #13 Lancaster-Lebanon, Lancaster.
- Instructional Materials - Tom Yatska, IU #13, Lancaster.
- Instructional Materials - Jeanne Sandusky, State College.
- Instructional Materials - David Estep, Ebensburg State School, Ebensburg.
- Instructional Materials - Charlotte Harton, Lititz.
- Instructional Materials - Dorothee Baker IU #13, Hearing Conservation Clinic, Lancaster.
- Instructional Materials - Carol Miller, Berks County IU #14, Reading.
- Instructional Materials - F. Liadra Kis, Schukill Co. Unit 29, Pottsville.
- Instructional Materials - Pat Thomas, Williamsport Area School District, Williamsport.
- Instructional Materials - Sandra Jadick, Capital Area Int. Unit, Camp Hill.
- Instructional Materials - Evelyn King, York.
- Instructional Materials - Priscilla Forry, Spring Grove.
- Instructional Materials - Jeanette Alessi, Saint Clair.
- Instructional Materials - Rosanne Roche, Hanover School District, Hanover.
- Instructional Materials - Diane McCuen, State College.
- Opaque and 8mm. projectors - Esther Schuster, Western PA School for the Deaf, Pittsburgh.

The number of additional correspondences within the state was four.

## RHODE ISLAND

## Section I Personal Visits to the State

- Sept 14 Presentation of services and delivery of equipment to Ladd State School, Exeter.
- Oct 15 Presentation of services and delivery of equipment to Rhode Island School for the Deaf.
- Oct 15 Presentation of services and delivery of materials to Cranston Special Education Instructional Materials Center.
- Oct 23 Picked up and delivered equipment at the Ladd State School and the Cranston SELMC.
- Oct 23 Delivered equipment to Rhode Island School for the Deaf.
- Nov 27 Picked up equipment at the Rhode Island School for the Deaf.

## Section II Materials and Equipment Sent

Instructional Materials--Mr. Bruce Godsave and Ms. Barbara Simon, Rhode Island School for the Deaf

Instructional Materials--Mrs. Thomas Henry, teacher of the deaf, North Kingstown

There was one additional correspondence within the state.

## Rhode Island

## Section I Personal Visits to the State

June 10- Equipment retrieval from the Rhode Island School for the Deaf

## Section II Equipment and Materials Sent

Instructional Materials - Mrs. J. McGlauglin, Cranston.

Instructional Materials - Suzanne Sylveste, Cumberland School, Cumberland.

## VERMONT

## Section I Personal Visits to the State

- Oct 1, Oct 22     Delivered and picked up equipment at the Austine School for the Deaf, Brattleboro
- Nov 9, 10        Participated in curriculum sharing conference at the Austine School for the Deaf

## Section II Equipment or Materials Sent

Instructional Materials--Betty Iglehart, Austine School

The number of additional correspondences to people within the state was three.

## VERMONT

## Section I Personal Visits to the State

Jan. 9 Delivery of equipment at the Austine School, Brattleboro.

## Section II Equipment and Materials Sent

Instructional Materials - Robert A. Schmidt, Newport.

Instructional Materials - Muriel Heistad, Rutland.

Instructional Materials - Lydia Brademeur, Austine Program, Burlington.

The number of additional correspondences within the state was four.

## VIRGINIA

## Section I Personal Visits to the State

- Sept 5 Delivery of MIVR system to Mrs. Anita Largent, Oral School, Richmond, VA.
- Oct 4,5 Presentation of services and activities to the staff at Dilenowisco Educational Cooperative, Norton. (Associate Center of the GW - IMC)
- Oct 9 Presentation of services to teachers of the deaf, Norfolk Public Schools.
- Oct 21-23 Follow-up visit to Dilenowisco Educational Cooperative.
- Nov 17 Workshop for parents of the pre-school deaf, RAP, SEIMC, Richmond.
- Dec 3 Presentation of services to Arlington Public Schools Teachers of the Deaf.
- Dec 4 Presentation of services to teachers of the deaf, Portsmouth.
- Dec 5 Presentation of services to teachers of the deaf, Virginia Beach.
- Dec 6 Presentation of services to Virginia School for the Deaf, Hampton.

## Section II Equipment or Materials Sent

Virginia School for the Deaf, Staunton--Instructional Materials  
 Ms. Sharon Berry, DAC Center, Portsmouth--Instructional Materials,  
 carousel slide projector, super 8 projector, thermofax secretary  
 Virginia School at Hampton--Instructional Materials  
 Center for Effective Learning, Virginia Beach--Instructional Materials,  
 Laminating machine, Florida I machine  
 Mrs. Beth Johns, Arlington Public Schools--Instructional Materials,  
 polaroid camera, 3 cassette recorders

There were additional correspondences (six written) to people within the state.

## VIRGINIA

## Section I Personal Visits to the State

- Mar. 4 In-service workshop on utilization and creation of media at the Center for Effective Learning, Virginia Beach.
- Apr. 3 In-service workshop on utilization and creation of media at the Center for Effective Learning, Virginia Beach.
- Apr. 4 Presentation of services at the Virginia School for the Deaf, Hampton.
- Apr. 8 In-service workshop on utilization of media at the Chesapeake Day Classes for the Deaf, Chesapeake.
- May 1 In-service workshop on utilization and creation of media at the Arlington Public School, Arlington.
- May 16 Presentation on career education for the hearing impaired at Madison College Special Educational Materials Center, Harrisonburg.
- June 3-6 Consultant for writing of secondary curriculum (EMR) at the Virginia Dept. of Special Education Symposium, Fredricksburg.

## Section II Equipment and Materials Sent

- Instructional Materials - John Moore, Virginia School at Staunton, Staunton.
- Instructional Materials - Joanne Funk, Norfolk.
- Instructional Materials - Center for Effective Learning, Portsmouth.
- Instructional Materials - Doris Norwood, Norfolk.
- Instructional Materials - Pearl S. Pekar, King George Co. Schools, King George.
- Instructional Materials - Mary Begley, Speech Pathologist, VA Beach.
- Instructional Materials - Linda Griffin, Center for Effective Learning, VA Beach.
- Instructional Materials - Susan Jennings, Luxford Elem. School, VA Beach.
- Instructional Materials - A. Kay Altizer, VA Beach.

- Instructional Materials - Marietta Lang.ord, VA Beach.
- Instructional Materials - Effie Gore, Center for Effective Learning,  
VA Beach.
- Instructional Materials - Marcia Thiesse, VA Beach.
- Instructional Materials - Linda Shipley, Va Beach City Schools,  
Speech Therayp Dept., VA Beach.
- Instructional Materials - Barbara Jones, VA Beach.
- Instructional Materials - Mary Walker, Va. Beach City Schools,  
VA Beach.
- Instructional Materials - Cathy Harrison, Norfolk.
- Instructional Materials - Doris Norwood, Norfolk.
- Instructional Materials - Rosemary Cohick, Norfolk.
- Instructional Materials - Jane Hills, VA Beach.
- Instructional Materials - Jane Harvey, VA Beach.
- Instructional Materials - Nan Ray, VA Beach.
- Instructional Materials - Marilyn Tutterman, Norfolk.
- Instructional Materials - Gay Maitland, VA Beach.
- Instructional Materials - Bonnie Parker, Loyise Luxford Elementary,  
VA Beach.
- Instructional Materials - Harriet MacFarlane, Norfolk.
- Instructional Materials - Ramona Hart, Sparrow Rd. School, Chesapeake.
- Instructional Materials - Gail Mastrangio, VA Beach.
- Instructional Materials - Phyllis W. Sanford, Chesapeake.
- Instructional Materials - Carrie Smith, Chesapeake.
- Instructional Materials - Vernice Dzura, VA Beach.
- Instructional Materials - Rose McDonald, Chesapeake.
- Instructional Materials - Anne Madden, Chesapeake.

## VIRGINIA (cont.)

Instructional Materials - Claudia Griffin, VA Beach Public Schools,  
VA Beach.

Systems 80E - Terry McConnell, Williamsburg Jr. High School,  
Arlington.

VTR System and Monitor - Doris Norwood, Norfolk Dept. of Special Edu-  
cation, Norfolk.

The number of additional correspondences within the state was six.

## WASHINGTON, D.C.

## Section I Personal Visits to the District

- Sept 6      Workshop at Grant School
- Sept 25     Delivery of equipment to Grant School
- Nov 16      Workshop at Grant School for faculties of Grant and  
Military Road Schools

## Section II Equipment and Materials Sent

- Instructional Materials--Ben Provance, Beth Bagswell, Kendall School
- Instructional Materials--Gertrude Cheng, Grant School
- Instructional Materials--Ms. Jones, Gallaudet College

There were three additional written correspondences to people within the district.

## Washington, D.C.

## Section I Personal Visits to the State

Mar. 24 Consultation and delivery of materials at Gallaudet College  
for the Deaf.

## Section II Equipment and Materials Sent

Instructional Materials - Ms. Betty Rosenbloom, Model Secondary School  
for the Deaf.

Instructional Materials - Ms. Carolyn Jones, Gallaudet College for  
the Deaf.

Additional NRMCD response within work Area IV has been detailed in earlier portions of this Final Technical Report. NRMCD Center efforts to increase regional state program delivery have been augmented by the following:

1. Materials Exchange Program, a program which furnished instructional materials to the 13 state service region;
2. INTERACT, the electronically based information and resources retrieval system utilized by teachers, administrators and students throughout the region;
3. Interlock coordination provided by individuals like Mr. Ben Birdsell and detailed in Appendix IV of this report;
4. Research into the Visual Response system currently housed by many schools for the deaf in the service region; additional details on this research and various applications of the procedures are included in Supplementary Materials III.

Programs, products and procedures, while addressing objectives within the work area, also served as interim procedures appropriate to the emergent national system for delivery of materials and services to a wide population of users.

SECTION III

### III. Introduction

Procedures, products and activities within work areas were described in Section II. In Section III, these procedures, products and activities are discussed. Recommendations for new and continued directions for providing educational technology and media application services to the deaf are included.

#### IIIA.

### RESULTS

NRMCD programs have received continued and increasing reinforcement from educators within the service region and from a nationwide audience. Requests for information and copies of child-use and parent-use programs have been numerous. Response to the programs, both from formal field-testing and less formal teacher, parent and student evaluation, has been enormously positive. Feedback on these and other facets of NRMCD service are included in Appendix V.

Some of the newer programs which have generated considerable excitement are the visual communications program, the parent-child communication program and the survival handbook detailing implementation procedures for the visual response (MIVR) system. These programs were initiated in response to a mandate from the NRMCD Student Advisory Committee, a mandate which was reiterated by educators of the deaf in the service region. During FY '74, these programs were completed, formatively evaluated and revised.

There has been a major concentration at NRMCD on the research and development of procedures to review, adapt and test already existing instructional materials. These procedures were developed in the course of examining programs

in human sexuality education. The results of the process were a booklet on resources in human sexuality education and an article on general procedures for the adaptation of instructional materials.

Master copies of these materials and programs have been prepared for insertion into the NCEMMH dissemination procedures. Interest in their wide dissemination and implementation has also been expressed by Dr. Robert Stepp. Final dispositions of programs reflect the strategy most likely to yield optimal exposure, dissemination and implementation to potential users. Clearly, this major result of NRMCD efforts, these major mediated programs, have provided and will continue to provide a learning opportunity of enormous importance to deaf students and their educators and families.

Outreach to programs, centers, clinics and individuals within the service region has been effectively accomplished during FY '74. Teacher training as detailed in Section IIB. and IID. and as provided by the Materials Exchange Program and the INTERACT system have served as the basis for this outreach.

Response to the efforts of NRMCD field staff has been overwhelmingly positive. Appendix V includes responses from teachers, parents and administrators who received these services. Educational technology training was accomplished on a wide variety of subjects in a wide variety of areas throughout the region. Interlock with other agencies within the states was accomplished through this outreach.

The Materials Exchange Program was based on the very good curricula ideas of teachers in the field. NRMCD selected these excellent materials and programs and duplicated and disseminated them. This Materials Exchange Program enabled teachers, those closest to deaf students, to serve as resources for

each other. Feedback for this program is also included in Appendix V.

Project INTERACT, a program developed to facilitate the flow of information between classroom teachers and mediated resources, met with very positive response (Appendix V.) Teachers and administrators appreciated the ability to call toll free and to request information specific to their day to day needs. The INTERACT Resource Librarian's responses were equally specific. Information from the extensive catalogue and material collection housed at NRMCD was quickly retrieved and placed in the hands of the caller. That kind of articulation of immediate, specific needs is best served by immediate, specific response to the query. INTERACT, M.E.P., and the field staff's training workshops and seminars were effective outreach of programs and services.

The evaluation of programs and services provided by the NRMCD has been ongoing. Programs were field tested in many sites throughout the northeast region. Considerable effort was made to select sites, learners and measures of effect, most likely to resemble the eventual learners for the program. Comprehensive formative evaluation was carried out for the visual communications and parent-child communications programs and the visual response system. The failure to submit materials and programs to NRMCD by other centers and sources led to a concentration on the formative testing of NRMCD produced programs. This effort was beneficial; field testing led to changes and improvement based on teacher, parent and student input.

The positive impact of NRMCD services and materials was greatly enhanced by its relationship with other major agencies and SEAs serving the region. Section IID. details the kind and frequency of contacts outside Amherst,

Massachusetts. While it is clear that all states were not equally served, it is also clear that the service was extensive.

This particular center operation was given a high priority during FY '74. The efforts of Mr. Ben Birdsell and Mr. Ira Miller reflect this priority. Their input into NRMCD operations and NRMCD field staff visits and consultations to the 13 states evoked very positive response from those receiving the service.

Perhaps the strongest facet of NRMCD efforts has been the extension and provision of services and products to the northeast region. The kinds of services and products have been varied. The response has not been varied. It has been overwhelmingly supportive of NRMCD efforts to improve the education of the deaf in the northeast region.

IIIB.

## CONCLUSIONS

The vast majority of NRMCD work has been successfully completed and positively received. Requests for continued services and copies of programs far exceeded federal support of NRMCD. Disposition of materials, resources and equipment has been accomplished in such a way as to facilitate their continued provision to educators and students.

Certainly, certain work elements were more effectively carried out than others. NRMCD efforts in program development and outreach of service, equipment and instructional materials were judged highly effective. For reasons outside of NRMCD control, certain work elements were less effectively carried out. They were in the areas of national non-NRMCD product field testing and extensive and equal interlock with all state education agencies. While product testing and interlock did occur, these areas show fewer demonstrable results than other NRMCD efforts.

The letters included in Appendix V are just a sampling of recent statements on NRMCD services and products. Supplementary Materials I and II include other such testimonials. In conclusion, it is best to rely on a lesson that NRMCD has learned in regard to the setting of priorities and the development of services and programs: Ask the eventual consumer and then listen to the answer. Appendix V offers feedback to NRMCD.

## III.C.

## RECOMMENDATIONS

The experiences of staff members at the NRMCD have contributed to the following list of ideas for future directions and emphases in the provision of effective media services to the field of education of the deaf. This listing is just a beginning. Further definition and detail should rest in the hands of the enacting agencies.

1. It is recommended that an emphasis on providing media services to the deaf be placed instead on providing these services to the handicapped, in general. Federal and agency energies should be devoted to providing excellent media and training services to teachers of all special children, and not in emphasizing one category of disability over another. The selection of curricula should be based on the needs of the individual learner regardless of larger category of disability.
2. It is recommended that a nationally organized and supported, yet regionally based media and materials retrieval system be instituted. NRMCD experience with INTERACT substantiates the need for a procedure to put resources in the hands of teachers as the needs arise.
3. It is recommended that federal funding be granted to programs providing mediated parent and para-professional training. The use of audio or video cassettes, fully capable of utilization and application in the home, could lead to a "resourceteria in the kitchen" concept of early and special childhood education.
4. There is vast and unused potential in cable TV. It is recommended that a task force of special educators, media specialists within

special education and representatives from cable concerns be convened to examine potential services to handicapped children from this medium.

5. It is recommended that there is a utilization of educational technology to provide teacher training in areas of concern to teachers of children in special needs: individualization of instruction, criterion referenced evaluation, operant procedures and curriculum development.
6. It is recommended that services be expanded to schools not considered "special" schools; that these services be expanded to public school settings and teachers within non-exceptional classrooms likely to be receiving mainstreamed special children.
7. It is recommended that programs for non-handicapped students be researched and developed. The objectives of these programs should be to provide affective and cognitive education about handicapped children for non-handicapped children.
8. It is recommended that a program to facilitate an international exchange of media services to the handicapped be researched and developed. Many letters of inquiry are received by NRMCD. At the present time there is no procedure for facilitating the flow of resources internationally.
9. It is recommended that a national newsletter and/or scholarly journal devoted to examining the relationship between media and the handicapped be considered.
10. It is recommended that the question of standardization of equipment be given higher priority. At the present time, teachers are presented with an overwhelming array of options in format; they have not vet

been given efficient data for choosing among these options.

11. It is recommended that an experiment in the use of sign language as a second language within a public school system be designed.
12. It is recommended that research on student-active responding materials be continued and expanded. The research on the MIVR system and Project ME provide examples. This might be an opportunity to expand the development of open-ended programs and the research into the effects of these programs.
13. It is recommended that funds be provided to public school professional libraries for the purchase of a set of basic books on deafness and deaf education. Such purchases might include:

1. Davis, H. and Silverman, S.R. Hearing and Deafness. New York: Holt, Rinehart and Winston, 1970.
2. Fine, Peter. Deafness in Infancy and Early Childhood. New York: Med-Com Press, 1974.
3. Furth, H. Deafness and Learning. California: Wadsworth, 1973.
4. Mindel, E. and Vernon, M. They Grow in Silence. Maryland: NAD, 1971.
5. Schlesinger, H. and Meadow, K. Sounds and Sign. Berkeley, California: University of California Press, 1973.

These books would serve as a jumping off point for teachers of mainstreamed deaf children.

SECTION IV

APPENDIX I

Title: Bank Street Readers - Transparencies Referral No. 681  
 (NRMCD only)  
 Name of School: St. Joseph's School for the Deaf  
 Author(s): Brenda Avelsen  
 Type of Material: Transparency Masters  
 Curriculum Area: Language  
 Instructional/Behavioral Objective: The student will be able to recognize single components in a related situation  
 Reading Level: Beginning  
 Interest Level: Urban Primary to Medium

.....

Description

General Description: A series of 34 transparency masters for use with the first primer in the Bank Street Reader Series, In the City, published by the MacMillan Company.

Example: The transparencies break down complex page illustrations into their most elemental components thus enabling the teacher to present one concept at a time, i.e. page 14 contains illustrations for the following language:

Houses are in the city.  
 Streets are in the city.  
 People are in the city.

The transparency masters illustrate each component to be presented in sequenced overlays.

Recommended Additional Materials: The book, In the City, first in the Bank Street College of Education Series published by the MacMillan Company.

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

115

Title: StoriesReferral No. 261

(NRMCD only)

Name of School: Austine School for the DeafAuthor(s): Teachers and Students from the Rhode Island School for the DeafType of Materials: bookletsCurriculum Area: EnglishInstructional/Behavioral Objective: Give students necessary exposure to develop or learn the syntax of EnglishReading Level: 1st - 3rd GradesInterest Level: Lower Elementary

## Description

General Description: Four booklets containing several short stories: "Stories About Early America," "The Earth That We Live On," "Animals," "Winter Stories." Booklets put together using materials written by teachers of the deaf and deaf students from the Rhode Island School.

Example: (1) Stories About Early America

Example: Samoset and Squanto were Indians. They lived in Plymouth. They helped the Pilgrims plant corn. Massasoit was the leader of the Indians. He was an Indian Chief. The Indians were friendly. The Indians and Pilgrims did not fight. The Indians and Pilgrims traded many things.

(2) The Earth That We Live On

Example: Lakes - Some lakes are big. Some lakes are small. We swim in a lake. We use boats on a lake. We fish at a lake. Frogs live in lakes. Fish live in lakes. Turtles live in lakes. Ducks live in lakes. Beavers live in lakes.

(3) Animals

Example: Penguins - Penguins are black and white. They do not fly. They walk and they swim. Penguins sit on icebergs. They are careful because seals are in the water. Seals eat penguins. Penguin nests are on the ground.

(Continued on next page)

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Stories (page two) Referral No. 281  
 (NRMCD only)

Name of School: Austine School for the Deaf

Author(s): Teachers and Students from the Rhode Island School for the Deaf

Type of Materials: Booklets

Curriculum Area: English

Instructional/Behavioral Objective: Give students exposure to develop or learn the syntax of English

Reading Level: 1st - 3rd Grades

Interest Level: Lower Elementary

.....

Description

General Description:

Example: Continued from page one:

(4) Winter Stories

Example: Winter - Winter has three months.  
 December is all finished.  
 Now it is January.  
 Winter is very cold.  
 Sometimes it snows.  
 No flowers grow in Winter.  
 We wear warm clothes.  
 Winter is fun!

Recommended Additional Materials:

Comments: A

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of  
 Massachusetts, Amherst, Massachusetts 01002

Title: Poetic Language Referral No. 2C1  
 (NRMCD only)  
 Name of School: The Austine School for the Deaf  
 Author(s): Beth Jowry  
 Type of Materials: Textbook  
 Curriculum Area: English  
 Instructional/Behavioral Objective: \_\_\_\_\_  
 Reading Level: 6th or 7th Grade  
 Interest Level: 1, 2, 3

.....

### Description

General Description: This text is a study of language and covers the following aspects of language:

1. Denotative and connotative meaning
2. Literal and figurative meaning
3. The use of imagery and types of word-images (images of sight, sound touch, taste and smell)
4. Figures of speech:
  - similes
  - metaphors
  - personification

### Example:

"Poetic. What is poetic?"

What is poetry?

'Poems are for girls.'

'Poems are written so they are hard to understand.'

'Poems don't tell you anything.'

1. How do you feel about poetry?

\_\_\_\_\_  
 \_\_\_\_\_  
 (Continued on next page)

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Poetic Language (page two) Referral No. 2C1  
 (NRMCD only)

Name of School: The Austine School for the Deaf

Author(s): Beth Mowry

Type of Materials: Textbook

Curriculum Area: English

Instructional/Behavioral Objective: \_\_\_\_\_

Reading Level: 6th or 7th Grade

Interest Level: 12th Grade

.....

Description

Example: (continued from page one)

In this unit we will study language. We will see how language works, and how language can work for us.

When language works well, we say the language is "poetic."

2. What does it mean when we say "language works well?" What work can language do?"
- \_\_\_\_\_
- \_\_\_\_\_

Recommended Additional Materials:

Comments: The text uses poetry as a vehicle for studying language, and each section contains poems which illustrate the uses of language being studied. There are multiple choice questions throughout the text which are intended for class discussion.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

## INSTRUCTIONAL MATERIALS

Title: Atlas of Parts of Speech and Their Habits Referral No. 4D1  
 (NRMCD only)

Name of School: Crotched Mountain School for the Deaf

Author(s): Robert Parsons

Type of Materials: Reference Manual

Curriculum Area: Language

Instructional/Behavioral Objective: To clarify terms appearing in Rhode Island School Deaf Curricula

Reading Level: 3rd - 4th Grade

Interest Level: For Teacher Use

## Description

General Description: A reference book referring to the language patterns and curriculum created by the Rhode Island School for the Deaf. To be used when clarification of terms appearing in specific curricula is desired. Written in a light style that lends to its easy comprehension and use.

Example: Includes sections on subject and predicate nouns, direct and indirect objects, pronouns, adjectives, verbs, tenses, and transformations.

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Curriculum Guide for Language Instruction Referral No. 4D2  
 (NRMCD only)

Name of School: Crotched Mountain School for the Deaf

Author(s): Robert W. Parsons

Type of Materials: Teacher Guide

Curriculum Area: Language

Instructional/Behavioral Objective: To aid teacher using the five sentence patterns developed at the Rhode Island School for the Deaf

Reading Level: \_\_\_\_\_

Interest Level: 4-7 (year levels)

.....

### Description

General Description: This is an explanation and analysis of the five sentence patterns developed at the Rhode Island School for the Deaf, with description of when and how to integrate the patterns into the language curriculum. Specific examples and exercises are suggested for each pattern and level of development. This is a detailed and concise plan for three years of language curriculum.

#### Example:

"Pattern One consists of a subject followed by an intransitive verb. This is about as basic as a sentence can be:

John fell.  
 The girl ran.  
 Birds fly.

It can be expanded by adverbs such as those telling Where or When.

We went to the store.  
 It rained yesterday.  
 The boys ran in the gym last week."

#### ANALYSIS

"...After this has been going on for a while and the children seem fairly at ease about it, it is time to begin analyzing Sentence Pattern One in terms of the information it provides. The information provided means what questions it answers. So, we begin:

John fell.  
 Who fell? (John) (Continued on next page)

#### Recommended Additional Materials:

#### Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

INSTRUCTIONAL MATERIALS

Title: Curriculum Guide for Language Instruction (page 2) Referral No. 4D2 (NRMCD only)

Name of School: Crotched Mountain School for the Deaf

Author(s): Robert W. Parsons

Type of Materials:

Curriculum Area: Language

Instructional/Behavioral Objective:

Reading Level:

Interest Level: 4-7 (year levels)

Description

General Description:

Example: (Continued from page one)

A bird flies
What flies? (a bird)

This faces us right now with the dilemma of Who versus What. "Who" is used of persons; "What" is used of animals, places and things. The fourth chart, which has seen only limited action up to now, suddenly comes to our aid. We use up all that vacant space to indicate which are persons and which are not (incidentally, giving us a chance to slip in a negative transformation):

- John is a person.
A bird is not a person.
(Classmate) is a person.
I am a person.
An (animal) is not a person.
(Family member) is a person."

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Exercises to Accompany Language Curriculum Referral No. 4D3  
 (NRMCD only)

Name of School: Crotched Mountain School for the Deaf

Author(s): Ladoucer and Bartlett

Type of Materials: Illustrated Reading Exercises

Curriculum Area: Language

Instructional/Behavioral Objective: Clarify students' concepts of various objects and places and stimulate language development.

Reading Level: 2nd - 3rd Grade

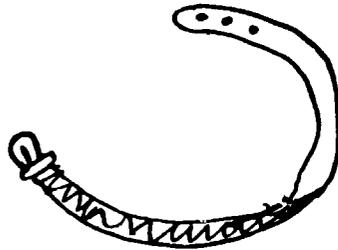
Interest Level: Year level 4-7

.....

### Description

General Description: This unit consists of more than 80, one page, illustrated reading exercises for clarifying the students concepts of various objects and places, and stimulating language development.

Example: A belt is a thing. A belt may go with pants. A belt may be wide or thin. A belt may be different colors. Some dresses have belts. Belts hold pants up. A belt has a buckle. Belts have holes. Belts may be big or small. A belt is made of leather, cloth, or silk.



Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Experiential Program for Beginning Classes Referral No. 4D4  
 (NRMCD only)  
 Name of School: Crotched Mountain School for the Deaf  
 Author(s): Anne E. Hennessy  
 Type of Materials: Workbook  
 Curriculum Area: Language  
 Instructional/Behavioral Objective: To develop language in the beginning deaf student.  
 Reading Level: For beginning students  
 Interest Level: Teachers

.....

### Description

General Description: This is a plan to develop language in the beginning deaf student by promoting a program rich in experience. It is designed for an approximate duration of two to three years.

- Example:
- |  |   |
|--|---|
| <p>I. Self</p> <p>A. Self-care</p> <ol style="list-style-type: none"> <li>1. Body</li> <li>2. Clothing</li> <li>3. Food</li> </ol> <p>B. Physical Development</p> <ol style="list-style-type: none"> <li>1. Physical motor skills</li> <li>2. Visual perceptual skills</li> <li>3. Pre-speech</li> <li>4. Auditory training</li> </ol> <p>C. Basic Skills</p> <ol style="list-style-type: none"> <li>1. Reading</li> <li>2. Writing</li> <li>3. Math</li> </ol> <p>D. Aesthetics</p> <ol style="list-style-type: none"> <li>1. Arts</li> <li>2. Crafts</li> <li>3. Music</li> <li>4. Stories</li> <li>5. Creative Dramatics</li> </ol> | <p>II. Environment</p> <p>A. Social</p> <ol style="list-style-type: none"> <li>1. Home and Family</li> <li>2. School and School Family</li> <li>3. Community</li> </ol> <p>B. Natural</p> <ol style="list-style-type: none"> <li>1. Plants</li> <li>2. Animals</li> <li>3. Elements</li> <li>4. Simple Physics</li> </ol> |
|--|---|

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Sentences\* Referral No. 4D5  
 (NRMCD only)

Name of School: Crotched Mountain School for the Deaf

Author(s): Roger Ladoucer

Type of Materials: Notebook of Language Exercises

Curriculum Area: Language

Instructional/Behavioral Objective: Clarify students' concepts of various objects and places and stimulate language development.

Reading Level: 2nd - 3rd Grade

Interest Level: 4-7

.....

Description

General Description: A student oriented set of language exercises intended to supplement your existing language program. The notebook is divided into six sections.

- I. Exercises dealing with sentence pattern 1 and its variations; who, what, where, when.
- II. Exercises dealing with sentence pattern 2 and its variations.
- III. Exercises pertaining separately to sentence patterns 3, 4, 5.
- IV. Series of exercises that test students' ability to discriminate among sentence patterns 3, 4, 5.
- V. Series of exercises to test students' ability to discriminate among sentence patterns 1, 2, 3, 4, 5.
- VI. Stories currently on hand in Crotched Mountain AV Department.

Example: (Continued on next page)

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Sentences\*(page two)Referral No. 4D5

(NRMCD only)

Name of School: Crotched Mountain School for the DeafAuthor(s): Roger LadoucerType of Materials: Notebook of Language ExercisesCurriculum Area: LanguageInstructional/Behavioral Objective: Clarify students' concepts of various objects and places and stimulate language development.Reading Level: 2nd - 3rd GradeInterest Level: 4-7

## Description

## General Description:

Example: (Continued from first page)

My Body

My body moves.  
 My hair grows.  
 My eyes see.  
 My ears hear.  
 My nose smells  
 My mouth speaks and eats  
 My neck turns and bends  
 My chest breathes  
 My hand writes and holds.  
 My legs walk.  
 All my body moves.

Questions: What do my eyes do? \_\_\_\_\_  
 What hears? \_\_\_\_\_  
 What turns and bends? \_\_\_\_\_  
 What do my legs do? \_\_\_\_\_  
 What writes and holds? \_\_\_\_\_

## Recommended Additional Materials:

Comments: Sentence patterns referred to are those initially used by the Rhode Island School for the Deaf.

\*These materials are part of "Exercises to Accompany Language Curriculum," and may be used independently or as part of the other exercises.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

## INSTRUCTIONAL MATERIALS

Title: Science Lessons Referral No. 2E2  
 (NRMCD only)

Name of School: Austine School for the Deaf

Author(s): Palmer and Longs

Type of Materials: Workbook-Textbook

Curriculum Area: General Science

Instructional/Behavioral Objective: Supply students with science lessons that will promote discovery of scientific principles through science-related activities.

Reading Level: 4th or 5th Grade

Interest Level: Jr. High, 9-10

.....

## Description

**General Description:** This workbook-textbook is intended for classes which have students with low-level reading ability; and its purpose is to supply these students with science lessons that will promote the discovery of scientific principles through science-related activities. The activities are supplemented by textual materials written at approximately the fourth or fifth grade reading level. Ideally, this will allow the students to read the text without continuous aid from the teacher. However, while the low reading level is desirable, it is also limiting. It necessitates employing a policy of short, concise lessons. Nevertheless, even though the lessons are verbally short, it is possible to add much supplementary and complementary materials.

The book itself is organized on a "discovery" method of teaching whereby the students grasp scientific principles and related ideas by observation, experimentation, and examination. Each lesson has information pertinent to a particular topic, usually one or more activities, and homework questions for the lesson.

Most of the activities require no complicated scientific apparatus, and all the activities can be prepared with nominal effort.

The class time required for each lesson varies, but this should present no problem if the science class is left open-ended, rather than strictly structured into daily lessons. Hopefully, the students will develop interest in and find success in the lessons and will want to continue on their own. It is felt this is a most desirable product and should be encouraged with aid and guidance from the teacher.

## Recommended Additional Materials:

**Comments:** The ages above indicate a junior high level class with which the book has worked well. It has also worked well with older groups who have about the same achievement level.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Rocks and Minerals Referral No. 2E3  
 (NRMCD only)

Name of School: Austine School for the Deaf

Author(s): Helene Bonura

Type of Materials: Booklet

Curriculum Area: Science

Instructional/Behavioral Objective: See "Example" below

Reading Level: 3rd - 5th Grade

Interest Level: Middle School III

.....

Description

General Description: Booklet of exercises and activities designed to teach student how to identify various rocks and minerals.

- Example:
1. Students write meaning of the terms rock and mineral.
  2. Students describe and list attributes of rocks and minerals.
    - (a) Perform various attribute tests for rocks and minerals.
  3. Students identify unnamed objects.
    - (a) Explain why some belong to one group "rocks" and the other group "minerals."
  4. Students identify the described objects (at least three correct ones)
  5. Students classify groups of rocks
    - a. Sedimentary
    - b. igneous
    - c. metamorphic
  6. Students list at least three names of rocks for each of the above groups.

Recommended Additional Materials:

Comments: In addition, field trips where students picked up some rocks and minerals. For final test, students explain how to determine names of rocks and minerals they found.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Scientific Processes Referral No. 2E4  
(NRMCD) only

Name of School: Austine School for the Deaf

Author(s): Helene Bonura

Type of Materials: Booklet

Curriculum Area: Science

Instructional/Behavioral Objective: See "Example" below.

Reading Level: 2nd - 4th Grade

Interest Level: Middle School III

.....

#### Description

General Description: Booklet of exercises and activities designed to teach student the four scientific processes: observe, identify, describe and classify.

#### Example:

1. Students observe and identify objects.
2. Students describe and identify the described objects.
3. Students list attributes of certain objects.
4. Students classify objects into classes or groups.

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Contemporary History Referral No. 2F1  
 Name of School: The Austine School for the Deaf (NRMCD only)  
 Author(s): J. Enola  
 Type of Materials: Learning Packages  
 Curriculum Area: Social Studies  
 Instructional/Behavioral Objective: Listed at beginning of each unit.  
 Reading Level: 6  
 Interest Level: 10 - 11

.....

### Description

General Description: The following LAPs (Learning Activity Packages) comprised the course taught during the 1970-71 school year. These LAPs are meant mainly for individualized study units with no limits placed on the progress of the students. All LAPs have a pretest, a listing of the behavioral objectives to be accomplished, some definitions, an introduction and a posttest.

Example:

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>I. Nationalism               <ul style="list-style-type: none"> <li>A. Meaning</li> <li>B. Beginning</li> <li>C. Nationalism &amp; Democracy</li> <li>D. Germany</li> <li>E. Italy</li> <li>F. Chian &amp; Japan</li> <li>G. South America</li> </ul> </li> <li>II. Imperialism               <ul style="list-style-type: none"> <li>A. Meaning</li> <li>B. Britain</li> <li>C. Grance</li> <li>D. China</li> <li>E. Effect of Imperialism on Nationalism</li> <li>F. Imperialism &amp; War</li> <li>G. Summary</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>III. Militarism               <ul style="list-style-type: none"> <li>A. Causes of World War I</li> <li>B. Results of World War I</li> <li>C. Revolution in Russia</li> <li>D. Results of Russian Revolution</li> <li>E. Europe After World War I</li> <li>F. Fascism in Italy</li> <li>G. Nazism</li> <li>H. World Depression</li> <li>I. China</li> </ul> </li> <li>IV. China               <ul style="list-style-type: none"> <li>A. An Early History</li> <li>B. The Family</li> <li>C. Dynasties</li> <li>D. China and Japan</li> <li>E. China and Russia</li> <li>F. China Today</li> </ul> </li> </ul> |
|---|---|

(Continued on next page)

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Contemporary History (page two) Referral No. 2F1  
 Name of School: The Austine School for the Deaf (NRMCD only)  
 Author(s): J. Enola  
 Type of Materials: Learning Packages  
 Curriculum Area: Social Studies  
 Instructional/Behavioral Objective: Listed at beginning of each unit.  
 Reading Level: \_\_\_\_\_  
 Interest Level: \_\_\_\_\_

Description

General Description:

Example: (continued from first page)

V. Communism

- A. Karl Marx
- B. The European Solution
- C. The Russian Revolution
- D. Communism Today

VI. American Capitalism

- A. The Meaning and Early History
- B. The Corporation
- C. Big Business
- D. The Golden Twenties
- E. Capitalism Today

VII. The Labor Movement

- A. Organization
- B. The Government and Labor
- C. Minority Groups and Labor
- D. Procedures
- E. Goals

VIII. The Depression

- A. At Home
- B. Abroad

Recommended Additional Materials:

Comments: All LAPS also have bibliographies and listings of Captioned Films that might be used with units.

Nationalism, Imperialism and Militarism available as one unit.  
 China, Communism, American Capitalism, The Labor Movement and  
 The Depression as available as individual units. Each unit used independently.

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Title: U. S. History Referral No. 2F2  
 (NRMCD only)

Name of School: The Austine School for the Deaf

Author(s): Richard Virkstis

Type of Materials: Supplementary Reading Analysis Packets

Curriculum Area: Social Studies

Instructional/Behavioral Objective: To aid and improve student's comprehension in reading.

Reading Level: 5-7

Interest Level: Junior-Senior

.....

### Description

General Description: Reading Analysis Packets which are designed to aid and improve the student's comprehension in reading. The packets are to be used as supplementary materials in conjunction with the "Science Research Associates series -- "America: Land of Change."

Example: There are six books in the series: Rights, Promise, Growth, People, Black and Power. All were used here though only partially in each case. Reading at the rate of four stories each week, students taking the course under a two-hour class period should complete all of the packets in nine weeks. This amount of time should also allow for sufficient class discussion of each story. Additional stories in the book are suggested at the beginning of each section and can be completed as individual class work or home work.

The choices of each of the six stories in each unit were made with a hope of maintaining a continuity of theme as well as an historical perspective.

The sequence of the tasks involved begins with demanding of the student an immediate response to statements referring to the main idea of each paragraph in the story. At the end of each story in Book I, the student must select a statement from a given list, that best describes the theme of the story. Prior to Book II a short presentation should be given on question types. This is an attempt at furthering the inquiry approach through the understanding and asking of different types of questions. Book II then deals with answering given questions as to type and selecting a theme, as well as picking out the main idea from each paragraph.

In Book III, the student is asked to continue selecting the main idea of each paragraph, sometimes writing in an idea, write and answer 5 questions of different types about the story, and select and answer questions

(continued on next page)

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Title: U. S. History (page two) Referral No. 2F2  
 (NRMCD only)

Name of School: The Austine School for the Deaf

Author(s): Richard Virkstis

Type of Materials: Supplementary Reading Analysis Packets

Curriculum Area: Social Studies

Instructional/Behavioral Objective: To aid and improve student's comprehension in reading.

Reading Level: 5-7

Interest Level: Junior-Senior

.....

Description

General Description:

Example: (continued from first page)

relating to the theme of the story. The students at this point have moved from selecting the given theme to learning to recognize questions that relate to the theme.

Book IV requires that the student select questions and statements that relate to the theme, write 5 different types of questions about the story, and write the main idea to each paragraph in the story.

The stories in Book V should not be read until the exercise on Writing the Theme has been read and discussed fully. The teacher may want to supply further examples to illustrate the differentiation of main idea and theme in stressing this important step. The students should now move from a process of selection of answers and statements to one of supplying answers and statements. The student should, by employing mentally those processes of analyzing each paragraph and page be able to arrive at some basic idea about the story which he can now communicate by writing out. Separating the theme from the main idea may prove difficult for some students, and the part-whole concept may need to be expanded in certain cases.

In book VI analysis of each paragraph is omitted. Students should now try to read through the entire story before attempting to comment on it. Their reading and question writing up to this point should raise questions and  
 (continued on next page)

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: U. S. History (page three) Referral No. 2F2  
 (NRMCD only)

Name of School: The Austine School for the Deaf.

Author(s): Richard Virkstis

Type of Materials: Supplementary Reading Analysis Packets

Curriculum Area: Social Studies

Instructional/Behavioral Objective: To aid and improve student's comprehension  
 in reading.

Reading Level: 5-7

Interest Level: Junior-Senior

.....

Description

General Description:

Example: (continued from second page)

reinforce this inquiry approach by writing out and answering questions in class discussions. A review of the main idea and theme relationship should not be made until the student is able to separate theme from main idea.

Answers to questions and statements are provided throughout the program to aid the students understanding. It is, however, understood that the student must accept the responsibility for keeping the answer sheet covered as he or she reads each story. Their success in their understanding and performance in this series depends upon this condition at the very least.

Recommended Additional Materials:

Comments: The six books making up "America: Land of Change" may be purchased from Science Research Associates. The Reading Analysis Packets cannot be used without these books.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Social Psychology Referral No. 2F3  
 (NRMCD only)

Name of School: Austine School for the Deaf

Author(s): Raymond P. Stevens

Type of Materials: Textbooks and Games

Curriculum Area: Social Studies

Instructional/Behavioral Objective: Objectives for each section listed separately below

Reading Level: 6th - 8th Grades

Interest Level: 10th Grade

.....

Description

General Description: Three sections: Socialization (20 pages), Adolescence (65 pages), Social Problems (112 pages).

Socialization - Textbook discussing the process of socialization, primary groups, values, language development, information obtained by the five senses, innate and learned behavior, and feral children (social isolation of infants). Fifteen assignments included.

Adolescence - A group program (group program) dealing with seven (7) major areas of adolescence: heterosexual relationships, intellectual development, new social experiences, career choice, establishing independence from parents, development of an ethical code and physical changes in the body. Students take turns leading each area of discussion, and acting as secretary of the group discussions. Both open-ended and specific questions are used in the program.

Social Problems - Deviant behavior and social disorganization are studied. Alcoholism, homosexuality, drug abuse, mental illness, and crime are the five examples of deviant behavior studies. A sociological description and a group program role-playing procedure are used for each area. Students must construct specific scenes to role-play friends or relatives of hypothetical persons studied. Social disorganization is studied through poverty and racism. No textbook is used; two games, Racism, and Ghetto or Cities are used as the text.

A bibliography is included for each section.

(Continued on next page)

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Title: Social Psychology (page two) Referral No. \_\_\_\_\_  
 (NRMCD only)

Name of School: Austine School for the Deaf

Author(s): Raymond P. Stevens

Type of Materials: Textbooks and Games

Curriculum Area: Social Studies

Instructional/Behavioral Objective: Objectives for each section listed separately below\*

Reading Level: 6th - 8th Grades

Interest Level: 10th Grade

.....

(Continued from page one)

Description

Example:

Maybe we better think about the "quiet lad" again. He wanted a date with a girl, right? O. K. group, read this carefully:

"The quiet lad wanted to date a girl so we know he was not interested in homosexual relationships. He was trying to establish a heterosexual relationship.

A heterosexual relationship is between:

- two girls
- two guys
- a guy and a chick
- a guy and his street buddies
- a girl and her man

Group Leader: 'Does everyone agree?'

Go on to next frame."

(Continued on next page)

Recommended Additional Materials:

Comments: As of March 20 the class has completed the first two sections: Socialization and Adolescence. Student response has been good. The group program has lasted longer than originally planned.

Units can be ordered separately, or as a whole.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Social Psychology (page three) Referral No. \_\_\_\_\_  
 \_\_\_\_\_ (NRMCD only)  
 Name of School: Austine School for the Deaf  
 Author(s): Raymond P. Stevens  
 Type of Materials: Textbooks and Games  
 Curriculum Area: Social Studies  
 Instructional/Behavioral Objective: Objectives for each section listed separately below\*  
 \_\_\_\_\_  
 Reading Level: 6th - 8th Grades  
 Interest Level: 10th Grade  
 \_\_\_\_\_

.....

Description

(Continued from page two)

\*Instructional/Behavioral Objectives for Each Section:

Socialization - To teach deaf children to think, conceptualize and use their imaginations regarding areas covered in this section.

Adolescence -

1. Name the seven areas in which young people experience problems during adolescence.
2. Name at least five examples of problems in each of the areas.
3. Write a definition for adolescence.
4. Write two descriptive paragraphs. One about male adolescence and one about female adolescence.
5. Name some solutions to the problems young people face during adolescence.

Social Problems - For each of the deviant behaviors studied there are behavioral objectives listed in the text.

Recommended Additional Materials:

Comments: Sections can be ordered separately, or as a whole.

As of March 20, the class has completed the first two sections: Socialization and Adolescence. Student response has been good. The group program has lasted longer than originally planned.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Basic Processes, Skills and Concepts in Social Studies Referral No. 2F4  
 (NRMCD only)  
 Name of School: The Austine School for the Deaf  
 Author(s): E. H. Igleheart  
 Type of Materials: Series of Nine Units in Booklet Form  
 Curriculum Area: Social Studies  
 Instructional/Behavioral Objective: See "Note"  
 Reading Level: 6.0 - 7.0  
 Interest Level: Freshman - Sophomore

### Description

General Description: A series of nine units, each containing examples, explanatory materials, references, and practice materials.

- I. Generalizations
- II. Induction
- III. Deduction
- IV. Inference
- V. Social Studies Areas
- VI. Concepts
- VII. Frame of Reference
- VIII. Caliertie: A Method of Investigating History
- IX. Discovering Historical Parallels

Note: Examples of objectives from each unit are as follows:

#### I. Generalizations:

1. Use a check list of eight characteristics to separate true generalizations from faulty ones.
2. Classify properly in a given group of mixed generalizations those which are substantive generalizations, sub-generalizations, methodological generalizations, and normative generalizations.

#### II. Induction:

1. Choose from several different series of numbers those which have a regular pattern and predict correctly the next additional number that fits each pattern.
2. Write three series of numbers, each series having a pattern that permits prediction.
3. Complete correctly any one missing part from simple four part analogies.

(Continued on next page)

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## INSTRUCTIONAL MATERIALS

Title: Basic Processes, Skills and Concepts in Social Studies (page two) Referral No. 2F4  
 (NRMCD only)

Name of School: The Austine School for the Deaf

Author(s): E. H. Igleheart

Type of Materials: Series of Nine Units in Booklet Form

Curriculum Area: Social Studies

Instructional/Behavioral Objective: See "Note"

Reading Level: 6.0 - 7.0

Interest Level: Freshman - Sophomore

## Description

Examples of objectives from each unit (continued from first page):

## III. Deduction:

1. Name the three parts of a syllogism in correct order.
2. Write a complete syllogism.
3. Use a check list of essential characteristics to find and explain errors in faulty syllogisms.

## IV. Inference:

1. Choose correctly from a mixed list of statements those which are characteristics of fact.
2. Choose correctly from a mixed list of statements those which are characteristics of inference.
3. Write a question involving a fact from a given body of information.

## V. Social Studies Areas:

1. Examine examples of special information and indicate which of the seven social studies areas each example belongs to.
2. Examine examples of special information and indicate which two or more of the seven social studies areas each example may belong to.

## VI. Concepts:

1. Write a clear simple definition that shows your understanding of the term "concept."
2. Examine some of the characteristics of a concept described in an example and properly label them critical or irrelevant.

## VII. Frame of Reference:

1. Write a statement that clearly explains the sources of a frame of reference.
2. Write a clear definition for the concept of a frame of reference.

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## INSTRUCTIONAL MATERIALS

Title: Basic Processes, Skills and Concepts in Social Studies (page three) Referral No. 2F4  
 (NRMCD only)

Name of School: The Austine School for the Deaf

Author(s): E. H. Igleheart

Type of Materials: Series of Nine Units in Booklet Form

Curriculum Area: Social Studies

Instructional/Behavioral Objective: See "Note"

Reading Level: 6.0 - 7.0

Interest Level: Freshman - sophomore

.....

## Description

Examples of objectives from each unit (continued from second page):

VIII. Caliertie: A Method of Investigating History:

Write a check-list of nine topics, or topical questions, that can guide a full investigation of any series of historical events.

IX. Discovering Historical Parallels:

1. Use the Caliertie frame of reference to collect, classify, and organize information about a given series of historical events.
2. Use inductive reasoning and the four point check list from Unit II to write generalizations about the information we collect with the Caliertie frame of reference.

Recommended Additional Materials:

Comments: Current testing indicates a need for additional simple examples and practice materials for students below 6.0 reading level.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

## INSTRUCTIONAL MATERIALS

Title: Indians of America Referral No. 2F5  
 (NRMCD only)

Name of School: Austine School for the Deaf

Author(s): Ida Hutchins

Type of Materials: Booklet

Curriculum Area: Social Studies

Instructional/Behavioral Objective: \_\_\_\_\_

Reading Level: Elementary

Interest Level: Lower First - Middle First

.....

Description

**General Description:** Short descriptions of each of the five geographical areas where Indians lived (Northeast, Southeast, Plains, Northwest, Southwest) and the homes they built in each area. Each description is followed by a worksheet.

**Example:** "Indians of the Plains"

Indians of the plains did not live in thick forests. There are small trees and bushes on the plains. They used wood from dead trees. The wood was from the north. It came down the rivers.

There are no mountains on the plains. There are small hills. In the summer the ground is covered with high grass. In the winter, the ground is covered with snow.

**ACTIVITY:** Construct the geographical environment of the Indians of the Plains.

1. What will we build?

\_\_\_\_\_

\_\_\_\_\_

2. What materials do we need?

\_\_\_\_\_

\_\_\_\_\_

(continued on next page)

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## INSTRUCTIONAL MATERIALS

Title: Indians of America (page two) Referral No. 2F5  
 (NRMCD only)

Name of School: Austine School for the Deaf

Author(s): Ida Hutchins

Type of Materials: Booklet

Curriculum Area: Social Studies

Instructional/Behavioral Objective: \_\_\_\_\_

Reading Level: Elementary

Interest Level: Lower First - Middle First

## Description

Example: (continued from first page)

## WORKSHEET

## "INDIANS OF THE PLAINS"

1. The Indians of the Plains lived in the Northeast. / yes no
2. The Plains have small trees. yes no
3. The Plains Indians live on mountains. yes no
4. There are small hills on the plains. yes no
5. In the summer the ground is covered with high \_\_\_\_\_.
6. In winter the ground is covered with \_\_\_\_\_.

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of  
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INSTRUCTIONAL MATERIALS

Title: Magnetized Vocabulary Game Referral No. 141  
 (NRMCD only)  
 Name of School: American School for the Deaf  
 Author(s): \_\_\_\_\_  
 Type of Materials: Envelope, magnet, pictures, vocabulary cards - IDEA  
 Curriculum Area: Reading Vocabulary - Number Concepts  
 Instructional/Behavioral Objective: To be able to match word with picture  
 Reading Level: Kindergarten - Pre-prep  
 Interest Level: \_\_\_\_\_

Description

General Description: Vocabulary pictures pasted on outside of envelope (9 x 12) containing piece of metal the same size as envelope. Child places vocabulary card on envelope with magnet under the correct picture. The same piece of metal can be inserted in many different envelopes.

Example:

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Footprint Game Referral No. 112  
 (NRMCD only)

Name of School: American School for the Deaf

Author(s): \_\_\_\_\_

Type of Materials: Idea; this is a description of a material not available through the  
exchange program.

Curriculum Area: Coordination and Reading

Instructional/Behavioral Objective: Be able to say words written on footprints.

Reading Level: \_\_\_\_\_

Interest Level: Kindergarten

.....

Description

General Description: Trace footprints on an old discarded window shade, on color for the left foot and another color for the right foot. Print a word on each footprint. To take a step you must read the word. The footsteps can go in different directions or cross over.

Example:



Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Experiential Sequence Pictures Referral No. 143  
(NRMCD only)

Name of School: American School for the Deaf

Author(s): \_\_\_\_\_

Type of Materials: Idea; this is a description of a material not available through the  
Curricular Area: Reading, Language, Social Studies, Cooking, etc. exchange program.

Instructional/Behavioral Objective: To sequence illustrations in a logical order.

Grade Level: \_\_\_\_\_

Interest Level: Kindergarten

Description

General Description: Draw pictures illustrating a class experience, like baking a gingerbread boy. Put them in sequence. Make a book. Match sentences to the pictures. Copy on ditto masters for individual take-home books. Dry mount and laminate a set to use in the classroom.

Example:

Recommended Additional Materials:

Comments:

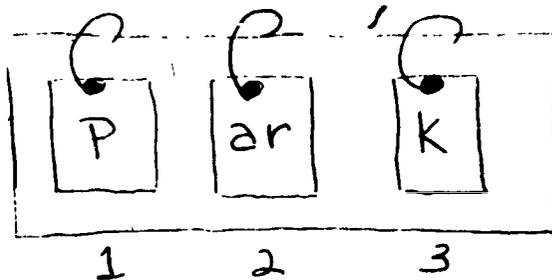
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Title: Flip Cards Referral No. 114  
 (NRMCD only)  
 Name of School: American School for the Deaf  
 Author(s): \_\_\_\_\_  
 Type of Materials: Idea  
 Curriculum Area: Speech  
 Instructional/Behavioral Objective: To recognize consonants and vowels and be able to say them correctly.  
 Reading Level: \_\_\_\_\_  
 Interest Level: Kindergarten - Pre-prep

Description

General Description: Flip cards: 1 consonant, 2 vowels, 3 consonants -- can be flipped for a variety of combinations. Can be made small with stiff cardboard backing or large to stand up with a wood support.

Example:



With wood support:



Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

## INSTRUCTIONAL MATERIALS

Title: Arithmetic Skills Referral No. 1L5  
 (NRMCD only)  
 Name of School: American School for the Deaf  
 Author(s): \_\_\_\_\_  
 Type of Materials: Idea; this is a description of a material not available through the  
 Curriculum Area: \_\_\_\_\_ exchange program.  
 Instructional/Behavioral Objective: To count  
 Reading Level: Elementary  
 Interest Level: Elementary

## Description

General Description: Two plastic bottles about the size of bleach bottles, one slightly smaller than the other (often different brands will vary slightly in size)

Cut bottles:



Cut circles in outer bottle:



Write numbers on inner bottle corresponding to a different hole. When the inner bottle is rotated a different number will appear.

The child can clip on the correct number of clothespins on the rim of the two bottles.

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

INSTRUCTIONAL MATERIALS

Title: Weather Wheel

Referral No. 1L6

(NRMCD only)

Name of School: American School for the Deaf

Author(s): \_\_\_\_\_

Type of Materials: Idea; this is a description of a material not available through the  
Curriculum Area: \_\_\_\_\_ exchange program.

Instructional/Behavioral Objective: To identify two prevailing weather conditions  
existing at the same time.

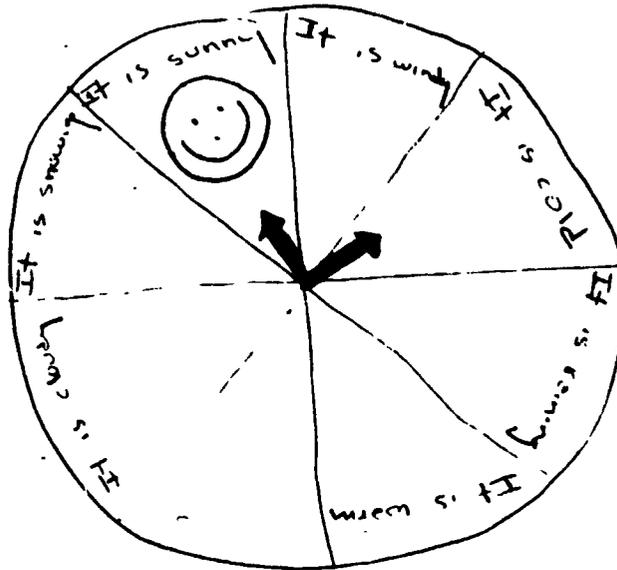
Reading Level: \_\_\_\_\_

Interest Level: \_\_\_\_\_

Description

General Description:

Example:



Each section has a picture appropriate to the weather. There are two arrows attached through to the other side so it is possible to show two prevailing weather conditions, i.e. it is sunny and cold.

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of  
Massachusetts, Amherst, Massachusetts 01002

INSTRUCTIONAL MATERIALS

Title: Perpetual Calendar Referral No. 117

(NRMCD only)

Name of School: American School for the Deaf

Author(s): \_\_\_\_\_

Type of Materials: Idea; this is a description of a material not available through the

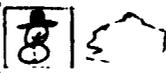
Curriculum Area: \_\_\_\_\_ exchange program.

Instructional/Behavioral Objective: To teach calendar skills

Reading Level: Pre-primary to Elementary

Interest Level: Pre-primary to Elementary

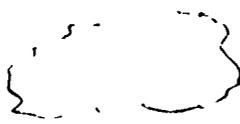
Description

*						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						

Each month has a strip for the top (see asterisk), i.e. January. This strip is laminated and may easily be taped on top.

Each month has date squares, with a picture appropriate to the month - color coordinated with the month strip -   These are also laminated.

Finally, there are laminated suns, clouds, and umbrellas -



A given square would look like the above (two weather symbols may be used if appropriate). (Continued on next page)

INSTRUCTIONAL MATERIALS

Title: Perpetual Calendar (page two) Referral No. 1L7  
 (NRMCD only)

Name of School: American School for the Deaf

Author(s): \_\_\_\_\_

Type of Materials: Idea; this is a description of a material not available through the exchange program.

Curriculum Area: \_\_\_\_\_

Instructional/Behavioral Objective: To teach calendar skills

Reading Level: Pre-primary to Elementary

Interest Level: Pre-primary to Elementary

.....

Description

(Continued from page one):

The month date squares are:

- September = apples
  - October = pumpkins
  - November = turkeys
  - December = wreathes; December 25 = Santa Claus
  - January = snowmen
  - February = valentines
  - March = kites
  - April = bunnies
  - May = flowers
  - June = beach balls
- } These can be reversed if Easter is in March.

Recommended Additional Materials:

Comments:

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

INSTRUCTIONAL MATERIALS

Title: Language Referral No. 541  
 (NRMCD only)

Name of School: Woods Schools

Author(s): T. R. Shaffer

Type of Materials: Idea

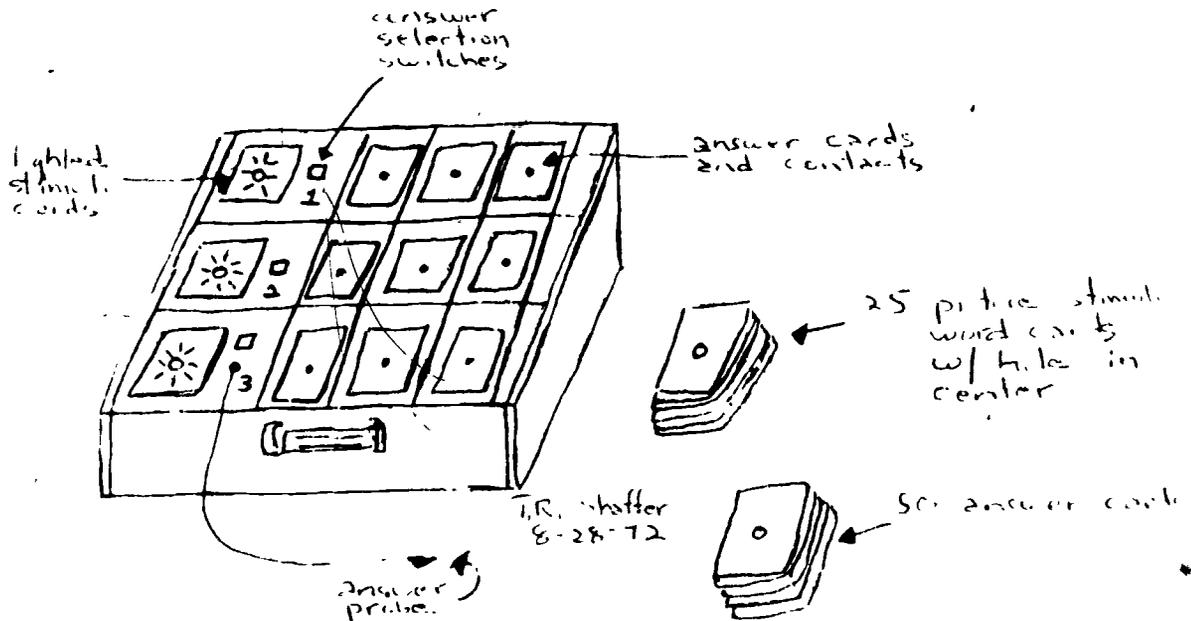
Curriculum Area: Visual Association (Matching Stimuli)

Instructional/Behavioral Objective: \_\_\_\_\_

Grade Level: Primary

Description

General Description: Consists of: One lighted board mounted in attache case, operates on 12V DC. Has mini bulbs for 3 stimuli cards which are placed over bulb through hole. There are contacts for each of 3 cards, one of which matches the stimuli. Wire probe with metal tip is touched to each answer card. When correct answer is touched, stimuli light is turned on. Each answer row has a three position switch to be operated by teacher whereby the correct answer can be changed as desired. Includes 25 3 x 3 1/2 noun cards of common things such as ball, airplane, telephone, bell apple, etc. Sign for each can be taught if desired and cards have the word only on reverse side for higher level response matching



Recommended Additional Materials:

Comments: Copyright pending.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

Title: Simple Sketching and Drawing Referral No. 6M1  
 (NRMCD only)

Name of School: Indiana University

Author(s): \_\_\_\_\_

Type of Materials: Booklet

Curriculum Area: Art

Instructional/Behavioral Objective: To aid the teacher in developing a maximum amount of skill in simple sketching

Reading Level: For teacher use

Interest Level: For teacher use

.....

### Description

General Description: Booklet designed to help teachers learn basic skills of simple drawing and sketching. Consists of exercises presented in an easy to follow sequence. Emerged as a very important visual aid for teachers of the deaf.

Example: "Simple sketching techniques can be useful in the classroom. Children enjoy seeing the teacher draw in front of them. Sketching simple figures on the blackboard will be an effective attention getter. Drawings may be a good way to introduce children to new material or a way to make old material continue to be interesting. Representing specific children in the drawings help to make the "teaching-learning" experience more individualized and more meaningful. Learning can be fun -- simple sketching in your classroom can help make it fun. Begin simple sketching by learning to isolate the basic geometric form which exists in all objects. A tree might be sketched using many lines and a complicated design. But a child would recognize a tree if we reduced it to a basic geometric form: a circle, triangle, or oval. Train your eyes to simplify even complex objects, then represent them as simple figures. ALL things in NATURE can be reduced to three basic shapes, CIRCLE, SQUARE, and TRIANGLE."

Recommended Additional Materials:

Comments: Illustrations throughout text.

For preview copy contact: Mrs. Karen Thomas, NRMCD, Thompson Hall, University of Massachusetts, Amherst, Massachusetts 01002

## TEACHER TRAINING

The Florida Teacher Education Modules, Panhandle Educational Co-operative  
Self contained modules aimed at specific teaching skills or specific  
concepts fundamental to teaching. Each mod details all materials and  
directions needed to accomplish the stated set of observable goals. May  
be used individually or by a group.

Cluster I - Teacher Aide Training  
(elementary level)

## Cluster I, module 1

Title: "Defining the Role of the Teacher Aide"

Description: Deals with the whole concept of teacher aides, Classification  
of tasks, clarification of roles and responsibilities.

## Cluster I, module 2

Title: "Recognizing How Children Develop"

Materials: (Vimcet filmstrips-tape program "Discipline") (not available at NRMCD)

Description: Designed to help the teacher aide work more effectively with  
pupils by applying positive techniques of behavior modification in  
relation to the child's patterns of human growth and development.  
(may be used for teacher)

## Cluster I, module 3

Title: "Promoting Appropriate Language Patterns"

Materials: English Made Simple, Doubleday (not available at NRMCD)Description: Designed to insure a level of competency in five selected  
language skills in spelling, capitalization, punctuation usage,  
and sentence structure.

## Cluster I, module 4

Title: "Utilizing Phonics and Word Attack Skills"

Materials: different texts (not available at NRMCD)

Description: Designed to help the teacher aide master certain relation-  
ships between the sounds of English and the Language in written  
form which are used in teaching phonics and word attack at the  
elementary level. Practice materials are produced.

## Cluster I, module 5

Title: "Demonstrating Legible Handwriting"

Materials: (texts not available at NRMCD)

Description: Designed to help the teacher aide demonstrate proficiency in  
correct letter, word, and sentence formation in manuscript and  
cursive writing on the chalkboard on paper and on chart paper.

## Cluster I, module 6

Title: "Developing Map and Globe Skills"

Materials: (Books and filmstrips not available through NRMCD)

Description: Designed to insure a level of competency in the areas of  
latitude and longitude, map scale and map symbols.

## Cluster I, module 7

Title: "Using the Library"

Materials: tape, not available at NRMCD

**Description:** Designed to help the teacher aide use the library more effectively and to become more aware of the materials and equipment in the media center. Emphasized skills with the card catalogue, and the Dewey Decimal System. (For teachers with minimum experience in these areas.)

Cluster I, module 8

**Title:** "Constructing a Resource File"

**Materials:** Workbook

**Description:** Teaches how to devise a format for recording information on resources.

Cluster I, module 9

**Title:** "Preparing the Physical environment for Learning"

**Materials:** most included in package

**Description:** Designed to help the teacher recognize and arrange the physical elements of the classroom to improve the comfort and safety of pupils as well as to implement instructional plans for their intellectual social and emotional development.

Cluster I, module 10

**Title:** Completing State and County Forms (for teacher aides in Florida)

### Cluster II - Planning Skills for Teachers

Cluster II, module 2

**Title:** "The Input Chain or How to Write an Activity"

**Materials:** Filmstrip, reel to reel audio tape, workbook

**Description:** Focuses on the instructional technology approach in preparing for the learning activity by dividing the activity into six discreet links.

Cluster II, module 3

**Title:** Selecting an Instructional Mode

**Materials:** workbook, filmstrip

**Description:** Designed to help teachers select and utilize appropriate large group, small group and independent modes of instruction in planning and managing activities for individualized instruction.

Cluster II, module 7

**Title:** Developing an Instructional Package

**Materials:** not available from NRMCD

**Description:** Designed to help teacher design an instructional package for classroom use which provide individualized learning experiences for the student.

Basic Processes, Skills, and Concepts in Social Studies, Eliot H. Inglehart,  
The Austine School for the Deaf, Brattleboro, Vermont, 1971

Written to be used directly by the student, this guide provides exposition and exercises designed to take the student through a sequential program in social studies. The guide focuses on nine units: generalizations, induction, deduction, inference, social studies areas, concepts, frame of reference, the Caliertie method of historical investigation and discovery of historical concepts. (Requires advanced language ability)

### Cluster III - Presentation Skills for Teachers

#### Cluster III, module 3

Title: Using Planned Repetition

Materials: Workbook, video tape equipment

Description: Designed to make teacher aware of specific techniques for planning and controlling repetition in the teacher-learning situation and to give the teacher practice in using such techniques.

#### Cluster III, module 4

Title: Establishing Appropriate Frame of Reference

Materials: Workbook, videotape equipment.

Description: Designed to enable the teacher to analyze a classroom topic for the purpose of identifying appropriate frame of reference and to apply the conclusions of the analysis to the election and application of frames of reference to the learning situation.

#### Cluster III, module 5

Title: Increasing Participation

Materials: Filmstrip, and reel to reel audio tape, Manual

Description: Describes techniques for using verbal and non-verbal teacher behavior to encourage verbal and non-verbal participation of students within the various interaction patterns in the classroom.

#### Cluster III, module 6

Title: What is Feedback?

Materials: Filmstrip, and reel to reel audio tape, manual

Description: Describes and develops the general concept of Feedback. Provides means for stimulating and encouraging student feedback. Includes an observational instrument for assessing student feedback behaviors.

### Cluster IV - Classroom Procedures

#### Cluster IV, module 2

Title: Monitoring In-Class Assignments

Materials: Workbook

Description: Teaches a set of monitoring skills designed to enhance the student's ability to achieve the objectives of in-class assignments.

#### Cluster IV, module 5

Title: Reinforcement

Materials: Workbook

Description: Designed to give teachers a working familiarity with positive and negative reinforcements, with the process of extinction and with schedules of reinforcement.

#### Cluster IV, module 6

Title: Classroom Management

Materials: Workbook

Description: Designed to help teachers acquire information and skills for detecting non-attending behavior and changing that behavior to attending behavior.

### Cluster V - Questioning Skills

Cluster V, module 1, parts 1 and 2

Title: Question Upgrading Information Package

Description: Part 1: Designed to help the teacher ask better questions in the classroom. Using the model of the Florida taxonomy the filmstrip attempts to help the teacher recognize and use higher order questions in order to stimulate critical thinking among students.  
Part 2: A detailed discussion of the seven levels of questions in the Florida taxonomy. Each level is defined and examples are given. (no filmstrip)

Cluster V, module 2

Title: Using Higher Order Questions

Materials: Tape recorder and blank tape, workbook

Description: Through this module the trainee can demonstrate his ability to use the seven categories of high order questions.

Cluster V, module 3

Title: Inducing Student Initiated Questions

Materials: workbook

Description: Designed to give the teacher practice in effectively inducing student-initiated questions in the classroom.

### Cluster VI - Assessment

Cluster VI, module 1

Title: Evaluating Learning and Instruction

Materials: reel to reel audio tape, workbook

Description: Provides practice in designing general mastery strategy and pre- and post-assessment measures. Provides practice in interpreting norm-referenced tests, designing and interpreting criterion-referenced tests which measure mastery of specific learning tasks.

Cluster VI, module 2

Title: The Diagnostic Arithmetic Test

Materials: Filmstrip and reel to reel audio tape, workbook

Description: Purpose of tape is to orient the inexperienced and the veteran teacher in the use of the arithmetic diagnostic test and the prescription of reinforcement material.

Cluster VI, module 3

Title: Practice in Recording Reading Errors

Materials: reel to reel audio tape, workbook

Description: Five reading selections from the Harper-Row reading series designed to give the teacher practice in using symbols to record reading errors. Selections are read by grade 5 pupils.

Cluster VIII - Introduction to a Diagnosis-Prescription System of Staff Development

Cluster VIII, module 1

Title: Assessing the System

Materials: Filmstrip, and reel to reel audio tape, workbook

Description: A humorous presentation of the idea that old Teacher Evaluation forms are unsatisfactory. A performance-based standard observation system which would diagnose a teacher's weak points and prescribe a remedy is advocated.

Cluster VIII, module 2

Title: Diagnosis Prescription System for Staff Development

Materials: Video tapes available from Leon County, Florida

Description: Teaches how to use diagnosis prescription system for staff evaluation.

Designing Effective Instruction, Units 1-5, General Programmed Instruction Materials: Filmstrips, audio cassettes, monitor's manual, script book participants workbook, initial tests and final examination.

- Description: A complete programmed instruction package designed to teach better instruction through the principles of instructional technology.
- Unit 1: Introduces the principles of instructional technology and discusses the instructional technology to the design of effective instruction.
- Unit 2: Differentiates between educational goals and objectives. Defines objectives in terms of performance. Explains the difference between affective behavioral objectives.
- Unit 3: Gives training in writing behavioral objectives
- Unit 4: Treats discrimination objective, verbal objectives and motor performance objectives.
- Unit 5: Describes the criterion test, its production and use.

Individualized Instruction Kit, Associate for Educational Communications and Technology.

Materials: 6 filmstrips and reel to reel audio tapes, 6 script booklets, 1 administrator's manual, 46 case studies

Description: A straightforward presentation by filmstrips and audio tapes intended to familiarize the teacher with the concept and the workings of individualized instruction. (not programmed of self-directed)

- Film 1: Individualized Instruction: Its Nature and Effects  
 Film 2: Individualized Instruction: Its Objectives and Evaluation Procedures  
 Film 3: Individualized Instruction: Diagnostic and Instructional Procedures.  
 Film 4: Individualized Instruction: Materials and Their Use  
 Film 5: Individualized Instruction: Its Problems and Some Solutions  
 Film 6: Individualized Instruction: Recommendations for Implementation

Using Individualized Learning Procedures in Teaching, Basic Skills Films, (filmstrip)

Describes individualized instruction through audio-visual materials and self-instruction devices, its advantages and applications.

Vimcet Filmstrip-tape Programs

Educational Objectives

Materials: filmstrip, audio cassette

Description: Designed to familiarize teacher with concept of behavioral objectives, making him more favorably disposed toward them and enabling him to produce them.

Humanizing Educational Objectives

Materials: filmstrip and audio cassette

Description: Designed to counteract argument that the use of objectives implies mechanism and memorization.

Perceived Purpose

Materials: filmstrip and audio cassette

Description: Designed to increase the probability that a teacher, when planning instructional sequences, will include some procedures designed to increase the learner's perception of the instructor's purpose.

Knowledge of Objectives

Materials: filmstrip and audio cassette

Description: Deals with the principle of knowledge of results, i.e. the instructional technique of providing the learner with immediate feedback with the adequacy of the responses he makes during an instructional activity.

Analyzing Learning Outcomes

Materials: filmstrip and audio cassette

Description: In this program techniques of task analysis are applied to instructional objectives. Practice is provided so that an operational objective can be analyzed into sub-tasks, designated as either entry or en route skills.

Evaluation

Materials: filmstrip and audio cassette

Description: Teaches the preparation of both formal and informal pre-assessment procedures, of test items measuring certain objectives and of making inferences from test data. Advocates evaluation of teacher effectiveness based on student achievement.

Appropriate Practice

Materials: filmstrip and audio cassette

Description: The program focuses on two forms of learner behavior (equivalent and analagous practice) which permit students to practice the behavior called for in the instructional objective. Pre-requisite tasks and behavior irrelevant to the objectives are also treated.

Instructional Supervision: A Criterion Referenced Strategy

Materials: filmstrip and audio cassette

Description: Examines an approach to supervision wherein attention is directed toward the consequences of instruction rather than the means used during instruction. Focuses on function and activities of supervisor who uses criterion-referenced strategy.

How Does a Picture Mean? A Kodak educational aid

Materials: filmstrip, teacher guide

Description: Introduces the concept of "visual writing," the communication of an idea or feeling through the visual elements in a photograph. Compares the visual elements in a photographic statement to the syntactical elements in a verbal statement showing the relation of verbal language to reality. Teaches other aspects of visual information in a photo.

Structuring the Classroom for Success, Instructional Center for Special Education, University of Southern California

Materials: 6 filmstrips, 3 audio cassettes, programmed guide book

Description: An auto-instructional media package blending principles from the behavior management field and the open classroom concept which demonstrates methods of creating, structuring and maintaining a productive learning environment. The program advocates use of activity centers, individualized instruction, and the techniques of behavior management.

Film 1: Overview

Film 2: Room Environment

Film 3: Creating Activity Centers

Film 4: Behavior Management Principles

Film 5: Behavior Management in the Classroom

Film 6: Individualizing Instruction

Behavior Management in the Classroom, Behavior Products

Materials: 30 overhead transparencies, audio cassette, text

Description: Designed as a device to aid in training teachers to manage more effectively the behaviors of students in the classroom through the principles of behavior management. Compares traditional and behavioral approaches and 1/2 covers basic techniques of behavior modification.

Behavior Modification, SEIMC, University of Wisconsin

Materials: guide to program, audio cassette, various supplementary material

Description: Self-described as a "humanistic approach to behavior modification which respects the individuality of each child and seeks to promote self-directed learning and happy pro-social behavior. Designed to help the teacher identify and describe desirable behavior, record it, and modify it.

Defining Objectives for Six Varieties of Learning, SEIMC, U. Wisconsin

Materials: audio cassette, teacher guide, various supplementary material

Description: Designed to teach the definition of behavioral objectives and to give the teacher practice in writing specific objectives in specific subject matter and evaluation for student performance with reference to those objectives.

Folders of written materials from various sources collected by NRMCD;

Subjects: 1. Community resources  
2. Behavior Management  
3. "A Programmer looks at the Education of the Hearing Impaired", Sivasailan Thiagarajan, Indiana University.

Non-Instructional Management, "A Self-Directed Learning Program," The Research and Development Center for Teacher Education, University of Texas at Austin (for specific teacher training) (observer teacher and co-operating teacher)

Description: Designed for the teacher facing his initial classroom experience, this self-directed learning program brings to the teacher's attention pertinent non-instructional aspects of the elementary school facility and organization which

contribute to successful instruction. It aids the teacher in developing a repertoire of techniques and procedures which give competence in classroom and management. (Companion books for the observer teacher and the co-operating teacher.)

Systematic and Objective Analysis of Instruction, Training Manual, Northwest Regional Education Laboratory, Portland, Oregon (Training Manual and participant manuals) 1972.

(for workshop (experienced leader required))

Description: A. Inclusive self-directed program designed to improve classroom teaching, based on research and empirical knowledge about interpersonal relations, supervisory systems and teaching strategies. The program incorporates information from various approaches to supervision into a rationale for systematically improving instruction and suggests a number of methods which can be used by teachers as a basis for identifying and developing alternative teaching behaviors.

Development of Higher Level Thinking Abilities, Commercial- Educational Distributing Services, 1972.

(for workshop) (leader necessary, experience helpful, but not required)

Description: Designed for instructional leaders who have as their responsibility the translation and application of current research on the "thinking process" to an implemented program of instruction for the classroom. Within the training program, participants are provided with skills to apply the specific instructional process to a specific structure of knowledge and are required to program an instructional sequence which demonstrates these skills. The goal of the program is that the teacher so trained will be able to produce autonomous learners.

Examination, Evaluation, and Use of Instructional Materials, SEIMC, (Instructor's and Students' Manuals)

(for workshop) (instructor trained in methods of educating the hand-icapped required)

Description: The course is primarily designed to provide the student with sufficient background in instructional materials and media to permit the organization of a classroom oriented toward individualized instruction. The course specifically emphasizes an awareness of and skill in selecting and using existing media materials.

Teacher-Parent Communication Program, SEIMC, University of Kansas  
(for workshop) (trained leader required)

Materials: Guide book, transparencies (Film can be ordered)

Description: The Parent-Teacher Communication Program is based on a co-operative agreement between student, parents, and teacher to help the student correct unacceptable behavior. The workshop is aimed at familiarizing individual teachers with the program as well as making it possible for them to carry the program back to their schools.

## PRODUCTION AND USE OF MEDIA MATERIALS

Set of audio cassettes and filmstrips produced by the Special Educational Resource Center, Bureau of Pupil Personnel/Special Education Services, Connecticut State Board of Education.

### How to Make Overhead Transparencies

**Materials:** Filmstrip, audio cassette, script

**Description:** Describes the purpose and use of overhead transparencies. Describes transparencies, materials needed and the lifting and heat transfer methods of production.

### How to Make 35mm Slides

**Materials:** Filmstrip, audio cassette, script

**Description:** Describes uses and advantages of 35mm slide projector. Describes methods of preparing slides with and without a 35 mm camera

### How to Make a Black and White Filmstrip

**Materials:** Filmstrip, audio cassette, script

**Description:** Describes the production of a student conceived and student made black and white filmstrip in an elementary classroom.

Set of springbound loose leaf programs with which the user may teach himself to use media materials. Produced by Northeast Regional Media Center for the Deaf.

- Subjects:**
- 1) Mounting with Rubber Cement
  - 2) Dry-Mounting on Cardboard
  - 3) Making Diazo Transparencies
  - 4) Using the Overhead Projector
  - 5) Using a Kodak Ektagraphic AF Slide Projector
  - 6) Using a Kodak Instamatic M109 8mm Super 8 Projector
  - 7) Using a 16mm Bell and Howell Specialist DilmoSound Autoload Projector

Designing Good Slides, U.S. Dept. of Health, Education and Welfare, 1971  
A self-directed learning booklet on the preparation of slides, for those who have knowledge of the use of slides as visual aids. Focuses on the preparation of copy, photographs and slides.

Basic Educational Graphics, Educational Media Laboratories, 1967  
 Materials: 4 filmstrips and record programs, instructor's manual,  
 students' manuals

Description: A thorough program dealing with the descriptions, uses  
 and abuses of basic graphics procedures used in teaching.  
 including: lettering, dry-mounting, laminating, taping,  
 composition and storage.

The Overhead Projection Series, Educational Media Laboratories  
 Materials: 4 filmstrips and record programs, instructor's manual,  
 students' manual

Description: The manual is concerned with the effective utilization  
 of the overhead projector as a versatile and flexible teaching  
 device. It explains the use of overhead projection and the  
 planning and production of the projectual through both simple  
 and sophisticated techniques.

Perspective I, Library Filmstrip Center (#16)

Materials: Filmstrip, audio cassette

Description: Deals with the concept of perspective in teaching basic  
 free-hand technique.

Multimedia Center, Library Filmstrip Center (#17)

Materials: filmstrip, audio cassette

Description: The multimedia center and audio-visual materials are  
 described. Interfiling of print and non-print materials  
 in the card catalogue are suggested.

Sequencing Visual Perception Materials Manual, University of Southern  
 California

Designed primarily for teacher-information, the model presented outlines  
 the structure of the task sequence and provides a list of materials  
 appropriate for practice at each task.

BFA Educational Media ProgramsBulletin Boards and Display

Materials: 2 captioned filmstrips

Description: The filmstrips show by using a using drawings and examples of good bulletin board design how the bulletin board can be made to function as an effective educational tool. Examples of various types of background materials, fastening devices and layouts are shown. Principles of good design are emphasized.

Chalkboards and Flannel Boards

Materials: 4 captioned filmstrips

Description: Part I - Chalkboard Care  
Part II - Chalkboard Use  
Part III - Flannel Board Construction  
Part IV - Flannel Board Use

Teaching with Still Pictures

Materials: filmstrip

Description: Deals with still pictures in various forms emphasizes how still pictures increase learning, how children look at pictures, how to choose the right picture, and how to use pictures in teaching. (For teacher with no knowledge in the area.)

Using Filmstrips in Teaching

Materials: filmstrips

Description: Defines and describes the nature of a filmstrip, their value as a teacher aid and methods of teaching with filmstrips. For teacher with no knowledge of the filmstrip.

Folders of written materials on media use and production from various sources. Collected by NRMCD.

- Titles:
- 1) Multimedia systems and instructional packages
  - 2) Motion Pictures
  - 3) Mounting and Lamenating
  - 4) Drawing, Lettering, and Silk Screening
  - 5) Models, Maps and Globes
  - 6) A-V Equipment Operation
  - 7) Technical Background: Projection Screens and Optical Systems
  - 8) Selection and Evaluation Media
  - 9) Physical Facilities and Space Consideration for Media Use
  - 10) Audio Materials
  - 11) Background of Media Systems and Teaching
  - 12) Picture Graphs, and Other Display Materials
  - 13) Photography and Photocopy Equipment and Techniques
  - 14) Still Projection: Slides, Filmstrips, Opaque and overhead projection
  - 15) Transparencies for Overhead projection
  - 16) Games, Simulation and Computers
  - 17) Television

## CURRICULUM GUIDES

Apollo Elementary School Curriculum Guides (Bossier Parish Educational Resource Center, Benton, Louisiana, 1970)

A series of inclusive detailed curriculum guides for the 1st through 6th year of school. In each curriculum guide extensive lists of correlative mediated materials, workbooks and textbooks are suggested for work at each level. Check lists are provided for gauging student progress.

Language Arts (Books I and II)

A sequential curriculum for teaching language arts. The program recognizes a continuum of language skills in the areas of listening, oral and written expression, spelling and reading. Skills are taught not by level or age, but by the stage of need for each child. Levels of proficiency are defined in behavioral terms.

Social Studies

A sequential curriculum for teaching social studies.

Basic Skills Division: Grades 1-3

The program is designed to develop a foundation of concepts and understandings of community life in children during the first 3 years of elementary school. Relationships in home, school and expanded community are explored with emphasis on relating content to contemporary social needs.

Applied Skills Division: Grades 4-6

The program treats economic systems, forms of government, history of nations and the effects of geographic factors upon man, with emphasis on promoting the recognition of the importance of conservation, the worth and dignity of the individual and the rights and duties of democratic citizenship.

Music

A curriculum designed to expose students to all aspects of music. Based on the Prentice-Hall Growing With Music, Book I-IV, the program suggests records and other educational aids for use in conjunction with these books and in activities such as singing, listening, rhythmic and creative activities, music reading and composition and the use of rhythm and tonal instruments.

Art

A curriculum based on the assumption that art is a means of expression and an avenue of creativity. The program suggests activities for first through fifth grade pupils in the areas of drawing and painting, cutting and pasting, printing, construction and modelling, and art appreciation. It further delineates what kinds of behavior pupils at different ages should develop in art.

### Science

A sequential curriculum designed to develop the orderly process of observation, experimentation, discovery and the exchange of knowledge and experience. The program incorporates three types of units: "Basic Skills Units" are organized in relation to stated behavioral objectives. "Depth Units" are child-oriented non-descriptive exploration sessions. "Text Units" are teacher-oriented information gathering sessions.

### Mathematics

A sequential curriculum designed to develop the ability to perform number operations with skill and understanding. The program emphasizes the importance of planned proficiency-practice once the learner understands the step in the process he is performing.

Crotched Mountain School for the Deaf, Greenfield, New Hampshire. Robert Parsons, Ed.M., Year Levels 4-7.

A guide to the teaching of sentence patterns using the five patterns evolved at the Rhode Island School for the Deaf based on structural and transformational grammar. The guide explains the patterns and talks the teacher through each logical step in teaching them. It makes suggestions for activities, but does not provide specific exercises.

Workshop for Improving Instruction for the Deaf, 1966  
Mathematics, Training Manual, Grades K-3, 4-6, Junior High, High School

A series of academic guides in outline form based on the "new" mathematics. Sample units are provided which suggest necessary procedures, references and materials for direct classroom instruction of the outlined concepts. Criteria for evaluation and also correlated concepts in speechreading and language are suggested.

Workshop for Improving Instruction for the Deaf, 1964.  
Science, Training Manual, Grades K-9

Grades K-3: Nature Study and Basic Science  
 4-8: General Science  
 9: Earth Science

The curriculum outlines are designed thus:

- A. Overviews: highlights of each subject intended to give or picture of the entire science program
- B. Outlines: each subject and grade given in detail to aid in curriculum development
- C. Sample Units: one phase or unit of work taken from the outline developed or actual implementation by the teacher.

## MISCELLANEOUS

Planning for the Evaluation of Special Education Programs, University of Nebraska

Materials: 35mm slides, reel to reel audio tape

Description: Introduces various ideas about evaluation of special education programs. The need for objectives, ways of collecting data, budget, using consultation, and reporting results are also discussed.

Teacher Student Interaction, Russell Film Laboratories, 16mm film

A student debate on drugs moderated by a teacher. May be used as an observation film. Shows poor student teacher interaction.

Total Communication Series, Southern Regional Media Center for the Deaf, Tennessee

Instructional program series designed especially for hearing parents of young hearing-impaired children. This series introduces several unique features: words/sentences simultaneously spoken, signed, finger-spelled, captioned, and illustrated by graphics; instructions for both left- and right-handed viewers; and captivating drawings which depict Alaska and its people

The series of 27 twenty-minute programs was produced by the Early Education Assistance Grand Program for Preschool Hearing Impaired (Dr. Helen D. Bierne, Project Director) and funded by Media Services and Captioned Films, BEH/USOE. Keith Tolson is the instructor.

## Sex Education Resources

The following bibliographies and lists were compiled as part of a manual entitled "Sex Education Resources for the Hearing Impaired". (Developed by Northeast Regional Media Center for the Deaf, August, 1974.) This manual was designed to help sex education teachers working with the deaf find media materials, print materials and other resources. The information appears in six sections: I. An Annotated Bibliography of Materials previewed at Northeast Regional Media Center for the Deaf; II. Captioned Films on Sex Education; III. Media used for Sex Education of various Schools for the Deaf; IV. A Bibliography in sex education; V. Resources of People and Places; VI. Distributors, Producers, and Libraries where materials can be obtained.

### I - AN ANNOTATED BIBLIOGRAPHY OF PREVIEWED MATERIALS: FILMS, FILMSTRIPS, SLIDES AND TRANSPARENCIES

Appraised for effectiveness with the Hearing Impaired.  
Asterisks (\*) note especially excellent and/or adaptable materials.  
Within each medium, selections appear alphabetically by title.

Age recommendations are marked as follows:

PS	Preschool (ages 3-5)	SH	Senior High (ages 15-18)
EP	Early Primary (ages 6-8)	C	College
LP	Late Primary (ages 9-11)	A	General Adult
JH	Junior High (ages 12-24)	TCAP	Teacher Counselor, Administrator and Present Training

### FILMS

\*\*\*"About Conception and Contraception" (1972) (National Film Board of Canada and Perennial, Inc.). 16mm., color, 11 minutes, \$140.  
Rental: \$14.00. No narration.

Topic: Conception/contraception

Animated, simple, entirely without words. Shows how baby is conceived in coitus, and how various methods of contraception prevent pregnancy in subsequent unions.

Recommended Age: JH-A

"About Sex" (1972) (Texture Films). 16 mm., color, 23 minutes. \$225.00.  
Rental: \$22.00. Dialogue/Voice-over.

Topic: Sex education for adolescents: an introduction.

Film is in two sections. The first half shows a live "rap" session with urban youth. Conversations are frank, lively, and revealing of adolescent worries and concerns. A counselor gives them sound information and attitudes. Captioning might prove difficult, but if feasible, well worth the trouble. The second half of the film reviews the various topic areas, with the facts. This latter portion would do excellently with captions.

However, in present form, film is less useful than others. Diagrams in second half are good, but burden of explanation would be on the group leaders. Attitude section would be lost.

Recommended Age: JH, SH, C. - only with captions.

"Boy To Man" (1962) (Churchill Films). 16mm., B&W, and color, 16 minutes, \$195.00 (color), \$100.00 (B&W). Rental: write to Churchill Films for rental referral. Available in captioned form.

Topic: Physical Adolescence

Explains physical changes which occur in adolescence, with underlying physiological causes. Good for preparing both young men and women for the changes which they will encounter during puberty. Good also used with the companion film, "Girl to Woman". Definitely an "Informational" film, excellent for review of "facts" of individual maturation, with frequent interruptions for discussion, quizzing, etc. Filmically a bit dated, and the graphics weak.

Recommended Age: LP, JH

"Contraception" (1973) (John Wiley and Sons). 16 mm., color, 19 minutes, \$225.00. Rental: \$22.00. Voice-over.

Topic: Contraception

Explanation of reproductive system and function of various contraceptives. As in other films in the series, nudity and explicit photographs are used (how to put on a condom for example). Other films on contraception cover the topic more accurately and fully, however, captioning essential for understanding by hearing impaired viewers.

Recommended Age: SH, C, A, TCAP

"The Edge of Adolescence" (1971) (Oxford) 16 mm., Color, \$210.00  
Rental: \$21.00. Dialogue.

Topic: Problems and concerns of adolescents, 13-15 years old.

In a series of interviews with kids, they cover four basic topics: Adolescent awareness and embarrassment about height; expression of emotions, particularly by males, and a discussion group on what "sex" means to kids of this age. Many levels of maturity and points of view shown. Good discussion-opener. Needs captions since all information is spoken. Leaders may be interested to get a feeling for contemporary teen attitudes, language, concerns.

Recommended Age: JH, SH, TCAP

\*"La Sortija de Compromiso"; "The Engagement Ring" (1968) (Planned Parenthood). 16 mm., color, 25 minutes. \$200.00. In Spanish with English subtitles.

Topic: Family Planning

A Spanish-speaking couple become engaged. First the girl and then her fiancé are faced with the question of family planning. Excellent plot; acting is good so that emotional tensions come through clearly. Language level is high, and captioning a bit poor (quick and some white-on-white) but generally very good.

Recommended Age: JH-A and classes where marriage is under consideration. Reading ability should be good.

\*\*"Families" (1970) (E.C. Brown, available from Perennial), 16 mm., color, 9 1/2 minutes, \$140.00. Rental: \$14.00. Voice-over.

Topic: Nature of a Family

Animated with children's drawings, very catchy style and pace. Comprehensive explanation of the supportive role a family plays in the life of a child. ("The world is full of children which is why the world is full of families.") Covers function of family names, teaching role of families, need of family members for one another. Interdependence of all human beings is the conclusion of the film. Excellent for all ages, but especially young children. Should be interpreted or captioned.

Recommended Age: EP-JH

"Families Get Angry"(1970)(Oxford) 16 mm., color, 9 minutes, \$125.00.  
Rental: \$12.00. Dialogue/Voice-over.

Topic: How a child feels when his parents have a fight.

The parents argue about bills. The boy (a black child) goes outside and as he walks, his various thoughts and feelings emerge ("voice-over"). Message is essentially aural, with visual on essentially contrived vehicle. Message is important - that fear and anxiety caused by parental fight are OK, that everyone feels the same, and that a child should know that although they are fighting, they can still love each other and the child himself. This message definitely requires captions or skilled interpreter.

Recommended Age: LP, JH, SH

**\*\*"Felipa: North of the Border"**(1973) (Learning Corporation of America).  
16 mm., color, 17 minutes, \$210.00. Rental: \$20.00. Dialogue.

Topic: Value-conflict and clarification

Young Mexican American girl teaches her uncle enough English to pass his driving test. He fails the first one, succeeds when she convinces officer of desperate need. Confrontation of Mexican and white American cultures is dramatic. Needs captioning to reveal plot fully, but is visually sensitive to mood, feelings, etc. and excellent. Part of a lovely series on minority children growing up in different parts of this country, faced with problems associated with poverty and minority status. Other films in the series are: "Su Mei Wong: Who Shall I Be?", "Todd Grows Up In Appalachia" and "William: From Georgia to Harlem" (captioned). Good horizon expanders.

Recommended Age: LP, JH, SH, C, A

"George and Betty: Career vs. Marriage" (Newenhouse) 16 mm., 10 minutes  
\$125.00. Dialogue.

Topic: Early Marriage

Again in the style of the other films in the "Dating Series", the film provokes discussion through an open-ended situation. Shows a couple struggling to decide whether or not to wait for George to develop his career before getting married. A bit biased - they do not consider Betty's opportunities. Still, the film makes an excellent third to this series. Dialogue needs interpreting or captioning.

Recommended Age: JH, SH, C

"Girl to Woman" (1966) (Churchill Films), 16 mm., Color, 18 minutes, \$210.00 and for rental referral, write Churchill Films. Available in captioned form from Captioned Films Repositories.

Topic: Physical Adolescence

Companion film to "Boy To Man", it describes the growth and development encountered in the change from girlhood to womanhood. Female reproductive system and glandular change is described in detail. Good for use with young men and women as they approach puberty. As in "Boy To Man", the piece is definitely an "Informational" film; however, graphics are weak and dated.

Recommended Age: LP, JH

\*\*\*"Happy Family Planning" (1969) (Planned Parenthood-World Population). 16 mm., Super 8 mm., 8 mm., color, 6 minutes. \$45.00. No narration.

Topic: Family planning and contraception

Animated, concise, simple, and clear. The only language is in the names of the various contraception devices (in five languages). Excellent.

Recommended Age: LP-A

"The Homosexuals" (1967) (Produced by CBS TV; distributed by Carousel Films, Inc.) 16 mm., B&W. 45 minutes, \$250.00. Interviews/Dialogue.

Topic: Homosexuality

A look at the lives of homosexual life in the U.S., mainly via conversation and interviews. A documentary which covers the psychological and sociological aspects of homosexuality. Discussion provoking, but generally too long for class use. Film techniques make the impact visually hard to understand, for deaf and hard of hearing viewers.

Recommended Age: SH, C, A

"Hope Is Not A Method" (1972) (Perennial Films) 16mm., color, 16 minutes, \$200.00. Rental: \$20.00. Voice-over.

Topic: Contraception

A film for those who accept contraception. Details the unfortunate experience of young couples who suddenly must confront an unwanted pregnancies. Dramatic situation serves to frame a detailed scientific explanation of the different types of birth control and their functioning. Dry at points, but in general well done. Without soundtrack, though, film does not make much sense.

Recommended age: JH-C. Teachers may be interested, for training sessions.

\*\*\*"Human Heredity" (revised 1969) (E.C. Brown Foundation, Distributed by Perennial). 16mm., color, 21 minutes. \$250.00. Rental: \$25.00. Voice-over and dialogue.

Topic: Heredity and genetics

Covers a large body of information on genetics, chromosomes, inheritance, twins. Excellent film, although for classroom use it should be segmented. Information is up-to-date and well-expressed, diagrams colorful and accurate.

Recommended Age: SH, C, A. TCAP

"The Innocent Party" (1959) (Perennial Films). 16mm., color, 17 minutes. \$40.00. Dialogue.

Topic: Venereal Disease

A diñausaur, very moralistic, sexist and "talky". Talent all look very young and part of the 50's. Information is accurate, but uses scare technique. Dialogue would need interpreting or captioning.

Recommended Age: JH, SH, C,

\*\*\*"Like Other People" (1973) (Perennial) 16mm., color, 37 minutes. \$375.00. Rental: \$37.50. Dialogue/Narration.

Topic: Love and sexuality for physically handicapped young people

An excellent film. Portrays the love between two young people with cerebral palsy, and the block they encounter from the world of "normal" people who refuse to recognize the right of the handicapped. Visually lovely. Captions are needed, but a must for all teachers, parents, administrators and counselors who work with normal and handicapped people. Gives real insight into the nature of sexuality, should be interpreted for hearing impaired adults.

Recommended Age: JH, SH, C, A, TCAP

\*\*"Look What's Going Around" (Churchill), 16 mm., color, 16 minutes, \$ 195.00.  
Rental: \$15.00. Voice-over/dialogue.

Topic: Venereal Disease

This film gives excellent coverage of topics, associated social stigmata and adolescent fears. Graphics are good. Opportunities for lip reading occur frequently. Information is correct, complete and up-to-date. Talent is personable and tenor of film is relaxed, yet serious.

Recommended Age: JH, SH, C, A

\*\*"Love is a Planned Family" (1972) (Oxford films) 16 mm., color, 19 minutes, \$250.00. Voice-over.

Topic: Family planning

This is an exciting film. Content is excellent, Birth control methods section is excellent. Visual is dynamic, varied, clear: in short, superior. A brief guide included. Should be tried without captions, though of course in captioned form it would be terrific.

Recommended Age: JH, SH, C, A, TCAP

"Marriage Licence" (W.C. Brown Company) 16 mm., 8 mm., color, 16 minutes, \$120.00. Rental: \$12.00. Dialogue.

Topic: How To Get Married

Shows two young people going through the bureaucratic steps involved before marriage is legal. They get blood tests, answer questions of a priest, and then a week later take their vows. All without mention of parents or family permission. Presentation deals solely with the legal side of marriage. The question of where love enters into the set of responsibilities is not considered, and would provide material for good discussion after the screening. Dialogue would be difficult for the hearing impaired viewer to understand. Piece-by-piece presentation, accompanied by an outline, might render the film useful for teaching the procedure of obtaining a marriage license.

Recommended Age: SH, C, A

\*"A Matter of Choice" (Planned Parenthood). 16 mm., color, 17 minutes.  
\$115.00. Rental: \$12.50, Voice-over and dialogue.

Topic: Family planning and general reproduction functioning

This film is a well organized, and camera can be stopped to allow for discussion of each topic. Complete information; graphics are good. Talent is a bit stone-faced, but offers good opportunities for lip reading. Language is simple and clear; a script would provide a sound basis for captions.

Recommended Age: JH, SH, C, A

\*"The Matter With Me" (1969) (Oxford Films) 16 mm., 15 minutes, \$145.00  
No narration.

Topic: Self-awareness

Black child, age 8 or 9, wanders through his Florida home town looking at white then black America. In so doing, awareness of the meaning of his blackness begins to emerge. Visually effective, the film is basically a set of social comparisons (yachts with battered dinghy's, etc.) A bit contrived but powerful. Discussion provoking.

Recommended Age: LP-SH

"Methods of Family Planning" (1972) (Oxford Films) 16 mm., color, \$195.  
23 minutes. Rental: \$18.00. Voice-over.

Topic: Family Planning

Traditional, not terribly original. Starts with physiology of reproduction. Graphics are excellent, but information is voice-over. Visually stagnant after a few minutes.

Recommended Age: JH, SH

"One Quarter Million Teenagers" (1964) (Churchill Films) 16 mm., color.  
\$195.00. Rental: write to Churchill Films for rental referral. Voice-over and dialogue available with captions.

Topic: Venereal Diseases

Presents plight of those people who contract venereal diseases, of whom now a half million a year are teenagers. Describes how diseases are contracted, what symptoms, if any, they cause, and resulting damage. Film is straight forward and accurate, but talent and settings make it feel out of date.

Recommended Age: JH-C

106

"Parent to Child About Sex" (Perennial). 16 mm., color, 31 1/2 minutes.  
\$260.00. Rental:

Topics: How to field children's questions about sex

A static and visually uninteresting treatment. Aimed at parent audience. Gives parents moral support, but in frozen settings. Might be useful in small, selected segments as introduction to parent-discussion groups. Definitely deadly shown full-length.

Recommended Age: TCAP

"Phoebe: Story of a Premarital Pregnancy" (1964) (National Film Board of Canada, distributed by Contemporary McGraw-Hill Films) 16 mm., B&W, 29 minutes. \$175.00 Rental. Dialogue.

Topic: Premarital Pregnancy

Presented through series of imaginings and flashbacks, this film portrays a young girl's love affair and her reactions to finding herself pregnant. Without the soundtrack, film techniques are confusing, and film did not go over well with a group of deaf college students who previewed it. Definitely needs captions, since it has been very effective for groups of hearing youth.

Recommended Age: JH, SH, C, A, TCAP

"Sexuality and the Teenager" (Perennial) 16 mm., color, three films: 21, 28, 31 minutes. \$450.00. Rental: \$60.00. Dialogue/voice-over.  
600.00

Topic: Introduction to Sex Education

Films attempt to be a curriculum in themselves and are unsatisfactory for this reason. They are also talky, static. Many other materials do a better job.

Recommended Age: JH, SH

"The Sexually Mature Adult" (1973) (John Wiley and Sons) 16 mm., color, 23 minutes. \$250.00. Rental: \$25.00. Voice-over.

Topic: Intercourse and concerns of young adults

A clinical exposure to coitus and sexual attraction. Presentation which chooses to deal with neither moral issues nor emotional complications of male-female sexual relations. Attempts to give information using material which is explicit and therefore of the "desensationalizing" mode. These two objectives conflict and are confusing. Captions might clarify some of the photography, etc. Would need careful handling by leader, with many interruptions for discussion.

Recommended Age: SH, C, A, TCAP

"Steve and Kathy" Going Steady" (Hank Newenhouse). 16 mm., color, 11 minutes. \$125.00. Rental: \$12.50. Dialogue.

Topic: Dating (going Steady)

Part of a series of three films on dating, this film presents in a short, openended dilemma, the pressures and complications involved in going steady in high school. Steve and Kathy both feel their "couple" status wedging them apart. Although the clothing is a bit dated (middle sixties), the message is contemporary. Talent is good, and pacing builds well. Much of action needs no explanation, but all of conversations need captioning or interpreting. Excellent, especially for "affective" side of man-woman relationship, though a bit sexist. Discussion provoking, as it is open-ended. Others in the series are "Tom and Alice: Making Out" and "George and Betty: Career vs. Marriage".

Recommended Age: JH, SA

\*\*\*"Su Mei Wong: Who Shall I Be?" (1973) (Learning Corporation of America) 16 mm., color, 18 minutes. \$220.00. Rental: \$22.00.

Topic: Value conflict related to minority status

Chinese American girl in Los Angeles wants to become a dancer. Her parents want her to hold onto her Chinese culture. The after school classes conflict--what to do? Conversations with her parents (in Chinese) are captioned in English, but not those segments in school. Captioning required would not exceed five minutes, but it would add to the perfection of the film which is already visually lovely. Simple explanation at key points would render the film eminently usable with hearing impaired viewers. A good discussion provoker and horizon expander. Others in the series included: "Todd: Growing Up In Appalachia", "William: From Georgia to Harlem" (captioned); and "Felipa, North Of The Border".

Recommended Age: LP, JH, SH, C, A

\*"Sylvia, Fran and Joy" (Churchill Films) 16 mm., B&W, 25 minutes, \$150.00.  
Rental: \$12.50. Voice-over.

Topic: Woman's Role

Balanced portraits of three young women as they see their own lives. Each talk about their feelings and attitudes toward marriage, children and their own creative role (or lack thereof). One woman is a traditional housewife, one has broken off her marriage, and one is struggling to balance out her own understanding of the marriage relationship. Technically nice, the film tends to be "talky", but overall gives a good picture of the three options without biases. Good discussion starter, but obviously needs an ASL interpreter.

Recommended Age: SH, C, A

\*"To Be A Friend", (Billy Budd Films, Inc.) 16 mm., and 8 mm., color, 13 1/2 minutes. \$175.00. Rental: \$17.50. Dialogue-sound.

Topic: Friendship

Friendship is defined in contemporary teenage terms through a series of compelling, open-ended vignettes. Dialogue makes scenes difficult for the deaf/hard of hearing viewer to understand, but interpreted into the language of signs or accompanied/preceded by a script, materials might be useful in starting discussion.

Recommended age: JH, SH

\*\*\*"Todd: Growing Up In Appalachia" (L972) (Learning Corporation of America) 16 mm., color, 13 minutes. \$195.00. Rental: \$19.50.

Topic: Value clarification

A young boy in coal mining poverty of Appalachia finds a book of food stamps. He struggles with the impulse to spend them for his own family but finally returns them. No sappy morality; he is not particularly happy or externally rewarded by the "honest act". Poignant and visually beautiful. Sparse captioning needed to clarify one or two key transition points. Leader certainly could supply these explanations. Part of series including "Su Mei Wong: Who Shall I Be?", "William: from Georgia to Harlem" (captioned), discussion and horizon-expanding.

Recommended Age: LP, JH, SH, C, A

"Tom and Alice: Making Out"(Newenhouse), 16 mm., color, 11 minutes.  
\$125.00. Dialogue.

Topic: Dating (Necking)

In this short, openended film, also in the "Dating Series", Alice has a crush on Tom, although her friends can't see why. Tom asks her out. They go to a movie, to the malt shop, and then stop to park. Tom plies Alice with liquor, and sees "how far he can get"; she is upset and makes him take her home. Both feel terrible. Film puts boy and girl in traditional male-female roles of aggressor, victim, so is quite sexist. However, with this in mind, the film could be used to expose and explore these stereotyped behaviors, and to find new models for male-female relationships. Needs either captioning or skilled interpreting for hearing impaired groups.

Recommended Age: JH, SH

"Tomorrow's Children" (1972) (Perennial Films) 16 mm., color, 28 minutes.  
\$225.00. Rental: \$22.50. Voice-over.

Topic: Population explosion and birth control

Voice-over technique would make captioning easier, though discussion of ecological balances get awfully wordy at points. Photography is good. Information on birth control is correct, though sparse. Should definitely be previewed, especially to up-date facts on the population explosion.

Recommended age: JH, SH, C, A, TCAP

"VD: Handle With Care" (Oxford), 16 mm., color, 25 minutes. \$230.00.  
Rental: \$20.00. Dialogue/voice over.

Topic: Venereal Diseases.

A series of conversations with young people, exploring their experiences with VD; no preaching, but an implicit message that promiscuity means more exposure to possible infection. Also implicit is that if you know you've got one of the diseases, you have the responsibility of telling your "contacts" to allow them the chance for cure. Film is very effective, though long, and discussion-provoking. Filmically excellent. Use of "trendy" vocabulary speaks right to teens. With captions or interpreter would provide an excellent introduction or follow-up to "Look What's Going Around". As a pair, these films are very excellent.

Recommended Age: JH, SH, C, A, TCAP

"VD: Prevent It!" (Newenhouse) 16 mm., color, 11 minutes. \$145.00.  
Rental: \$14.00. Captioned.

Topic: Venereal Disease

Clear explanation, though entirely verbal. Few diagrams are used, so much reading would be involved with the captioned version. Pacing is slow. Other films have more modern appeal and information.

Recommended age: JH, SH, C, A, TCAP

"Venereal Diseases" (1973) (John Wiley and Sons). 16 mm., color, 27 minutes, \$250.00. Rental: \$25.00. Voice-over.

Topic: Venereal Disease

Other films treat the topic more thoroughly and with more personably talent. However, graphics and visuals are good. Use of explicit photography may prove objectionable to some groups, although are useful as "desensationalizing" materials. Combination of "Informational" and "desensationalizing" modes tend to work against each other. Film is also long with much voice-over explanation, which is in this case particularly necessary.

Recommended age: SH, C, A, TCAP

"You Can Do Something About Acne" (Oxford). 16 mm., color, \$220.00.  
Rental: \$20.00. Voice-over.

Topic: The why's of complexion troubles in adolescence.

Visually varied and interesting. All information is in the "voice-over", in relatively simple language. Graphics are excellent. One problem for the deaf is a motif of two kids talking on the telephone. Could be imaginatively and effectively captioned, but unless interpreted into sign skillfully, will not be understood by hearing-impaired viewers.

Recommended age: JH, SH

## FILMSTRIPS

"Abortion: A Rational Appraisal" (Audio Visual Narrative Arts)  
2 filmstrips with 2 cassettes and a leader's guide.

Topic: Historical and contemporary concerns about abortion,  
and current methods

First filmstrip, "A Timeless Question", comprehensive overview of attitudes toward abortion in the past, all over the world. Interesting, but with complex language and concepts; much time is spanned, and the narrative jumps around in time and place. Focus is unclear. The second filmstrip, "A Continuing Debate", gives a terse, dry, and swift-moving information about current techniques for abortion on the debate over its morality. Over information here results in under-communication and a scared feeling.

Because of fast pace and amount of information which the series attempts to impart on the verbal soundtrack, visual presentation is inadequate; the graphics are small with too much detail, and symbolism is often so sophisticated as to make meaning unclear. Use with script in small segments would be only partially satisfactory.

Recommended Age: C, A, TCAP

\*"About Sex and Growing Up" (1968) (Q'ED Productions, Cathedral Films)  
Four filmstrips with sound track' four guides; one text of same title by Evelyn Duvall.

Topics: 1. "Maturing Boys and Girls" (changing body and feelings)  
2. "Becoming A woman" (Physiology of maturation)  
3. "Becoming A Man" (Physiology of maturation)  
4. "Where Babies Come From" (Conception, Pregnancy and Birth)

With the possible exception of the first strip, this series need little adaptation. Distribution of the script to students with middle reading ability should be tried; or teacher interpreting; or parallel transparency projected scripts. The last three have visual progression which makes them useful independent of the script. Preview is a must.  
(It is free)

Recommended Age: LP, JH, SH

"Becoming A Man/Becoming A Woman" (1968) (Guidance Associates), each with two color filmstrips, two LP records, and a Teacher's Guide. \$40.

Topic: Coming into Puberty

Each filmstrip presents the reproductive system and physical changes encountered at puberty. Explores and leads to discussion of emotional and social attitudes, and masculine and feminine roles. Except for poor material on masturbation, artwork is in general fine.

Recommended Age: JH

"Being Responsible About Sex and Love" (1966) (Singer/SVE) 2 filmstrips, 1 record, 2 guides.

Topic: Dating and Value-information

Both filmstrips, "Responsible Sexual Attitudes", and "Dating", deal with the conflict between dating and the sexual drives it calls upon, on the one hand, and the dictates of society and responsible behavior on the other.

Message is biased toward traditional mores and ethics, and argues these tenets will. Little attention is given to alternatives. Unfortunately, all of the message is carried in the soundtrack, and the visual is vague, using few techniques of visual organization. The text, too, is difficult, wordy, with complex syntax and vocabulary.

Recommended Age: JH, SH, c

"Breaking the Language Barrier" (1969) (Teacher Training Aide) 1 filmstrip, 80 frames long, in color. \$7.

Topic: Slang and Technical terms related to sexuality

Designed to bridge the language gap between slang and technical usage to facilitate conversation and discussion of human sexuality without confusion or embarrassment. Serves to open channels of communication and remove shock value of slang terms, provide definitions for anatomy and behavior, and start verbal communication in groups.

Gives 15 anatomical and 21 behavior terms along with the most universal slang equivalents, and anatomical diagrams. Suggested uses are: (1) reading terms aloud, (2) list local terms, (3) allow for laughter which releases tension, (4) use as an icebreaker in beginning groups on sexuality.

Visually very strong, the major difficulty will be reading level, especially in the definitions of technical terms. Otherwise up-to-date, thorough and quite unique.

Recommended Age: JH (with strong reading), SH, C, A, TCAP

"Especially for Boys" (1966) (Henk Newenhouse/Perennial Films), 1 filmstrip, 1 record, 1 guide, free on preview basis.

Topic: Physical Maturation in boys; sketchy reproduction

Again, language is needed for continuity as well as for information. Cutting strip into individual slides might be an effective means of adaptation.

Recommended Age: LP, JH

"Especially for Girls". (1966) (Henk Newenhouse/Perennial Films) 1 filmstrip; 1 record; 1 study guide.

Topic: Physical maturation of girls; reproduction in sketchy terms

Illustrations are in watercolor, diagrams vague and visual flow is fragmented and confusing. Could be used for teacher's own program, but do not fit aural flow of scripts. Again, verbal language is essential to organization and continuity of program.

Recommended Age: LP, JH

"Everything But ..." (1969) (Guidance Associates) 2 color filmstrips, 90 frames long, 2 LP records, discussion guide. \$40, \$44 with cassette.

Topic: Decision making with respect to sexual behavior

Recorded opinions of teenagers to show their confusion about their feelings about definitions of love, infatuation, sexual desire, and decision making. Excellent photography. Good kick-off for discussion.

However, since the main import is carried by the dialogue, much is missed by the hearing-impaired viewer. Skillful interpretation and/or adaptation is needed.

Recommended Age: JH, SH, C

"Family Planning Today"(1970) (Guidance Associates) 2 color filmstrips, 2 cassettes, and discussion guide with script. \$44.00.

Topic: Family planning

Historical background of birth control across the ages, in the first filmstrip, and in the second exposure to three different personal motivations for the use of contraceptives.

Format depends on interview and opinions recorded on the sound track. Attitudinal material, the most valuable part of the series, is lost. Visuals are not structured to convey the message of the sound track, and hence the program would not work for a hearing impaired group unless the leader provided extensive scripts or mediated language of some sort. Language would need simplification.

Recommended Age: SH, C, A

"Food, Fuel for the Body" (1963) (Denoyer-Geppert) One color filmstrip with guide. Captioned. \$6.75

Topic: Function of food

Information about digestion of food and its metabolism by the body. Visually less than satisfactory, with crowded diagrams and advanced terminology. Frame-to-frame the ration of information to visual is far too high. The use of color is weak.

Part of a series on structure and function of the human body. Might be useful in an advanced biology class.

Recommended Age: Sh, C, A

"Growing Into Manhood/Growing Into Womanhood: A Middle School Approach" (1968) (Guidance Associates) 2 filmstrips, each with a cassette and a Teacher's Guide. \$44.00

Topic: Sexual Maturation in Adolescence

Each program briefly explains the respective reproduction systems, body changes at puberty, material on glandular functioning and genetics. The girl's program goes into menstruation, while the boy's helps them understand erections, ejaculations, seminal emissions and masturbation. Both are reassuring and straightforward, with excellent photography. An excellent set.

As with all Guidance Associate filmstrips, however, all of the affective and informative material is carried by the sound track of the cassettes. The leader would have to spend time finding ways of mediating the scripts either on paper or slides to be shown simultaneously. Also, he or she would need to think about simplifying the script which is syntactically and lexically complex. The scripts are long and need segmentation.

Recommended Age: JH (with adaptation of language), SH, C, TCAP

"Human Glandular System" (Denoyer-Geppert) #4 in Human Physiology Series". Captioned filmstrip. \$6.00.

Topic: Human Physiology

Quite excellent in the traditional educational filmstrip style, with diagrams, whole frames with writing only, and review questions, within this format, the writing is of moderate difficulty, but quite simple in style. Color scheme is unified; repetition techniques are employed to give continuity, information is pointed and clear, while organization is clearly defined by section headings. Material is covered thoroughly on beginning biology level. Good preparation, with imaginative teacher, for the physiology of reproduction. Others in the series, including #3, "Human Circulatory System" should be investigated.

Recommended Age: JH, Sh

"Learning About Sex" (1968) (Guidance Associates) 1 color filmstrip, cassette, and teacher's manual, 90 frames long. \$20.

Topic: Introduction to Sex Education

Emphasis is to focus understanding of both sexes, and social implications of sexual behavior, and mastery of sex vocabulary. Also good for parents and teachers to give them a feeling for how pre-adolescents tend to approach the topic. Emphasizes development of individual standards.

Recommended Age: LP, JH, SH

"Life/Before Birth"(1966) (Life Filmstrips) 2 color filmstrips, captioned. Part I 61 frames, Part II 88 frames. \$7.00. Also available is the text of the Life article with a list of teaching aids, editor's notes, and further readings: 10-24 copies, \$.40.

Topic: Fetal development in Utero.

Filmstrip series is based on Lennart Nilsson's photographs of fetal development, originally appearing in Life Magazine. Shows first 5 weeks of embryonic development in Part I, and the process of gestation to birth in part II.

Visually varied with remarkable use of the photographic medium. Intention of each frame is clarified by use of arrows which clarify meaning or captions use of visual techniques such as repetition, side-by-side comparisons, and step-by step organization. A few of the captions are wordy and of advance reading level. These would need to be replaced or explained by the leader.

Recommended Age: LP, JH, SH, C, A, TCAP

\*\*\*"Life Begins" (Eyegate House) Four filmstrips with sound cassettes; 12 charts; one manual for filmstrips; 1 manual for charts; cataloguing materials.

Topic: Introduction of basics of reproduction in living things

The filmstrips follow one class of 8-10 year olds as they go on a trip to the zoo (exposure to mother and baby animals); to a class "show and Tell" discussion of pregnancy in mammals, and simple concepts of fertilization; to non-animal reproduction (#3, "Reproduction in Flowers"); to "Human Reproduction"-- the basics of growth and physiological change; insemination, pregnancy, twins, and birth. Simple and very visual, building on previous concepts. Charts of different animals/flowers, etc. are a wonderful supplement. Free on preview basis.

Recommended Age: EP, LP, (JH)

\*\*"Living With Dying" (L973) (Sunburst Communications) 2 filmstrips, with sound cassette; Guide (mimeo script; question sheets; vocabulary)

Topic: Facing and accepting death as a natural part of the life cycle

The first strip describes man's basic fear of death and the various ways he expressed this fear (war, religion, reproduction, art). The second deals with acceptance of death, starting with a child's first encounter with death (a dead bird), and then the five stages of acceptance through which a terminally ill patient must pass. The script is complex with quite difficult reading, but the visual line is strong. Many adaptation levels and means are possible. Free on preview basis. Should definitely be seen.

Recommended Age. JH, SH, C, A, TCAP

"Love and Marriage" (1970) (Guidance Associates) 2 color filmstrips, 2 LP records, and A teacher's manual with a complete script. \$44.

Topic: Relationship of love to premarital sex and marriage

Follows six couples both married and unmarried, and as they discuss their own relationships, the filmstrip itself urges for analysis of the factors which make or break a relationship. No easy answers are offered, but the series has been successful in helping young couples struggling to make decisions of their own. Helps them to think about practical matters, about the need for flexibility, and communication.

Adaptation for use with a hearing impaired group would entail mediating the soundtrack via a script distributed to the class, or slides of the script projected simultaneously with the filmstrip.

Recommended Age: SH, C, A

\*"The Miracle of Nature" (Glenbrook Labs) 1 captioned filmstrip with a guide. \$6-7. Free on preview basis.

Topic: Menstruation Simply Explained

Photographs, diagrams and captions clearly explain the process of physical maturation in a woman, including the onset of menstruation. It explains the various physical, emotional and technical aspects of the monthly "period" for girls on the eve of puberty. (and boys too). Glenbrook produces "Midol".

Recommended Age: LP, JH

"There's A New You A Comin'" (Marsh Films, Inc.) Sound filmstrip program with one strip for Boys and the other for Girls. Record and pamphlet guide for the leader are included. \$34 for the set.

Topic: Physical and emotional changes which accompany puberty

Covers matters of concern to young people approaching adolescence, from the facts of physical development to health concerns such as nutrition, exercise, cleanliness and dental health.

Visually a combined mode of diagram and photograph are used. Unfortunately the aural message (from the record) carries the vast majority of the information and organization of the program. There is little repetition of visuals to clarify a point, only fair visual consistency and for the most part the visual message is episodic, jumping from one topic to the next. A bit biased toward the stereotypical male-female attributes but not bad.

Strips are long, and could be used well in smaller segments if the leader took the time to organize her/his own presentation, to replace soundtrack. Use of script's with good readers might also be tried in groups and individually.

Recommended age: JH and early adolescence

"Values for Teenagers in the 70's" (Guidance Associates) 2 filmstrips with cassettes and 2 teacher manuals.

Topic: Value and feeling clarification

Deals with confusion which adolescents feel as they confront the hypocrisy of adults, the big issues of sex, politics and morality, and the lack of leadership from adults. They also touch on pressures young people encounter, among them, competition and cheating. Second strip delves into decision making and building of individual's ethical framework.

Visually the format is that of a walk in the woods with a leader and 10 youth. They find a secluded grove and begin a discussion group "rap" session. The photography concentrates on the faces of the kids, 40 of the 66 frames are "expression" shots to show that the kids are deeply involved and reacting. The 26 of the frames remaining illustrate the topics, but in a haphazard fashion. There is little visual organization despite the excellence of the photography. Again the script or sound track is essential to meaning. For use, the groups should be provided with scripts, the leader should interpret, and each filmstrip presented in third, as they are far to long.

Recommended Age: JH, SH, C

"Why Wait Till Marriage?" (1971) (Singer-SVE/Q'Ed Productions/Cathed. of  
Films) 4 filmstrips with sound; study guide and script. 5

Topic: Arguments against premarital sex

Arguments are traditional, but script tends toward very abstract language. However, use of visual symbols, sequencing, repetition and thought bubbles make each strip visually lively. A teacher familiar with the script could do an affective ad lib interpretation. Alternatives to arguments need to be stressed.

Recommended Age: JH, SH, C

SLIDES

"How the Health Are You: Unit #1, Sex Is Not A Dirty Word" (Harper Row & Co.) Slide program, with cassette and Teacher Guide, but no script.

Topic: Sexuality

Confusing and over-loaded, this slide series attempts to summarize past and current trends in sexuality and stereotyping. Message is mostly in the sound cassette, and language is complex, at least college level. Visually the sequencing is confusing, and the message unclear. Not enough space is accorded each concept.

For use, captions would have to be rewritten, and supplementary slides and material provided.

Recommended Age: SH, C, A

"Human Reproduction 100" (1969) (Guidance Associates) 80 slides, complete set: \$70.

Topic: Human Reproduction

This slide series is an adapted version of the filmstrip "Understanding Human Reproduction". It utilizes a new technique: it can be projected on a blackboard in the daylight, which allows for much flexibility of use. Especially where participants are concentrating on lip-reading, it is a great help not to have to completely darken the room to show a program.

However, the drawings are not the best (there is no picture which indicates where the sex organs are located on the body) and this set would have to be used with other media and a lot of instructor initiative. There is no explanation of the objectives of the program, but the teacher's manual includes both an index of the slides and a lesson plan for both junior and senior, high school levels. Each plan includes a range of teaching methods and review and testing methods. Flexibility is the key note. It should be previewed.

Recommended Age: JH, SH, C

"V.D." (Educational Modules). Series of 40 slides, with booklet.

Topic: Venereal diseases

Slide series focuses mainly on the visible signs and symptoms of V.D. in photographs. The scare technique is employed, but may overemphasize the external signs of V.D., where an infected person may show none at all. Booklet is excellent, nevertheless: complete in coverage and information. Its language is teacher-oriented.

Recommended Age: SH, C

## TRANSPARENCIES

"Achieving Adulthood" (Perennial Inc.) Set of transparencies and teachers guide. Available for purchase at \$10 a set while supply lasts.

Topic: Problems of physical, emotional and social maturation

The set of transparencies and teacher's manual looks excellent in dealing with some of the problems which a young person encounters while growing up. It is not based on sexual development, but on the larger areas of maturation. There is much room for leader and student discussion. This set in particular should be tried.

Recommended Age: JH, SH, C

"Advanced Human Reproduction" (Hubbard Scientific Company) 29 transparencies

Topic: Physiology of Reproduction

This title encompasses 6 sets of color transparencies, a total of 29 transparencies which may also be purchased individually. Material is text-book basic along the lines of traditional "reproduction education". Set titles are:

1. "The Human Body". (12 transparencies, \$47) treat various anatomical systems and structures: ("Digestive System"; "The Eye"; "The skeletal System"; etc.)
2. "Basic Human Reproduction" (6 transparencies, \$22) visuals show development of the embryo; birth; glands and growth.
3. "Human Reproduction I" (6 transparencies, \$21) same as "Basic . . ." except "embryo growth" is substituted for "glands and growth."
4. "X-Rays and Photos" (6 transparencies, \$20) Photographs of foetus in utero; of chromosomes; of an ovum and sperm; and a cell.
5. "General Topics" (6 transparencies, \$21) Repetition of other sets.
6. "Human Reproduction II" (6 transparencies, \$21) four repetitions, plus "V.D." and "D.N.A."

An accompanying lesson plan and transparency guide comes with each set. Sets 2-4 might be most revealing of the kind of material involved. Service is prompt, especially if you list titles of the materials you want. The preview is free.

Recommended Age: JH, SH, C, A

"Conception, Prenatal Development and Birth"(1967) (3M Brand, Visual Products Division), 20 transparencies

Topic: Stages of Gestation

First 8 transparencies show male and female genital systems, female menstrual cycle, embryo development, and womb lining structure. Last twelve cover month-by-month development of foetus, stages of labor and birth. The series has a 15-day free preview period. Graphics are good, though not unusual. Colors are somewhat dull, and individual frames rather crowded. Functional, but require advanced reading level.

Recommended Age: SH, C, A

"Venereal Diseases" (Denoyer-Geppert Company) 13 transparencies, \$120. Free on approval basis.

Topic: Venereal Diseases

This is a very striking set of transparencies which is sure to elicit discussion by viewers. There are many ways an imaginative teacher/leader could use this set. The guide included with the set does offer helpful suggestions for directions utilization could take.

Recommended Age: SH, C, A

## II CAPTIONED FILMS FOR SEX EDUCATION

In alphabetical order by title  
See page 1 for key to age abbreviations.

About the Human Body. Color. 15 minutes.

Topic: Human physiology  
Recommended age: LP - A

Adolescence: Love and Maturity. Color. 11 minutes. 1969.

Topic: Human and animal reproduction and maturation.  
Recommended age: LP - A.

Animals Hatched from Eggs. Color. 11 minutes.

Topic: Reproduction in non-mammalian animals.  
Recommended age: EP - SH

Animal Reproduction. Color. 10 minutes. 1967.

Topic: Reproduction and birth (of sheep).  
Recommended age: EP - Jh

The Ant and the Dove. Black and White. 8 minutes.

Topic: Friendship  
Recommended age: EP, LP, JH

Baths and Babies. Color. 18 minutes.

Topic: Parenting  
Recommended age: SH - A

Beginning Good Posture Habits. Color. 11 minutes.

Topic: Physical education  
Recommended age: EP, LP

Beginning to Date. Color. 12 minutes

Topic: Dating  
Recommended Age: JH, SH

100

Beginning Responsibility: Doing Things for Ourselves in School.  
Black and White. 11 minutes.

Topic: Social living  
Recommended age: EP - JH

Beginning Responsibility: Other Peoples' Things. Black and White.  
11 minutes.

Topic: Social living  
Recommended age: EP - JH

Beginning Responsibility: Rules at School. Color. 11 minutes.

Topic: Social living  
Recommended age: EP - JH

Beginning Responsibility: Taking Care of Things. Black and White.  
11 minutes.

Topic: Social living  
Recommended age: EP - JH

Biography of the Unborn. (1956) Black and White. 16 minutes. J-S

Topic: Foetal development  
Recommended age: LP - C

The Birth of Puppies. Color. 16 minutes.

Topic: Birth process  
Recommended age: EP - SH

Butterfly: Life Cycle of an Insect. Black and White. 8 minutes

Topic: Life cycles  
Recommended age: EP - JH

Boy to Man. Color. 16 minutes. 1962.

Topic: Male physical maturation  
Recommended age: LP - SH

186

The Day Grandpa Died. Color. 11 minutes.

Topic: Human life cycle  
Recommended age: EP - SH

The Day Life Begins. Black and White. 23 minutes.

Topic: Eggs and conception  
Recommended age: JH - A

The Ears and Hearing. Color. 22 minutes.

Topic: Structure and function of the human ear  
Recommended age: JH - A

Eat Well, Grow Well. Color. 11 minutes.

Topic: Nutrition  
Recommended age: EP - JH

Eggs to Chickens.

Topic: Chicken's life cycle  
Recommended age: EP, LP

Everyday Courtesy. Color. 11 minutes.

Topic: Social living  
Recommended age: EP, LP

Exploring your Growth. Color. 11 minutes.

Topic: Biological growth (nutrition, cells, etc.)  
Recommended age: EP - JH

Farm Babies and their Mothers. Black and White. 10 minutes.

Topic: Baby animals  
Recommended age: EP

Fertilization and Birth. Color. 10 minutes.

Topic: Reproduction of animals  
Recommended age: EP - SH

Foods and Nutrition. Black and White. 11 minutes.

Topic: Nutrition  
Recommended age: LP - A

Frogs and How They Live. Color. 15 minutes.

Topic: Life cycle of frogs  
Recommended age: LP - A

From Generation to Generation. (1959) Color. 30 minutes.

Topic: reproduction  
Recommended age: EP - SH

Getting Angry. Color. 10 minutes.

Topic: Human emotions  
Recommended age: EP - SH

Girl to Women. Color. 18 minutes. 1962.

Topic: Female maturation  
Recommended age: LP - SH

Heart and Circulation. Black and White. 11 minutes.

Topic: Human physiology  
Recommended age: JH - C

Heredity. Black and White. 11 minutes

Topic: Principles of heredity  
Recommended age: JH - C

High School Prom. Color. 16 minutes

Topic: Kating etiquette  
Recommended age LP, JH

How To Be Well Groomed. Color. 11 minutes.

Topic: Hygiene  
Recommended age: LP, JH

The Human Body: Reproductive System. (1959) Black and White  
14 minutes.

Topic: Human anatomy  
Recommended age: JH - C

The Human Body: Skeleton. (1959) Black and White. 14 minutes.

Topic: Human anatomy  
Recommended age: JH - C

Human Growth. Color. 20 minutes (1962)

Topic: Human development, conception to maturity  
Recommended age: JH - C

I Never Went Back. Color. 16 minutes

Topic: Dropping out of school  
Recommended age: JH - A

Inheriting your Physical Traits. Color. 11 minutes.

Topic: Heredity  
Recommended age: LP - A

Junior High - A Time of Change. Color. 11 minutes.

Topic: Junior High  
Recommended age: LP, JH

Kindness to Others. Black and White. 11 minutes.

Topic: Social living  
Recommended age: EP, LP

Kittens: Birth and Growth. Color. 11 minutes.

Topic: Gestation and birth  
Recommended age: EP, LP

Let's Have a Party. Color. 8 minutes.

Topic: Social living  
Recommended age: LP - A

Let's Play Fair. Color. 11 minutes.

Topic: Social living  
Recommended age: EP, LP

Let's Share with Others. Black and White.  
11 minutes.

Topic: Social living  
Recommended age: EP

Life Cycle of the Paper Wasp. Color. 18 minutes.

Topic: Reproduction and maturation  
Recommended age: SH, C

Life Story of a Cray Fish. Black and White.  
10 minutes.

Topic: Life cycles  
Recommended age: LP, JH

Life Story of a Moth. Black and White.  
11 minutes.

Topic: Life cycles  
Recommended age: LP, JH

Life Story of a Toad. Black and White.  
10 minutes.

Topic: Life cycles  
Recommended age: LP, JH

Living and Growing. Color. 11 minutes.

Topic: Birth and growth of rabbits  
Recommended age: EP, LP

Making Friends. Black and White. 11 minutes.

Topic: High school friendships  
Recommended age: LP

Mammals and Milk. Color.. 14 minutes.

Topic: Mammals  
Recommended age: LP, JH

Manners at Home. Color. 15 minutes.

Topic: Social living  
Recommended age: EP

Manners at School. Color. 15 minutes.

Topic: Social living  
Recommended age: EP, LP

Meeting New People. Color. 15 minutes.

Topic: Social living  
Recommended age: EP, LP

The Money Tree. Color. 20 minutes.

Topic: Marriage and budgeting  
Recommended age: SH - A

Movement Exploration: What Am I? Color. 12 minutes.

Topic: Animals, objects, children in motion  
Recommended age: EP - JH

Origin of Life: Chemical Evolution.

Topic: Evolution  
Recommended age: SH - A

Others Just as Nice. Color. 14 minutes.

Topic: Dating  
Recommended age: JH, SH

Our Angry Feelings. Color. 12 minutes.

Topic: Human emotions  
Recommended age: EP, JH

Our Wonderful Body: How it Grows. Color. 11 minutes.

Topic: Nutrition  
Recommended age: EP - JH

Our Wonderful Body: How its Parts Work Together. Color.  
11 minutes.

Topic: Human anatomy  
Recommended age: EP - JH

Our Wonderful Body: How We Breathe. Color. 11 minutes.

Topic: Human physiology  
Recommended age: LP - SH

Our Wonderful Body: The Heart and Its Work. Color.  
11 minutes.

Topic: Human physiology  
Recommended age: LP - A

Our Wonderful Eyes and their Care. Black and White  
11 minutes.

Topic: Caring for eyes  
Recommended age: EP, LP

Overprotection: A Family Picnic. Color. 17 minutes.

Topic: Parenting the deaf child  
Recommended age: A, TCAP

Parental Authority: A Canoe Trip. Color. 12 minutes.

Topic: Deafness in adolescence  
Recommended age: LP - SH

People are Different and Alike. Black and White.  
11 minutes.

Topic: Social living  
Recommended age: EP, LP

Personal Health for rls. Color. 13 minutes.

Topic: Hygiene  
Recommended age: LP - SH

Personal Hygiene for Boys. Color. 10 minutes.

Topic: Hygiene  
Recommended age: JH - A

A Quarter Million Teenagers. Color. 16mm 1964.

Topic: Venereal Disease  
Recommended age: JH - A

Rice: From Seed to Flower. Color. 13 minutes.

Topic: Life cycle of rice plants  
Recommended age: LP - C

Self-Defense for Girls. Color. 17 minutes.

Topic: Social living  
Recommended age: JH - A

Society and You. Color. 17 minutes.

Topic: Drugs and problems in the home  
Recommended age: SH - TCAP

Till Tomorrow. Color. 14 minutes.

Topic: Dating  
Recommended age: JH, SH

To Plan Your Family. Color. 14 minutes. 1967.

Topic: Contraception and family planning  
Recommended age: SH, A

The Ugly Duckling. (two versions) Black and White or Color.  
10 minutes. 1967.

Topic: Growing up  
Recommended age: EP - JH

A Very Special Day: An Adventure at Coney Island. Color, 19 minutes.

Topic: Friendship, responsibility  
Recommended age: EP - C

VD: Prevent It. Color. 11 minutes.

Topic: Venereal disease prevention  
Recommended age: LP - A

A Weekend Visit. Color. 16 minutes.

Topic: Social living  
Recommended age: LP - SH

What Do Flowers Do: A First Film. Color. 12 minutes.

Topic: Biology of a flower  
Recommended age: LP - SH

What Do Seeds Do: A First Film.

Topic: Plant seeds  
Recommended age: EP - SH

What's Alive? Color. 10mm

Topic: Animate and inanimate  
Recommended age: EP, LP

What Should Kathy Do? Color. 5 minutes.

Topic: School pressures  
Recommended age: LP - S

Why Exercise? Color. 18 minutes.

Topic: Physical education  
Recommended age: EP - A

William: From Georgia to Harlem.

Topic: Move to new home and friendship  
Recommended age: LP - A

Your Cleanliness. Black and White. 12 minutes.

Topic: Hygiene  
Recommended age: EP - JH

Your Clothing. Black and White. 12 minutes.

Topic: Hygiene  
Recommended age: EP - JH

Your Family. Black and White. 11 minutes.

Topic: Social living  
Recommended age: EP, LP

Your Food. Color. 18 minutes.

Topic: Nutrition  
Recommended age: LP - A

Your Table Manners. Black and White. 10 minutes.

Topic: Social living  
Recommended age: EP - JH

Zoo Baby Animals. Color. 11 minutes.

Topic: Babies  
Recommended age: EP

Zoo Families. Color. 10 minutes.

Topic: Families  
Recommended age: EP

188

### III MATERIALS SUGGESTED BY SCHOOLS FOR THE DEAF

#### Films

"Are you Ready for Marriage?" (Coronet Films)

Topic: marriage

Recommended by: The Beverly School for the Deaf

"At Home" (Curriculum Films, Inc.)

Topic: social living

Recommended by: The Beverly School for the Deaf

"Birth Right" (Roy Productions, University of Buffalo)

Recommended by: St. Mary's School for the Deaf

"Care of Hair and Nails" (Encyclopedia Britannica Films)

Topic: hygiene

Recommended by: The Beverly School for the Deaf

"Care of Skin" (Encyclopedia Britannica Films)

Topic: hygiene

Recommended by: The Beverly School for the Deaf

"Choosing for Happiness" (McGraw Hill)

Topic: marriage

Recommended by: The Beverly School for the Deaf

"Date Etiquette" (Coronet Films)

Topic: dating

Recommended by: The Beverly School for the Deaf

"Dating: Do's and Dont's" (Coronet Films)

Topic: dating

Recommended by: The Beverly School for the Deaf

"Family Life" (Coronet Films)

Topic: families

Recommended by: The Beverly School for the Deaf

"Fertilization and Birth" (Perennial)

Topic: conception and birth

Recommended by: Educators of the Mentally Retarded

"Going Steady?" (Coronet)

Topic: dating

Recommended by: The Beverly School for the Deaf

"Good Sportsmanship" (Coronet)

Topic: social living

Recommended by: The Beverly School for the Deaf

"Growing Up" (University of Illinois)

Topic: maturation

Recommended by: The Beverly School for the Deaf

"Home Management: Why Budget?" (Young America Films)

Topic: family life

Recommended by: St. Mary's School for the Deaf

"How Much Affection?" (McGraw Hill)

Topic: dating

Recommended by: The Beverly School for the Deaf

"How to Say No: Moral Maturity" (Coronet Films)

Topic: values

Recommended by: The Beverly School for the Deaf

"Human and Animal Beginnings" (Henk Newenhouse)

Topic: reproduction

Recommended by: St. Mary's School for the Deaf

"Human Reproduction" revised edition (Massachusetts Department of Public Health)

Topic: reproduction

Recommended by: Clarke School for the Deaf

"Human Structure" Part II

Topic: human anatomy

Recommended by: Pennsylvania School for the Deaf

"In Public Buildings" (Curriculum Films)

Topic: social living

Recommended by: The Beverly School for the Deaf

"It's Wonderful Being a Girl" (Association Films)

Topic: menstruation

Recommended by: Clarke School for the Deaf

"Joe and Roxy"

Topic: dating

Recommended by: The Beverly School for the Deaf

"Kathy" (AIMS)

Topic: venereal disease

Recommended by: Special Education Instructional Materials Center, Boston, MA

"Let's Visit our Friends" (Society for Visual Education)

Topic: social living

Recommended by: The Beverly School for the Deaf

"Marriage Problems" (NET--University of Indiana)

Topic: marriage

Recommended by: The Beverly School for the Deaf

197

"Marriage Today" (McGraw Hill)

Topic: marriage

Recommended by: The Beverly School for the Deaf

"Meaning of Engagement" (Coronet Films)

Topic: marriage

Recommended by: The Beverly School for the Deaf

"The Miracle of Reproduction" (University of UMASS Film Library)

Topic: reproduction

Recommended by: The Clarke School for the Deaf

"Origin and Evolution of Life"

Topic: evolution

Recommended by: Pennsylvania School for the Deaf

"Personal Appearances" (McGraw Hill)

Topic: hygiene

Recommended by: The Beverly School for the Deaf

"Physical Aspects of Puberty" (McGraw Hill)

Topic: physical maturation

Recommended by: Clarke School for the Deaf

"Posture and Exercise" (Encyclopedia Britannica Films)

Topic: hygiene

Recommended by: The Beverly School for the Deaf

"Responsibility" (Curriculum Films)

Topic: social living

Recommended by: The Beverly School for the Deaf

"Social Sex: Attitudes in Adolescence" (McGraw Hill)

Topic: attitudes

Recommended by: Clarke School for the Deaf

"The Story of Menstruation" (Kimberly-Clark Corporation, Neenah, WI)

Topic: menstruation

Recommended by: Clarke and Beverly Schools for the Deaf

"This Charming Couple" (McGraw Hill)

Topic: dating

Recommended by: Beverly School for the Deaf

"Unitarian Church Program on Human Sexuality"

Topic: twelve films on various aspects

Recommended by: The Framingham Learning Center

"V.D.--Very Communicable Diseases" (AIMS)

Topic: venereal disease

Recommended by: Special Education Instructional Materials Center, Boston, MA

"V.D." (Holt, Rinehard and Winston)

Topic: venereal disease

Recommended by: Special Education Instructional Materials Center, Boston, MA

"What to do on a Date" (Coronet)

Topic: dating

Recommended by: The Beverly School for the Deaf

"Who's Boss?" (McGraw Hill)

Topic:

Recommended by: The Beverly School for the Deaf

"Your Body During Adolescence" (McGraw Hill)

Topic: physical maturation

Recommended by: The Beverly School for the Deaf

"You're in Public" (McGraw Hill)

Topic: social living

Recommended by: The Beverly School for the Deaf

Filmloops"Babysitter"

Topic: babysitting (Openended) (Eotnen)

Recommended by: Pennsylvania School for the Deaf

"Childbirth" (Eothen)

Topic: birth

Recommended by: Pennsylvania School for the Deaf

"Embryo and Fetus" (Ealing)

Topic: gestation

Recommended by: St. Mary's School for the Deaf

"The Engagement" (Eothen)

Topic: marriage

Recommended by: Pennsylvania and St. Mary's School for the Deaf

"The Experienced One" (Eothen)

Topic: dating

Recommended by: Pennsylvania School for the Deaf

"Fertilization and Early Development" (Ealing Cooperation, Cambridge, MA)

Topic: reproduction

Recommended by: St. Mary's School for the Deaf

"Human Birth" (Ealing Cooperation, Cambridge, MA)

Topic: birth

Recommended by: St. Mary's School for the Deaf

"Intercourse" (Eothen)

Topic: intercourse

Recommended by: Pennsylvania School for the Deaf

"The Lift" (Eothen Films)

Topic: hitchhiking

Recommended by: Pennsylvania School for the Deaf

"Love Story" (Eothen)

Topic: dating

Recommended by: St. Mary's and Pennsylvania Schools for the Deaf

"The Meeting" (Eothen)

Topic: dating

Recommended by: Pennsylvania School for the Deaf

"Menstruation" (Eothen)

Topic: menstruation

Recommended by: Pennsylvania School for the Deaf

"The New Born Baby" (Ealing)

Topic: birth

Recommended by: St. Mary's School for the Deaf

"Night Out" (Eothen)

Topic: adolescent dilemma

Recommended by: Pennsylvania School for the Deaf

"The Older Touch" (Eothen)

Topic: dating

Recommended by: Pennsylvania School for the Deaf

"The Party" (Eothen)

Topic: adolescent dilemma

Recommended by: Pennsylvania School for the Deaf

"Sexual Intercourse" (Ealing Corporation, Cambridge, MA)

Topic: intercourse

Recommended by: St. Mary's School for the Deaf

"The Swimming Party"

Topic: adolescent dilemma

Recommended by: Pennsylvania School for the Deaf

Filmstrips"Being Sensible About Sex" (Church Screen)

Topic: morality

Recommended by: Beverly and St. Mary's Schools for the Deaf

"Boy Dates Girl" (Church Screen)

Topic: dating

Recommended by: Beverly and St. Mary's Schools for the Deaf

"Boy Marries Girl" (Church Screen)

Topic: marriage

Recommended by: The Beverly School for the Deaf

"Clothes" (McGraw Hill)

Topic: hygiene

Recommended by: Beverly School for the Deaf

"Good Sportsmanship" (Captioned Films for the Deaf)

Topic: social living

Recommended by: Beverly School for the Deaf

"High School Prom" (Captioned Films for the Deaf)

Topic: etiquette

Recommended by: Beverly School for the Deaf

"Human Birth: Growth and Development: Facts and Feelings" (Warren Scholat Pro.)

Topic: 12 sound filmstrips on various aspects of birth and development

Recommended by Special Education Instructional Materials Center, Boston, MA

"Learning about Loyalty" (Society for Visual Education, Inc.)

Topic: social living

Recommended by: Beverly School for the Deaf

"Life Before Birth" Parts I and II (Time-Life)

Topic: gestation

Recommended by: St. Mary's School for the Deaf

"Manners in School" (Captioned Films for the Deaf)

Topic: social living

Recommended by: Beverly School for the Deaf

"Marriage and Money" (Institute of Life Insurance)

Topic: budget

Recommended by: St. Mary's School for the Deaf

"Reproduction Systems" (McGraw Hill)

Topic: reproduction

Recommended by: St. Mary's School for the Deaf

"When Are We Ready for Marriage" (Filmstrip of the month club)

Topic: marriage

Recommended by: St. Mary's School for the Deaf

"Your Cleanliness" (Captioned Films for the Deaf)

Topic: hygiene

Recommended by: Beverly School for the Deaf

"Your Clothing" (Captioned Films for the Deaf)

Topic: hygiene

Recommended by: Beverly School for the Deaf

"Your Ears" (Captioned Films for the Deaf)

Topic: hygiene

Recommended by: Beverly School for the Deaf

"Your Eyes" (Captioned Films for the Deaf)

Topic: hygiene

Recommended by: Beverly School for the Deaf

"Your Table Manners" (Captioned Films for the Deaf)

Topic: hygiene

Recommended by: Beverly School for the Deaf

"Youth Meets the World: This Holy Estate: Teenage Marriage" (Eyegate)

Topic: teenage marriage

Recommended by: St. Mary's School for the Deaf

Transparencies"Causes and Effects of Family Disharmony" (3M Company)

Topic: family life

Recommended by: St. Mary's School for the Deaf

"Family Cycle and Values" (3M Company)

Topic: family life

Recommended by: St. Mary's School for the Deaf

"Growth and Development Patterns" (3M Company)

Topic: maturation

Recommended by: St. Mary's School for the Deaf

"Marriage and the Family: Responsibility and Privilege" (3M Company)

Topic: family life

Recommended by: St. Mary's School for the Deaf

## IV GUIDES TO GUIDES OF NON-PRINT AND PRINT RESOURCES

American Association of Health, Physical Education and Recreation, Sex Education: Resource Unit, Grades 5-7. Washington, D.C.: American Association for Health . . . , 1967.

American Association for health, Physical Education and Recreation, A Resource Guide in Sex Education for the Mentally Retarded. Washington, D.C., 1965.

E.C. Brown Foundation, Curriculum Guides for Family Life and Sex Education, Eugene, Oregon: E.C. Brown Trust.

E.C. Brown Foundation, Sex Education for the Handicapped and an Annotated Bibliography of Selected Resources, Eugene, Oregon: E.C. Brown Trust, 1970.

Child Study Association, Sex Education-Recommended Reading, New York City, NY: Child Study Association of America.

Committee on Health Guidance in Sex Education, Growth Patterns and Sex Education: An Update Bibliography, Pre-School to Adulthood, American School Health Association, Kent, OH, 1972.

Cushing, Jane, 101 Films for Character Growth, Notre Dame, Indiana: Tides Publishers, Inc.

Siecus, Film Resources for Sex Education, New York: Siecus, 1971.

Siecus, A Resource Guide for Sex Education for the Mentally Retarded, New York: Siecus, 1972.

Singer, Laura, and Buskin, Judith, Sex Education on Film, Teachers College Press: New York, 1971.

Zero Population Growth of Massachusetts, Sex Education: Resources for Teachers, Boston, MA: Zero Population Growth of Massachusetts.

V PEOPLE AND PLACES: Additional Resources

Asterisks (\*) indicate groups with obtainable curricula and guides.

A. Sex Education for the Hearing Impaired.

American School for the Deaf:

The Life Situations Dept. is offering a voluntary 3 phase program to co-educational classes. The first phase, grades 7-8, deals with birth, physical and emotional changes during puberty, and the reproductive system. The second unit, grades 9-10, consists of the development of a baby before birth and family planning. The final unit, grades 11-12, deals with social disease and sexual abnormalities. All of the three units include "buzz" sessions every week to clarify student questions. (4/73)

Address:  
139 N. Main St.  
West Hartford, CT. 06107

Contact:  
Ms. Shirley Jefferson  
Ms. Lynn Cameron

Amoskeag Center for Educational Services:

An elementary school, Amoskeag program offers information on reproduction in "flowers and chickens." (4/73)

Address:  
121 Front St.  
Manchester, NH. 03102

Contact:  
Ms. Robin Henne

Austine School for the Deaf:

The elementary grades learn about reproduction (plants and animals) in science, the school nurse provides information to pre-adolescent girls regarding menstruation, and the science teachers in the upper school use the text, Sex Education for the Exceptional Child, to aid them in their sex education course. Austine expressed a need for materials dealing with attitudes and values. (4/73)

Address:  
120 Maple Street  
Brattleboro, VT. 05301

Contact:  
Mr. Phil Palmer  
Mr. Raymond Stevens

204

**\*Ball State University:**

Development of sex education curriculum evolving out of a workshop in 1965. The workshop was devoted to determine how existing film materials could be related effectively to instruction of the deaf in this particular subject. Suggest necessary procedures, references and materials for adapting most curricula to needs of the hearing impaired. (6/74) Sample curricula K-3, 4-6, 7-9, 10-12. Reprinted 1969 by Educational Media Corporation, White Plains, NY.

**Address:**

Muncie, Indiana 47303

**Governor Baxter School for the Deaf****Address:**

P.O. Box 799  
Mackworth Island  
Portland, ME 04104

**Contact:**

Ms. Anne Roseberry  
Mr. William Nye  
Ms. Marie O'Reagan

**\*Beverly School for the Deaf:**

Curriculum developed 1972. "Sex Education and Family Living" treating preadolescence, marriage and family for children entering upper school. (6/74)

**Address:**

6 Echo Avenue  
Beverly, MA 01915

**Contact:**

Mr. Herbert K. Goldberg

**\*Boston School for the Deaf:**

1971 developed course in "Social Hygiene" which encompassed "Family Living Patterns," "How Families Begin" and "Becoming a Person"

**Address:**

Randolph, MA

**Bruce St. School:**

Bruce Street is an elementary school and the nurse offers a course in hygiene to the 11 and 12 year old girls. The Newark Public School Curriculum (K-12) will be adopted and adapted next year if it is approved. (4/73)

**Address:**

45 Bruce St.  
Newark, NJ 07103

**Contact:**

Ms. Bea Edelstein

205

**\*Clark School for the Deaf:**

An extensive program for middle and upper schools, organized around a developed curriculum: "Sex Education and Social Hygiene." (1968)

**Address:**

Northampton, MA 01060

**Contact:**

Ms. Shirley Boot  
Ms. Barbara Wyman

**Crotched Mountain School for the Deaf:**

Crisis intervention and counseling; a more extensive curriculum, K-upper school, is being developed. (6/74)

**Address:**

Greenfield, NH.

**Contact:**

Ms. Shirley Pollinger  
Mr. Stephen Nestor

**Framingham Learning Center for the Deaf:**

Framingham is also using materials from the Unitarian Church Program with students 12-19 years of age. They initiated the program with a co-educational group of 23 and then broke up into smaller groups, one of which prefers to be segregated. (4/73)

**Address:**

P.O. Box 2046  
Framingham, MA 01701

**Contact:**

Ms. Annette Posell  
Ms. Susan Bass

**Gallaudet College:**

Program run through guidance counseling staff and informally by graduate students and school nurse.

**Address:**

Kendall Green  
Washington, D.C.

**Contact:**

Ms. Claire Timmons  
Ms. Della Fitzgerald  
Mr. James Achtzehn  
Mr. Max Fitzgerald  
Ms. Lydia Bourne

Horace Mann School for the Deaf, Boston, MA:

No sex education program for the students at Horace Mann is in operation. However, the school is working with parents of students using the Unitarian Church Program materials. (4/73)

## Address:

20 Kearsarge Avenue  
Roxbury, MA 02119

## Contact:

Ms. Rosalie Gabel

\*Illinois State School for the Deaf:

Development of two curricula under guidance of Frank Withrow:  
"Social Hygiene Guides to Family Living, Social Hygiene, etc."  
"Development of a Sex Education Curriculum for the Hearing Impaired."

## Address:

Jacksonville, Illinois

Marie Katzenbach School:

Katzenbach has just initiated a co-educational program for the upper school which deals with personal, emotional, psychological, social and physical growth. (4/73)

## Address:

Sullivan Way  
West Trenton, NJ 08625

## Contact:

Mr. Paul Ferridio  
Ms. Daryl Duprez

\*Maryland School for the Deaf:

Offers family living courses as electives, using own curriculum:  
"Family Living." (1973)

## Address:

Frederick, MD 21701

## Contact:

Ms. Marsha Payne  
Mr. Charles Day

National Technical Institute for the Deaf:

The counseling department makes available materials for individual instruction, guest speakers, and a hot line program for their post-secondary students. Video tape is also used to convey information and provide an opportunity for role-playing. (4/73)

Address:  
Rochester, NY

Contact:  
Ms. Pat DeCaro  
5851 Palmyra Rd.  
Pittsford, NY 14534

North Carolina School for the Deaf:

Address:  
Morganton, NC 28655

Contact:  
Timothy Shane

\*Deafness Research and Training Center:

Adapting Herb Goldstein's social learning curriculum for use with hearing impaired children. Placing with 15 teachers, and having them rewrite according to their needs. They will then collate the changes and publish.

Address:  
New York University  
80 Washington Square East  
Room 51  
New York, NY 10003

Contact:  
Dr. Doris Naiman

\*Pennsylvania School for the Deaf:

Although a new curriculum is being created, the existing program is being taught to the first year classes in upper school, ages 13-14 as part of a health course offered by the physical education department. The classes are segregated, and dissatisfaction was expressed concerning the entire program. (4/73)

Address:  
7500 Germantown Ave.  
Philadelphia, PA 19119

Contact:  
Mr. Norm Hawkes

Pennsylvania State Oral School for the Deaf:

Currently, there is no formal program, but the guidance department will implement sections of the Ball State Curriculum to be used in the high school next year. (4/73)

Address:  
Scranton, PA

Perkins School for the Blind:

Currently, sex education is begun at the intermediate level on a limited basis. A full 2 year program is initiated in the high school which is built around two sex education guides available from SEICUS (Sex Information and Education Council of the U.S.): Sex and Family Life for the Visually Impaired; Sex and Family Life for the Mentally Retarded. Plans are underway for an expanded curriculum at the Perkins School. (4/73)

## Address:

175 N. Beacon St.  
Watertown, MA 02178

## Contact:

Mr. Carl Davis

Practical Living Skills Program:

This program is concerned with deaf adults 22-36 years of age, all of whom are on a therapeutic level of sex education. The program uses total communication, group interaction and parent involvement for communicating information and attitudes. (4/73)

## Address:

Boston, MA

Rhode Island School for the Deaf:

The psychologist and science teachers are now teaching segregated high school classes a course dealing with the physical, social, and emotional aspects of sexuality. Plans are now underway to integrate a program into the total curriculum of the school on all levels to be taught co-educationally. (4/73)

## Address:

520 Hope Street  
Providence, RI 02906

## Contact:

Ms. Dorothy Silvestry  
Ms. Helen McGarty  
Mr. Kevin McCarthy

\*St. Mary's School for the Deaf:

Developed "A High School Course in Preparation for Marriage: a course text/guide/outline." (1970) by L. and J. Trujillo.

## Address:

Buffalo, NY 14214

## Contact:

Sister Virginia Young

\*Special School District of St. Louis County:

Organized a 2-day workshop for a Teen Club of Deaf and Hard of Hearing kids. Willing to send materials and program used.

Address:

12110 Clayton Road  
Town and Country, MO 63131

Contact:

Ms. Martha Ross  
Ms. Maxine Davidson

\*Margaret Sterk School for the Hearing Impaired:

Curriculum guide: "Family Living and Sex Education." (1969) for primary through upper school. (6/74)

Address:

Newark School District  
Chestnut Hill Road  
Newark, Delaware 19711

Contact:

Mr. J. Paul Rudy  
Mr. John Persiger  
Ms. Earlene Gillman  
Ms. Ruth Kordausky  
Mr. Harold Lauber

Western Pennsylvania School for the Deaf:

At the upper elementary level, dorm counselors supervise informal group discussions. Sex ed. is a formal, structured curriculum topic in the junior and senior high school. (4/73)

Address:

300 East Swisssdale Avenue  
Pittsburg, PA 15218

Contact:

Mr. James Garrity

B. Sex Education for the General Public

AASEC (American Association of Sex Educators and Counselors):  
Emphasis on training programs for educators and counselors. They run summer workshops, etc. Some materials and information dissemination. Valuable Annual Conference.

\*American Association for Health, Physical Education and Recreation.  
"Sex Education, Resource Unit: grades 5-7".

Address:  
Washington, D.C.

Address:  
815 Fifteenth Street, N.W.  
Washington, D.C. 20005

Contact:  
Ms. Patricia Schiller

\*,\*\*E.C. Brown Center for Family Studies:  
Active research, training and information dissemination. Production of films and literature, among them: "Sex Education for the Handicapped with Annotated Bibliography" by Bass and Lang, 1972. Also: "Curriculum Guides for Family Life and Sex Education: An Annotated Bibliography," 1972.

Address:  
1802 Moss Street  
Eugene, Oregon 97403

Contact:  
Ms Joyce Lang

Center for Study of Sex Education and Marriage Dynamics:  
Research, training and workshops.

Address:  
University of Pennsylvania  
Philadelphia, Pennsylvania

Contact:  
Mr. William Stanton

Central Massachusetts Family Planning:  
Counseling, workshops and information.

Address:  
Worcester, Mass.

Contact:  
Michael Murray

\*Department of Curriculum Services, Public Schools of Newark, New Jersey:  
Curriculum: "Education for Family Living" for Pre K through 12.

Address:  
Department of Curriculum Services  
Public Schools of Newark, New Jersey  
Newark, NJ

\*Education Development Center:  
Curricula, among them: "Human Development Exploring Human Nature,"  
Unit III: "Transitions." Excellent.

Address:  
15 Mufflin Place  
Cambridge, MA 02138

\*Human Development Program:  
Excellent curriculum on "Affective Human Development."

Address:  
University of California, at San Diego  
San Diego, Calif.

Contact:  
Mr. Waldo Palormes

\*\*Institute for Family Research and Education:  
Research, training, workshops, publications, among them the comics  
"10 Heavy Facts About Sex," etc.

Address:  
Syracuse University  
Syracuse, NY

Contact:  
Sol Gordon

\*,\*\*Institute for Sex Education:  
Professional preparation in family life and VD information. Publications  
and films. Curricula. In-service training. Seminars. Rental film  
library.

Address:  
22 West Madison - Suite 805  
Chicago, Illinois 60602

Institute for Sex Research:  
Research and courses.

Address:  
University of Indiana  
Bloomington, Indiana

Michigan State University:  
Courses in "Sex Education and the Handicapped."

Address:  
Michigan State University  
East Lansing, Michigan

Contact:  
Dr. George Gore

Minnesota Couples Communication Program:  
Research, training, workshops.

Address:  
College of Medicine  
University of Minnesota  
Minneapolis, Minn.

Contact:  
James Maddox

**\*\*National Sex and Drug Forums:**  
Designed to supervise, review and recommend sex education materials.  
Evaluation techniques developed.

Address:  
330 Ellis Street  
San Francisco, Calif. 94102

**\*\*National Sex Forum:**  
Courses from University of California Human Sexuality Program, 727  
Parnassus Street, San Francisco, and distribution of materials  
distribution (mostly films.)

Address:  
540 Powell Street  
San Francisco, Calif. 94108

New England Center for Human Sexual Concerns:  
Forum of studies in Human Sexuality; courses given at Amherst and  
University of Massachusetts.

Address:  
c/o Donald Read  
Butternut Road  
Amherst, MA 01102

Contact:  
Mr. Howard Munson

**\*\*Planned Parenthood of East Central Georgia:**

Development of 3-5 minute "trigger" films, excellent for stimulating group discussion.

Address:  
P.O. Box 3993 Hill Station  
Augusta, GA 30904

**Planned Parenthood of Maryland:**

Address:  
352 East 25th St.  
Baltimore, MD 21218

**Planned Parenthood of Southeastern Pennsylvania:**

Publications: "Love, Sex and Birth Control for the Mentally Retarded."  
"A Guide to Sex Education for Persons with Disabilities that Hinder Learning."

Address:  
1402 Spruce Street  
Philadelphia, Penna. 19102

**\*\*Planned Parenthood - World Population:**

Planned parenthood international center. Rental of films. Information and literature available. They also run workshops on family planning.

Address:  
267 West 25th St.  
New York, NY 10001

See also State Planned Parenthoods.

**\*\*Population Dynamics:**

Production of materials, research literature and information.  
Distribution of films: "Abortion without Cervical Dilation"; "Vasectomy Technique."

Address:  
3829 Aurora Avenue  
Seattle, Washington 98103

**\*,\*\*SIECUS (Sex Information and Education Council of the U. S.):**

Emphasis on information dissemination, and aid to special populations. Have cooperated on developing curriculums in human sexuality for the mentally retarded and for the blind. Interested in cooperating on a program for the hearing impaired. Much pamphlet and written material, resource guides and curriculum material available. Publication keeps up with current materials and ideas.

Address:  
1855 Broadway  
New York, NY 10023

Contact:  
Mr. Derek Burleson

Studies in Human Sexuality:  
Research, training, workshops.

Address:  
Trenton State College  
Trenton, NJ

Contact:  
Donald Brown

\*Unitarian Universalist Church  
Sex Education Materials

Address:

University of Michigan:  
Workshops and courses in Human Sexuality, and Human Sexuality  
for the Handicapped.

Address:  
Ann Arbor, Michigan

Contact:  
Mr. Matthew Tripp

## VI DISTRIBUTORS, PRODUCERS, LIBRARIES

Most of the below have obtainable catalogues.

Astericks (\*) highlight particularly helpful groups.

AIMS Association for  
Instructional Materials  
600 Madison Avenue  
New York, NY 10022

Association Films, Inc.  
600 Grand Avenue  
Ridgefield, New Jersey 07657  
(201) 763-9693, 421-3900

\*Audio-Visual Communications, Inc  
Framingdale, NY 11735

\*Audio Visual Narrative Arts  
Pleasantville, NY 10578

Augsburg Publishing House  
426 South Fifth Street  
Minneapolis, Minnesota 55474

A-V Corporation  
2518 North Boulevard  
P.O. Box 66824  
Houston, Texas 77006  
(713) 523-6701

Bell and Howell Human  
Development Institute  
20 Executive Park West, N.E.  
Atlanta, Georgia 30329  
(404) 633-4581

\*\*The E.C. Brown Trust  
3170 S.W. 87th Avenue  
P.O. Box 25130  
Portland, Oregon 97225  
(503) 292-5434

W.C. Brown, Co.  
2460 Kerper Blvd.  
Dubuque, IA 52001

Billy Budd Film Library  
257 West 25th Street  
New York, New York 10001

Brigham Young University  
290 HRCE  
Provo, Utah 84601

Broadcasting and Film Commission  
National Council of Churches  
475 Riverside Drive  
New York, New York 10027  
(212) 870-2541

Calvin Productions  
1105 Truman Road  
Kansas City, Missouri 64106  
(816) 421-1230

Carousel Films, Inc.  
1501 Broadway  
New York, New York 10036

Cathedral Films also  
(Q'ED Productions)  
2921 West Alameda Avenue  
Burbank, California 91505  
(213) 848-6637

Center for Mass Communication  
Columbia University  
562 West 113th Street  
New York, New York 10025  
(212) 865-2000

Childbirth Film Service -  
Education League  
Box 188  
Lynwood, Washington 98036

Education Film Library Association  
17 West 60th Street  
New York, New York 10023  
(212) 246-4533

\*\*Churchill Films  
662 North Robertson Boulevard  
Los Angeles, California 90069  
(213) 657-5110

Educational Modules  
266 Lyell Ave.  
Rochester, NY

Communicable Disease Center  
Public Health Service - Audio Visual  
Facility  
Atlanta, Georgia 30333

Eyegar House  
Jamaica, NY 11435

\*\*Contemporary/McGraw Hill Films  
330 West 42nd Street  
New York, New York 10036

Family Films  
5823 Santa Monica Blvd.  
Hollywood, California 90038

David Cook Publishing Co.  
Elgin, IL 60120

Filmmakers Incorporated  
1144 Wilmette Avenue  
Wilmette, IL 60091  
(312) 256-4730

Coronet Instructional Films  
65 East South Water Street  
Chicago, Illinois 60610  
(312) DE 2-7676

Focus Education, Inc.  
Three East 54th Street  
New York, NY 10022  
(212) 421-0870

For Preview:

Preview Film Department  
369 West Erie Street  
Chicago, IL 60610

Franciscan Films  
P.O. Box 6116  
San Francisco, CA 94101  
(315) 388-9372

\*\*Denoyer-Geppert  
5235 Ravenswood Avenue  
Chicago IL 60640

Glenbrook Labs  
P.O. Box 204  
Murray Hill Station  
New York, NY 10016

\*Ealing Corporation  
2225 Massachusetts Ave.  
Cambridge, MA 02140  
(617) 491-5870

Glenn Educational Films, Inc.  
P.O. Box 371  
Monsey, NY 10952  
(212) 292-8159

Educational Activities, Inc.  
Box 392  
Freeport, New York 11520  
(516) BA 3-4666

The Graphic Curriculum  
P.O. Box 565  
Lenox Hill Station  
New York, New York 10021  
(212) 249-1549

Imperial Film Company, Inc.  
4404 South Florida Avenue  
Lakeland, Florida 33803  
(813) 646-5705

\*\*Guidance Associates  
41 Washinton Avenue  
Pleasantville, New York 10570  
(914) RO 9-7755

Indiana University Audio-Visual  
Center  
Bloomington, Indiana 47402  
(812) 337-8087

\*Harper & Row Publishers, Inc.  
Keystone Industrial Park  
Scranton, Pennsylvania 18512  
(717) 343-4761

Jarvis Couillard Associates  
142 Paseo de Gracia  
Redondo Beach, California 90277

Harris County Center for the  
Retarded, Inc.  
3550 West Dallas  
P.O. Box 13403  
Houston, Texas 77019  
(713) JA 8-6371

Journal Films, Inc.  
909 West Diversey  
Chicago, Illinois 60614  
(312) LA 5-6561

KOMO-TV  
Seattle, Washington 98101  
(206) MA 4-6000

\*\*Henk Newenhouse, Inc. (See  
Perennial Films, Inc.)  
1825 Willow Road  
Northfield, Ill. 60093

\*\*Learning Corporation of America  
Preview Library  
50-30 Northern Boulevard  
Long Island City, NY 11101

Alfred Higgins Productions  
9100 Sunset Boulevard  
Los Angeles, California

\*Life Filmstrips  
Box 834, Radio City Station  
New York, New York 10019  
(201) 837-7800

Hoebel-Lieterman Productions  
630 Ninth Avenue  
New York, New York 10026

Louis de Rouchemont Associates  
25 East 46th Street  
New York, New York 10017

Holt, Rinehart and Winston, Inc.  
383 Madison Avenue  
New York, New York 10017  
(212) MU 8-9100

Lutheran Film Library  
267 West 25th Street  
New York, New York 10001

Hubbard Scientific Company  
P.O. Box 105  
2855 Shermer Road  
Northbrook, Ill. 60062

Marsh Films, Inc.  
P.O. Box 8082  
Shawnee Mission, Kansas 66208

Mass Media Associates  
2116 North Charles Street  
Baltimore, Maryland 21218

Modern Talking Picture Service Inc.  
2323 New Hyde Park Road  
New Hyde Park, New York 11040  
(516) 437-6300

NET Film Service  
Indiana University  
Audio Visual Center  
Bloomington, Indiana 47401

National Foundation. March of Dimes  
315 Park Avenue South  
New York, New York 10010  
(212) 677-2100

National Medical Audio-Visual Center  
(National Health Films)  
Station K  
Atlanta, Georgia 30324  
(404) 633-3351

New York University Film Library  
41 Press Annex  
Washington Square  
New York, New York 10003  
(212) 596-2251

Oxford Films, Inc.  
1136 N. Las Palmas Ave.  
Los Angeles, California 90058

\*\*Perennial Education, Inc.  
1825 Willow Road  
Northfield, Illinois 60093  
(312) 446-4153

Pictura Films Distribution Corporation  
43 West 16th Street  
New York, New York 10011  
(212) 691-1730

\*\*Planned Parenthood/World Film  
Population  
810 Seventh Avenue  
New York, New York 10019  
(212) OR 5-5330

Pomes and Popcorn  
P.O. Box 22169  
Cleveland, Ohio 44122  
(216) 462-2905

Popular Science Publishing Co.  
Audio Visual Division  
355 Lexington Ave.  
New York, New York 10017

Population Dynamics  
13201 Ninth Avenue, NW  
Seattle, Washington 98177  
(206) EM 3-4821

Professional Arts, Inc.  
PO Box 8484  
Universal City, California 91608  
(213) 985-1200

QED Productions  
(See Cathedral Films)

Warren Scholat Productions, Inc.  
115 Tompkins Avenue  
Pleasantville, New York 10570  
(914) 769-7161

SRA (Science Research Associates, Inc.)  
259 East Erie Street  
Chicago, Illinois 60611  
(312) 944-7552

Silver Burdett Company  
A Division of General Learning  
Corporation  
Morristown, New Jersey 07960

**\*\*Singer/SVE**  
1345 Diversey Parkway  
Chicago, Illinois 60614

Wayne State University  
A-V Utilization Center  
5448 Cass Avenue  
Detroit, Michigan 48202

Society for Visual Education  
1345 Diversey Parkway  
Chicago, Illinois 60614  
(312) 525-1500

Western Publishing Co. Inc.  
850 Third Avenue  
New York, New York  
(212) 753-8500  
Sales: 1107 Broadway  
New York, New York

Sterling Educational Films, Inc.  
241 East 34th Street  
New York, New York 10016  
(212) 683-6300

\*John Wiley and Sons  
600 Grand Avenue  
Ridgefield, New Jersey 07657

**\*\*Sunburst Communications**  
Poundridge, New York 10576

WNET/Channel 13 School Television  
Service  
304 West 58th Street  
New York, New York 10019  
(212) 581-6000

Syntex Laboratories  
Attn: Professional Services  
Palo Alto, California

Teacher Training Aids  
27 Harvey Drive  
Summit, New Jersey 07901  
(201) 273-6278

Teachers College Film Library  
Teachers College, Columbia University  
New York, New York 10027

Texture Films  
1600 Broadway  
New York, New York 10019

3M Company  
Education Services/Visual Products  
Division  
Box 3100  
St. Paul, Minnesota 55101  
(612) 633-1110

TRAFCO (Television, Radio and  
Film Communication)  
The United Methodist Church  
1525 McGavrock Street  
Nashville, Tennessee 37203  
(615) 327-0911

220

APPENDIX II

## (Educational and Training Equipment)

By RAYMOND WYMAN

*Note.* The Association for Educational Communications and Technology supports the activities of the International Electro-technical Commission by providing necessary travel and communication expenses for the SC 60C Chairman, Raymond Wyman, University of Massachusetts, during his three-year term of office. Secretariat support for the Subcommittee is provided by the Netherlands National Committee and the Secretary is Wim Koeter, N.V. Philips Gloeilampenfabrieken, HIG ELASAN 4, Eindhoven, The Netherlands. United States participation is formulated and guided by an Advisory Committee chaired by Herbert E. Farmer, University of Southern California, Division of Cinema, University Park, Los Angeles, CA 90007. Responsible for Assn. for Educational Communications and Technology liaison is Richard Nibeck, AECT, 1201 16th St., Washington, DC 20036. Suggestions for the work of this Committee will be welcomed by Messrs. Farmer or Nibeck or Dr. Wyman whose address appears in the footnote below. The first report of this Committee was published on p. 617 of the August 1972 *Journal*.

The second meeting of IEC SC 60C for international applications of technical standards to educational and training equipment was held in Munich, West Germany, 19-21 June 1973. Two general meetings of the Committee included approximately twenty representatives from nine countries. Several important countries in the manufacturing and use of audio-visual equipment were unfortunately not represented.

Technical Subcommittee 60C as a component of Technical Committee 60 on Recording was established with the hope that wide and wise use of standards would result in: (1) greater and better use of equipment by educators; (2) greater amounts of and better engineered or perfected equipment produced by industry; and (3) substantial benefits in selling, servicing and maintenance of equipment. It must be remembered that the typical educator and student, in a world dominated by technology, still make very little use of equipment. It must also be remembered that considerable amounts of equipment already purchased by schools are lying idle. International standards should help those who manufacture, sell, service and use educational equipment.

The Committee is concerned with: (1) the promotion and publicizing of existing and useable standards; (2) adaptation or simplification of existing and rigorous standards for educational use; (3) stimulating other committees to produce needed educational standards; and (4) creation or preparation of needed standards that cannot be obtained otherwise.

The Committee must, of course, also identify the current and emerging needs of education for standards. It depends primarily on national advisory committees and professional associations for this input.

Six working Groups of SC 60C met several times between the two general meetings to attack specific areas identified at the first meeting in France a year earlier, and to prepare recommendations for future work.

Working Group 1 (I. D. H. Burns, United Kingdom, Chairman) was concerned with symbols and information for rating specifications, instruction cards, input and output terminals and controls. It was agreed that general use of symbols would make equipment operation easier, faster and internationally understandable. Symbols for educational apparatus should be identical to those used for similar purposes elsewhere, and new symbols should be created only as a last resort. Symbols should be explained in the language of the user country on information or rating plates and in instruction sheets or booklets. A docu-

ment or handbook of recommended standard symbols for makers and users of educational equipment will be undertaken.

Working Group 2 (F. Brochtorb, Norway, Chairman) was concerned with electrical and mechanical matching of elements, modules and components of educational and training systems. The great variety and nonstandardization of mechanical interconnection devices for educational systems and the unreliability of them, has been a major problem. Although certain connectors seemed preferable for specific purposes, several improvements were suggested. The group will prepare a document on connectors for audio-visual systems for circulation and response. Work has not yet started on the important area of electrical matching problems which have become more evident with the advent of solid-state electronics, transformerless outputs, multiple headsets, recording duplicates, etc. Members of WG2 will undertake a study of needed activities in this area.

Working Group 3 (B. R. Webster, United Kingdom, Chairman) was concerned with electronic learning systems including feedback systems, unconventional uses of audio- and video-recorders, restricted bandwidth communications, optical scanning remote control systems, programmed learning systems, electrowriters, slide-tape programs and automatic recording of off-hours broadcasting. This area is very promising for technical help to education, but it is in a state of confusing and rapid development. The Working Group will continue to monitor the field and prepare a questionnaire to survey status and needs.

Working Group 4 (L. Yngvesson, Sweden, Chairman) was concerned with system safety. They considered whether existing safety requirements prepared for consumers adequately meet the needs of educators. They concluded that there should be one common safety standard for equipment used in education, training and the home. Electrical safety seems to be adequately covered in existing IEC standards with the possible exception of isolating transformers. A special safety problem created by the local and amateur interconnection of two or more pieces of electrical apparatus meeting different standards needs attention. Other kinds of hazards such as sharp edges, heat, ear damage, radiation, stability and flammability also need attention. The group will prepare a document for submission to the Secretariat for circulation and response.

Working Group 5 (W. Koeter, Netherlands, Chairman) was concerned with audio cassette systems. It accepted all of the usual standards for the cassette and its recording-playback characteristics and prepared only those additional characteristics for educational systems. Four problems were discussed in the light of several national or proposed national standards and the following points were agreed upon:

(1) *Track configuration.* Track 1 or 1 + 2 should be used for prerecorded information (mono or stereo). Track 3 should have no recording for AAC and cue or pulse recording for AACV and AIV. Track 4 should be used for student response for AAC and AACV and have the same pulse recording for APV.

(2) *Cue tones.* Frequencies, timing and tolerances were agreed on for cue tones to advance a picture, pause, random access, programmed instruction and automatic shutoff.

(3) *Cue tone levels.* Minimum and optimum levels for cue or pulse tones were established.

(4) *Channel separation.* Requirements for the separations among the four channels were agreed upon for optimum operation and minimum crosstalk.

The Secretariat will prepare a new document for circulation and comment.

Working Group 6 (L. Morris, United States, Chairman) was

A contribution submitted on 20 August 1973 by Raymond Wyman, Chairman of TC Subcommittee 60C (Educational and Training Equipment), Director, Northeast Regional Center for the Deaf, Thompson Hall, University of Massachusetts, Amherst, MA 01002.

concerned with video recording systems in education and training. There is much interest in this field and much confusion caused by the many existing and announced noncompatible formats. The group will consider trying to determine various educational and training requirements for video recording systems. They will also monitor the field and attempt to provide helpful advice to users. It was agreed that the address code for visual information should be recorded on the unused audio track.

Several new items for possible future consideration and standardization were briefly discussed. These came from committee members and national committees:

- (1) Mounts for overhead projectors.
- (2) Containers for filmstrips and other software to permit standard storage units.
- (3) Still picture motion-picture audio program combination formats such as PIP and Cue-See.
- (4) Synchronizing and address codes.
- (5) Projection room viewing conditions.
- (6) Test targets for additional devices such as overhead projectors.

## Errata

### New Products Column

JULY 1973 JOURNAL, p. 604

"Print-through edge-numbering on 16mm release prints. . ."  
In this announcement by Consolidated Film Industries of the service being made available, it was noted that the Laboratory Practice Engineering Committee of the SMPTE is considering a "Recommended Practice that would suggest that all 16mm release prints be edge numbered with numbers in accordance with American National Standard P1122 83-1972. . ."

This statement is in error. At present the SMPTE Laboratory Practice Committee is preparing a Recommended Practice intended to guide those who are concerned with placing edge numbers on 16mm prints. The Recommended Practice will say, in effect, that if edge numbering is used, American National Standard P1122 83-1972 should be followed.

It should be noted here that American National Standards are voluntary and are intended for guidance.

### The Subjective Effects of Echoes in 525-Line Monochrome and NTSC Color Television and the Resulting Echo Time Weighting

By A. M. LESSMAN DECEMBER 1972 JOURNAL, pp. 907-916

Page 909, column 3, step (4)

For: "An appropriate function of the test variable  $d_i$  . . ."

Read: "An appropriate function of the test variables . . ."

Page 909, Fig. 2

For:  $K/S = S_1/E_1 - S_2/E_2$

Read:  $K/S = S_1/E_{2.6} - S_2/E_1$

Page 910, columns 2 and 3, and on Figs. 3 and 4. It is stated that the  $KM$  function ( $KM = KM1 + KM2DKM$ ) represents the value of SER at which  $\mu = 4$ , the middle of the comment range. However, the  $KM$  function is only an approximate representation of this; it actually represents the value of SER at which  $\mu = KD + KA/2$ , i.e., at the inflection point of the logistic curve of  $\mu$  vs SER. Exact curves for  $\mu = 4$  can be obtained by solving the equation given in Table III for

No immediate action was planned; instead, the committee was urged to consider resolution of work already underway.

A possible publication on standards related to audio-visual media for the educational consumer was briefly discussed. A comprehensive scope has been prepared, but only a modest beginning including the first sections was considered possible at this time.

The Secretariat will prepare and issue a document on the identification and explanation of general terms used in educational and training applications of recording and other audio-visual equipment. This will rely heavily on existing IEC publications.

The next general meeting for SC 69C is planned to coincide with the next meeting of SC 50A and SC 60B in approximately 18 months. It was informally agreed that the Chairman, Secretary and Working Group Chairman would attend a two-day meeting in London in mid-January of 1974 to consider work in progress, proposals from national committees and to plan continuing and future work. Each Working Group Chairman will monitor his particular area of interest and arrange for necessary communications, meetings and proposals.

SER and setting the value of  $\mu$  to 4. These exact curves for the middle of the comment range differ only slightly in appearance from the  $KM$  function curves of Figs. 3 and 4 and the general conclusions concerning differences between pictures is not affected.

Page 916, Appendix, column 2, line 4

For: "Its value is the difference, in dB, between  $KM$  and the value of SER at which  $\mu$  is approximately equal to 2.6"

Read: "Its value is the difference, in dB, between the value of SER at which  $\mu$  is approximately equal to 2.6 and the value of  $KM$ ."

## Correction for an Erratum

### Wide-Screen Stereoptics Without Special Glasses in a Normal Theater--An Abstract

By ROBERT B. COLLENDER MAY 1973 JOURNAL, p. 409

Erratum on p. 670 of August 1973, column 2 lines 9 and 10

For: "This 3-D system . . ." (a leave-out in typesetting and proofing was that now shown in italics in the complete sentence):

Read: "This 3-D system does not allow *direct shuttering* but an effective interlace is employed to bring the flicker rate to 48 Hz."

Robert B. Collender, 709 Patterson Ave., Glendale, CA 91203

## Addendum

### SMPTE Committees, Reports and Information for Members JULY 1973 JOURNAL

On page 617, under the heading "Joint Committee on Inter-Society Coordination," the listing for The JCIC Ad Hoc Committee on Television Broadcast Ancillary Signal was regrettably omitted. It should read as follows:

JCIC AD HOC COMMITTEE ON TELEVISION BROADCAST ANCILLARY SIGNALS

SMPTE Representative: Frank Davidoff

### Videocassette Technology in American Education

By George N. Gordon and Irving A. Paik. Englewood Cliffs, N.J.: Educational Technology Publications, 1972. \$7.95.

A book on videocassettes is obviously needed because at this time there are many unanswered questions about this latest technology, which may or may not revolutionize some or all aspects of education. These questions are of a technical nature, an educational nature, a philosophical nature. And the book comes at a time of massive frustration with technology in education, particularly with television and the means for recording and reproducing it. It also comes at a time of financial belt-tightening in education.

This hard-cover volume does not propose to answer all questions for all people at this time of technological indigestion in education. It is not, for example, concerned with the details of various non-compatible systems for self-threading or pre-threaded videotape containers and the mechanisms for recording and/or reproducing messages on television monitors and/or receivers. There is not a single diagram or picture to help one to understand or compare the inner workings of the various systems. There is no chart of technical details to help one to assess or predict overall sound and picture quality. There is a chart at the end, added grudgingly at the request of the publisher, that identifies various available and announced systems along with gross details. This is not a book for technical people who want details on the "state of the art" for cassette videotape units.

Nor is it concerned with details of the various emerging and innovative patterns of education that videocassettes might serve. It assumes that the reader is already familiar with them and only needs a brief review of open classrooms, open universities, alternate schools, continuing education, career education, community or junior colleges, etc.

It is definitely concerned with the possible *interactions* between emerging videocassette technology and emerging patterns of education. The authors provide keen insight into a confused situation for media technologists, teachers, equipment manufacturers, and materials producers. No simple or clearly defined solution either for educators or suppliers emerges, but important considerations for both are detailed.

The authors are cautiously optimistic that the new combination of record-reproduce-sound-moving-picture-cassette loading-pushbutton-portable technology makes possible and probable a revolution in education that has been promised and never delivered by a long succession of potentially revolutionary devices and materials.

It seems obvious that the videocassette will soon replace open reels of videotape that had to be carefully threaded and integrated into a complex mechanism. A parallel to the rapid and widespread adoption of the audio compact cassette is indicated. Certainly the success story of the audio cassette is a model that is much admired and much in need of duplication in the video field. But can the videocassette follow the same route? The authors have not resolved this question. With audio recording, one clearly superior system was developed ahead of competitors and made easily (if not freely) available to all manufacturers who were willing to abide by strict standards to insure compatibility. The present possibility and ease of using any audio cassette (various lengths, mono-stereo, various qualities, etc.) on any machine (various sizes, mono-stereo, various sound qualities, various power outputs, etc.) has resulted in a boom for equipment manufacturers and materials producers and a boon for consumers.

But the videocassette situation is entirely different. Instead of one clearly superior and easily adopted standard, there are a dozen possible standards with no clear superiority and massive proprietary interests. The authors indicate that a single standard cassette is

essential to the revolution they envision, but they provide no blueprint of the process for attaining it other than to state that the consumers must be involved or actually force the issue. The survival and wide acceptance of one cassette version as a standard will inevitably mean the death of many others. Euthanasia in the technical world is difficult, unpopular and necessary. The authors would settle for even two or three surviving standards, which might jeopardize many of their conclusions.

Even if the videocassette replaces reel-to-reel tape, which it undoubtedly will, will it replace the other media now used in education? Will it become the predominant medium for providing audio and visual messages for education or only another medium to cohabit the educational scene? With the exception of audio cassettes, which the authors see as a continuing and very popular source by audio-only materials, videocassettes will largely dominate the media field. But this may be only wishful thinking. They point out, but do not extrapolate from it, that practically every new medium has come to live with existing media rather than replace them. Will videocassettes be any different? Slides, filmstrips and motion pictures have much to recommend them and the equipment for reproducing them is simple and inexpensive. Videocassette playback requires complex and relatively expensive equipment, and resolution (with all common systems) is very limited.

Another consideration is the playback or reproduction of audio-visual materials versus the record and playback of materials. Educators, and other users, have need for both features, but they may be provided by entirely different and non-compatible systems. The wide acceptance of audio cassettes has not hurt the phonodisc industry because we have much use for commercially produced audio in addition to our own. Why use a record and reproduce system when reproduction is the only requirement? The PIP (Programmed Individual Pre-

sentation) system might be a far simpler and less expensive system for making commercial materials available to students. Alternatives to electronic reproduction are seldom considered by television enthusiasts.

The videodisc was just coming over the horizon when this book was written, and it is given little consideration. It may be that mass-produced (by stamping) videodiscs of commercial material will serve the same function as phonodiscs and prosper side by side with videocassettes for the record plus reproduction needs.

The authors state that the book was easy to start and impossible to finish, and that they could turn out to be dead wrong in some of their conclusions. It is good that these considerations did not keep them from jumping into a very difficult subject at this time.

The book should be very helpful to commercial people who have a potentially valuable device for education but little understanding of the complex, peculiar, and baffling educational enterprise. There is an excellent analysis, often critical and irreverent, of the American educational scene and the many innovations that promise a better education for a wider variety of students.

The book should be very helpful to a wide variety of educators who are faced with yet another technological device before they have mastered a long succession of others.

We all dream of an educational world in which any student can easily select any needed audio and/or visual resource and make use of it at his or her convenience with readily available, inexpensive and easily used equipment. Students already have the key (literacy) to unlock print resources. They now need *the* key, rather than a hopeless variety of keys, to unlock the non-print resources. Perhaps the videocassette and its player-monitor will provide that key. The answer is still in doubt.

*Raymond Wyman*  
*University of Massachusetts*

225

# A Proposal for a 24 volt Standard for Audio-Visual Equipment

Audio-visual equipment is now manufactured for a variety of mains voltages, frequencies and connectors to interface with worldwide power systems. A standard low direct-current voltage is proposed for all components of audio-visual equipment and power outlets to be used in individual study and small group instruction. Several benefits are discussed: increased user safety, international compatibility, more portable equipment, more efficient optical systems, possibly lower cost equipment and use of equipment in places where there are no electrical mains.

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AUDIO VISUAL equipment is now designed primarily for operation on 120-V (North America), 100-V (Japan) and 220-V (Europe), but with many exceptions and additional voltages. The frequency may be dc, 25-, 40-, 42-, 50- or 60-Hz, with 50- and 60-Hz being most common. The traditional audio-visual equipment system is shown in Fig. 1. The resulting variety of equipment, confusion, equipment malfunctions, equipment failure and equipment destruction are interfering with the wide use of needed apparatus to improve instruction, particularly in the developing parts of the world.

There is another fundamental consideration. None of the common institutional or home voltages is well suited to operate modern electronic devices and small incandescent lamps. Much of the better audio-visual equipment is now being made with

a step-down transformer within its housing to change the voltage to some lower value for more efficient solid-state amplifiers, control circuits and projection lamps. A voltage somewhere around 24 seems to be most desirable and most commonly used. The "state of the art" audio-visual equipment system is shown in Fig. 2.

This proposal is for a new standard of 24 volts to be established as the recommended voltage for components of audio-visual equipment to be used in individual study and small group instruction. A higher voltage would continue to be needed for permanent and semipermanent auditorium installations and other high-power equipment.

The new standard would specify that amplifiers, other electronic components, motors, control circuits and lamps be constructed for a nominal

Presented on 25 October 1972 at the Society's Technical Conference in Los Angeles by Raymond Wyman (Chairman of American National Standards Institute PH 7 Committee for Audio Visual Equipment and of the International Electrotechnical Commission Technical Committee 60C for Audio-Visual Equipment), Director, Northeast Regional Media Center for the Deaf, Thompson Hall, University of Massachusetts, Amherst, MA 01002.

(This paper, first received on 14 September 1972, received in final form on 7 February 1973.)

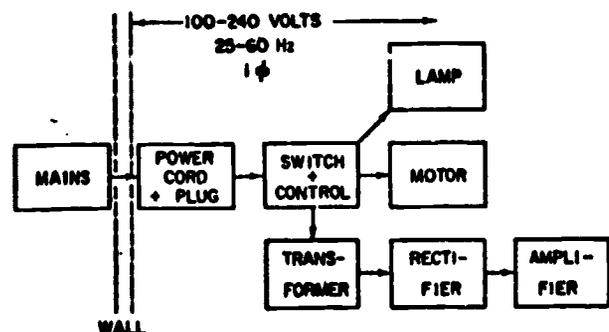


Fig. 1. Traditional audio-visual equipment system.

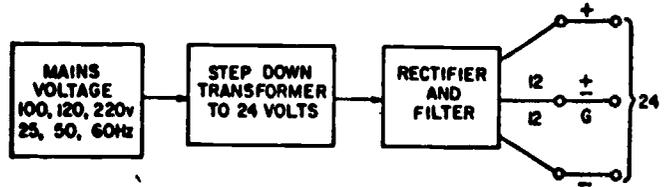
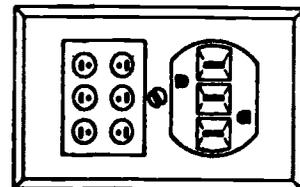


Fig. 4. Interim 24-V system.

educational settings would have approved 120-V to 24-V step-down transformers and rectifiers installed on walls, in closets, in desks, under projection stands, etc. An interim 24-V system is shown in Fig. 4. Existing electrical codes would, of course, need to be adhered to, and they would be far more demanding for the higher than for the lower voltage.

The new standard would specify a new or adapted series of universal plugs and jacks that would be used world-wide. Equipment that required low current might have very small diameter cords and miniature plugs and contacts. Outlets might have multiple holes for the insertion of several low-current devices. Higher-current devices might have larger cords and multiple pins. Outlets might have a number of holes related to supply or battery capacity. Outlets would need to be polarized and grounded. Far more portable cords and connectors for low-power equipment would result, particularly in Europe.



Six 5 Amp. Plugs  
Three 10 Amp. Plugs  
(One 20 Amp. Plug  
Two 5 Amp. Plugs  
One 120 Volt Plug  
(Either Circuit)  
One 240 Volt Plug  
(New Design)

Fig. 5. Proposed 24-, 120-, 240-V outlet.

Figure 5 shows a possible wall outlet for the proposed 24-V system and a possible new 120/240-V ac outlet. Each of the six small outlets would supply 24 V with a grounded centertrap. Construction details would need to be determined, or an existing system adopted or adapted.

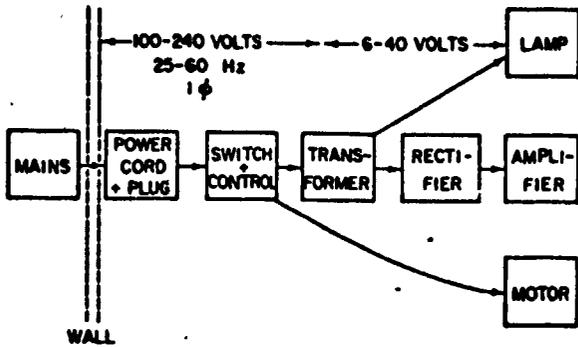


Fig. 2. State-of-the-art audio-visual equipment system.

voltage of 24. Since amplifiers must have direct current, and motors, control circuits and lamps can work on either dc or ac, it would seem desirable to have the new standard specify direct current with not more than some per cent of ripple. Direct current would eliminate all problems associated with various frequencies. The proposed audio-visual equipment system is shown in Fig. 3. There would also be several advantages to specifying a centertapped 24-V dc system with the center tap grounded. This would permit and encourage the production and use of low-power 12-V equipment for portable and automobile use as well as for use in schools, homes, etc. Higher-power equipment would need

the full 24 V, but internal components such as complementary transistors, reversing motors, etc., could take advantage of the reversed polarity and dual voltages.

The new standard would specify that new educational settings such as study carrels, libraries, resource centers, classrooms and even home study centers would be equipped with built-in transformers and rectifiers to provide 24 V for convenient plug-in of all portable equipment. One transformer might serve one or several rooms. The transformers could be fed from any building source, even high voltage and multi-phase circuits for optimal use of copper, since no unauthorized human contact would be possible. Existing

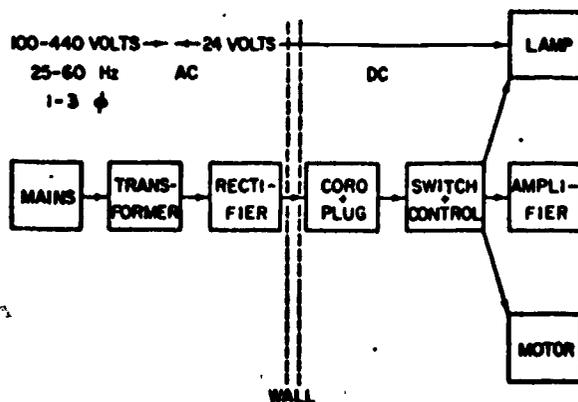


Fig. 3. Proposed audio-visual equipment system.

One of the small outlets would be sufficient for a low-power device and multiples could be used for larger power devices. The 120/240-V outlet would be connected to the usual centertapped 240-V building electrical system so that any existing 120-V plug could be inserted into either of the existing circuits and 240-V equipment could be connected by means of a newly designed five-contact plug. This would permit European equipment or higher-power American equipment to be used directly. Electrical codes would have to be followed or perhaps modified. All existing schools and homes have a 240-V supply for high power needs, but it is largely unused due to a proliferation of plugs and outlets that are infrequently available.

### For the Sake of Safety

Safety is of course a primary reason for the proposed standard low voltage. Equipment that was once operated only by teachers, trainees and technicians is now regularly operated by students who may be young, inexperienced and handicapped. Equipment that was once out of reach is now often in a child's lap. A voltage around 120 provides a serious shock and the common European 220 volts is deadly. Twenty-four volts is usually considered safe, and many precautions needed for higher voltages are not needed. Underwriter's Laboratories have entirely different and much less stringent requirements for voltages under 25 or 30.

Lower costs would result from the elimination of transformers, rectifiers and filters within individual pieces of equipment. Any equipment from any country could be used in any other country.

Greater portability would result from the elimination of the usual heavy internal transformers. The space and substantial mounting hardware for the transformer would also be unnecessary. Low-power equipment could have small cords and plugs for portability and easy storage within the case. Students would find it far easier to make use of media wherever they wanted to be, rather than be restricted to certain

places.

### Efficiency Gains

Projection lamps are far more efficient and robust at about 24-V. Numerous late model projectors require only about one-fourth the wattage for equivalent screen lumens when operated on low voltage. This means not only low power requirements from over-taxed utilities, but approximately the same current drain in amperes and copper wire sizes that were formerly needed for the higher voltages.

Solid-state electronic circuits currently make use of voltages from about 6 to 40 V depending on power output needed. Twelve and 24 V would seem to be a compromise that would be acceptable for all but the smallest and largest units. Control circuits for language laboratories, multi-media units and other systems work well on 24 V.

A standard voltage and connectors would permit components of language laboratories, multi-media units and other systems from a variety of sources and even a variety of countries to be combined and interconnected easily to make the most effective, flexible and economical packages for custom-tailored installations.

### International Compatibility

International trade in educational equipment for 24-V dc would be infinitely easier. All equipment would work in all countries without modification. Special transformers and rectifier modules would be needed at the individual setting or universal models for 100-, 120-, 240-V and 50-60-Hz could be developed.

Much educational equipment is needed where there are no electrical mains. Twenty-four volts can be easily supplied by portable generators, alternators and batteries. Sixteen dry cells in series or twelve lead-acid storage cells would provide 24-V dc. Two standard auto batteries in series would provide the suggested centertapped system to operate a great variety of equipment for a considerable time and they could be recharged by any automobile or service station. A new generation of

special-purpose batteries could result.

A complete change-over from our present world-wide variety of completely noncompatible audio-visual equipment to standard voltage, outlets and plugs would require considerable debate and time. Perhaps a comprehensive standard could be approached in stages. New projector designs and new electronic designs might immediately include 24-V specifications even though they made use of internal transformers. Learning laboratories might have 24-V components specified. Research and development laboratories might plan toward such a new standard.

National and international standards organizations would need to establish or designate groups to study and prepare recommendations. This would be an unusual situation. Requests for standards are now often prepared and promoted by a single manufacturer with the hope of gaining wide acceptance. This proposal is by an educator who wishes that many manufacturers in many countries would develop and produce equipment that would better serve education by being safer, more portable, more efficient, less costly and universally usable throughout the world.

### Call for Written Discussion

The suggestions of the reviewers of the first draft were many and varied; not all suggestions could be taken into account in the author's preparation of the final paper.

Because of the nature and status of this proposal, written commentary is especially desirable and needed as early as possible before the Meeting of IEC TC60C in the last two weeks of June in Munich. Commentary sent to the attention of the Editor at SMPTE Headquarters will be forwarded according to the best timing to reach the author.

Please send all commentary in double-spaced typewriting to facilitate review and preparation for clearance by all contributors for possible publication in the Journal after the TC600 Meeting, through the editor of AUDIO VISUAL 

RAYMOND WYMAN

Innovation is one of the major facts of life in education today. Anyone responsible for any aspect of education must spend a part of his or her time and energies in studying, evaluating, and possibly applying innovations in his or her program. There are so many innovations to consider that the task often seems impossible.

Education is often divided into three sub-systems for closer study and possible change. In a typical educational program, about 40 percent of a student's time is spent in group presentations of one kind or another. Another 40 percent is spent in individual study activities. The remaining 20 percent is spent involved in some kind of interaction with peers, teachers, or manipulative devices. A great variety of resources are currently available to improve each aspect of education. Innovation often involves the wider and wiser use of resources.

The presentation that involves only a teacher lecturing or talking to a group of students is frowned on by nearly everyone today. A presentation involving the weaving together of films and verbal communication, television and verbal communication, transparencies and verbal communication, real things and verbal communication, and amplified sound has proved far more interesting and productive to students.

Individual study that once consisted almost entirely of reading printed materials now is likely to take place in a carrel with a great variety of audio and visual materials as well as print materials available for study as needed. Interaction that traditionally involved a teacher and a small group of students sitting in a circle with printed materials and discussion may now involve a variety of teacher- and student-produced and used media. It may even involve a Mediated Interaction Visual Response (MIVR) laboratory in which students and teachers all have individual overhead projectors for simultaneous visual responding.

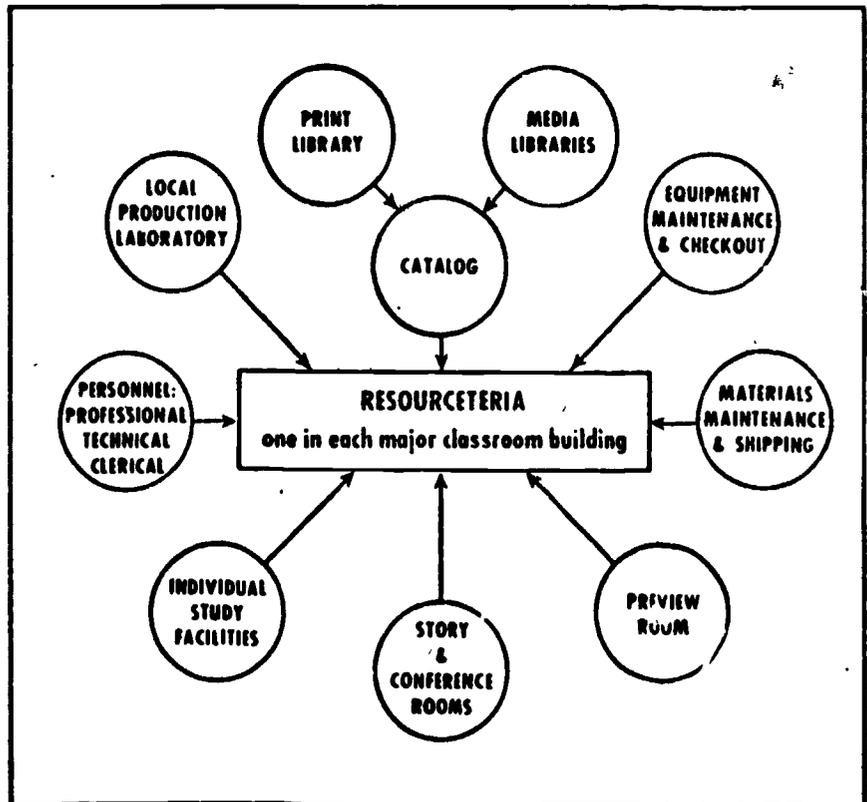
Thus, part of the current revolution

in education involves the wide and wise use of media in the large group, individual study, and interaction aspects of education. There are good reasons for using media. The traditional teacher talents of speaking, listening, reading, writing, assigning, and evaluating—all based essentially on verbal communication—can now be expanded and enhanced through the use of media. A teacher can present a wide variety of audio and visual experiences, either separately or in combination, in order to set the stage for meaningful small group interaction and individual assignments. The student who is flooded with multi-media experiences outside of the classroom can have a comparable quality, quantity, and variety of experiences within the school domain. Only traditional teachers continue to feel that the chalkboard and talk are a viable substitute for the projection screen, television tube, and loudspeaker or headphones.

Media also expand and enhance in-

dividual learning experiences. Still pictures (slides and filmstrips), motion pictures with or without sound (8mm, 16mm), and audio materials (discs, audio cards, reels, cassettes) can easily be added to the domain of print materials normally associated with individual study. Student reports that traditionally consisted of speaking or writing can be expanded and enhanced through the use of individually selected or constructed audio and/or visual materials. Interaction, which traditionally consisted solely of discussion and question-answer periods, can now involve group and individual reactions to materials of considerable variety. The student report may as well be a film, slide set, audiotape, or videotape as a paper or speech.

Our efforts so far to attain wide and wise media utilization in the improvement of the total educational process have not been very effective. We have worked only on fragments of the total system necessary to improve education



with media. We have concentrated on equipment, or materials, or local production, or room facilities, or assistance, without ever considering the total system necessary. We have tried to incorporate audiovisual aids at the curriculum implementation level when we could have been far more successful if an expanded media concept could have been integrated into the curriculum development phase.

Neither the traditional audiovisual center nor the traditional library is adequate for our current needs at the building level. A resource center in each major classroom building, on the other hand, would make a giant step toward effective media utilization. The resource center should be centrally located in the instructional area of each school. It could be used to connect various specialized instructional spaces. It should be spacious, attractive, and inviting to all who pass by it or through it.

The resource center would contain a library. It would not only contain a library of print materials, it would also contain a great variety of audio and visual materials. The library should be considered as a function or a collection of functions rather than a place. It would collect information in whatever form it might be available. It would classify information in a system providing for easy and efficient identification. It would store the information in orderly and effective fashion. It would retrieve information on demand for teachers and students. It would adapt information by changing its form or reproducing it. It would counsel on the use of information for studying, reporting, and presentations.

A common card catalog of all sources of information is essential. No teacher or student should need to decide in which form (print or nonprint) he or she wants help before looking in the card catalog.

The resource center would have a local production laboratory where both teachers and students could construct audio and visual presentation materials. It would need a paper cutter, hot press, slide copy stand, thermal transparency maker, tape recorder, graphics materials, etc.

The resource center would have an equipment pool for special purposes in addition to standard classroom machines, so that almost any teacher or student use could be accommodated. Equipment would include such machines as motion picture projectors, slide projectors, tape recorders, etc. Spare lamps and consumable supplies

to go with equipment should be stocked nearby.

Not only local libraries of materials, but ready access to additional outside materials must be available through a materials handling, maintenance, and shipping area.

Teachers and students need to observe materials before they are used for presentation to others. Reasonably isolated preview rooms are needed for this purpose.

Story telling with both print and nonprint materials needs to be provided for in elementary schools. A comfortable and delightful little area adjoining the other activity areas needs to be provided with a fair degree of isolation. This room might also be used as a workshop and conference area. An alternative story area configuration consists of a stepped sunken area or well with thick carpet and no chairs.

Individual study facilities (carrels) for the easy and complete use of all types of study materials must be available. Some carrels would contain only a reading and writing surface for print materials or battery operated equipment. Some would have electrical power for using a portable device from the equipment pool. Some would have individual machines such as cassette players, disc players, filmstrip viewers, slide viewers, projectors for brief movies, and television playback-monitors. Some carrels might have more than one machine.

The library of nonprint media and the equipment for using them are unnecessarily complicated at the present time because so many separate, distinct, and non-compatible media formats have developed through the year. Educators are now looking with considerable interest at a single machine and two cassettes that have the potential of revolutionizing individual study. The machine is known as PIP, which stands for Programmed Individual Presentation. The visual cassette can hold any material now available in filmstrip, slide, overhead transparency, or brief silent movie. The audio cassette can hold any material now available on tape or disc. The two cassettes together can reproduce sound movies or any complex combination of sound, still pictures, and moving pictures. The media library based on this device would need to stock only the two types of cassette, and each carrel could have a single universal machine. It remains to be seen whether the software to feed this machine is to be available.

Another development being watched with great interest is the high speed and low cost duplication of audio and visual materials so that only masters are stocked on the shelves and individual and perhaps single-use copies reproduced on demand for teachers and students. We already have this capability with audio and video cassettes.

A professional person needs to be in charge of the resource center. In the smallest unit, he or she would probably be the only person involved. As the size and/or activities increased, the professional would need the help of a technical assistant and a clerical assistant. Professionals with broad backgrounds in library science, media or instructional technology, instructional development, and student advising are only now beginning to be prepared. Some traditional library and audiovisual personnel are retraining themselves. It must be added that others are hoping that the resource center concept will go away!

A resource center in each major classroom building could do much to improve education. It would promote and make possible the wide and wise use of media in the presentations that teachers make to their students. It would make student's individual study far more interesting and productive. It would provide for more interesting and challenging interaction sessions. It would tend to make media as much a part of the in-school experiences of students as it is now a part of their extracurricular activities.

Most schools already have most of the pieces necessary to construct a resource center. A quotation from John Gardner is appropriate: "The parts of a desperately needed academic revolution continue to lie around unassembled."

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*Raymond Wyman is director, Northeast Regional Media Center for the Deaf, University of Massachusetts, Amherst.*

# STANDARDS FOR 8MM SOUND FILM PROJECTORS IN EDUCATION

*The following is a discussion paper published for reader reaction. Send your written comments to Lee Follis, AECT Technical Equipment Standards Committee, Orange Unified School District, 370 N. Glassel Street, Orange, California 92666.*

For many years there have been optimistic and even bold predictions of the role that 8mm film would play in education if we would accept the opportunities it offers. In 1962, at a conference on 8mm sound film in education, John Flory of Eastman Kodak Company stated that, "The 8mm sound film may broaden the perimeter of the motion picture industry much as paperback books have affected the field of publishing." Other proponents of the 8mm movement have spoken of 50 dollar sound projectors to be available in every classroom and libraries of 10 dollar films in each school. Now, in 1974, we still find these predictions unfulfilled. The silent loop 8mm film has had some impact in instruction, but to date this is about all we can say for 8mm in education. Why is this so?

There are two primary reasons. First, there has been a lack of standardization in format among the 15 or more manufacturers of 8mm sound projectors. Some units are reel-to-reel, while others require special cartridges or cassettes. There are optical sound and magnetic sound projectors. The sound may be at various locations before or after the picture. This lack of uniformity discourages or prohibits the wide acceptance of any brand or format of projector. Thus, the number of units sold has remained low, with the resulting price necessarily high. Limited production of many versions has also resulted in restricted allocations of technical and human engineering to each model.

Closely related to the limited number of projectors being purchased is the limited number of 8mm prints produced and purchased. The predicted 10 dollar print cost has never been realized, and 8mm prints have been sold at a print price very close to that of 16mm.

Do these facts mean that 8mm film for education is destined to be a lost

cause? AECT does not believe this must be the case. We recognize the great potential of 8mm and the needs that could be so effectively served for both group and individualized learning. But to accomplish this goal some adjustments in thinking and concerted efforts among interested parties on all sides must take place. These include educators who purchase 8mm films and projectors, teachers who use 8mm films, film producers, film laboratories, and equipment manufacturers.

The most urgent need is to recommend and have accepted a *standard* for the important features of all 8mm sound projectors to be used in education. Without resolving conflicts concerning optical *vs.* magnetic sound, and cassette or reel *vs.* continuous loop cartridges for film holders, the standardized packaging of films and their use with any projector cannot be realized. Without such agreement and then willingness to implement, there seems little hope for 8mm sound film to gain any degree of widespread use in education. And without widely accepted projector specifications, there will be few purchases and few films needed . . . and the chicken-egg dichotomy continues.

An informal group within AECT has squarely faced the issues described above, and for the first time, a group of concerned educators has suggested standards for a type of audiovisual equipment, *from the user's point of view with the user's requirements*. This informal group recommends that the Board of Directors of AECT, on recommendation of the Technical Equipment Standards Committee, propose and promulgate the following major specifications for 8mm sound projectors. The first group of items that follows is essential and would be required of any 8mm sound projector or other 8mm viewing device purchased by an educational institution. The second group includes optional or desirable features depending on cost and individual preference factors.

## Group 1: Required Features:

- A. Super 8 format and 18/24 frames per second film speed
- These are the accepted standards in the field at present

**B. Film reel or container.**

A low-cost, simple, and reliable reel for 8mm release prints, standardized so as to be directly used on any machine, or which can be easily inserted without tools by the user into any cassette or cartridge for use with his projector.

All films, of any length up to 400 feet, delivered by a film laboratory or film distributor must be useable on any manufacturer's projector either by mounting the reel as is now accomplished with 16mm reels for 16mm projectors or they must fit easily into the projector's cassette.

**C. Self-threading or slot threading.**

The film reel may be in a closed cassette or cartridge which includes both feed and take-up reels, or it may move from a set-on feed reel to a built-in take-up reel. With the self-threading feature, a projector mechanism locates and draws the film leader into the threading path. By feeding the film leader into a slot by hand in order to start the threading activity, a lower cost may be realized, and some users even prefer slot threading over complete self-threading since with the latter the front end of the leader is not seen and may unknowingly become damaged, thus preventing successful threading.

Provision should also be made to easily remove any cover over the threading path so film can be removed by hand if necessary.

**D. Fast rewind through the film gate with stop control for replay.**

The tail end of the film should be secured on the reel so that at the completion of viewing, tension of the film will bring into play the rewind control and the film will rewind immediately, at high speed, through the film gate to the supply reel. Consideration should be given to the instances where the end of film is not secured. It should not be necessary to disassemble the projector to retrieve the end of the film not so secured. In addition, provision

should be made for a way to stop the film at any time during projection and to rewind quickly to the supply reel, or to rewind the film by any amount and replay a part of it as the user desires.

The ability to rewind at any time and replay a section of a film must be an essential feature of an 8mm projector because much of the use of 8mm will be for small group and individual viewing which may require detailed or repetitive study of techniques and processes. The endless loop cartridge, while useful for some situations in education, can only cycle to the beginning in real time (18/24 frames per second) without rewind capability. In addition, the loop cartridge is costly to load, cannot be done locally, requires special lubrication and periodic servicing, and is difficult to repair, with damaged films only partially serviceable again.

**E. Optical sound with plus 22 frame synchronization.**

The quality of reproduction from an optical soundtrack on 8mm film is acceptable. The economy in release printing of commercially-prepared materials over magnetic track must be realized. Also, maintaining the integrity of information on the track is recognized with optical as opposed to the possibilities for erasing and substituting narration as can be done on a magnetic track. But there are special applications of the magnetic sound feature, such as for local production and bi-lingual needs which make it desirable to also have available projectors with magnetic sound capability. But for general use of commercial materials, optical sound is strongly recommended.

*In addition to these required features, the development of any projector for use in education should give consideration to:*

- A. Professional quality of the unit, requiring limited maintenance over a long use period.
- B. Quality screen image of suf-

ficient size for viewing by individuals and for groups of up to 40 persons.

- C. Quality sound for narration and music to provide for convenient and pleasant listening with provision for an external speaker or at least two headsets.
- D. Modular construction for easy servicing and replacement of parts.
- E. Provision for securing the unit against theft (e.g. a hole in the base of frame for chaining to a stand or table).
- F. A variety of focal length lenses.
- G. Minimum noise from the projector mechanism.
- H. UL and CSA approval for safety.

**Group 2: Optional but not Essential Features:**

- A. Fast forward control.
- B. Still picture control.
- C. Sound playback combination of optical (+ 22 frames) and magnetic (+ 18 frames).
- D. Sound playback combination as in 'C' and in addition magnetic sound recording capability.

These features in Group 2 may be considered on the basic projector, or might be available on one or more additional models. The price of the basic unit should be kept to a minimum to better insure volume use.

**Group Members**

Raymond Wyman—Chairman, PII-7 American National Standards Institute

Herbert Farmer—Vice President Educational Affairs, SMPTE

Lee Follis—Chairman, AECT Technical Equipment Standards Committee

Richard Nibbeck—Deputy Executive Director, AECT

Robert Gerletti—Los Angeles County Schools

Pierre Patterson—Chairman, AECT 8mm Film Festival Committee

Neal Kechn—SMPTE Group Chairman

Jerrold Kemp—Group Chairman, San Jose State University

232

RAYMOND WYMAN

## THE UNMET PROMISE OF TELECOMMUNICATIONS

*The significant question raised by Professor Wyman in this essay deserves a considered response. Your comments and reactions will be appreciated.—Editor*

Traditional audiovisual devices and techniques such as films, slides, and recordings are regularly used by teachers within the teaching and learning situation. Several newer audiovisual devices and techniques such as television, radio, computers, and telelectures are brought into the classroom by way of wires, cables, and electromagnetic waves. The latter are commonly described as telecommunications, from the Greek *tele* meaning "far" or "far off" or "to denote operating at a distance." The former, for this discussion, are being described as juxtacomunications from the Latin *juxta* meaning "situated near."

Juxtacomunications for the improvement of instruction have been used for a long time from the early lantern slides, filmstrips, discs, silent motion pictures, etc., up to the present 5C x 50mm slides, overhead projection, sound motion pictures, audiotapes, sound slides, videotapes, etc.

Telecommunications started with radio 40 years ago, and is now represented by broadcast television, cable television (originating within a school studio or a distant studio), telelectures over telephone lines, remote-access or dial-access information systems, and time-shared interactive computers.

The telecommunication concept for improving in-school education has been heavily financed, technologically perfected, vigorously demonstrated, and widely promoted. It has been a colossal failure. We might have better put our resources into improving juxtacomunications.

It has taken me a long time to state this conclusion publicly to my professional colleagues even though I have been aware of it for some time. It seems blasphemous even to question whether the great god *Tele* could be anything but a magnificent and munificent gift to all schools that sought to take a giant step forward in improving education.

I too worshipped telecommunications for many years. I wired schools to make use of radio in all classrooms simultaneously. I was an early observer and chronicler of the Hagerstown T.V. Project. I published on the MPATI Project. I tried hard to persuade my university to establish a TV station, or at least connect all campus buildings to a studio. I promoted telecommunications in my classes and on the stump.

In the meantime, the juxtacomunications continued a slow development with gradually improved devices for enabling teachers to reproduce sound and/or visual materials within the classroom, custom tailored in content and timing, and explicitly related to the unique needs of their own students.

It is interesting to conjecture what might have happened to education during the past 20 years if the funds, technical expertise, and promotion put into telecommunications had instead been put into juxtacomunications.

The promise of telecommunications has been so great that countless educators have climbed on the bandwagon. The best teachers in the best equipped studios with the best equipment, best materials, adequate support staff, research facilities, and expert consultation could make their presentations available to any number of students in any geographical area at low cost on a per pupil basis. Furthermore, the studio teacher or programmer could devote all of every day to the superb preparation of a single presentation. The regular classroom teacher with limited expertise, time, equipment, materials, and environment could bring educational riches into his or her teaching/learning settings or situations at the flick of a switch. A marvelous team of a few remote master teachers and many local classroom teachers could capitalize on scarce resources and make them available to all. The system would also provide such large rewards for great teachers that they would be kept in teaching rather than promoted to administration or lured elsewhere.

What went wrong? Why should a system with so many advantages, so much support, and so much publicity fail to fulfill the promise?

The unmet promise may be due to the failure of classroom teachers to make optimum use of telecommunications. Or the unmet promise may be the fault of the promoters of telecommunications who failed to realize an essential characteristic of the great army of classroom teachers who are primarily responsible for the day-to-day teaching and learning activities of all of our students. I believe that the latter fault is the crux of the situation in which we have tremendous educational resources that are largely unused.

Classroom teachers generally prefer limited and local resources for group and individual presentations to much better and more distant resources. They prefer resources that they can schedule and reschedule as they please. They prefer to capitalize on their own strengths rather than the

*Continued on page 72.*

strengths of others. They prefer to relate constantly to the obvious needs of their own, and well known, students rather than rely on distant experts.

The result of this failure to understand classroom teacher preferences has been a tremendous waste of scarce educational resources on largely unused technological white elephants. I have been shown so many school television studios costing many thousands of dollars that are practically unused after the initial showcase effect and the warranty on the equipment has expired. I have seen so many remote-access or dial-access individual study systems with countless racks of expensive equipment and many fully equipped carts, also largely unused. Computer terminals are the latest example of multiple local use of distant expertise that teachers have been enjoined to use with mostly apathetic results. Perhaps we can soon duplicate the disaster with satellites.

Meantime, the local resource center or resource center has gradually improved and expanded to take care of genuine and accepted needs of classroom teachers and their students.

This does not mean that telecommunications does not have an important place in education. It certainly does. It provides remarkable out-of-school learning experiences for masses of students. It can do much for students remote from resource centers. The open university makes major use of telecommunications. Lifelong learning and part-time learning can be helped tremendously by telecommunications. The innovative teacher can constantly upgrade his or her preparation by judicious use of available telecourses and informal telecommunication.

But given a choice between local resources and remote resources for regular class use, teachers prefer the local variety, even though they be much more limited. The classroom teacher using a remote resource often feels underemployed and forced into a mold not of his or her making or desire. With local resources, the teacher remains an essential and high level manager of the teaching-learning endeavor. Control is centered in a local, humane, and responding person.

What might have been accomplished if we had put our efforts into local resource centers at the level we have put them down the telecommunications rathole?

We would undoubtedly have well-equipped resource centers near to every teacher. Teachers and students who

sought information in print or audio/visual forms would usually have it for group presentations or individual study. Equipment/material combinations would have been perfected and mass produced so that a great variety of high quality materials could be easily reproduced as needed. Resources for teaching and learning would be constructed or renovated for easy use of media. Local production centers would be well equipped and staffed to produce or help teachers and students to produce custom tailored materials not available in commercial form. It is not too late to recognize what has happened, and to take corrective steps. We can start now to put resources into portable television rather than studios. We can redesign schools for local use of media rather than wiring them with cables. We can employ our best teachers as local team leaders rather than sending them to regional production centers. We can purchase small equipment that the child can have the program he or she needs when needed rather than when a master schedule indicates it. We can support the development of rapid and inexpensive still and motion picture duplicators. We can make visual and/or audio communications as ubiquitous as print.

We can enhance the effectiveness and self-respect of the large, dedicated, and competent corps of teachers who are ultimately responsible for the education of our students. And we can make our students far more responsible for their own education through the use of an exciting variety of locally available equipment and materials.

"But what should I do with the 50 thousand dollar package of inoperative telecommunications equipment that the boss has refused to support in the manner to which it became accustomed?" Perhaps the Ford Foundation would provide some prize money for the best answers.

—Raymond Wyman, director, Northeast Regional Media Center for the Deaf, University of Massachusetts, Amherst

# An Optimum Interaction Learning Laboratory

Raymond Wyman

The revolutions in learning theory and educational media have not been matched with facilities to make their application possible or probable. The Northeast Regional Media Center for the Deaf and the Boston School for the Deaf have constructed and equipped a special learning laboratory based on practical applications of modern learning theories and optimum utilization of currently available equipment, materials and technology.

## Optimum Teaching-Learning Situations

Various contributions to what we know about optimum teaching-learning situations have been summarized in the teaching-learning cycle which appears in Figure 1.

The teacher has major goals usually described as knowledge, understanding, principles, skills, attitudes, ideas, etc., that have come from experience with the subject matter to be mastered. These goals are initially meaningless to the student so the major goals remain in the teacher's plan book.

Major goals must be broken down into objectives that can be stated in terms of behaviors to be observed and evaluated.

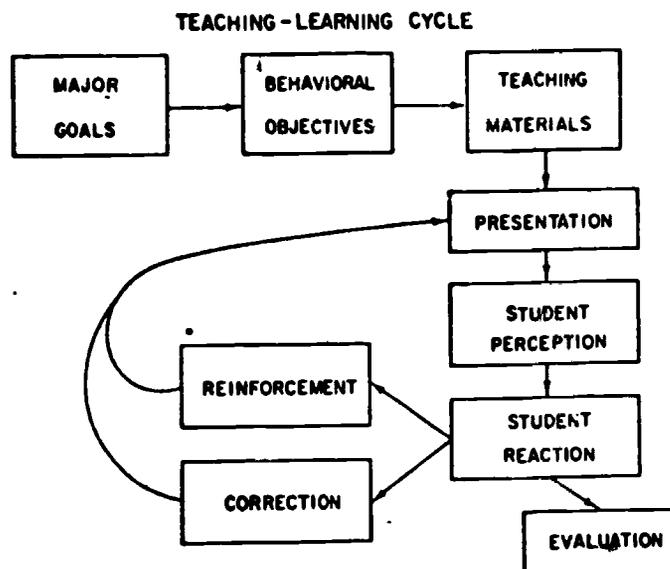
The teacher must next select or prepare appropriate teaching materials for group presentations or for individual study. These materials are arranged for logical use by the learner or learners with well-known characteristics and entry behaviors. The media most likely to be effective for specific learners in specific situations should ideally be used. The unfortunate state of affairs is that most teaching consists of talking and most individual learning consists of reading.

Selected materials must next be exposed to the senses of the learners. With hearing impairment, only one sense becomes dominant. "Do not say that I am deaf, but that I am primarily dependent on my eyes for communication." Arrangements must then be made to provide the very best visual stimuli for students, accompanied by the best sound for whatever residual hearing they may have.

Students in most school situations must perceive selected stimuli directly related to their individual

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Figure 1



needs within a hodgepodge of competing and conflicting stimuli.

Students must react or respond to what they perceive. Passive students are not students, but mere bystanders to the educational process. Learning requires that action follows perception, and the sooner the better. Teaching machines and programmed learning, for the first time, made teachers really aware of the necessity for frequent and observable responses. Unfortunately, the typical teaching-learning situation includes long periods of presentation followed by long-delayed opportunities to respond.

Student reaction, responses or behavior must be monitored, reinforced and evaluated. Reinforcement means anything that tends to produce or repeat the observed and desired behavior. It may be a nod of the head, a word of encouragement, praise, movement of a counter, etc. Many studies indicate that the sooner the reinforcement follows behavior, the better the learning situation.

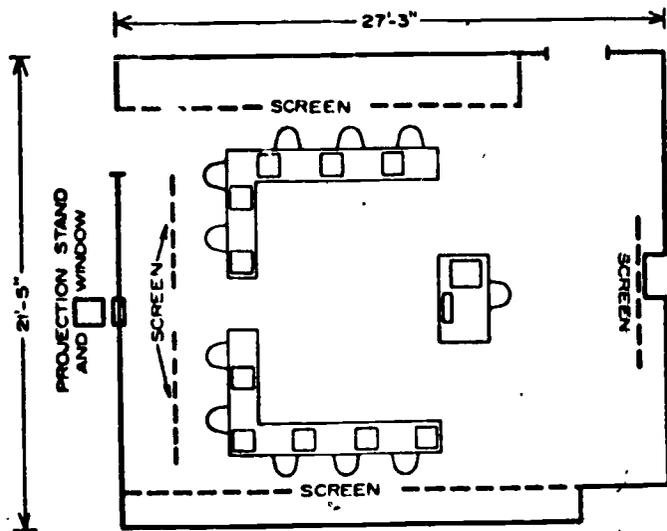
Monitoring of the successes and failures of students exposed to a teaching-learning system provides the raw material for evaluation of the total system and its many individual components, such as environment, objectives, materials, etc. All future teaching-learning activities should be based on evaluation of previous activities.

## The Laboratory

The purpose of the optimum interaction learning laboratory is to make the teaching-learning cycle noted above more efficient.

A diagram of the room or laboratory is shown in Figure 2. This room is an expansion and refinement of the Mediated Interaction Visual Response, MIVR, system developed by the author in 1968. MIVR

Figure 2



rooms have been set up in many schools for the deaf and more are planned. Research conducted with MIVR systems has been very encouraging. Eachus (1969) has reported on his research related to sentence writing by fourth grade deaf children in which performance increased from 26-75 percent of sentences with errors to 92-100 percent of sentences without errors. Piper (1970) conducted an experiment on question-writing by eight- to nine-year-old deaf children. She reported that they started with an average of about 50 percent of questions correct and ended with 80-100 percent of questions without errors. Gonzales (1971) experimented with five-year-old deaf students in reading readiness. They began the experiment making 10-50 percent of their responses correctly and ended with accuracies of 85-100 percent. Barrette (1971) conducted an experiment with hearing high school students in chemistry. Students began the experiment meeting 62 percent of the performance objectives and ended the experiment meeting 89 percent of the performance objectives.

To those unfamiliar with the usual insignificant gains from controlled experiments, the gains reported above are almost unbelievable. The desirable characteristics of MIVR reported by the experimenters are as follows:

1. Generates active student response, either choice or composed.
2. Allows all responses to be directly monitored by teacher.
3. Permits immediate consequence for each student.
4. Allows teacher to remediate errors without punishing.
5. Fosters full interaction in a class.
6. Provides setting for performance based lessons.
7. Determines pace of lessons by student responses.

### 8. Facilitates complete records of achievement.

Teachers using the laboratory at the Boston School for the Deaf have an optimum opportunity to make use of the teaching-learning cycle.

They prepare behavioral objectives from their major goals and then select and create appropriate teaching and learning materials. The laboratory is directly across the hall from an excellent and comprehensive instructional materials center.

Teachers schedule their classes in the laboratory on a needs-and-desire basis for 20-30 minute concentrated learning experiences.

Presentations to students can be made on the teacher's overhead projector, filmstrip projector, 2x2 projector, motion picture projector, television monitors, disc player, tape player or orally. Equipment for such presentations is constantly available and ready to use at the flip of a switch. A great variety of existing and specially created materials can be used for presentation.

Students have an unusual opportunity to perceive sights and sounds. High quality projection and television equipment of current design is included. A high fidelity and flexible sound system is included with headsets for all students and the teacher with individual binaural volume controls. There are no windows, tackboards, posters, calendars, chalkboard or any other visual noise to compete with planned visual messages. All sounds delivered to headsets originate in discs, tapes, TV cable, movie sound tracks or from microphones on booms attached to the headsets not more than two inches from the source of sound.

Student responses may consist of writing, drawing, pointing, selecting, matching, opposing, identifying, restating, simplifying, analyzing, synthesizing, solving, diagramming, drawing, sketching, composing, coloring, completing, charting, mapping, etc. All of these behaviors can be planned for, taught for and immediately and simultaneously observed on up to 10 student overhead projectors. In a typical classroom situation, students take turns responding. In this situation, every student takes a turn every time. With 10 stations, one student makes 10 times as many responses!

Responses can be scanned easily and quickly and appropriate reinforcement and correction provided. Scanning of response is made easier by having numbered or letter boxes on response transparencies at each student station. Evaluation of teaching and learning continues constantly as responses from all students are observed.

Each student station also has a red light, a green light and a counter. Each of these signaling devices is activated by buttons at the teaching console. A variety of uses can be made of these signals. Right

# Open Learning Systems: Toward Humanistic Educational Technology

Robert T. Filep

and wrong behaviors can be immediately and individually indicated. Shaping can be done by indicating any identifiable response toward or away from a desired goal. Points on the counter can be given for every acceptable response and certain numbers of points can be traded for or equated to any desired reinforcer in a typical token economy situation.

Each student also has a call button that flashes a number light at the teacher's station. When a student needs help or wants to signal that he is ready for reinforcement or correction, he simply pushes his button. The teacher's response can be a nod of the head, a green light, red light, counter advance or written message on the overhead. Visual dialogue (as well as oral dialogue) is constantly possible.

The system for the first time provides a complete opportunity for a teacher to use modern media, technology and learning theory. It is relatively simple, entirely teacher-operated and self-contained. It also makes students a part of the media and technology program rather than observers of a teacher using them. Although most experimentation has been conducted with hearing impaired subjects, several experiments indicate that the system works very well with other children. □

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We stand on the threshold of a great era—or which may provide humanistic education to all people, in a quantity and quality heretofore unknown

To achieve this promise, we must demand greater use of television and other media within validated educational technology systems called "open learning systems." Open learning systems have the following characteristics:

- Access at low cost for all who want service.
- Provide either alternatives to current institutions of learning or be highly integrated with ongoing endeavors.
- Utilize not only television but radio, facsimile transmission, non-broadcast materials and new two-way interactive response devices.
- Provide a wide "network" of personnel who have been trained to assist in aiding learners via resource centers, and provide, in concert with the learners, evaluative data as to the system's effectiveness.

Systems bearing some of these characteristics are the Open University of Great Britain, Sweden's TRU, the Munich Telecollege, the work of the Japanese Broadcasting Corporation and the U.S.A.'s Chicago TV College, *Sesame Street* and the *Electric Company*. The characteristics and components that have been successful, and less than successful, need to be examined carefully as we evolve more complex open learning systems requiring creative coordination of all technological and human components.

Characteristics of currently operating open learning systems require careful consideration. Included in such consideration would be the potential of greater cost *benefits* through use of these systems; the reexamination of new and creative *approaches to management* in developing and operating such endeavors; a requirement to give added attention to *utilization* of the non-broadcast learning products of such systems; the emergence of new training requirements for personnel to operate such learning activities; and the implantation of developmental testing and summative *evaluation* from the outset.

Robert T. Filep is Associate Commissioner and Director, National Center for Educational Technology, U.S. Department of Health, Education and Welfare, Washington, D.C.

## APPENDIX II

*Ms. Rossett is a Graduate Assistant at the Northeast Regional Media Center for the Deaf, Amherst, Massachusetts.*

## Special Strategies for a Special Problem

### Improving Communication Between Hearing Impaired Adolescents and Their Parents

Allison Rossett

*A vital and intense concern of hearing parents and their hearing impaired children is the improvement of their communication with each other. The Regional Media Center for the Deaf has designed a parent program to facilitate this communication. It is based on group discussions focusing on the parents' individual responses to the emotional and factual experiences depicted in selected projective, open-ended visuals. The visuals show pictures of parents and hearing impaired adolescents in familiar, everyday situations and provide the stimulus for discussion and for subsequent modification of communication behaviors.*

**W**hat are the things that concern hearing impaired adolescents? What do they worry about? We asked these questions of a group of 14 hearing impaired students, ages 16-19, who were selected by their school principals to serve as an advisory committee to the Northeast Regional Media Center for the Deaf.\* They came from 14 different schools in the Northeast, predominantly residential and representing a variety of environments and communication methodologies. Unanimously, these teen-agers pinpointed communication with their parents as their number-one concern.

While the students described a number of specific communication problems between deaf adolescents and hearing parents — such as tension or silence during family meals, reluctance on the part of the parents to visit the school for the deaf, or misunderstandings about dating — they also spoke of the many hearing parents and deaf children who successfully share their ideas, information, and emotions. The teen-agers' description of their communication difficulties outlined a need while their stories of successful communication provided a goal. We therefore turned to parents and educators of the deaf to ask for their concrete suggestions regarding

\*The Northeast Media Center is a federally funded project of the Bureau of Education for the Handicapped, U.S. Office of Education.

parent behaviors or attitudes which would facilitate parent-child communication. Relying upon their suggestions, we designed a media-oriented program based on the following assumptions:

1. Parents are central to the child's learning; parents of exceptional children have a special responsibility for their child's learning.
2. Communication is central to the parent-child relationship and, thus, to the child's learning.
3. Parents can learn to communicate more effectively; a program which stimulates parents to talk to each other and to educators of the deaf about more successful parent communication behaviors will improve parent-child communication.

**Parents of exceptional children have a special responsibility for their child's learning.**

The parents are the hearing impaired child's initial link with the world, creating an environment which influences his learning. Because they provide the experiences which shape the child's behaviors, it is relevant and critical to focus on the parents and their concerns when considering the growth and development of the hearing impaired child.

Many exceptional children have a special need for their parents. Understandably, the very young deaf child may rely more on his parents than does his hearing peer. He turns to his parents for explanations of the unknowns that are more easily inferred by a hearing child and for the enjoyment and the language stimulation that hearing children naturally receive from their constant interaction with a variety of people. Also, he will look to his parents for assistance or reassurance regarding those experiences that his youth and deafness make difficult. *Sesame Street*, the soap operas, or the neighborhood children cannot be expected to provide the deaf child with the same kind of stimulation and encouragement that a parent is able to give him. It is the interaction between a young deaf child and his parents which provides the language base, the learning behaviors, and the feelings about himself which enable intellectual and social growth to occur. The parents of a deaf child can and must learn to improve this interaction.

**Communication is central to the parent-child relationship and, thus, to the child's learning.**

For many hearing parents and their deaf children, the signs of unsuccessful communication begin at the child's birth. The child is deaf and does not immediately respond to the single, isolated stimulus of his mother's or father's voice. The parent who receives no response to his greeting, singing, or bantering may stop or limit this behavior when he is with the child. Very early, usually far before a diagnosis of deafness is obtained, the parent has begun to make fewer communication overtures to the child.

Often, after the diagnosis of deafness, the parents do not know what to do. They are not consciously aware of the communication techniques they have been using with hearing people, and they do not know how to modify, adjust, and supplement these techniques for their hearing impaired child. Some parents continue to do what they have been doing with other nonresponsive children: they talk, they shout, they become irritated, and often they become noticeably angry. Realizing how little the child is understanding, they may feel guilty because they are unable to make themselves understood.

This pattern is *not*, however, typical of all hearing homes with deaf children. Many parents do learn varied and effective means of communicating with their deaf child. It is these parents who are most successful in cementing a positive relationship with their child and in providing pivotal language-yielding experiences. The communication pattern that is set early in the child's life can yield either frustration or joy for the child and his parents. If communication is blocked, neither is able to send or receive the vital messages which bind them to each other and which also tie the child to the outside world. Yet, if communication is facilitated, this essential sharing of messages and attitudes enriches all their lives.

Parents are educators. Just as children benefit from carefully considered goals, well-developed content, and effective strategies of salaried educators, they need the same thought and planning from their parents. The baby is born; the baby enters the home; the parents meet, greet, and raise the child. Too often this "raising" proceeds with little introspection, instruction, or evaluation.

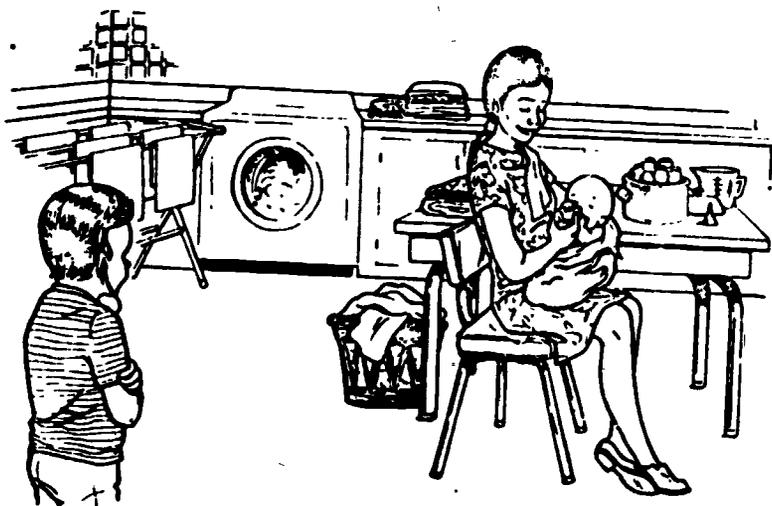
Most parents love their children and many of these loving parents are able to communicate with their children consistently and effectively. They know the direction in which they want their children to travel and they have thought about and carried out some processes which will enable their children to reach these objectives. Their establishment of goals and the procedures for attaining them can and should be shared with other parents. This can become the core of a program to facilitate communication between hearing parents and their deaf children through a program based on dialogue and the establishment of successful communication behaviors in familiar family situations.

#### **a media-oriented parent education program**

Input from parents, educators of the deaf, and deaf adolescents led to the development of a parent education program based on visual representations of experiences that may confront the family of a hearing impaired child. The program defines parent-child communication as the transfer of ideas, information, and feelings between hearing parents and their deaf children; it is based on the assumption that this transfer can be improved.

In order to talk and learn about their communication experiences with their hearing impaired children, it is often helpful for parents to look objectively at some of the communication situations in which they and their children find themselves. If parents can examine these situations and choose, plan, and practice new communication behaviors that seem appropriate for them, the flow of information, ideas, and emotions will be increased and enhanced. The following visuals suggest some family situations which may be characteristic. Their ambiguity is intended; they are meant to evoke varying reactions from the individuals who view them. The accompanying written discussions offer various ways of looking at these situations and of facilitating the parent-child interaction.

**Visual 1** Mother, newborn baby, and deaf son.



ARTWORK BY SHIRLEY ALVES

I. **Description of the visual:** The deaf son is observing his mother feeding her newborn baby.

II. **Suggested questions:** What is happening here? What does the son feel? Does he communicate anything to his mother? How does she react? What can she do to include him in the feeding process? Have you been in this situation? What specific things did you do before and after the birth of the new child to prepare the deaf child for the newcomer?

III. **Subjects for discussion and parent reaction:** 1) the feelings of a child when a new child enters the home; 2) communication with the child about the birth of a baby brother or sister; 3) methods of including the deaf child (or any child) in caring for the infant.

**Comments:** There has been a strong, "Oh, yes! That happened to us," reaction to this visual. The parents are asked how they involved their child and are requested to list specific suggestions not included in Section IV, below.

**IV. Parent behaviors:** 1) Prior to the birth of the new child, the parents communicate with the child about this event through speech, drawings, or other appropriate methods. (The depth of the explanation of the birth will vary with the maturity of the child.) The important thing is that the child be prepared for the mother's disappearance and her eventual reappearance with the infant. 2) The parent asks the deaf child to help feed, bathe, and clothe the infant. 3) The parent takes time to participate in some of the activities which she/he has previously shared with the deaf child and explains why it is no longer possible to do others. 4) The parent communicates the concept of brother and sister and takes the child to visit other families in which there are brothers and sisters.

**Visual 2** The family of a hearing impaired child at the dinner table.



**I. Description of the visual:** A family is gathered around the dinner table, happily talking and laughing with each other. The deaf son is tapping his sister's shoulder.

**II. Suggested questions:** What is the problem here? What is the deaf son feeling? What does he say or do? What could his parents or siblings do? Does this happen at your dinner table? How do you involve your deaf child? How much does your deaf child contribute to dinner conversation?

**III. Subjects for discussion and parent reaction:** 1) problems that the deaf child and his family have in communicating with each other; 2) methods for reducing these communication problems.

*Comments:* Because this situation is so specific, parents have often expressed strong identification with it and sadness that it occurs at their dinner tables. Perhaps members of families with a deaf child should rotate seats so that different individuals are responsible for doing the necessary repeating or interpreting and are praised for their contribution. Often parents give this communication responsibility to the hearing siblings, explaining that the major responsibility of the parents is making and serving the food. However, if the latter responsibility is shared, then the communication effort can be shared also.

**IV. Parent behaviors:** 1) Parents discuss the difficulty in rapid, emotional communication with their deaf child. 2) Parents discuss the deaf child's feelings about seeing communication occurring all around her/him at the dinner table. 3) Parents discuss the importance of including the deaf child with the hearing children and plan for a rotating system by which each individual takes responsibility for interpreting or repeating. 4) Parents themselves communicate to the child what is going on at the dinner table. 5) Parents ask the deaf child's opinion during dinner conversations and encourage the hearing siblings to do so also. 6) Whenever the family is gathered to eat, parents ask the deaf child to relate a story or incident that occurred during the day.

**Visual 3** Father, deaf son, and scout troop.

".. when I'm an Eagle Scout I won't be deaf anymore. Right, Daddy?"



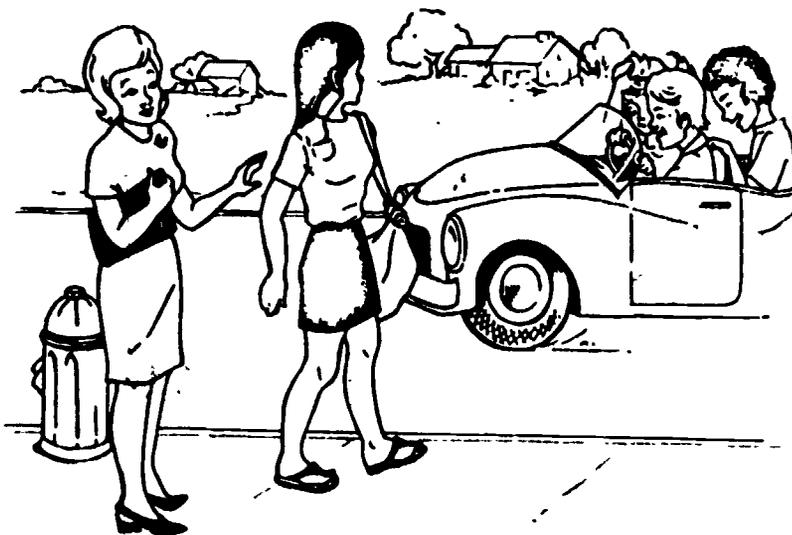
I. **Description of the visual:** A father and son are walking out to a car full of boys in the son's scout troop. The son questions the father.

II. **Suggested questions:** What does the father feel after this question? What does he say? What prompted the son to ask the question? Has your deaf child asked a similar question? How did you respond? Did you discuss the child's question and your response with your spouse?

III. **Subjects for discussion and parent reaction:** 1) the child's feelings about being deaf and his communication of those feelings; 2) the deaf child's desire to be a hearing child; 3) the parent's response to the child's feelings and wishes concerning his deafness; 4) the deaf child's participation in traditional learning activities such as scouting.

IV. **Parent behaviors:** 1) The parent encourages the child to talk about being deaf. 2) The parent explains to the child that there are children who hear and others who cannot. 3) The parent honestly communicates to the child that his hearing loss will not disappear with good behavior, graduation, or promotion to an Eagle Scout. 4) The parent discusses his/her response to the child's questions with his/her spouse. 5) The parent finds out about local girl and boy scout organizations so that the child might join one.

**Visual 4 Mother, daughter, and teen-agers.**



I. **Description of the visual:** A mother and daughter are walking down the street. The mother watches her daughter as she looks at a car full of laughing teen-agers.

APRIL 1974

237

II. **Suggested questions:** What is happening here? What is the daughter thinking? What is the mother thinking? Do they say anything to each other? Is it difficult for a deaf adolescent to interact socially with hearing peers? Does your child spend time with hearing peers? Do you prefer your child to date hearing boys or girls? How can you encourage or discourage this interaction?

III. **Subjects for discussion and parent reaction:** 1) expectations for the deaf child's social life; 2) communication with the deaf child about interaction with hearing peers; 3) the deaf child's friends.

*Comments:* Some parents have felt that the mother in this visual is trying to hold the daughter back and away from more sophisticated hearing adolescents. Others have felt that she may be sad that her daughter is not in the car; still others have said that the daughter couldn't possibly join the group in the car because she is deaf. The parents' reactions varied with their own expectations, their child's social life, and their attitude toward the integration of hearing and deaf children.

IV. **Parent behaviors:** 1) The parents discuss the child's deafness and its social ramifications. 2) The parents ask the deaf adolescent how she/he feels about interacting socially with hearing people. 3) The parents question the adolescent about her/his feelings and support her/his preference. 4) The parents let their child know that they will answer her/his questions about male/female relationships.

#### **effective communication — a worthwhile goal**

Parents can learn how to communicate more effectively with their hearing impaired children by asking themselves and other parents questions about the communication process and by adopting new ways to carry out this process. Changes will come as the parents ask themselves these questions and deal frankly with the answers:

Am I effectively communicating with my deaf child?

What are our problems in communication?

Where can I begin to change my interaction with my child?

What are the changes I want (need) to make?

How will I know if I have made these changes?

Introspection, analysis, and evaluation will lead to the facilitation of communication between hearing parents and their deaf children. While deafness makes the sharing of thoughts, ideas, and feelings more difficult, it does *not* make this parent-child communication impossible

**Author's Note:** This program is now being reviewed by the National Center and will be available at no or nominal cost to parent and school groups from the National Center on Educational Media and Materials for the Handicapped, Ohio State University, 220 West 12th Street, Columbus, Ohio 43210. 

*Reprint No. 74E*

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*Headquarters: The Volta Bureau - 1537 35th St., N.W., Washington, D.C. 20007*

*Printed in U.S.A. - 1974*

## NEEDED: A NEW FILMSTRIP FORMAT

Filmstrips, once called slidefilms, were invented in the twenties to make still pictures and captions available to class size groups of students, which meant 30-40 individuals in a large room. Projectors had 100-200 watt lamps, optical systems were inefficient, screens were poor and darkening was very limited. The large 35mm film single frame image (18 X 24mm) was needed in order to get screen images of reasonable size and quality. Completely manual threading of a loose length of film was easily mastered by the teacher or an older specially trained student. Strips were each used once or twice a year and they lasted indefinitely. So few were cataloged, stored and used that small round cans were not a problem.

Double frame filmstrips with 24 X 36mm images along the strip, rather than across, enjoyed a brief popularity in order to obtain acceptable screen images under difficult conditions. They are still very common in Europe and seldom seen in America.

The single frame filmstrip format of the seventies is identical to the one of the twenties except that it is usually in color. The conditions of filmstrip use and projection technology, however, have changed tremendously. Perhaps an entirely new format and technology is needed.

Filmstrips are now cataloged and stored in large numbers by most schools for individual student and small group use. Very efficient projection systems and screens are available. Light control is far more common. A single filmstrip may be used hundreds of times and by any and all students. Repeated handling, threading, operating and rewinding may result in short life.

Cataloging, storage and retrieval of thousands of small round cans in a library-resource center may be very difficult. And sound plus filmstrips, often with remote or automatic advance, has become the rule rather than the exception even though the original filmstrip was not designed with these features in mind.

The need for a new filmstrip format and the technology for it clearly exist. But no one manufacturer of equipment or producer of materials currently has the dominant position and resources necessary to invent, perfect and popularize a new format and technology.

What would be the requirements for such a materials-format-container-equipment system

The film should probably be S8 or 16mm which are completely standardized, made by the millions of miles, very inexpensive, very easily packaged and easily stored. Most filmstrips now come in a series of six or eight strips totaling perhaps 300 frames on the same unit. All of the images would easily fit on one strip of S8 or 16mm film. There are about 40 frames per foot of 16mm film, so 300 frames plus leader would be no more than 10 feet in total length. Readily available optical systems would probably put enough light through S8 and certainly put enough light through 16mm film for individual and small group viewing. The current 35mm filmstrips would probably continue to be useful for large group use.

Perhaps the S16 format and the new films developed for the Pocket Kodak Carousels would be a good compromise to get excellent images for even moderate size audiences. The optical system of the Pocket Carousel demonstrates what can be done with 16mm film images. Coupled with the new high brightness screens, projection even in poorly darkened rooms is quite acceptable. S16 film is the regular 16mm film used for sound movies but with the picture occupying the normal picture area plus the usual sound track area.

The S16 size would be more than adequate for individual viewing.

The much smaller image size compared to 35mm would mean far less "popping" or sudden defocusing due to expansion of the frame in the hot projection aperture, so no glass pressure plates would probably be needed. Since far less mass of film needs to be moved for each new image, remote advance and reverse, automatic or pulsed advance and even fast forward and reverse systems could be easily designed for sophisticated machines.

The film, either S8, 16 or S16, should be completely enclosed in a cassette or container for storage, handling, projection or viewing and re-winding. It should probably be the co-planar type in which the film is permanently attached to both supply and takeup spools. It should not be of the endless loop type due to lubrication requirements, binding, difficulties in fast forward and reverse and the problem of usually finding the subject matter in the middle rather than at the beginning. Rewinding might be accomplished by a motor or crank on the projector or viewer or in the simplest systems by inserting a hexagonal wood pencil in the hub. Simplicity, reliability, low cost and protection for the film should all be easily possible. Very sophisticated uses of the medium should also be possible.

A variety of machines could be developed to handle the new standard filmstrip cassette. The simplest would be a battery illuminated and hand operated viewer for school carrel, home use and uses in developing countries. Mains operated machines (120 volts in America) would be available for individual study, with built in rear projection-screens. Small group study would be accomplished with large units and wall screens.

Combinations of still pictures in the new format and sound plus pulses would continue and enhance the trend toward true audio-visual presentations. The sound and pulses would certainly be on compact cassettes and

follow the new standards for track use and configuration.

Perhaps some consideration should be given to a visual format that would permit and promote dissolving one image into another rather than seeing the film move. This might be done by using two identical strips in one machine. On the other hand, very rapid advance mechanisms might be a very acceptable substitute.

If several 50 frame filmstrip topics are to be combined to cover a typical unit of work, then some sort of frame identification system will be needed. Perhaps a three digit edge numbering system between the sprocket holes could be used to identify each frame. The numbers might appear on the screen or be visible at the machine. Each unit of the strip should have at least some leader (perhaps colored), a focus frame with instructions for the audio, if any, an opaque frame, and then the title or first content frame. An indexing system would, of course, also be needed for the audio segments.

The cassettes and/or containers should be designed with library shelf storage in mind. A typical book size package with spine for labeling would seem ideal.

Since either 8 or 16mm film can be rapidly and expertly printed with motion picture duplicating equipment of very high quality, it would seem possible to make quantities of filmstrips readily available to all students who need them, even in developing countries.

The masters for filmstrips now owned by commercial producers could easily be combined, processed, and numbered to make new masters of the proper size for mass duplication.

But the word "filmstrip" would continue to designate the old, and perhaps someday obsolete, 35mm size so a new term would need to be coined. How do you like "pocketstrip" or "cassette strip"?

239

## ABSTRACT

This paper describes materials and procedures designed to provide a more optimal learning environment for parent behavior change. The target parent behaviors are those behaviors which relate directly to communication between hearing parents and their hearing impaired children. The program is designed for use with parent groups by a facilitator.

The materials and procedures have the following major components:

- (1) a set of 45 stimulus visuals in transparency format which depict parents and deaf children engaged in communication of critical types. This systematic series of prompts is designed to evoke more effective communication behaviors and procedures to incorporate these behaviors into the parents' daily interactions with their child.
- (2) a facilitator's manual which describes the possible chronological (from prior to birth to late adolescence of the deaf child) or thematic (sibling conflicts, discipline, sex education, etc.) treatments by group leaders. The facilitator's manual details potential parent communication behaviors appropriate to the depicted situation.
- (3) regularly scheduled parent meetings from 6-15 parents to view visuals and to analyze evoked parent communication behaviors. Parent-parent interaction and parent-leader interaction leads to the selection of behaviors and the procedures for insuring incorporation into daily interaction with children.

This paper will demonstrate and discuss these materials and procedures and present the formative evaluation response to the program from parent test sites.

The Development of Discriminative Stimulus Materials  
to Increase Parent-Child Communication

Allison Rossett and Todd Eachus

University of Massachusetts

A recurring issue in the application of principles of behavior to social problems is that of "who shall select and who shall decide." Whenever the efficacy of behavior modification procedures is demonstrated, critics imbued with non-empiricist values raise issues concerned with the selection of target behaviors, consequences, and reinforcers. A systematic prompting of individual parent's communication strengths and weaknesses and the transition from statements of individual problems to the application of behavioral procedures is presented in this paper. Based on individual response to visual prompts within a group setting, parents and leaders make joint decisions as to target behaviors, consequences and reinforcers.

When behavior analysts concern themselves with areas of human functioning which are emotionally toned or closely tied to basic human functions, the problems of ethics and morality are compounded. The analysis of those behaviors involved in parenting is particularly subject to emotionally stated arguments concerning the selection of target behaviors, the use of extrinsic reinforcers and the manipulation of behavior. Parenting is certainly one of the most complex and critical of human functions. The likelihood of increased resistance to behavior modification procedures above those ordinarily voiced is increased when analyzing parent-child relationships.

With the increased success of behavior modifiers in generating effective programs in schools, clinics, residential institutions, penal facilities, and with individuals, the press for reliable and efficient methods for generating substance and structure for programs has also increased. Ordinarily,

individual behavior modifiers generate training programs for specific audiences. That is, little attention has been paid to the process of identifying the ways in which teachers, counselors, ward attendants, etc. select particular student or patient behaviors which should be increased or decreased in frequency. Undoubtedly, a few catastrophic errors have been made in the selection of target or terminal behaviors.

Further, most behavior modification programs depend for their effectiveness on the capabilities of the individuals running the program to evoke, consequate and develop generalized behaviors in the individuals concerned. With the increased frequency and number of programs involving behavior modification, there is an increasing requirement for procedures to generate certain behaviors among given audiences. Two ends can be achieved through such procedures. The target audience for a program can identify the specific terminal behaviors for the program and can generate those stimulus conditions which are most likely to produce desired behaviors by program participants.

Of particular importance in the development of behavior modification programs is the generation of terminal behaviors which are suitable for a widespread audience of clients. That is, classroom teachers are faced with problems in common and parents learn to cope with the manifold problems of child rearing regardless of circumstances or location. Teaching and parenting can be identified as coherent, consistent repertoires of human functioning. By turning to the verbal communities of teachers, parents, and program developers, one can obtain reliable data with which to generate materials and procedures for widespread application to those verbal communities in general.

The process reported here for the development of discriminative stimuli to change certain verbal behaviors can be briefly described as an extension of the statement "If you need to know what they want, go ask 'em." Simply put,

the concern is with utilizing the information available in a verbal community to frame and structure the widespread application of behavior procedures. The dangers inherent in selection of terminal behaviors by an individual can be avoided through utilization of a systematic process to obtain such information from the verbal community of concern. Also, processes can be utilized to insure that programs are built which result in the generation of appropriate behavior from participants by developing discriminative stimuli which are based on the operationalization of goal statements from members of that particular verbal community.

The particular application reported here of such developmental procedures is directed at the particular problems related to parenting of deaf children by hearing adults.

#### The Need For The Program

The young deaf child relies more on his parents than does his hearing peer. He turns to these parents for help with all of the unknowns that are easily inferred by a hearing child through supplementary contacts. He turns to these parents for the fun and games and language that other children receive from constant interaction with varying people. He will turn to his parents for the experiences that his youth and deafness make difficult. Sesame Street, the soap operas, and the neighborhood kids cannot provide the deaf child with essential stimulation that some parents fail to provide.

Deafness makes a tremendous impact on communication between parent and child. Schlesinger and Meadow (1973) state that, "... the primary handicap imposed by early childhood deafness is that it jams and weakens communication between the child and others in his environment."

Mindel and Vernon (1970) and Rainer and Altschuler (1967) provide a basic picture of the angst involved in communication between hearing parents and deaf

children. Goss (1970), Altman (1973), Simmons-Martin (1972) and Schlesinger 247. and Meadow (1973) have provided specific research describing the interactions which occur in a home with a deaf child. Their work sheds additional light on the shape and strength of the intrusion that deafness makes within a home. Goss (1970) compared the language used by mothers of hearing children with the language used by mothers of deaf children. He found that the mothers of hearing children were more likely to ask questions, to ask for opinions and to use language showing solidarity and agreement. On the other hand, he found that mothers of deaf children were more likely to show disagreement, to appear tense and to make suggestions. These mothers of the deaf were not as likely to use verbal praise as were the mothers of hearing children. Considering the impact of parents in stimulating language growth through their own verbal language (Davitz, 1966; Levenstein and Sunley, 1967), there is an obvious importance in these major differences in parental communication with deaf and hearing children.

Simmons-Martin (1972) observed mother-infant interaction in homes of hearing children and listed the frequency of their occurrence. From the most frequently occurring to the least frequently occurring, she listed the following activities: holding, talking, talking to infant, feeding, and looking at face. Simmons-Martin finds that in a home with a deaf infant, the talking and the talking to the infant is likely to be extinguished. The deaf child fails to provide the pivotal reinforcement for that important form of parent-child communication.

Schlesinger and Meadow (1973) describe their observation of communication between hearing parents and deaf children in Sound and Sign. From counseling sessions with parents and home observations, they observe that hearing parents of deaf children using total communication rely on an abundance of tactile stimuli and frequently run toys and fingers over the deaf child's face and head.

they have often observed parents making signs right on the infant or child's body. In a comparison study of maternal interaction with hearing parents of deaf children and hearing children, Schlesinger and Meadow found highly significant differences in interaction behaviors. Mothers of deaf children were rated as significantly less flexible, permissive, encouraging and imaginative. The mothers of deaf children were also rated as significantly more intrusive and didactic. These blatant and major differences in communication and child rearing patterns were definitely related to the deaf child's communication deficit. When the 60 mothers' backgrounds were screened for significant personality characteristics, education or ethnic variables, the analyses still pointed to deafness as the distinguishing variable.

A study by Altman (1973) focused on ten deaf children. She used professionals to rate the children on their communicative competence. Altman's findings were distinguished by their one or two word utterances and that these same mothers gave out more facts and information than did the mothers of the children rated as more competent communicators. Mothers with children rated as more competent tended to speak more frequently and had more to say when they did speak.

From an oralist's perspective, the Altman study described the characteristics of mothers of deaf children rated as being highly competent communicators. She found that mothers of the more competent children corrected their children more often. They also demanded more frequent repetitions of sentences and words from the deaf 4-7 year olds in the study. These same mothers asked more questions of their children and the children responded more often to their mother's queries. In general, Altman found that the mothers of the more competent communicators offered more feedback to the children, placed more pressure to excel on the children, used more positive reinforcers, manifested more positive affection and warmth and introspected more frequently on their

performance as mothers of deaf children. Based on her observations, a program, even a total communication program, should be aimed at evoking or increasing the frequency of the described parental behaviors.

The work of Stuckless and Birch (1966); Quigley and Frisina (1961); Stevenson (1964); Schlesinger and Meadow (1973); Vernon and Koh (1970); Howse and Fitch (1972) and Brill (1960, 1965) all support the utilization of sign language and fingerspelling by parents with their infant and very young deaf children. Reacting to the ancient contention that the early use of signs is harmful to the speech development of the deaf person, Stuckless and Birch (1966) found that there was no significant difference in the speech intelligibility of deaf children educated in early manual communication (sign language and fingerspelling) classes and those educated in early oral education programs. While the speech intelligibility figures offered no significant differences, significant differences in reading, speech reading (lip reading) and written language were found in the early manual communication groups over the early oral group. Vernon and Koh (1971) concur in the findings which show higher educational achievement in children educated through early manual communication. Howse and Fitch (1972) looked at the effects of a sign language orientation course for parents on the expressive language of deaf children and their hearing parents. They found a significant increase in the desired expressive language after the parents' exposure to sign language. Schlesinger and Meadow (1973), looking at deaf parents with their deaf children, attributed the significant educational differences to the early parental input of language via total communication and the resulting relative ease of child-rearing. They reiterate the Howse and Fitch finding of improved parent-child communication based on the introduction of sign language into the parent-child communication.

The requirement for improved means for assisting parents of deaf children is evident in the studies described. The aspects of parent-child interaction which seem detrimental and supportive of the development of deaf children are apparent. The development of the mediated program described here relies on those data reported by others in that they guided the refinement of information obtained from parents and children.

#### The Developmental Process

In the fall of 1971 the Northeast Regional Media Center for the Deaf, a federally funded Office of Education, Bureau for the Education of the Handicapped project, gathered fourteen deaf adolescents and asked them for assistance in program development. They were very explicit about their needs and the direction project efforts should take in response to these needs. Clearly and directly, they made these statements:

"My parents don't know how to communicate with me."

"My parents are overprotective."

"My parents are ashamed of me. They send me to spend weekends with my friends who have deaf parents."

"My parents don't understand me."

"I can't understand my parents."

"My parents should show more love."

"If we can learn to communicate better, then everything will be O.K.,"

The deaf adolescents wrote, signed and/or spoke a message which left little room from confusion. They urged the development of a program to improve communication between hearing parents and their deaf children. Consultation with parents, teachers and administrators further defined the problem suggested by the adolescents. By returning to parents and adolescents for further information, they provided the feedback necessary in the development of

the program. Visits to parent groups were made; ideas obtained there generated visual materials; visuals and written accompaniment were then presented to the deaf adolescents and to parents, educators and counselors of the deaf. This process was repeated throughout the course of the 18 month developmental period.

These steps revealed an almost universal progression of experiences and concerns faced by parents of deaf children. These experiences and concerns were reiterated by the educators of the deaf, the deaf adolescents and the parents who served as resources in the development of the program. Visits to parent groups yielded graphic descriptions and poignant discussions of key moments and interactions in the parenting of a deaf child. These moments and interactions were translated into the discussion-stimulating visuals which serve as the basis for the program. A visit with a parent group at the Robin's Speech and Hearing Clinic, in Boston, Massachusetts, was typical of the way the ideas for the open-ended visuals were generated. Parents talked about restaurants and their child's temper tantrums in these restaurants. Parental concern about people associating the annoying tantrum behavior with deafness was evident. The parental choice of deciding to put the hearing aid on the child in public or not caused them considerable pain and evoked discussion of discipline, public reaction to deafness, necessity for amplification and the self-concept of the deaf child. Another similar and meaty discussion centered around blindness and deafness. The six mothers in the room were evenly split on the subject of which was the most debilitating handicap. Crucial issues were raised here: what is the impact of deafness on the child? What are the functions of a child's hearing? What is the likely impact of congenital deafness as compared to adventitious deafness? What do individual parents feel about deafness and how do they communicate these feelings to their child?

Another area highlighted by the Robbins group was responding to strangers' questions about deafness generated by the young child's hearing aid. The parents described incidents in supermarkets, trains and playgrounds and they asked important questions: What should I say? Why do people ask these questions? What is the germane information that I should impart? Why do I feel anger at these people? Should I tell my child about the questioning? Should I invite the child to respond if she/he is capable of responding?

These are three examples of parent discussion and description of incidents; visits with many other parent groups provided additional material. The incidents they all described resulted in ideas about parent concerns and the generation of visuals which depict these concerns. Once in systematized visual form, they stimulated parent verbal behavior or behavior rehearsal related to improved interaction with their deaf child.

Deaf adolescents were another source of ideas for the discriminative stimuli. Their suggestions for this project were elicited in a structured fashion. They were asked to respond to these open-ended questions: (1) I am happiest with my parents when we . . . ; (2) I am saddest with my parents when we . . . ; (3) A happy time that I can remember was when we . . . ; (4) A sad time that I can remember was when we . . . . Their responses suggested many important moments and incidents in interaction with their parents. They wrote about mealtime, telephone conversations with distant relatives, family parties, sibling privileges in which they could not participate, curiosity over television newscasts, and social relationships with hearing peers. Their descriptions of parent-child interactions surrounding key issues provided the impetus for many other visuals.

The needs and concerns of parents of deaf children serve as the themes for the visuals. These visuals elicit the inter-parent behavior likely to bring about change in the parents' communication with their deaf children. The

focus is on process; the focus is on parents serving as behavior modifiers in an effort to increase the quantity of their interactions with their deaf children. This improvement comes out of the discussion stimulated by the visuals and the direction provided to the leader by the facilitator's manual.

#### The Form and Content of the Program

There is ample support for the contention that effective parent education (i.e. education which will yield an increase in the selected parent and/or child behaviors) can be brought about through a focus on parent and child behaviors and parent education in behavior modification. The program described in this paper creates an environment to bring about this parent behavior change.

Work on the application of operant theory to child-rearing has been carried out by Allen and Harris (1966) and Hall and Broden (1967). Their suggestions have been utilized in seeking to demonstrate the effectiveness of parents in changing their children's behaviors (Wahler and Erikson, 1969). Additional applications of behavioral principles to home settings yield plentiful data supporting their use in decreasing children's maladaptive behaviors (Knight, Hasazi and McNeil, 1971; O'Leary and Becker, 1971). The needs of exceptional children and parents of exceptional children have also been met through these procedures.

Mira (1972) details the effectiveness of these operant procedures on deaf children and their parents. When several parents of deaf children described the marked negativism of their deaf children, Mira trained them to institute time-out procedures when the child demonstrated the described negativism. The parent indicates (through signs or a combination of signs and vocal language, "When you do that, you can't stay in the room with us.") that this negativism was unacceptable behavior. Mira designed similar applications or operant procedures for children who refused to wear hearing aids and some

who were foot stompers. In all cases, there was a decrease in the target behavior(s). Mira suggests that the special potency of behavior modification for children with communication disorders over traditional psychoanalytic treatment is based on its freedom from reliance on verbal instruction as reinforcements. The Carpenter and Augustine (1973) study on four parents with children with communication disorders yielded almost as striking results. In three out of the four homes, the parents trained in behavior change techniques related significant improvement in their child management and communication skills.

While not yet carried out with deaf children, the following studies have obvious applications for children with communication limitations: Herbert and Baer (1972) and Kogan et al. (1972). Herbert and Baer demonstrates how uncomplicated parent education procedures can bring about desired increases in the parents' and children's behaviors. In this study, parents were given wrist counters and told to attend more frequently to selected, desired behaviors. This instruction and the counter yielded large increases in the parents' attention and the children's demonstration of the desired behavior. The Kogan et al. study shows similar promise but with a far larger and more comprehensive approach. Computer diagnosis of videotaped mother-child interactions was used to prescribe remediation. The computer quantified the frequencies of specific behaviors within general classes of interaction like warmth overtures, child's solicitation of guidance, and physical demonstration of affection. The trainers then worked with parents to increase and decrease selected interaction behaviors.

These studies support and detail the application of operant procedures to parent-child interactions. The effectiveness of these procedures is assured. What is not always assured is the procedure for getting at individual needs

and for selecting consequences to structure programs. Questions obviously remain the creation and utilization of an environment aimed at the evocation of deficits in communication behaviors and the structuring of programs to respond to these deficits. The NKMCD program, a program designed to provide this environment, is composed of the following major components:

1. Stimulus, open-ended visuals.

Stimulus visuals are materials which precipitate rather than complete the educational process. They are important not for what they are, but for what they begin in the group which views them. The visuals provide no answers; rather they provide the impetus for individual answer-finding or additional question-posing. The open-ended, unresolved format utilizes the basic communication situations universal to families with a deaf child while encouraging individual suggestions for parent communication behaviors. The open format stimulates parents to observe the strengths and weaknesses in their communication behaviors. Procedures based on these statements can then be developed in concert with parents. The focus of these materials and the concomitant procedures is the systematizing and structuring of an environment to bring about change in parent behavior with their deaf children.

2. A facilitator's manual.

The facilitator's manual enables someone who is unfamiliar with the visuals, but who knows something about deafness and/or parent education and/or being the parent of a deaf child to lead a group of parents towards an increase in selected communication behaviors. The manual discusses each visual in light of the basic visual content, the questions facilitators should raise (both affective and cognitive), the parent concerns and reactions touched on in the visual, and the parent communication behaviors applicable to the situation. The written treatment of the visuals is based on the operationalization

by many parents and educators of the deaf or "effective parent-child communication." The listing of specific behaviors which would be observed in a home with such effective communication provided the suggested parent behaviors in response to each visual. Decisions about optimal behavior and additions to the listing would be made by individual parents in consultation with professionals. Appropriate leadership behaviors, those actions likely to bring the parents of the deaf to an increase in communication behaviors, are detailed in this manual. 256.

### 3. Parent Groups.

The utilization of these materials (visuals and manual) relies on the direction and maintenance of a parent group. This form of learning opportunity is based on a strong belief in the ability of parents to educate other parents and in the importance of parents and leaders becoming an information resource for each other.

### 4. Parent self-evaluation via parent checklisting of communication behaviors.

Because the visuals are designed to change what parents actually do in their homes with their deaf children, there are accompanying checklists. These checklists ask the parent to indicate the frequency of certain communication (vocal and non-vocal) behaviors. They enable the parent to look at himself/herself at the beginning, during and at the termination of the program. This consistent self-evaluation increases transfer of learning between parent group sessions and home communication behaviors.

### 5. Bibliographies and Northeast resource listing.

Parents need to know where to go for information about deafness. Parents need to know how to become more knowledgeable about deafness, so that they can begin making informed decisions for their young deaf child. The facilitator's manual answers these questions. Parents are provided with annotated informa-

tion on print, place and people resources on exceptionality, parent education and deafness. Geographical listing of parent education programs for parents of deaf children is also provided.

The open-ended visuals depict hearing parents and deaf children in likely interactions situations. They freeze the depicted individuals at decision and interaction points and stimulate behavior rehearsal from the parents who view them. The following visuals and written treatment provide examples of this utilization of visuals as discriminative stimuli for parents of the deaf. Operant procedures, based on needs and concerns evoked by the visuals, are then structured and instituted to bring about the increase in parent-child interaction.

In addition to a presentation of suggested questions and activities to accompany the visuals, to sample themes for discussion, and to reaction by parents who have already viewed the visuals, the facilitator's manual includes a listing of suggested parent behaviors evoked by the situation portrayed in the visuals.

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 Insert Figure #1  
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Suggested Parent Behaviors for Figure 1:

- (1) Parents discuss the child's safety and methods to assure it.
- (2) Parents seek out help in finding the best way to arrange their home and immediate environment to protect the child.
- (3) Parents discuss special dangers caused by the child's deafness and how to alleviate these dangers.
- (4) Parents tell the child about danger spots in home and community.
- (5) Parents tell the child how to avoid dangerous situations by setting down

clearly defined and explained rules.

- (6) Parents communicate these danger spots and protective rules in various ways: through talking, through drawing, through signing through pantomiming possible situations.
- (7) Parents set up a situation to make sure that the child understands and follows protective limits.

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 Insert Figure #2  
 -----

#### Suggested Parent Behaviors for #25

- (1) The parents discuss the likelihood of their hurried and sometimes emotional interchanges being misunderstood by the deaf child.
- (2) The parents try to avoid rapid and hostile exchanges in front of the deaf child.
- (3) The parents take time to explain to the child that they are not angry at the child and that she/he is not directly involved in the dispute.
- (4) The parents ask the deaf child to question them about the argument she/he has observed.
- (5) The parents answer the questions asked by the child which they judge to be appropriate.
- (6) When disputes which involve emotional responses are encountered on TV and in films, parents communicate with their child about these emotions.
- (7) Parents draw parallels for the child between emotions portrayed in the media and the child's observation of interactions in the home.

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 Insert Figure #3  
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203

**Suggested Parent Behaviors for #29**

- (1) Parents discuss the difficulty in rapid, emotional communication with their deaf child.
- (2) Parents discuss the deaf child's feelings about seeing communication going on all around her/him at a place like the dinner table.
- (3) Parents discuss the importance of including the deaf child with the hearing children and plan for a rotating individual to take responsibility for interpreting or repeating.
- (4) Parents draw, sign or talk to the child about what is going on at the dinner table.
- (5) Parents ask the deaf child's opinion during dinner conversation.
- (6) Parents encourage the hearing siblings to ask the deaf child's opinion.
- (7) Parents ask the deaf child to relate a story or incident in her/his day.

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**Insert Figure #4**  
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- (1) The parents talk to each other about what their child does well and likes to do.
- (2) The parents talk to deaf adults and parents of deaf children about the jobs which do not depend on hearing.
- (3) Parents talk to their child about his/her likes and abilities and what he/she sees in his/her future.
- (4) Parents discuss their child and his/her abilities with the teachers and administration at the child's school.
- (5) Parents discuss their work with the child and answer questions about it.
- (6) Parents take the child to observe varying jobs which are related to his/her interests and abilities.

- (7) Parents invite deaf adults with varying occupations to their home.
- (8) Parents encourage the deaf child to talk with deaf adults and vocational placement persons about options for careers.

#### The Response to the Program

In addition to the frequent presentation of the partially developed program to parent and educator groups, a more complete version of the program was placed in three field test sites in the northeastern United States. The results from these formative evaluations have been used in the improvement of the mediated program.

The major goals of the formative evaluation were to measure the impact of one program in light of its ability to bring about an increase in parent-selected communication behaviors and to solicit verbal statements from parents on necessary changes and additions to the program.

Parents in the field test sites were asked to select from one to four questions dealing with differing communication behaviors. After the selection of these questions for the Communication Behaviors Checklist, they were asked to self-record the number of times each day that they performed the behavior asked about in the question. Parents were provided with instructions on how to accomplish the self-recording and with forms for this self-measurement.

The Communication Behaviors Checklist instrument provided data which enabled us to look at the impact of the NRMCD program over time, i.e. at the end of each week and at the end of the six week exposure. It also provided data for looking at group change in average behaviors per selected question. Most importantly, this instrument offered information on individual parents and their self-perceptions of selected communication behaviors with their deaf children during the course of the NRMCD program.

Before concentrating on changes in individual's totals, it is useful to

examine the group averages. Numbers were arrived at by taking individual parent's total behavior per week and dividing by the number of questions selected by that parent. The results of these computations were then averaged by group. This process yielded weekly group means for behaviors per selected question.

The oral group in Longmeadow, Massachusetts, showed the most steady increase in average frequency/question. The means for this group also show that parents reporting generally lower frequencies of communication behavior at the onset of the program made the greatest gains during and after exposure to the program. The oral communication group in Hartford, Conn. made slight gains in frequency of communication behaviors. Interestingly, several parents in the oral groups stated that they felt the behavior checklisting was a strong positive part of the program and/or they intended to continue doing the behavior checklisting. The positive results of these first two group averages reflects this enthusiasm for the process of checklisting, an intrinsic part of the program.

The total communication group's averages show less change over time. The five weekly averages show a range of slightly less than 4. The difference between the week 1 average and the week 5 average is 1.4, a small decrease in average frequency per question. At the onset of the program, the average of the total parent group, the group which failed to show marked increases, was considerably higher than the week 1 average of 11.7 behaviors per question.

Individual parent averages reflect group trends. Most of the parents who continuously and consistently participated in the behavior checklisting showed increases in frequencies of communication behaviors with their deaf children. Better than 63% of the responding parents self-reported a higher frequency of selected communication behaviors at the end of the six week NRMCD

program than they did at the beginning. The remaining 37% reported sharp (a drop of 20 or more) decreases in only three of the twenty-two cases. Within the 63% who reported an increase from week 1 to week 5, 7 of the 14 or 50% were sharp (increase of 20 or more) gains. Only three of the parents reported virtually unchanged frequency scores over the course of the 6 weeks. These 16% of the parents reported frequencies which fluctuated only slightly (5 or less) from earlier or later scores.

In addition to effecting an increase in parent communication behaviors with their deaf children, the materials also evoked parent facilitator and parent-parent interchanges. Table 1 lists the mean # of interchanges and the direction of these interchanges.

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 Insert Table #1  
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It is interesting to note the greater mean of parent-parent interactions than parent-facilitator interactions in all 3 groups. Also, the oral group from Hartford, the group with the largest n, did not show the same pronounced gap in the quantity of the different types of interactions. A substantiation for the recommendation to diminish size of groups implementing the NRMCD program should be pointed out here. The individual number of interactions in this oral Hartford group was significantly less than the other groups. Certainly, it is plausible to attribute this difference to the size of the group.

Verbal feedback from parents included specific suggestions for changes in the program. A list of suggestions which have been incorporated into the program follows:

- (1) The facilitator should present options and encourage parents to make decisions. Facilitators should not tell parents what to do.

- (2) Parents should be given more suggestions for possible answers to their children's questions.
- (3) Group should focus more on "how to handle certain situations rather than so much free discussion."
- (4) More visuals should be focused on the experiences of parents and their 7-14 year olds.
- (5) There is a need for the inclusion of more parents of deaf teen-agers
- (6) Expand the program so that mothers and fathers can attend.
- (7) Limit discussion of visuals to no more than 15 minutes.
- (8) Increase the attendance of parents.
- (9) Include deaf adolescents and their parents in the groups.
- (10) Questions following the visuals should not be repetitive.
- (11) The parent education sessions should be longer (in weeks?) and have more continuity.
- (12) Deaf adults should be included in the program.

The suggestions of parents, their behavior change and the analysis of interactions evoked by the program have resulted in changes in the form and content of the program. Additional visuals, specific directions for deaf adolescents and adults involvement, ideas for increased parent attendance and an operant resource listing are the major additions made in response to the formative evaluation.

#### Conclusion

The development of the program for improving parent-child communications rested on a continuous process of determining the needs of parents and deaf children through direct participation. By basing the content and format of the program on the actual difficulties and problems of parents of deaf children, we have identified behaviors which are consistently seen as desirable and

essential to the parenting of a deaf child. By refining visual materials through feedback from parent groups, we have assured that the nature and sequence of the program address common requirements and evoke verbal behavior which can be easily shaped to improve parent-child communication.

The developmental process which has been used was not intended to provide a complete program. No specific program elements have been included which are concerned with the competence of the individual program managers or precise recording procedures for use in homes by parents of deaf children. Instead, we have focused on the process for identifying behaviors which will measurably improve communication between parents and children.

Through directly involving the verbal community in the identification and selection of target behaviors, we have systematized the determination of what behaviors should be acquired. The difficult issues surrounding change in complex areas of human functioning have been addressed directly by the straightforward procedure of analyzing and relying upon the individuals needing change.

Obviously, not all of the areas of application for which behavior modification procedures are useful can utilize the program strategies. Such clients as institutionalized retardates cannot clearly voice the terminal objectives of greatest concern for their welfare. However, teachers, parents, businesses and others can describe accurately their goals and objectives in precise, operational terms. This paper presents a program for prompting such statements and the concomitant planning from parents of the deaf.

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Table #1

## Mean Quantity and Type of Interactions

<u>group</u>	<u>n</u>	<u>M parent-facilitator</u>	<u>M parent-parent</u>	<u>M individual</u>
oral	7	12.29	19.29	31.57
oral	14	6.07	8.0	14.07
total	9	15.11	22.33	37.66

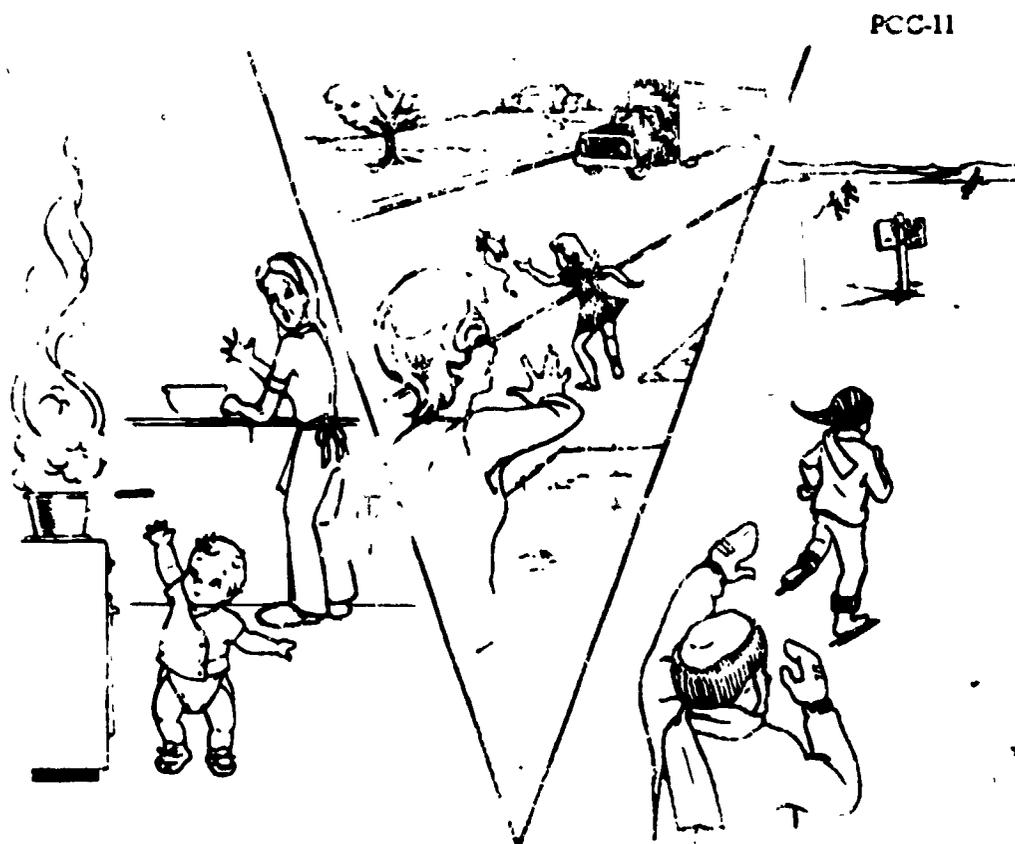


Figure 1

PCC-25

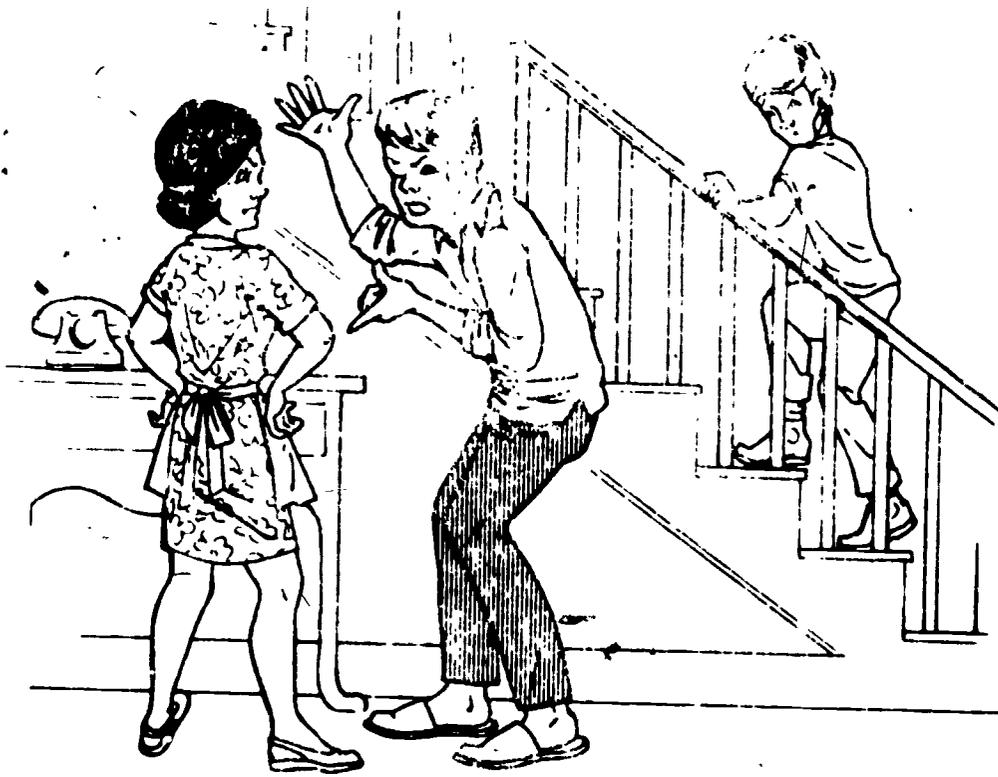


Figure 2

270

PCC-29

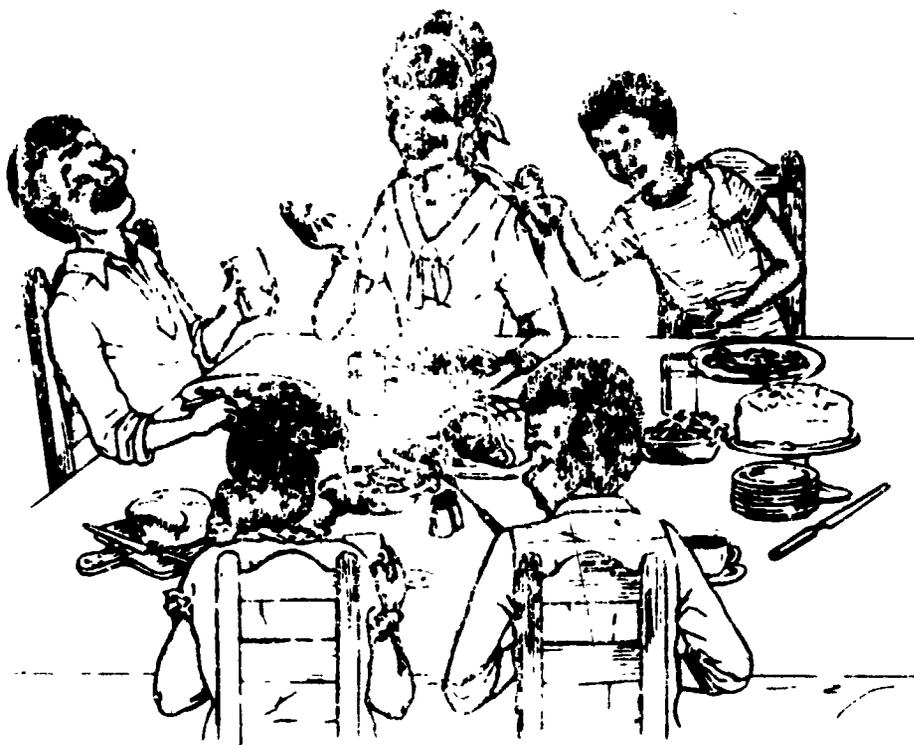


Figure 1

PCC-42

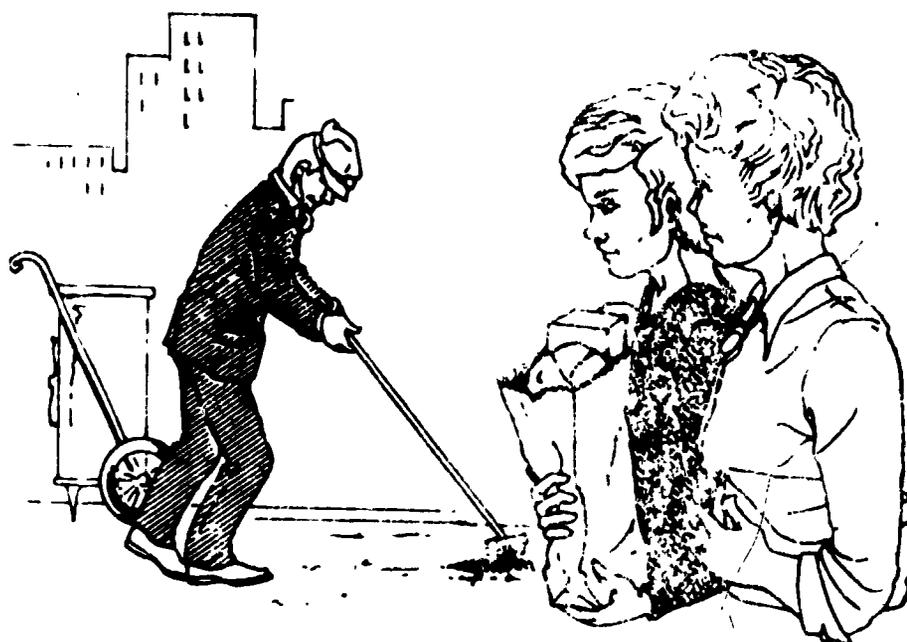


Figure 4

271

## THE UBIQUITOUS OVERHEAD

Raymond Wyman  
Northeast Regional Media Center for the Deaf

During the decade of the Eighteen-Twenties, an educational revolution took place with the development and wide acceptance of the chalkboard (then blackboard) as a standard classroom teaching device. Nearly everyone in education agreed that the device permitted greatly improved visual presentations to groups of students and that its cost, complexity and upkeep were well within school resources and teacher competencies. Practically every classroom since then has been equipped with large areas of chalkboard for teacher and even student use.

During the decade of the Nineteen-Sixties, John Gough had a dream that education of the deaf could be dramatically improved if overhead projection could become a standard classroom teaching technique. He saw overhead projection as a necessary visual complement to the already accepted group or individual sound amplifying systems so that both the visual and audio communication modes could be exploited to the fullest extent. Media to John Gough meant optimum audio and visual communication devices and techniques.

In order to infuse some overhead projection interest and expertise into his new Media Services and Captioned Films branch of the Bureau of Education for the Handicapped, John did some checking and found that the University of Massachusetts had done much work on overhead projection equipment and materials that might be adapted to or adopted by schools for the deaf. Much of this work had been stimulated by the Tecnifax Corporation (now Scott Graphics) in nearby Holyoke, Massachusetts. A

USOE study of locally produced overhead transparencies had also been completed by the University. Thus, the Northeast Regional Media Center for the Deaf was established at the University in Amherst, Massachusetts, with a primary responsibility for exploiting overhead projector utilization in the education of the deaf.

At the same time funds were allocated to begin the purchase of an overhead projection package for each and every classroom for the deaf in the country. It took several years to equip every room with an overhead projector, stand and screen, but the goal has long since been met. Schools for the deaf have been leading the nation in the use of this system. While other teachers must often locate, schedule, transport, set up and focus a machine before use, teachers of the deaf only need to turn on the switch.

Since most teachers were not trained to use such machines and materials, summer institutes, workshops, demonstrations and publications were made available on a large scale. A major part of the staff development program of the Regional Media Centers was devoted to overhead projection.

Overhead projection has many desirable characteristics in education of the deaf. It can be used in an ordinary lighted room, although not in direct sunlight. The teacher faces the class so that lip reading and every aid to communication can be employed. Audio and visual materials can be woven together. The speed of presentation can be constantly adjusted to the perceived assimilation of the messages. Many excellent commercial transparencies are available at reasonable cost. NRMCD has prepared sets of several hundred transparencies for distribution to all

schools for the deaf based on the expressed needs of experienced teachers. (This program has been completed.) The other regional media centers and many individual schools have also produced transparency sets. Thousands of paper masters for inexpensive and rapid local production of transparencies are readily available. Extemporaneous visual materials can be made with water soluble or permanent pens or pencils. Various small objects such as coins, keys, boxes, pins, etc. can be placed on the overhead stage and counted, categorized, arranged or described. Materials on the stage can be pointed to, progressively disclosed, labeled and completed with overlays. The lamp can be used as an attention getting device or as a spotlight for anything needing emphasis.

To complement the classroom overheads, most schools for the deaf have established local production areas for visual materials in each major building. These centers usually contain equipment for making thermal, diazo and color lift transparencies from a great variety of hand constructed or commercial masters. They often have graphics equipment, pressure sensitive letters and symbols and sometimes photographic or other enlarging or copying devices.

A major shortcoming of the typical overhead projector has been the inability to use full color continuous tone photographic materials similar to the 35mm camera and 50 x 50mm (2 x 2) slides. A study was made of an existing overhead projector for 50 x 50mm slides as a companion to the larger overhead, but little enthusiasm has so far been generated.

But all of these uses for overhead projection simply make teacher presentations to students more effective. What about student responses? Might it be possible to use the same device to permit students to make

visual responses to visual stimuli? These were some questions posed by Dr. Stepp and which bothered me on one of my return trips from Lincoln. Perhaps being upset is a prerequisite to invention, because the mediated interactional visual response system, MIVR, was the result. This system has been described at several symposia and discussed with participants. There has been a good deal of enthusiasm for it and a sound research base has been made through several dissertations indicated in the references.

Ordinary overhead projectors consumed too much power to be used together in groups of eight to twelve so that each student and the teacher would have individual machines. The Buhl Projector Company developed a special 150 watt low voltage model, a wiring harness and special student desks for us to experiment with. These have worked very well and many schools around the country now have some form of laboratory in which overheads are used for multiple student responses. Low wattage machines provide plenty of light for the small images usually used, and in addition they require far less cooling and produce far less noise.

Many deaf students now spend part of each day at an overhead projector in a laboratory with their teacher and peers responding to a variety of requests based on previous presentations or study such as: spell these words, identify this, solve this, write the opposite, underline the word, who is this?, when did she live?, where is this?, complete this, make a diagram, compose a sentence, what is wrong?, make it correct, etc.

An attempt was made to determine if individual television cameras

ocused on student work and connected to a battery of monitors in front of the teacher would do as well or better. Large monitors were used to provide an instant display of any student's work at the push of a button. The expense of this system was about five times that of overheads and no great enthusiasm or advantages were found.

All MIVR systems were adapted to existing classrooms which were not designed with them in mind. Perhaps it was time to construct or reconstruct a special room as near to ideal as possible for the use of the system. The Boston School for the Deaf agreed to work with us on the renovating, equipping and experimenting with an optimum interaction learning laboratory (OILL) to demonstrate what could be done. This system has worked very well and is reported in the references.

The Tennessee School for the Deaf has also purchased a modular building for making an optimum MIVR laboratory room connected to their primary building. Other schools are considering special MIVR facilities. A MIVR laboratory may soon become a regular feature of schools for the deaf. Several experiments with other handicapped students and ordinary students have produced good results.

Special materials need to be prepared to promote student responses rather than to provide them with answers. These visuals are often called "open end." One of our graduate assistants, Ms. Rossett, is doing her dissertation on overhead transparencies designed to promote parent and deaf child communication. Many materials from "programmed learning" packages seem to be easily adaptable to MIVR use.

Many teachers of the deaf and deaf students are not aware of the

contributions of the visual literacy movement to education of the deaf. Another graduate assistant, Ms. Dardig, is doing a dissertation in this area with fifteen participating schools.

Teachers who are asked or who volunteer to participate in a MIVR laboratory are often bewildered by the amount of equipment and materials involved. To help those who have not been involved, another graduate assistant, Mr. Howard, with special help from Mrs. Lloyd Graunke (Tennessee) and the staff of the Boston School for the Deaf has been preparing a teachers guide and survival kit for the MIVR system. It attempts to include most of what has been learned about using the system and demonstration materials.

Paul Mort once remarked that it took fifty years for educators to adopt an effective educational innovation. The teachers of the deaf are doing much better with the overhead projector, as a direct result of planned intervention by Media Services and Captioned Films and the Regional Media Centers for the Deaf established by them.

-- Raymond Wyman

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COMMUNICATION TRENDS BETWEEN HEARING  
PARENTS AND DEAF CHILDREN

Allison Rossett, Ed.D.

Submitted to the  
American Annals of the Deaf  
June 1974

Abstract

The impact of deafness on the communication interaction between hearing parents and deaf children is investigated in this paper. Comparative studies of parent interaction with hearing and deaf children highlighted differing parent communication behaviors when parenting a deaf child. Parents' self perceptions of their communication behaviors with their deaf children pointed to difficulties in dealing with abstractions, in addition to parent emphases on social interaction. Seventy percent of parents queried on their major problem(s) with their deaf child isolated communication as their major problem. Concern with career opportunities, self concept building, child management and explaining causation and emotion were also noted.

Parents' needs focused on interactions in routine and mundane environments. Psychologist, administration, social worker and teacher of the deaf efforts in parent education should take the needs described in this paper into account when planning programmatic goals, objectives and procedures.

### The Problem

One special part of the phrase "special education" should be its focus on the crucial relationship between parents and their special children. It is this interaction between a young exceptional child and his/her parents which provides the language base, the learning behaviors and the feelings about self which nurture the child's intellectual and social growth. While the importance of the quality of the parent-child relationship is seldom challenged, neither is it often examined or improved.

The parent of the deaf child should not avoid the introspection, self-evaluation, and concomitant change which would benefit the child and the family. In the past, however, teachers, administrators, counselors and psychologists who work with the deaf have not established an environment specifically conducive to effective parent involvement and education. While acknowledging the enormous benefits to be derived from a potentially excellent hearing parent-deaf child communication, while recognizing the likelihood of the actual strained or flawed communication, those in a position to work with parents do not often do this work. Parents do not

often utilize the school personnel or each other as resources. The communication strengths and weaknesses between hearing parents and their deaf children continue unexamined. The status quo parent-child interaction is maintained. It is the nature of this status quo relationship which is the subject of this paper.

### A Review

A description of the research into the interaction between deaf children and hearing parents is essential. The observation and examination of what is now extant in homes with deaf children provide the data necessary to formulate programmatic goals and strategies.

The assumption that the communication between hearing parents and deaf children is greatly affected by deafness is borne out by many researchers:

The socialization of a young child calls for infinite patience on the part of the parents under the best of conditions. When the child is handicapped, and the handicap inhibits communication, the patience demanded of the parent is increased many times.

(Schlesinger and Meadow, 1972)

Discipline, often difficult for any parent of a toddler, is even more arduous for parents who have recently learned of a hearing loss. (Mira, 1972)

The deaf child, because he must depend on communication of a non-verbal nature, remains more dependent on the mother than the normally hearing child. His is a forced dependence born of an inability to develop conventional communication. This inability forces him to depend on the actions, not the words, of the few people with whom he is familiar. He must approach strangers cautiously. Often they provide him with little or no novel learning opportunity, for rarely can they handle with ease the difficulties inherent in activities and communication with a deaf child.

(Mindel and Vernon, 1971)

230

Goss (1970) compared the language used by mothers of hearing children with the language used by mothers of deaf children. He found the mothers of hearing children were more likely to ask questions, to ask for opinions and to use language showing solidarity and agreement. On the other hand, he found that the mothers of the deaf children were more likely to show disagreement, to appear tense and to make suggestions. These mothers of the deaf were not as likely to use verbal praise as were the mothers of hearing children.

A study by Altman (1973) focused on ten deaf children. She used professionals to rate the children on their communicative competence. Altman's findings were that the mothers of the children rated as less competent were distinguished by their one or two word utterances and that these same mothers gave out more facts and information than did the mothers of the children rated as more competent communicators. Mothers with children rated as more competent tended to speak to their deaf child more frequently and had more to say when they did speak.

Schlesinger and Meadow (1972) have examined the parent-child interaction in Sound and Sign. Through counseling sessions with parents and home visitations they observed that hearing parents of deaf children using total communication rely on an abundance of tactile stimuli and frequently run toys and fingers over the deaf child's face and head. They often observed parents making signs on the infant or child's body. In a comparison study of maternal interaction with hearing parents of deaf children and hearing children, Schlesinger and Meadow found highly significant differences in interaction behaviors. Mothers of deaf children were rated as significantly less flexible

permissive, encouraging, and imaginative. The mothers of deaf children were also rated as significantly more intrusive and didactic. These blatant and major differences in communication and child-rearing patterns were definitely related to the deaf child's communication deficit. When the 60 mothers' backgrounds were screened for significant personality, education or ethnic variables, the pattern still pointed to deafness as being the sole and primary distinguishing variable.

#### Additional Data on Parent-Child Communication

The Northeast Regional Media Center for the Deaf recently developed a program to facilitate communication between hearing parents and deaf children.\* In the course of the development and formative evaluation of this program, data on the hearing parent-deaf child interaction was gathered. This data sheds additional light on the relationship between deaf children and their hearing parents.

The pre/post-test instrument utilized in the formative evaluation\*\* asked parents to rate themselves on the frequency of their interactions with their deaf child in specified categories. These 154 participating parents were responding to the questionnaire in small group meetings or via the mails. The parents' self-reporting suggested the communication strengths and weaknesses of parents of the deaf - as they themselves saw

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\* For information about the availability of this program, please contact the National Center on Educational Media and Materials for the Handicapped, Ohio State University, 220 West 12th Street, Columbus, Ohio 43210.

\*\* The evaluation described in this paper was conducted under a grant (OEG-0-73-0534) from the U.S. Office of Education, Bureau of Education for the Handicapped.

these strengths and weaknesses. The offered range of possible frequency of response for parents went from less than 1/week to a maximum frequency of 10 times/week. Parents also were offered an option of checking N.A. (not applicable); the choice of this option was discouraged by facilitators and by written directions to parents who provided their input via the mails.

Parent responses for the 30 item questionnaire were tallied. In order to arrive at percentage totals for individual items/communication categories, these tallied parent scores were then divided by the maximum potential individual item score, i.e. divided by the total number of responding parents X 10 (the maximum frequency of behavior allowed for in the questionnaire.) Table A<sub>1</sub> and A<sub>2</sub> display the percentages of parent response within individual item categories.

Perusal of Tables A<sub>1</sub> and A<sub>2</sub> suggest parent communication strengths and weaknesses. Trends emerged from consideration of the percentages of parent response within the different question categories. High percentages suggest a greater frequency of that particular parent behavior with the deaf child; low percentages suggest a lower frequency of parent behavior in that area, at least as these interactions were perceived by the parents themselves. It is important, however, to remember that there is not an equal opportunity for performance of all the behaviors asked about in the instrument, e.g., the potential number of opportunities to clarify an inter-parent dispute is presumably not equal to the number of potential opportunities for involving a child in a telephone conversation. Thus, although all questions were computed with the same maximum potential frequency, they cannot be regarded with the same expectations.

The following trends in communication between deaf children and hearing parents were reported by these parents:

(1) The parents saw themselves as frequently (40% of potential or more) communicating in the following areas: encouraging the deaf child's play with hearing peers; encouraging the deaf child's communication with hearing peers; asking for the deaf child's opinions and reactions during family conversations; asking the deaf child to relate an incident in his/her day; and communicating with the child about friends and friendships. Discussion of the parent's work with the child is another area of frequent communication; it was scored by parents with 35% of maximum potential frequency.

(2) When percentages for all of the parents in all of the groups are examined, the following six areas received a parental response indicating the lowest frequencies of behavior: communicating about plans after graduation; communicating about dating, in general; communicating about dating hearing people; encouraging the deaf child's questions about male/female relationships; communicating about social issues like war, VD, women's rights; and clarifying heated parental interactions. While these areas received the lowest frequency scores (8.5% of potential or below), there were other areas not far behind in low frequency: encouraging child's discussion of feelings about being deaf and questions about religion.

(3) Percentages in Table A suggest that parents tend to urge communication and play with hearing peers more often than encouragement of the child's relation of an incident in his/her day or observation of television together. Percentages for the encouragement of interaction with peers range between

50% and 70%, extremely high frequency figures. The high percentage responses to questions 17 and 24 again point to the emphasis placed on social interaction by parents of the deaf.

(4) Examination of Tables A<sub>1</sub> and A<sub>2</sub> suggest that parents of deaf children are more likely to communicate with their deaf children about other handicaps than they are to discuss the child's feelings about his/her own handicap of deafness.

(5) Percentage scores on cognitive input questions are considerably lower than percentage scores for early social facilitation. Parents judge themselves as less frequently explaining or involving the child with the telephone, providing language input through childhood games, and/or dealing with the abstractions implicit in religious education.

(6) Some additional and specific strengths and weaknesses in the communication between hearing parents and their deaf children are as follows:

-- There is little birth/sex education communication going on between hearing parents and their deaf children.

-- Parents of the deaf communicate with their children about interactions with hearing peers more frequently than they encourage and thereby facilitate their child to take part in community activities.

-- Parents of the deaf only minimally interact with their children through sports and sports events (observations and participation.)

-- There is a higher frequency of inclusion of the deaf child in the family's religious activities than in creating an environment to encourage the child's questions about religion.

-- Communication surrounding the controversial and/or the abstract is limited. Discussion of future plans, social issues and feelings received low percentage frequency scores.

Communication, the transfer of ideas, emotions or information from one source to another, was the major problem identified by the 50 hearing parents of deaf children who served as the experimental group in the evaluation study. Out of 50 respondents to the question, What do you see as your major problem(s) with your deaf child, 35 answered that question with the word "communication" or several words approximating that idea. Figure 1 provides a graphic representation of their responses. Clearly, 70% isolate communication by word or idea, the remaining 30% of parental attention was focused on concerns like career opportunities, child management, interaction with the majority hearing population, building a positive self concept in the deaf child, and developing the child's understanding of causation and emotion. Once again, the problematic area of communication of abstractions emerged. Speech was another major area of concern. When the responding parents were screened for the variable of communication methodology, as would be expected, oral parents identify speech far more frequently than total communication parents. (See Table B.)

Parent involvement in another instrument, the Communication Behaviors Checklist, provided more information on the major concerns and interests of parents of deaf children. When asked to select from 1 to 4 specific behaviors "that you feel are very important to you and your child. . .

behaviors whose frequencies you wish to increase," parents pinpointed certain areas for improvement. These pinpointed areas were indicators of areas of parent concern or problems, deficits in communication and/or areas with greater potential for interaction.

If a parent chose to checklist a question, this choice was tallied. Larger totals for questions suggested areas in which many parents wished to concentrate to seek "to increase." Smaller question totals indicated limited interest in the question area, limited potential in the area for new communications or already established excellence in communication in that area.

A total of 33 parents made the selections reported here. The questions they most frequently selected dealt with the following areas/opportunities for parent-child interaction:

- (1) communication about the child's schoolwork;
- (2) education to avoid dangerous situations in the world and the community;
- (3) communication about events, objects, or incidents the parent and child happen upon together;
- (4) praise of something the child is doing which pleases the parent;
- (5) communication and/or interpretation of the action and dialogue of a television program;
- (6) creation of an environment which would encourage the child's more active participation in meal time conversation;
- (7) expression in a physical manner of affection towards the child;

(8) encouragement and solicitation of the child's opinions or reactions; and

(9) inquiry into whether the child is understanding the events or conversations which are going on around him/her.

It is clear that the concerns and interests of parents and their deaf children are far from esoteric. They exist at the dinner table, the television, the bathtub and the kitchen sink. Clearly, it is on these mundane environments and the interaction possibilities within them that parent education must focus.

#### Conclusion

This paper has provided a review and report of data on the special relationship between hearing parents and deaf children. The concerns of parents described in this paper have been reiterated by deaf adolescents and deaf adults. The documentation necessary to initiate parenting components in mainstream and special school settings is present. What remains is the local investigation into individual parent and parent group needs, the consideration of school and community strengths and restraints and the concomitant structuring of responsive parent education programming.

Table A<sub>1</sub> Percentages of Parent Response  
For Each Item/Communication Category  
(n = 154)

Pre/Post Test

<u>Item #</u>	<u>Item Description</u>	<u>Frequency %</u>
1/6	communication about community activities	20%
2/13	familiarization with children's games, chants	24%
3/2	encouragement of play with hearing peers	56%
4/16	communication about birth process	11%
6/4	communication about child's hearing loss	18%
7/3	encouragement of child's response about deafness	15%
8/11	explanation of husband/wife dispute	9%
9/23	discussion of husband/wife dispute	10%
10/21	sharing of observation of sports	25%
11/19	explanation of sports	22%
12/24	solicitation of child's opinions & reactions	40%
13/12	encouragement to relate incident	68%
14/9	encourage discussion of feelings about being deaf	12%
15/22	response to question about religion	16%

Table A<sub>2</sub> Percentages of Parent Response For  
Each Item/Communication Category  
(n = 154)

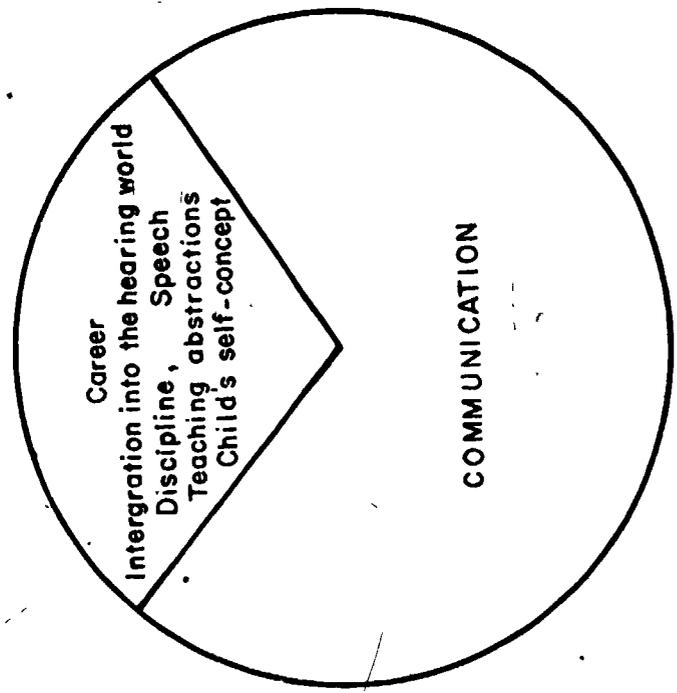
Pre/Post Test

<u>Item #</u>	<u>Item Description</u>	<u>Frequency</u>
16/7	inclusion of child in religious activities	20%
17/27	information about family social gathering	32%
18/29	solicitation of reaction to social gathering	27%
19/18	involvement in family telephone conversation	27%
20/10	solicitation of whether child wants parent to sign	28%
21/26	explanation of how telephone works	20%
22/14	discussion of handicaps other than deafness	14%
23/8	communication about dating	6%
24/15	discussion of friends and friendships	48%
25/28	suggestions for improvement of social interactions	19%
26/25	discussion of social interaction with hearing people	4%
27/30	solicitation of questions about male/female relationships	8%
28/1	discussion of social issues	8%
29/17	discussion of parent's work	35%
30/5	discussion with child of future plans	6%

Table B Comparison of Oral and Total Parents'  
Perception of Speech as a Major Problem

<u>Group</u>	<u>n</u>	<u>Identifying Speech Problems</u>	<u>%</u>
Oral Group 1	15	8	53%
Oral Group 2	15	5	33%
Total Group 1	13	2	15%
Total Group 2	7	0	0

**Major Problem(s) of Hearing Parents  
of Deaf Children as Perceived by  
Those Parents (n = 50)**



**Figure 1**

302

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## SOUND FILMSTRIPS FOR SILENT VIEWING

Lucinda Winslow  
August, 1974

## Crisis 1929, 1974

In 1929 the advent of the "talkie" or sound motion picture banished the deaf from the fraternity of the movie theatre. They could no longer view films on an equal basis with their hearing contemporaries. More importantly, since soundtracks carried most of the message, deaf access to public information about the world was severely curtailed.

With the increasing popularity of the "sound filmstrip program", hearing impaired students are facing a similar problem. The new filmstrips are characterized by an audio cassette or LP record which carries at least 95 percent of the program's message. Meanwhile, the filmstrip accompanies and illustrates the sound narrative, but is itself virtually meaningless without sound. Now as in 1929, while the flashy newcomer floods the market, its quieter cousin, the silent filmstrip, with meaningful visuals and captions, is rapidly becoming obsolete.

## Adaptation

Although the situation seems discouraging, educators of the deaf need not despair. Many of the sound filmstrips are excellent programs despite their dependence on sound. If these materials can be successfully adapted for use with the deaf, they promise a rich and varied new resource.

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Ms. Winslow is a staff assistant at the Northeast Regional Media Center for the Deaf, University of Massachusetts, Amherst, Massachusetts. NRMCD is a federally funded project under the U.S. Office of Education, Bureau of the Handicapped, Grant No. OEG-0-73-0534.

Special educators are all familiar with adaptation process. They are too often faced with the necessity of adapting mainstream curricula, methodology, and theory to fit their special needs. Instructional materials in particular are in constant need of alteration. In fact, teachers of the deaf assume they will have to prepare or adapt most materials they use. Sound filmstrips are simply the newest materials needing adaptation.

Fortunately, adaptation of sound filmstrips for silent viewing is extremely simple. Basically it is a three-step process involving: transcribing the verbal content of the sound track into a printed text; revising the language to suit viewers' reading skills; and then presenting the new text along with the original filmstrip. How this text is mediated depends on the time, resources and skills of the adaptor. But whatever the method, each produces a program which integrates verbal and non-verbal messages in an entirely visual program: "visual-visual" rather than "audio-visual".

#### Captioning?

Choosing the method for mediating the revised text, then, becomes the adaptor's prime concern. Professional captioning is of course an accepted option, used successfully by the U.S. Bureau of the Handicapped to bring educational and feature films to the deaf. This service could conceivably be extended to the new sound filmstrips. However, while successful and necessary for films, professional captioning may not be the best method for sound filmstrip adaptation for many reasons.

One problem is that cost of professional captioning is great. Staff equipment, and materials all demand a sizeable amount of money, even for

a small-scale operation. With the number of quality filmstrips on the market, such a program would have to be large and hence expensive. But deafness, as a "thin market" audience invariably has difficulty finding funds.

Another problem is that starting a professional captioning service takes time: time for funding to come through, time to hire staff, time to establish priorities, and time to consult advisors. Then captioning itself takes more time for copyright release, for captioning, for evaluation and final distribution. Years could pass before one captioned sound filmstrip program emerges. But the filmstrip market in its current state of upheaval is unfortunately changing too rapidly to wait for this eventuality.

Most important, the professional captioning of filmstrips means captioning according to norms. Norms for reading level of deaf children at various ages, norms for their interests, norms for their attention span: all will determine the scope of the new captioned products. But norms are not very helpful in predicting the needs of individual children. Even were money and time available, captioned filmstrips could never be guaranteed to reach more than the "normal" few who fit norm specifications. Whereas this risk is unavoidable for films, captioning being the only practical solution, it can and should be avoided for filmstrips, since they can be adapted directly by the child's teacher and a media specialist.

#### Responsive Adaptation

In response to the filmstrip dilemma, the Northeast Regional Media Center for the Deaf devised nine methods for making the "unusable" sound

filmstrip both usable and useful for hearing impaired children. Each of these methods is simple enough to allow either a classroom teacher or school media center to accomplish all necessary steps. All methods assume that the script has already been revised, and focus on the technical details of mediation.

Since choice of method will depend on constraints of time and finances, the methods are grouped in three categories. Where materials are on short-term loan, methods for adaptation of the soundtrack should be used. These procedures do not tamper with the filmstrip itself. However, when the adaptor has permission to buy and then cut, splice and otherwise change the filmstrip itself, the methods of filmstrip adaptation and hand captioning add variety to the repertory of adaptation techniques. (See methods listed below.)

#### A Bonus

Once the adaptor plunges into the adaptation process, he/she will realize that this list of methods is neither exhaustive nor definitive. Many techniques more suited to the particular group will surface and prove more effective.

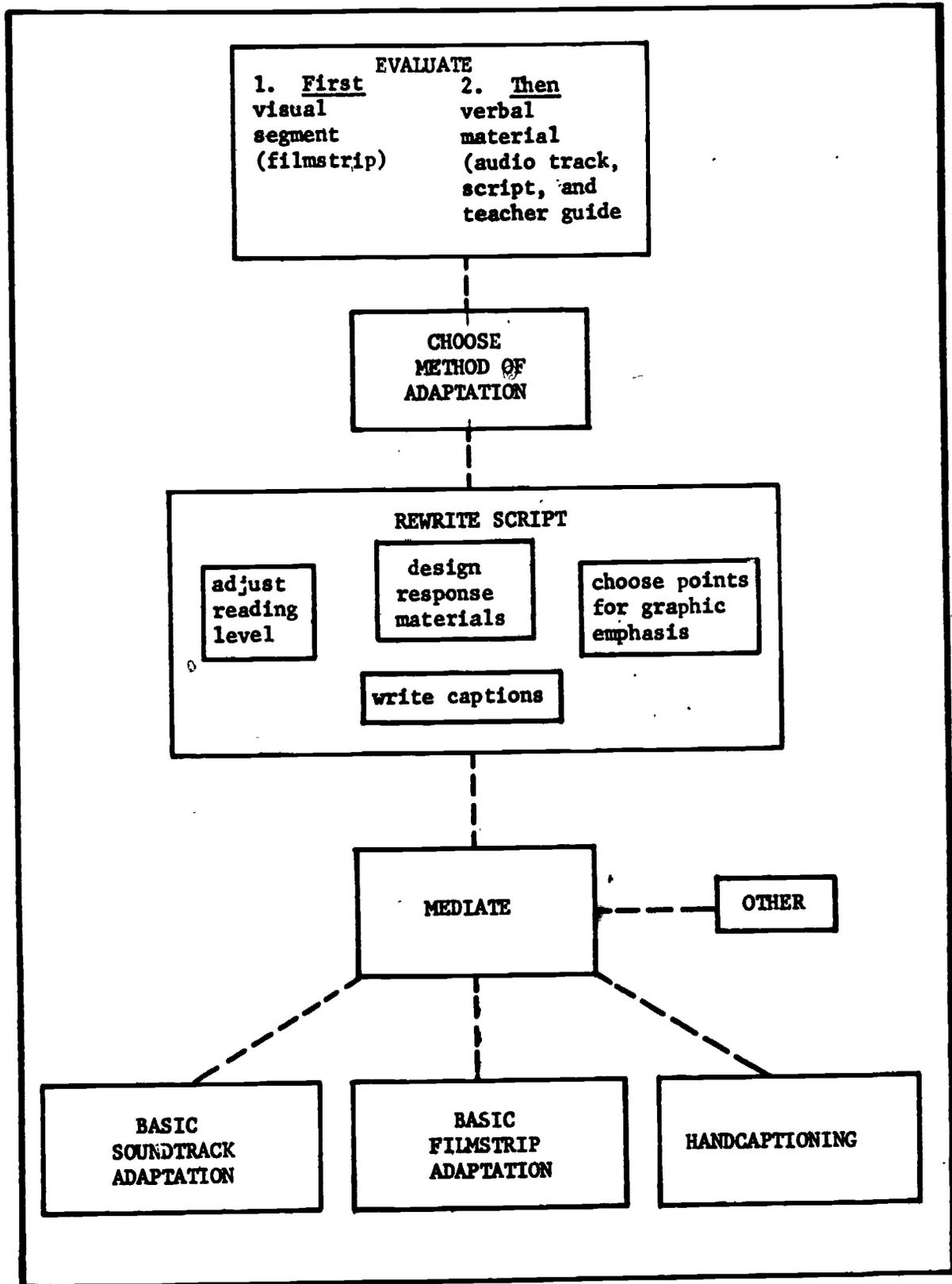
This sense of exploration is an important bi-product of adaptation. While tailoring a program to fit a class or curriculum, the adaptor must work directly with the text and its construction, the visuals, their sequencing and relative merits, and the reactions of children to these program components. Thus, he/she learns how an educational package is constructed and how changes can alter and improve its communication potential.

By working directly with materials, the adaptor moves into a new relationship with both the specific media materials and media in general.

As adaptor, he/she becomes creator as well. Then, not the materials, not even the medium, but the adaptor is responsible for the message and its impact.

This responsibility bears a double edge. Rather than relying on "canned" programs and fitting curricula around materials, the adaptor as teacher must have a message to teach and a program to mediate. Furthermore, he/she must care enough to take the time to prepare both message and materials.

Therefore the message of filmstrip adaptation reaches out beyond the specific need of the hearing impaired, although this need is critical. The message of adaptation speaks to all teachers caught in the web of pre-packaged, pre-programmed, ready-made education. For them, the option of adaptation opens an avenue leading to more creative and responsive use of media in the classroom.



Method 1:  
Script Dis-  
tribution

Method 1:

SCRIPT DISTRIBUTION

Script is duplicated and distributed to each viewer.

Most sound filmstrip programs provide a complete script of the audio track. But if a script is not supplied, the producer usually will provide one if the purpose is explained.

EDIT AND  
REWRITE  
PREVIEW

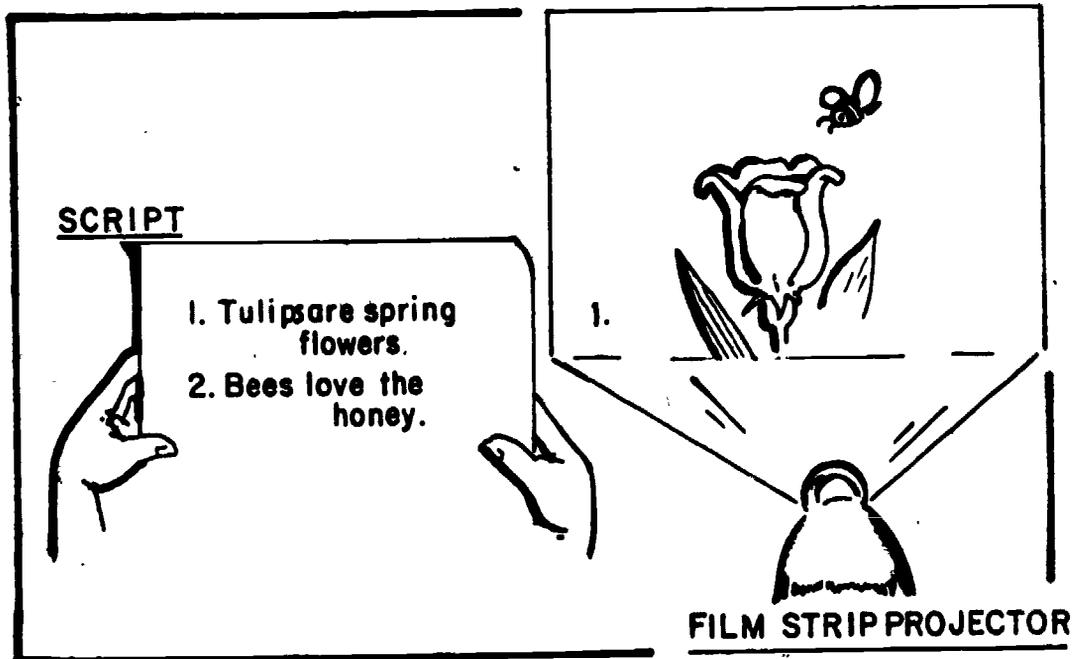
the script for con-  
tent and reading level.  
the new text with the  
filmstrip to make sure  
each frame is described.

DUPLICATE

by xeroxing or spirit  
duplication,

DISTRIBUTE

one script to each viewer,  
for use with filmstrip.



Method 2:  
Script on  
Transparency

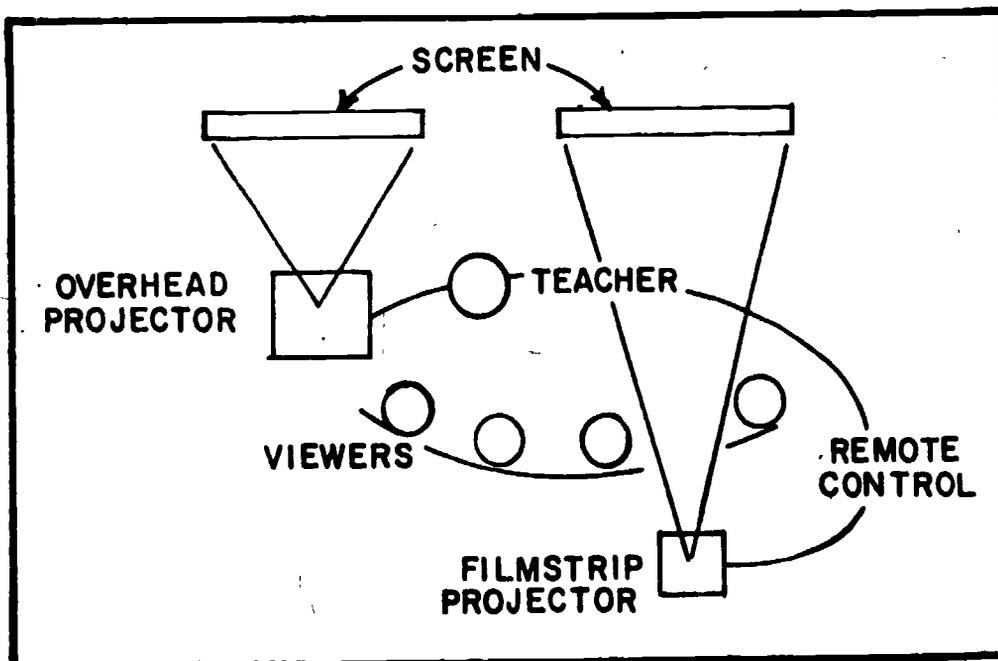
Method 2:  
  
SCRIPT ON TRANSPARENCY  
  
Script is projected with an overhead projector, caption by caption.

The "ubiquitous overhead" offers a dynamic and practical mode of script presentation.

EDIT, REWRITE,  
AND PREVIEW  
MEDIATE

script as above.  
script as a transparency, either by handwriting caption directly on acetate film, or by typing captions on white paper with a primer typewriter and transferring to transparency film with the thermofax copier.  
transparencies.  
simultaneous to the filmstrip.

MOUNT  
PROJECT



Method 3:  
Script on  
Slides

Method 3:

**SCRIPT ON SLIDES**

Script is photographed as a  
35mm half-frame slide series.

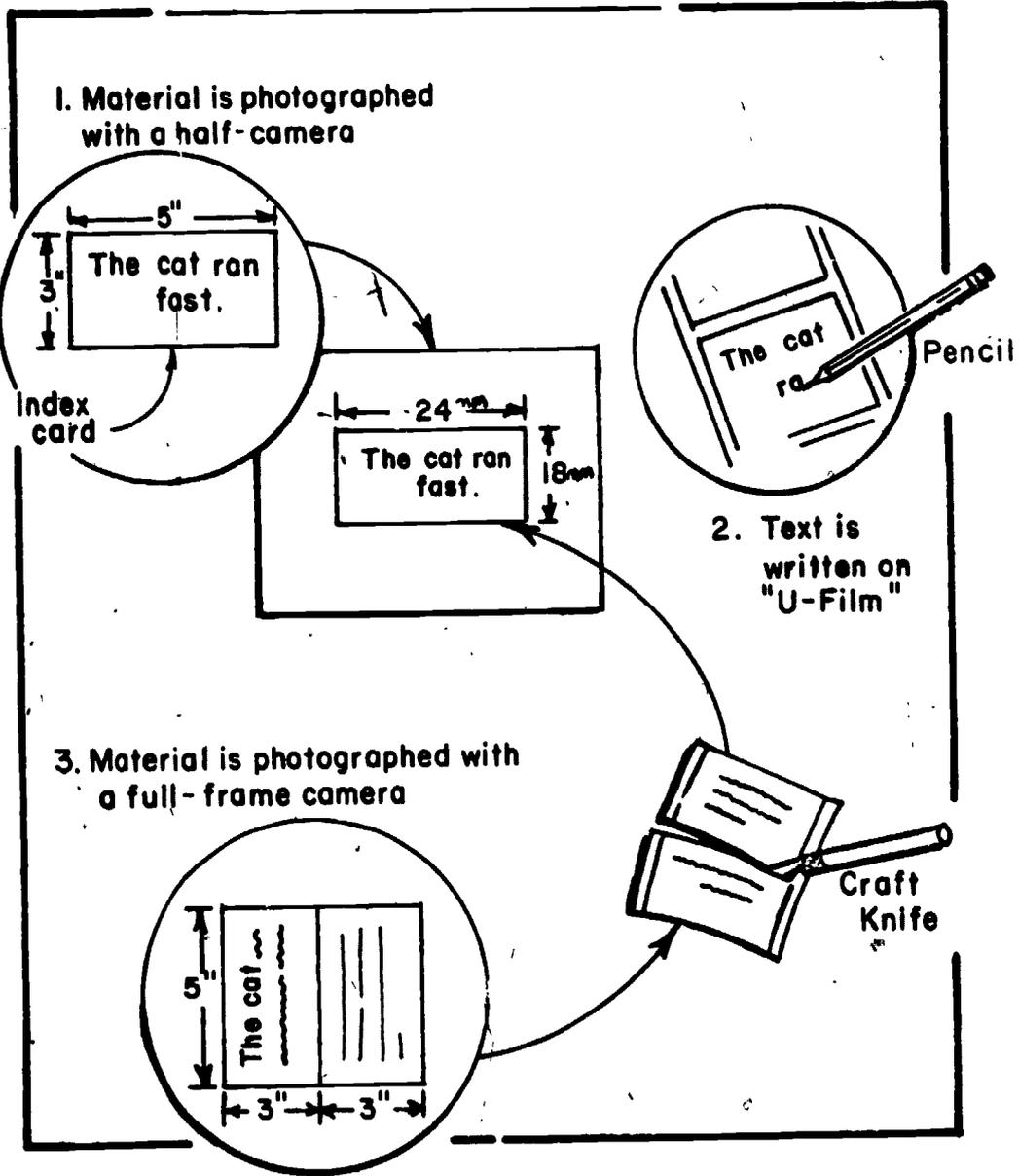
Filmstrip frames are half the size of regular 35mm frames. To match filmstrip size, slides projected simultaneously should be photographed and mounted in the half-frame format.

**EDIT, REWRITE,  
AND PREVIEW** .script as above.  
**TYPE** each caption on a 3x5  
index card with a primer  
or regular typewriter.  
**CENTER** caption in space 2x3 in  
card's center, limiting  
length to 12-15 words.  
**PHOTOGRAPH** captions with 35mm half-frame  
stop-frame camera, on high-  
contrast film.\*  
**MOUNT** negative print (for white  
print on black, easiest to  
read) or positive print.  
**PROJECT** slides with a slide projector  
while projecting filmstrip.

\*Half-frames may also be obtained with a full-frame camera by photographing one or two frames at a time, with material in only one half of the frame, and then trimming print for a half-frame mount. "U-FILM" can also be made into caption slides by cutting up #4a.

31 1/2

### THREE WAYS OF MAKING SLIDES



Method 4:

SCRIPT ON FILMSTRIP

Script is photographed as  
a 35mm filmstrip.

Method 4a:  
Script on a  
"U-Filmstrip"

Much the same as #3 can be  
captured, while preserving the  
filmstrip format by creating a  
filmstrip of captions.

EDIT, REWRITE,  
PREVIEW, TYPE,  
CENTER, AND  
PHOTOGRAPH  
PROJECT

as in #3  
new filmstrip simultaneous  
to the original, with two  
filmstrip projectors.

Method 4a:

SCRIPT ON "U-FILMSTRIP"

Script is written or typed directly  
on U-Film, and projected as in #4.

Writing the captions on U-Film  
avoids use of photographic technique.

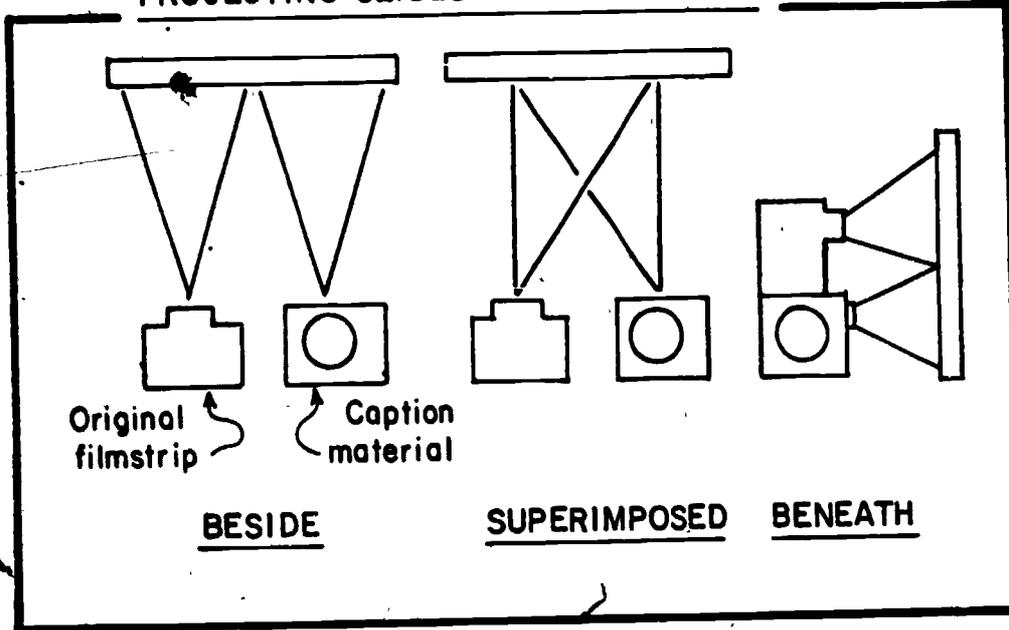
EDIT, REWRITE,  
AND PREVIEW  
CHOOSE

script as above.  
writing implement. (Type-  
writer, pen, pencil, markers  
and other tools all work.)  
captions on U-Film, following  
U-Film instructions.  
filmstrip of captions as  
in #4.

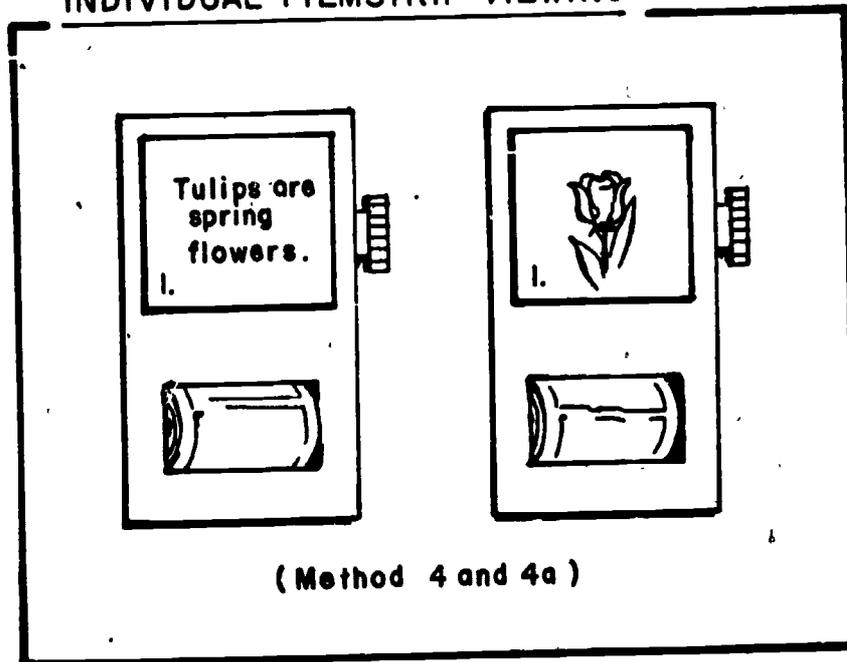
WRITE

PROJECT

### PROJECTING SLIDES AND FILMSTRIPS



### INDIVIDUAL FILMSTRIP VIEWING



Method 5:

FILMSTRIPS TO SLIDES

Selected frames are cut out and mounted on half-frame slide mounts.

Often a major difficulty with filmstrip visuals is lack of visual continuity. Transforming the filmstrip into a slide series remedies some of the difficulties.

PREVIEW  
CHOOSE

filmstrip with script.  
frames to be used, indicating  
where additional material  
would add to clarity..

REWRITE AND  
MEDIATE

text as in #'s 1-4, allowing  
for new material where necessary.  
any new material as in #3  
(optional)

PHOTOGRAPH

CUT OUT

cut out each chosen frame with  
an exacto knife on frame line.  
each frame in a half-frame  
(18x24) 50x50 slide mount.

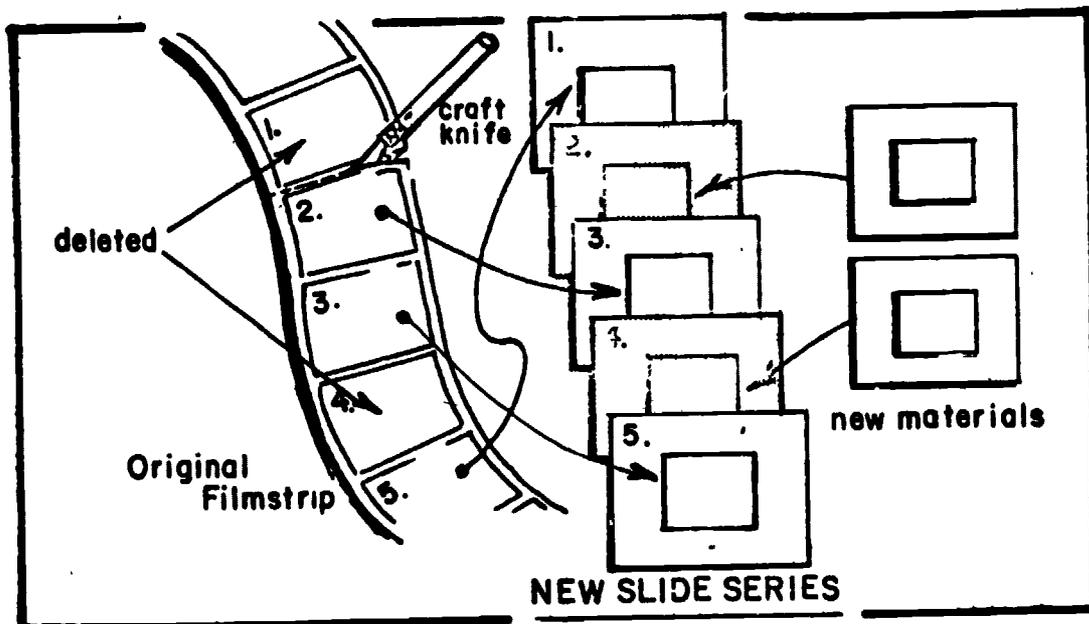
MOUNT

ORGANIZE

slides in new order, integrating  
new material, if any.

PROJECT

simultaneously with text mediated  
as in #'s 1-4. Text mediated as  
slides may be integrated directly  
into new slide series, if desired.



Method 6:

FILMSTRIPS AND SPLICES

Material is deleted, added, and organized as in #5 but using splices to retain filmstrip format.

If the filmstrip mode is preferred, visual continuity may again be doctored with exacto knife and splicing tape.

PREVIEW AND  
CHOOSE  
REWRITE AND  
MEDIATE  
PHOTOGRAPH  
CUT OUT

as in #5.

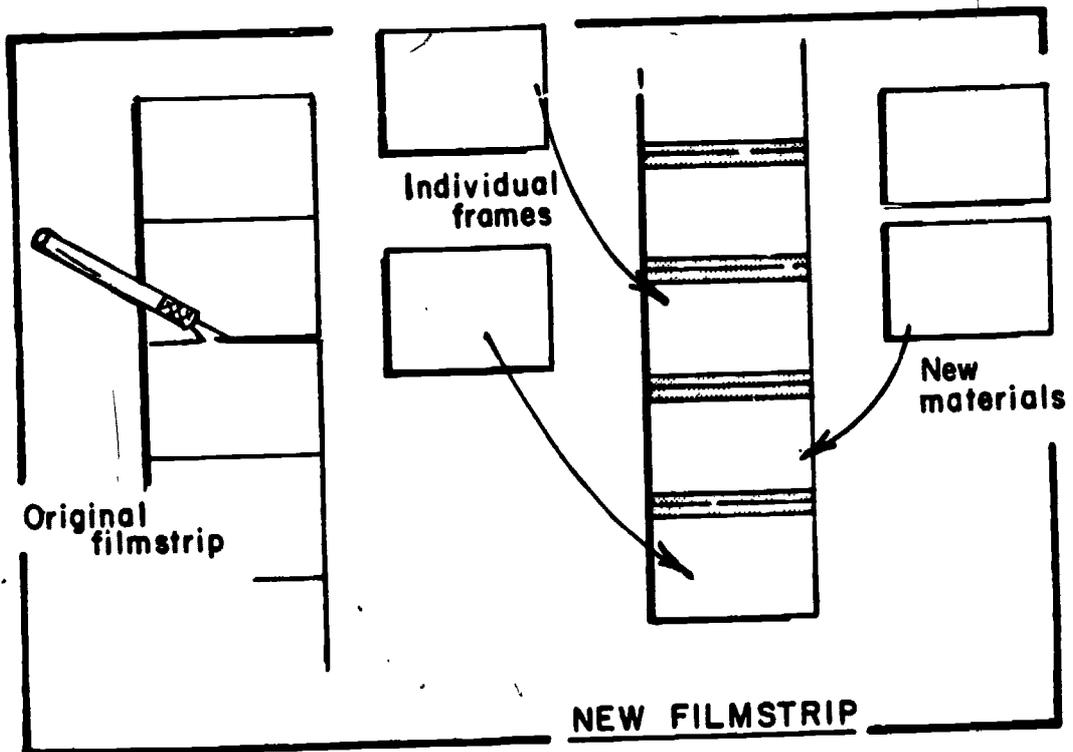
text as in #'s 1-4.  
as in #5 (again optional).  
frames not wanted, or in  
wrong order.

SPLICE

frames into new sequence,  
incorporating new material,  
if any,

PROJECT

simultaneous to text.



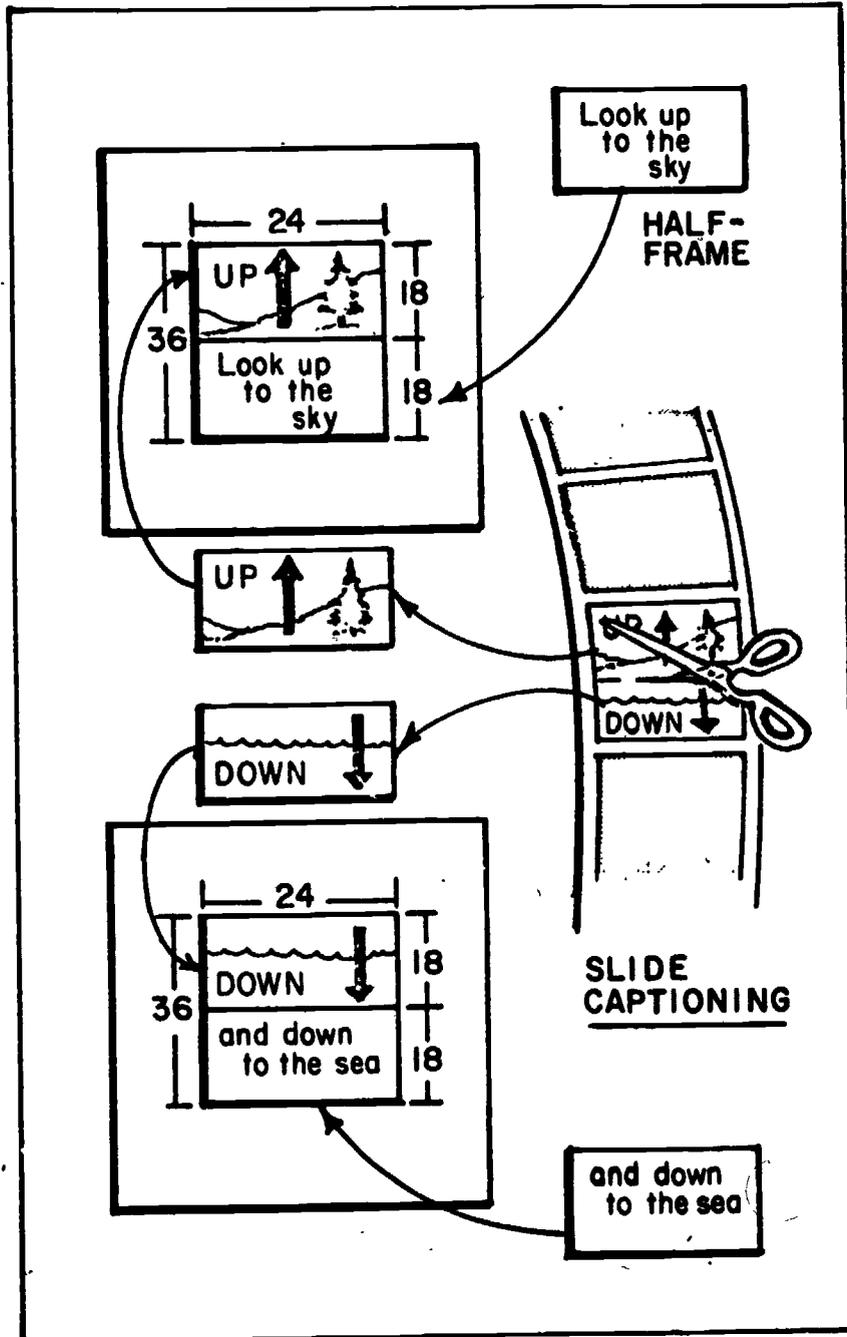
Method 7:

HALF-FRAME SLIDE CAPTIONING

A caption slide-frame may be combined with a filmstrip frame in a full-frame mount (24x36)

Because filmstrip frames are exactly half the size of regular 35mm slide frames, two fit into the regular 50x50 mount with a 24x36 center opening.

PREVIEW AND CHOOSE REWRITE AND MEDIATE	frames to be used. text as half-frame slides. (See #3)
CUT OUT	with exacto knife frames to be used.
PAIR	each frame with one caption frame.
MOUNT	each pair in a 50x50 full frame mount (24x36). Both frames should orient in the same direction.
OVERLAP	two frames a little in the middle to prevent light leaks.
ORGANIZE, PREVIEW, AND PROJECT	captioned slide program.



Method 8:

DOUBLE-FRAME FILMSTRIP CAPTIONING

Splicing in a caption frame after each filmstrip frame, and projecting with a double-frame projector provides a captioned filmstrip.

The availability of the double-frame attachment for the filmstrip projector opens up another captioning opportunity: a filmstrip version of #7.

PREVIEW,  
CHOOSE, AND  
MEDIATE  
CUT

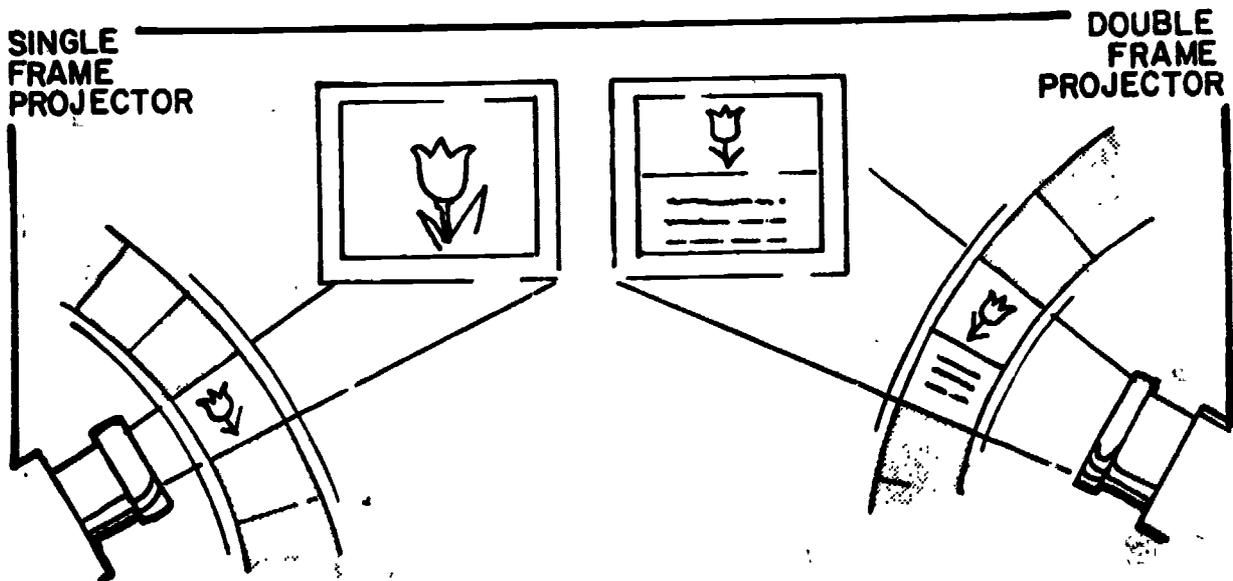
as in #7.  
along frame-line after  
each frame to be captioned.

INSERT AND  
SPlice IN

appropriate caption frame,  
splicing as in #6.

PREVIEW, AND  
PROJECT

with a double-frame film-  
strip projector.



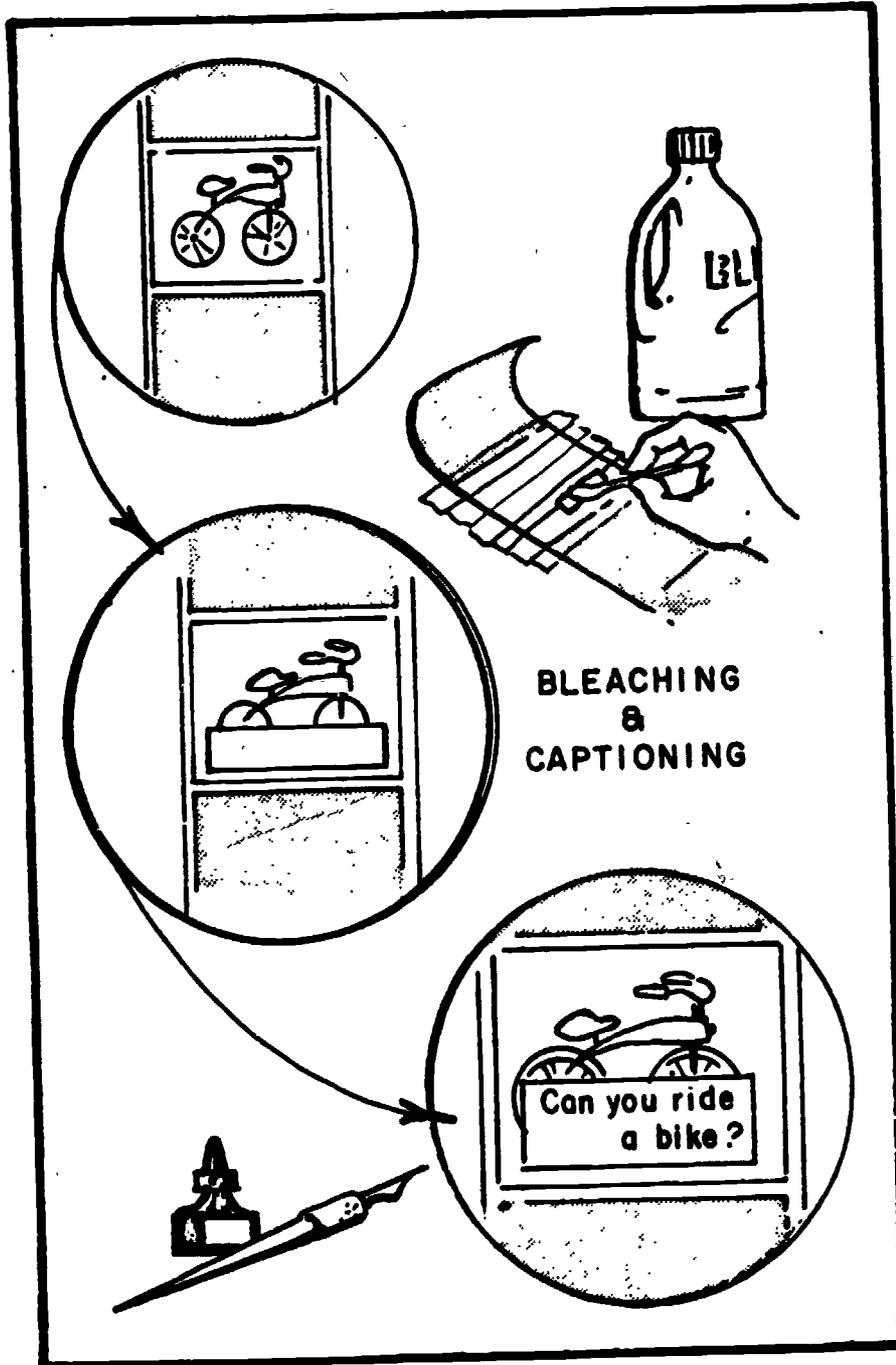
Method 9:

BLEACHING AND CAPTIONING

Caption balloons bleached onto the filmstrip provide a space for handwritten captions directly on the original.

Household bleach, cotton swabs, scotch tape, knife, and fine pen furnish tools for simple in-frame captions.

PREVIEW	filmstrip with text.
CHOOSE	frames, and within frames, space to be captioned.
REWRITE	text in <u>very</u> short sentences, one per frame.
SECURE	filmstrip to hard surface with masking tape, exposing 3 or 4 frames. Emulsion side must be up.
COVER	exposed frames completely with clear scotch tape, rubbing out air bubbles.
CUT	away tape around area for caption balloon in first frame, using an exacto knife. Try not to scratch filmstrip acetate.
PEEL	tape away from caption bubble area <u>only</u> .
APPLY, AND SCRUB	area with cotton swab and bleach until <u>all</u> emulsion is removed. (Takes up to 5 minutes.)
BLEACH	rest of filmstrip, leaving tape on completed frames.
REMOVE WASH	tape, and filmstrip thoroughly with soap and water.
CAPTION	each bubble with rapidograph pen and permanent ink, avoiding smudges and finger prints.
TOUCH UP	frame lines with permanent ink, or marking pens.
DRY, PREVIEW AND PROJECT	captioned filmstrip.



METHOD	ADVANTAGES	DISADVANTAGES	SUGG
<p>1. Script Distri- bution</p>	<p>Quick</p> <p>No special equipment</p> <p>Storage requires little space</p>	<p>Splits attention between script and screen; hard for slow readers.</p> <p>Leader must work to help viewer coordinate frame with appropriate caption.</p>	<p>For group of borrowed materials.</p> <p>Response m into scrip some of the</p> <p>For indivi strip can the script individual</p>
<p>2. Script on Trans- parency</p>	<p>Quick, especially when handwritten.</p> <p>Uses regular school equipment.</p> <p>Verbal and visual information are paired for quicker comprehension.</p> <p>Response material can be inserted.</p>	<p>Presentation awkward without two projectionists.</p> <p>Light-spill from overhead dims filmstrip frame somewhat.</p> <p>Transparencies take up storage space.</p>	<p>For group rented mat those prog to use rep</p> <p>Effective and diagram to the tra</p> <p>Group can captions for the spot.</p>

ADVANTAGES	DISADVANTAGES	SUGGESTED USES
<p>Quick</p> <p>No special equipment</p> <p>Storage requires little space</p>	<p>Splits attention between script and screen; hard for slow readers.</p> <p>Leader must work to help viewer coordinate frame with appropriate caption.</p>	<p>For group of individual use of borrowed or rented materials.</p> <p>Response materials written into script can overcome some of the disadvantages.</p> <p>For individual use, filmstrip can be stored with the script, along with the individual filmstrip viewer.</p>
<p>Quick, especially when handwritten.</p> <p>Uses regular school equipment.</p> <p>Verbal and visual information are paired for quicker comprehension.</p> <p>Response material can be inserted.</p>	<p>Presentation awkward without two projectionists.</p> <p>Light-spill from overhead dims filmstrip frame somewhat.</p> <p>Transparencies take up storage space.</p>	<p>For group use of borrowed or rented materials, especially those programs good enough to use repeatedly.</p> <p>Effective with illustration and diagrams applied directly to the transparency.</p> <p>Group can write their own captions for the visuals on the spot.</p>

BASIC  
SOUNDTRACK  
ADAPTATION 316.  
Cost and  
Profit  
Methods  
1 and 2

34

METHOD	ADVANTAGES	DISADVANTAGES	
<p>3. Script on Slides</p>	<p>Regular photographic equipment needed, no special skills.</p> <p>Caption and filmstrip frames are projected with the same light intensity, and thus are balanced.</p> <p>Space needed for storage is minimal.</p>	<p>Basic knowledge of photography is needed, or else access to personnel with necessary skills and equipment.</p> <p>Designing, photographing and developing processes add time to adaptation.</p>	<p>For gr rented, materi those</p> <p>Projec is flex placed on top frame (This if cap on bla</p> <p>Captio corpor of a f series</p>
<p>4. and 4a. Script on Filmstrip</p>	<p>Same as in #3 "U-Film" is very quick. (4a)</p>	<p>Same as #3</p> <p>Projecting two filmstrips is awkward.</p> <p>Photography (4) must be carefully planned and shot to match original filmstrip sequence.</p> <p>U-Film captions must be extremely brief. (4a).</p>	<p>For gr presen or sch</p> <p>For in viewer side b</p>

ADVANTAGES	DISADVANTAGES	SUGGESTED USES
<p>Regular photographic equipment needed, no special skills.</p> <p>Caption and filmstrip frames are projected with the same light intensity, and thus are balanced.</p> <p>Space needed for storage is minimal.</p>	<p>Basic knowledge of photography is needed, or else access to personnel with necessary skills and equipment.</p> <p>Designing, photographing and developing processes add time to adaptation.</p>	<p>For group use of borrowed, rented, or school-owned materials, particularly those in frequent use.</p> <p>Projection of the captions is flexible. They may be placed beside, beneath or on top of the filmstrip frame image on the screen. (This last is possible only if caption is white letters on black background.)</p> <p>Caption slides may be incorporated into the sequence of a filmstrip-turned-slide series, as in #5.</p>
<p>Same as in #3</p> <p>"U-Film" is very quick. (4a)</p>	<p>Same as #3</p> <p>Projecting two filmstrips is awkward.</p> <p>Photography (4) must be carefully planned and shot to match original filmstrip sequence.</p> <p>U-Film captions must be extremely brief. (4a).</p>	<p>For group and individual presentation of borrowed or school-owned materials.</p> <p>For individual use, two viewers can be set up side by side.</p>

BASIC  
SOUNDTRACK  
ADAPTATION 317.  
Cost and  
Profit,  
Methods  
3, 4,  
and 4a.

METHODS	ADVANTAGES	DISADVANTAGES	S
<p>5. Filmstrip to Slides</p>	<p>Makes program flexible Quick.</p> <p>No special equipment needed.</p>	<p>Frames in quick, cardboard mounts tend to slip and need re-centering after storage period.</p> <p>Must own filmstrip.</p> <p>If not edited, length of filmstrip is doubled, inviting boredom.</p> <p>✓</p>	<p>New writ fil as f</p> <p>If as may into and proj capt ject ject</p>
<p>6. Filmstrips and Splices</p>	<p>Makes program flexible.</p> <p>Quick, if splicing kit is available.</p> <p>No special projection equipment is needed.</p>	<p>If splicing kits must be ordered, adaptation time increases.</p> <p>If splicing kits are not available, 35mm splicing techniques makes adapta- tion harder.</p> <p>Splices in kits create air bubbles if applied sloppily.</p> <p>Splices snag in projector if incorrectly applied.</p> <p>Must own filmstrip.</p> <p>Filmstrip rapidly grows too long.</p>	<p>Esp for pro use</p> <p>Eff top</p> <p>Scr as pho fra dir fil</p>

ADVANTAGES	DISADVANTAGES	SUGGESTED USES
<p>Makes program flexible</p> <p>Quick.</p> <p>No special equipment needed.</p>	<p>Frames in quick, cardboard mounts tend to slip and need re-centering after storage period.</p> <p>Must own filmstrip.</p> <p>If not edited, length of filmstrip is doubled, inviting boredom.</p>	<p>New script may be written for altered filmstrip, and mediated as in #'s 1-4a.</p> <p>If script is mediated as slides (#3), they may be incorporated into the actual program and projected with one projector or slides and captions may be projected with two projectors, simultaneously.</p>
<p>Makes program flexible.</p> <p>Quick, if splicing kit is available.</p> <p>No special projection equipment is needed.</p>	<p>If splicing kits must be ordered, adaptation time increases.</p> <p>If splicing kits are not available, 35mm splicing techniques makes adaptation harder.</p> <p>Splices in kits create air bubbles if applied sloppily.</p> <p>Splices snag in projector if incorrectly applied.</p> <p>Must own filmstrip.</p> <p>Filmstrip rapidly grows too long.</p>	<p>Especially effective for designing short programs for individual use.</p> <p>Effective for single-topic presentations.</p> <p>Script can be mediated as in #'s 1-4a, or photographed caption frames may be spliced directly into new filmstrip sequence.</p>

METHOD	ADVANTAGES	DISADVANTAGES	SUGGES
<p>7. Half-frame Slide Captioning</p>	<p>Visual and verbal are contained in the same visual unit.</p> <p>Quick.</p> <p>Makes program flexible.</p> <p>No special equipment needed.</p>	<p>Frames in ready-mounts tend to slip, and iron-on mounts which prevent slippage are more difficult to use.</p> <p>Must own filmstrip.</p> <p>Multi-media aspect of presentation is lost.</p>	<p>For group or sentation of materials.</p> <p>Distributing restore mult</p> <p>Good use for with acceptab unacceptable captioning. caption to co latter case.)</p>
<p>8. Double-frame Filmstrip Captioning</p>	<p>Visual and verbal contained in the same visual unit.</p> <p>Order of filmstrip becomes flexible.</p>	<p>Time-consuming, if for many frames.</p> <p>Need double-frame filmstrip projector attachment.</p> <p>Need splicing kit (#4).</p> <p>Must own program.</p> <p>Multi-media aspect lost.</p>	<p>Especially e serting respo frames into filmstrips, school.</p> <p>Improves fil little captio</p> <p>Useful for cdividual les to be used w viewer, scri sheet.</p>

ADVANTAGES	DISADVANTAGES	SUGGESTED USES
<p>Visual and verbal are contained in the same visual unit.</p> <p>Check.</p> <p>Makes program flexible.</p> <p>Special equipment needed.</p>	<p>Frames in ready-mounts tend to slip, and iron-on mounts which prevent slippage are more difficult to use.</p> <p>Must own filmstrip.</p> <p>Multi-media aspect of presentation is lost.</p>	<p>For group or individual presentation of school-owned materials:</p> <p>Distributing script (#1) helps restore multi-media quality.</p> <p>Good use for old filmstrips with acceptable frames, but unacceptable sequencing or captioning. (Overlap new caption to cover old in the latter case.)</p>
<p>Visual and verbal contained in the same visual unit.</p> <p>Order of filmstrip becomes flexible.</p>	<p>Time-consuming, if for many frames.</p> <p>Need double-frame filmstrip projector attachment.</p> <p>Need splicing kit (#4).</p> <p>Must own program.</p> <p>Multi-media aspect lost.</p>	<p>Especially effective for inserting response-eliciting frames into already-captioned filmstrips, owned by the school.</p> <p>Improves filmstrips which need little captioning.</p> <p>Useful for creating short, individual lessons for students to be used with individual viewer, script, and response-sheet.</p>

METHOD	ADVANTAGES	DISADVANTAGES	
<p>9. Bleaching and Captioning</p>	<p>Verbal and visual contained within a single frame.</p> <p>No special equipment needed.</p>	<p>Order is inflexible; must accept original filmstrip ordering.</p> <p>Filmstrip smudges with excess handling, and cannot be washed since captions will wash off too. Therefore handling by young children is impractical.</p> <p>As with "U-Film", hand-written captions are large, even using the finest pen nibs. Caption length is restricted severely.</p> <p>Must own materials.</p> <p>Multimedia aspect is lost.</p>	<p>Use fil ing pro</p> <p>Esp ind sin ink</p> <p>Voc str req to</p>

201

ADVANTAGES	DISADVANTAGES	SUGGESTED USES
<p>Verbal and visual contained within a single frame.</p> <p>No special equipment needed.</p>	<p>Order is inflexible; must accept original filmstrip ordering.</p> <p>Filmstrip smudges with excess handling, and cannot be washed since captions will wash off too. Therefore handling by young children is impractical.</p> <p>As with "U-Film", handwritten captions are large, even using the finest pen nibs. Caption length is restricted severely.</p> <p>Must own materials.</p> <p>Multimedia aspect is lost.</p>	<p>Useful for revamping old filmstrips, or for captioning short segments of new programs.</p> <p>Especially effective for individualized instruction, since a new program may be inked on for each student.</p> <p>Vocabulary and math instruction suits the format, requiring only limited space to present the concept unit.</p>

APPENDIX III



<u>Person/Affiliation</u>	<u>Nature of Request</u>	<u>Nature of Response</u>
Susan Schiff Child Development Ctr. Morristown, PA	Looking for standardized test of speech-reading for young children.	located information on "Flowers-Costello" test through Educational Testing Service Clearinghouse. called with info.; sent copy of list of tests esp. for deaf from ETS.
Lyola Williams Virginia Schl. at Hampton Hampton, VA	Interested in names of companies that other schools for the deaf could recommend for reading texts and/or a sequential reading program.	sent list of six reading programs with manufacturers' names and addresses recommended by schools and by Field Services of NRMCD. included seven more items of interest and suggested contactin. R.I. Schl. for the Deaf concerning their program.
Arlene Kramer Mystic Oral School Mystic, CONN	Interested in materials available for drug education	suggested calling mental health agencies and local "hot lines" for visuals; sent NRMCD drug transparencies; sent list of six captioned films, 2 filmstrips and commercially produced anthology.
Claire Sheridan Somersworth Middle School Somersworth, NH	Teacher of two deaf teenagers in public school w/o any specialized materials. especially needing language arts materials.	sent 19 item mediography of professional volumes, available bibliographies, curriculum guides, instructional materials, and special educ. materials manufacturers; sent package of appropriate NRMCD distributed materials.
Catherine Schneider Maryland Schl. for the Deaf Westminster, MD	Interested in listing of films designed for deaf students, especially "open-ended" films.	sent letter informing of captioned films for the deaf, individual companies producing films especially appropriate for the deaf, film libraries loaning such films, anthology of nonnarrated films, examples of such films.
Kathleen Monaghan high school student McLean, VA	considering career in education of the deaf.	sent list of nine colleges offering undergraduate specialization in education of the deaf; suggested contacting American Speech and Hearing Association.
Paula Wilson Office of Mental Retardation Hartford, CONN	Interested in sign language to be used for mentally retarded ages 12-26.	suggested checking <u>Education Index</u> and <u>ERIC</u> for academic research; sent 10 item bibliography and suggestions of two people to contact doing research on psycholinguistics and the handicapped, and state schools using signing w/retarded enclosed 2 bibliographies from National Association of the Deaf.

<p>Chris Nazzaro Amoskeag Ctr. for Educational Service Manchester, NH</p>	<p>interested in half/frame cameras for making film- strips.</p>	<p>located producer and distri- butor of half/frame cameras; mentioned commercial adaptor of slides into filmstrips.</p>
<p>Margaret Danowski Berks County Assoc. for the Hearing Impaired Reading, PA</p>	<p>interested in any infor- mation for dealing with a 21-year-old deaf retarded man.</p>	<p>called to clarify mailed-in request. sent list of twelve appropriate facilities for testing and programming.</p>
<p>James G. Zoll Clark School for the Deaf Northampton, MA</p>	<p>wanted information on materials for teaching a unit on volcanoes, esp. visuals of volcanoes in action.</p>	<p>sent list of ten films - captioned and/or highly visual; two transparency sets; suggested local public library for books and travel agencies for posters of volcanoes of Hawaii etc.</p>
<p>Peggy Hanson Lynchburg Traing School and Hospital Lynchburg, VA</p>	<p>interested in <u>any</u> materials for or about deaf/retarded, esp. other programs/people/ hospitals with MR deaf; testing facilities and non verbal films.</p>	<p>sent list of 5 facilities in Virginia treating deaf/MR; suggested contacting specific personnel in Virginia and various appropriate programs in the U.S.; suggested 3 C.E.C. and NESEIMC bibliographies; 9 non-verbal films and anthology.</p>
<p>Adrien Fisher Newport, VT</p>	<p>itinerant special ed. teacher with 4-year-old profoundly deaf student. interested in any materials available.</p>	<p>sent bibliography of 13 ECE/deaf facilities, materials producers, curriculum programs.</p>
<p>Sidney Barefoot Archway School Atco, NJ</p>	<p>speech therapist interested in speech and language therapy for the deaf, esp. signing for 16-18-year-olds.</p>	<p>sent mediography of 20 programs, films, books, etc. on total communication and speech/language therapy esp. for the deaf; two N.A.D. signing bibliographies.</p>
<p>David Barr Crotched Mountain Schl. Greenfield, NH</p>	<p>interested in word lists other schools for the deaf are using in their language arts curriculum development.</p>	<p>contacted seven area schools which agreed to send list plus one school working on a similar project expressed plans to work directly with Mr. Barr.</p>
<p>Mary Lou Oltman SUNY at Geneseo</p>	<p>wanted to know name and address of president of NY State Assn. for the Deaf.</p>	<p>information retrieved and given immediately.</p>

## What is INTERACT ?

**INTERACT** is the resource index of the Northeast Regional Media Center for the Deaf

We have on our shelves and in our files catalogs and brochures with information about instructional materials for all subjects on all grade levels.

We have directories of people and services throughout the region. We have people at the center with whom you can confer.

We have people in the field for follow-up service.

You are in touch with **INTERACT** via our WATS (Wide Area Telephone Service) line. You may call us toll free by using your regular telephone, TTY or TV Phone to reach us at the following numbers:

Massachusetts 1-800-282-7774

All other states in our region  
1-800-628-1960

## What do we do ?

We exist to serve you:

to let you know what instructional materials -- hardware and software -- are available;

to let you know what services are available in your area and throughout the region;

to let you know what people are available for further assistance and to put you in contact with them.

## Who may call ?

Anyone within our region working with the deaf is a member of

### **INTERACT**

You are a member

You may call and make use of our service with any question, large or small, that you have

We will do our best to help.

## What is NRMCD ?

The Northeast Regional Media Center for the Deaf is one of four centers established in 1966 by Media Services and Captioned Films of the Bureau of Education for the Handicapped, United States Office of Education.

The goal of the NRMCD is to contribute to the provision of equal education for all hearing impaired children and youth by insuring the effectiveness, availability and utilization of instructional media, materials and products which meet the educational needs of hearing impaired children and youth in the region served.

The NRMCD is housed at the University of Massachusetts in Amherst, in the School of Education building.

Our region includes Connecticut, Delaware, Dist. of Columbia, Maine, Maryland, Massachusetts, New York, New Hampshire, New Jersey, Rhode Island, Pennsylvania, Vermont and Virginia.

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impaired children and youth in the  
region served.

The NRMCD is housed at the  
University of Massachusetts in  
Amherst, in the School of Education  
building.

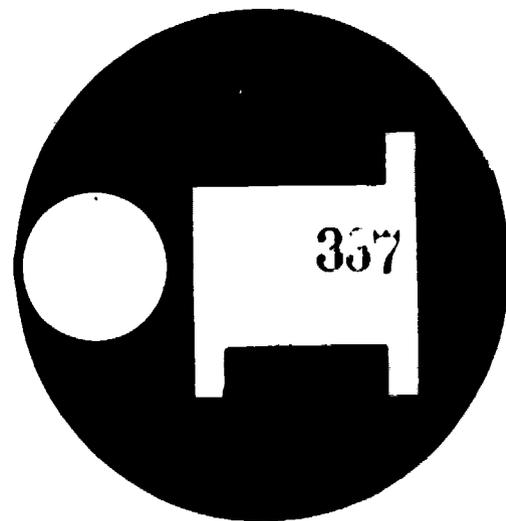
Our region includes Connecticut,  
Deleware, Dist. of Columbia, Maine,  
Maryland, Massachusetts, New York,  
New Hampshire, New Jersey, Rhode  
Island, Pennsylvannia, Vermont and  
Virginia.

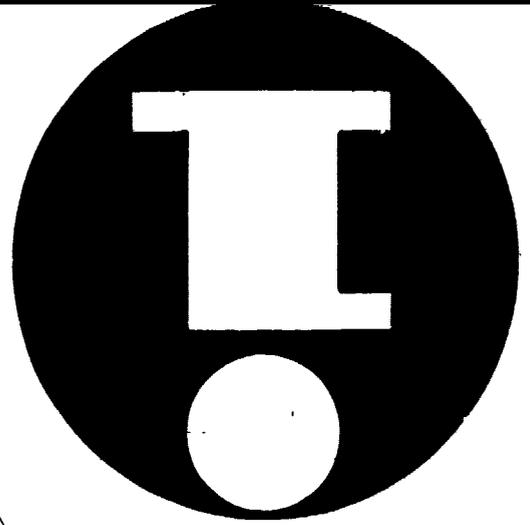
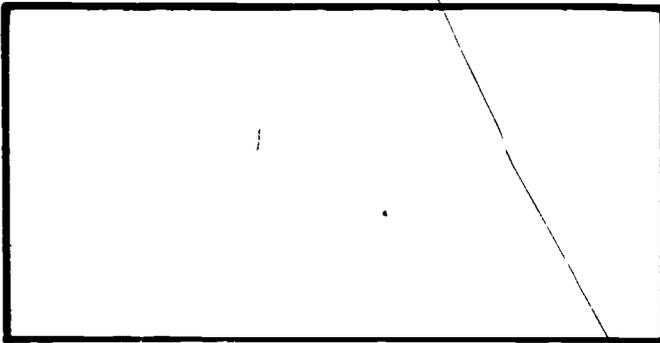
Please call us at NRMCD's INTERACT  
We're looking forward to hearing from you.

Monday - Friday  
8:30 - 12:30 1:30 - 4:00

From Massachusetts dial:  
1-800-282-7774

From all other states in the northeast region  
dial: 1-800-628-1960





Postage

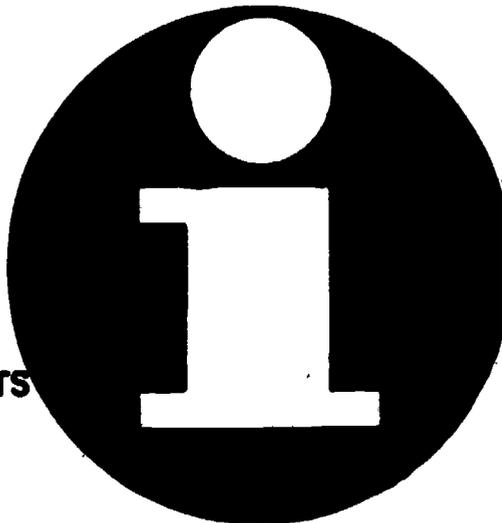
# INTERACT

NORTHEAST REGIONAL MEDIA CENTER FOR THE DEAF  
\_ RESOURCE INDEX \_

SCHOOL OF EDUCATION  
UNIVERSITY OF MASSACHUSETTS  
AMHERST, MASSACHUSETTS  
01002

NORTHEAST REGIONAL  
MEDIA CENTER FOR  
THE DEAF

SCHOOL OF EDUCATION  
UNIVERSITY OF  
MASSACHUSETTS  
AMHERST, MASSACHUSETTS  
01002



# INTERACT

INFORMATION  
RESOURCE  
INDEX

APPENDIX IIIB

325.

338

## SOURCES OF INSTRUCTIONAL MATERIALS

POLICY STATEMENT. SOURCES OF INSTRUCTIONAL MATERIALS WILL BE OBTAINED FOLLOWING A DISTINCT SET OF PROCEDURES.

- Commercial Directories 1. Consult all available, most recently published directories of commercial producers of instructional materials for addresses. e.g.s Educator's Purchasing Master; Westinghouse Learning Directory; most current list of exhibitors at the annual convention of the Association for Educational Communications and Technology; the National Information Center for Educational Media (NICEM); Thomas Register of American Manufacturers; The Audiovisual Market Place; The Annual Bluebook of Audiovisual Materials; the classified directory issue of Training In Business And Industry; The Annual Multimedia Index and Directory of Project Information of College Management Magazine. (See reference list for bibliographic data)
- Federal Government Directories 2. Consult all available directories of all federal government supported instructional materials producing organizations for address. e.g.s all organizations receiving grants and/or contracts from the United States Office of Education; the National Audiovisual Center Information Branch, Washington; D.C.
- State Government Directories 3. Consult all available directories of all state supported instructional materials producing organizations for addresses i.e. all organizations receiving funds from a state office of education.
- Private Foundation Directories 4. Consult all available directories of instructional materials producing organizations receiving private foundation funds, obtained through consulting all foundations listed in the Foundation Directory for addresses.
- Individual Producers 5. Write to all school districts for names and addresses of individuals producing instructional materials used by their students.
- Multi-Source Directories 6. Consult all other sources of information regarding producers of instructional materials. e.g.s Selected Free Materials for Classroom Teachers; Educators' Progress Service's Guides; Sources of Teaching Materials; Resources for Learning; Educational Media Yearbook; EPI Reports; Research in Education; Previews; etc. (See reference list for bibliographic data)

309

## PROCURING INSTRUCTIONAL MATERIALS

POLICY STATEMENT. MATERIALS WILL BE PROCURED FOR REVIEW PURPOSES FOLLOWING A DISTINCT SET OF PROCEDURES.

- |                              |  |
|------------------------------|--|
| Requesting Materials on Loan | 1. Write to materials producing organization <ul style="list-style-type: none"> <li>A. Explain purpose of NIMIS</li> <li>B. Request loan of specific instructional material or itemized list of a number of materials for review purposes</li> </ul>   |
| Purchasing Materials         | 2. Purchase materials, unavailable for loan, for review purposes   |
| Acquisition Record           | 3. Maintain record of each material requested and received on standard forms (see Appendix X for example of standard form) <ul style="list-style-type: none"> <li>A. Assign unique acquisition number determined by order in which material is received and its generic type, e.g. "VT 109" would indicate this videotape was the 109th instructional material received</li> <li>B. Include acquisition number</li> <li>C. Include date received</li> <li>D. Include producer's title</li> <li>E. Include producer's date of copyright or production</li> <li>F. Include producer's #</li> <li>G. Include producer's name and a main address</li> <li>H. Include distributor's name and main address</li> <li>I. Include how received <u>i.e.</u> loan, purchase, gift</li> <li>J. Include cost, if any</li> <li>K. Include collation information the content of which is determined by generic type (see Appendix X)</li> <li>L. Indicate if entered in NIMIS</li> <li>M. Include date entered</li> <li>N. If not entered in NIMIS, include brief statement of reason.</li> </ul> |
| Unobtainable Materials       | 4. Maintain separate record of materials requested and not available on standard form. (see Appendix XX for example of standard form) <ul style="list-style-type: none"> <li>A. Include name of material</li> <li>B. Include name and address of producer</li> <li>C. Include name and main address of distributor</li> <li>D. Include date request made</li> <li>E. Include reason material is unavailable (e.g. out of print)</li> </ul>   |

APPENDIX X  
ACQUISITION FORM

Acquisition #

Name of Material

Producer's Name

Producer's #

Copyright Date

Address

Distributor's Name

Address

Collation Info:

How Received, Date (Lost)

 Entered in NIMIS Date Not Entered

Reason:

F58749001

Name: Uncle Wiggley's Acid Stomach Trip

Prod: Uncle Wiggley Productions

# 15909

c 1897

• 57 Broadway, Moores Corner, MA

Dist. Uncle Wiggley Productions

57 Broadway, Moores Corner, MA

Collation: 2 reels. 16mm. Sound. Color. 413 min. with teacher's guide  
(trip series)

Gift, 1/4/76

 Entered in NIMIS Date Not Entered

Reason: Found to induce galloping consumption

**L** MEDIA ACCESSION CODES:

Art Print	AP
Charts	CH
Filmloops	FL
Films	F
Filmstrips	FS
Filmstrips with sound	
Filmstrip/record	FS/REC
Filmstrip/tape	FS/TA
Flashcards	FC
Globes	GL
Kits	K
Maps	MAP
Microforms	MF
Models	MOD
Pictures	PIC
Realia	REAL
Records	REC
Slides	SL
Study Prints	SP
Tapes	TA
Transparencies	TR
Videotapes	VT

## ABBREVIATIONS USED:

Black and White	b&w
centimeter	cm
edition	ed
et cetera	etc.
example	e.g.
inches	in.
inches	"
inches per second	ips
millimeters	mm
minutes	min
no date	n.d.
number	no.
opus	op
revolutions per minute	rpm
volumes	v.
versus	vs.

- Art Prints** i.e. a printed reproduction of a work of art: Collation to include the following as each applies: size. b&w or color. mounted or unmounted. framed or unframed. teaching and learning aids. e.g. reproduction of painting 23" X 30" color. mounted, with 35 miniature study prints.
- Book** i.e. a set of written, printed, or blank sheets bound together in a volume: Collation to include the following as each applies: size. number of pages. series title in parentheses. e.g. 9" X 5". 37pp.
- Charts** i.e. a sheet giving information in sequential order in outline, graph, or tabular form: Collation to include the following as each applies: #charts. #overlays. size. b&w or color. mounting. teaching and learning aids. series title in parentheses if received by individual title (charts mounted together in a unit receive same access. #)  
e.g. 16 charts. 50" X 38". color. multiple chart holder.
- Film Loops** i.e. a series of still pictures arranged in sequential order on a loop of precartridged 8mm film, producing motion when projected at standard speeds: Collation to include the following as each applies: number of loops, standard 8mm. super 8mm. color or b&w. silent. sound. running time. teaching and learning aids. series title in parentheses, if received individually. (each filmloop will be accessioned individually)  
e.g. 1 loop. standard 8mm. color. silent. 4 minutes.  
(learning about air series)
- Films** i.e. a series of still pictures in definite sequence with or without recorded sound, producing motion when projected at standard speeds: Collation to include the following as each applies: # reels. size (8mm, 16mm, 35mm, 55mm, 70mm) sound or silent. captioned. b&w or color. running time. teaching and learning aids. series title in parentheses.  
e.g. 1 reel. 16mm. sound. color. 16 minutes. with teacher's guide.  
(basic earth science program series)
- Flashcards** i.e. a card with printed words, numerals, or pictures used primarily for rapid drill in math, vocabulary, reading, historic or geographic facts: Collation to include the following as each applies: number of flashcards. size. black and white or color. teaching and learning aids.  
e.g. 15 cards. 11" X 14". color. text on back. with guide card. flashcards will be accessioned as a set.

- Globes** i.e. a sphere which depicts a map of the earth, one or more of the celestial bodies, or the universe: Collation to include the following as each applies: diameter, color, mounting, teaching and learning aids. The following items should be included if not given as part of the title: visual-relief, raised-relief, physical, political, terrestrial (earth), celestial (heaven). (Globes will be accessioned individually)  
e.g. 16 in. color, visual-relief, terrestrial, mounted in wooden cradle, with teacher's guide.
- Kits** i.e. a collection of media designed to be used as a unit: Individual items within a kit will be collated according to the instructions for that generic type. The same accession number will be used for each item.
- Maps** i.e. a drawing or representation of a terrestrial or celestial geographic area: Collation to include the following as each applies: number of maps, number of overlays, size, black and white or color, raised relief, visual relief, physical, political, terrestrial, celestial, flat, mounted, framed, teaching and learning aids, series title in parentheses if accessioned by individual title. (Maps mounted together as a unit should receive the same accession number)  
e.g. 16 maps, 44" X 41", color, visual-relief, physical, political, terrestrial, mounted in solid charthead with tripod stand, with teacher's guide.
- Microforms** i.e. miniature reproductions of printed or graphic information on opaque or transparent materials, requiring magnification to read: Micro-opaque forms include microcards and microprint. Micro-transparent forms include microfilm, microfiche, ultra-microfiche, and aperture cards. Microform will be accessioned by the original document title. Collation will include the following as each applies: number of forms with number of pages per form, teaching and learning aids, series title in parentheses.  
e.g. microfilm, 1 reel, 87 frames.
- Models** i.e. a three-dimensional representation of an object reproduced in the size of the original or to scale: Collation to include the following as each applies: number of models, number of pieces, size (exact, reduced, enlarged), size and type of container, black and white or color, operational, mounted or unmounted, teaching and learning aids. (each part of a single model and each model in a set should be given the same accession number).  
e.g. 1 model, 5 pieces, enlarged, color mounted on a plastic stand, with teacher's guide.
- Pictures** i.e. a representation of persons, places, objects, or ideas produced by photography, painting or drawing: Collation to

include the following as each applies: number of plates in series. size. black and white or color. mounted or unmounted. teaching and learning aids. series title in parentheses if accessioned by individual title. (all pictures intended as a unit will be assigned the same accession number).  
e.g. 8 pictures. 8 1/2" X 11". b&w. unmounted.

#### Realia

i.e. real objects or specimens: Collation to include the following as each applies: number of pieces. sized if needed. teaching and learning aids. (A group of related objects packaged together will be accessioned as a unit and given only one accession number.)  
e.g. 25 pieces.

#### Records

i.e. a disc of hard wax, rubber or plastic on which monaural or stereophonic sounds are recorded: Collation to include the following as each applies: number of records. number of sides. size. revolutions per minute. stereo or monaural. teaching and learning aids. series title in parentheses. (Multiple record sets packaged and intended for use as a unit will be accessioned as a unit.)  
e.g. 1 record. 2 sides. 12 inches. 45 rpm. monaural.

#### Slides

i.e. a single frame photographic reproduction in a 2" X 2" mounting: Collation to include the following as each applies: number of slides in series. size (2" X 2"). black and white or color. teaching and learning aids. (All slides in a unit will be assigned the same accession number.)  
e.g. 14 slides. 2" X 2". color.

#### Study Prints

i.e. a two-dimensional reproduction of places, persons, objects, or ideas with accompanying textual information: Collation to include the following as each applies: number of prints. number of overlays. size. black and white or color. teaching and learning aids. series title in parentheses if accessioned by individual title. (Study prints packaged and intended for use as a unit will be accessioned together.)  
e.g. 1 study print. 13" X 18". b&w. with teacher's guide. (historical reconstruction of Rome series)

#### Tape Recordings

i.e. a magnetic audio tape on which sound has been recorded. Open reel tapes on reels 3, 5, or 7 inches in diameter with sound recorded a 1 7/8, 3 3/4, 7 1/2, or 15 inches per second. A cassette tape is contained in a cartridge 3 7/8 inches long, 2 1/2 inches wide, and 5/16 inches deep. Collation to include the following as each applies: number of cassettes or reels. size of reels. single track (monaural or stereo). dual track. full track. running time. teaching and learning aids. series title in parentheses. (Tapes will be accessioned individually.)  
e.g. 1 reel. 5 in. 3 3/4 ips. full track. 18 min. (Political Science series)

**Video Tape**

i.e. an electromagnetic tape, 1/2, 1, or 2 inches wide with picture and sound recorded at varying speeds by special equipment: Collation to include the following as they apply to the video tape being cataloged: number of reels. size of reels. black and white or color. sound or silent. running time. make a model number of equipment used in recording. width of tape. teaching and learning aids. series title in parentheses. (Video tapes will be accessioned individually.) e.g. 1 reel. 12 in. b&w. sound. 45 min. recorded on Concord model 900. 1/2 in.

**Books**

i.e. a set of written, printed, or blank sheets bound together in a volume: Collation to include the following as each applies: size. number of pages. series title in parentheses.  
e.g. 9" X 5". 37 pp.

## REFERENCES

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CLASSIFICATION SYSTEM  
FOR VOLUMES HOUSED IN THE  
RESOURCE INDEX

ABBREVIATIONS:

- col. - college level
- d. - especially for the deaf
- ec - early childhood
- el - elementary level
- MAR - Mid-Atlantic Region
- NE - New England
- SE - Special Education
- se - secondary level
- vh - visually handicapped

Dir. 1.00

General, National Directories

Further Indicated by Grade Level etc. if Appropriate

1.10 Special Service Directories, Nat'l.

1.11 Special Service Directories within the Region

Further Indicated by State etc. if Appropriate

1.12 Special Service Directories Outside the Region

Further Indicated by State etc. if Appropriate

## CAT 2.00

General, Nacional Catalogs for all Media

Further Indicated by Grade Level etc. if Appropriate

- 2.01 General Film Catalogs, Further Indicated if Appropriate
- 2.02 General Videotape Catalogs, Further Indicated if Appropriate
- 2.03 General Audiotape, Further Indicated if Appropriate
- 2.04 General Record, Further Indicated if Appropriate
- 2.05 General Book Catalogs, Further Indicated if Appropriate
- 2.06 General Picture (including transparencies, prints, etc.) Further Indicated if Appropriate
- 2.07 General Filmstrips and Filmloops Catalogs, Further Indicated if Appropriate
- 2.08 Hardware Catalogs
- 2.10 General Catalogs Especially for the Deaf, Further Indicated if Appropriate
- 2.20 General Catalogs for Other Handicapping Conditions
- 2.21 Special Education Catalogs by State within the Region
- 2.21a Special Education Catalogs by State Outside the Region

## SUB 3.00

Subject Area Materials

- 3.10 Left Open
- 3.20 Science, Further Indicated by Grade Level
- 3.30 Social Studies, Further Indicated by Grade Level
- 3.40 Language Arts, Further Indicated by Grade Level
- 3.50 Math, Further Indicated by Grade Level

APPENDIX IV

337

#### APPENDIX IV

Through the joint efforts of NRMCD and the New York SED SEIMC provisions were made for the establishment of an interlock media coordinator position. The individual assuming this position was to be primarily responsible for coordinating resources and delivery of services of media and materials for the deaf within New York State.

This coordinating position was filled as of January 1974. Due to unavoidable delays encountered in hiring, it was necessary to revise the workscope to fit the remaining time constraints (January 1974 - August 1974).

The revised workscope placed primary emphasis on planning. The objective was to design a viable delivery system that would match needs to resources, taking into consideration the new resources resulting from the revised national media network to be implemented in September of 1974.

Pursuant to revised worksopes of New York SEIMC and NRMCD the following activities have been conducted:

- Participation in three meetings of the Advisory Committee of Superintendents of Schools for the Deaf.
- Establishment of a Media Task Force and co-chaired task force with Superintendent of St. Francis de Sales School for the Deaf of Brooklyn, New York.
- Conducted two meetings of the Media Task Force including representation from nine schools for the deaf in New York. (see Appendix A)
- Conducted site visits to all nine schools for the deaf in the state.
- Consulted with several BOCES Special Education Directors and Media Directors of public school programs.
- Attended the following professional meetings:
  - AECT Convention - Atlantic City, New Jersey
  - CEC Convention - New York City, New York
  - New England IMC Directors Conference - Northampton, Massachusetts
  - New York SEIMC Workshop on Monterey Language Program - Albany, New York
- Conducted equipment inventory of the nine schools for the deaf.
- Conducted budget survey of the nine schools for the deaf.
- Contacted personnel in the following agencies in attempt to identify resources. New York State Education Department:
  - Division Library Development
  - Division Educational Communications
  - Division Handicapped Children and Bureaus
  - Division of Curriculum Development and Bureaus
  - Division of Teacher Education & Certification
  - Division of Standards & Purchases

#### National Media Network:

NCEMMH  
N.Y. SEIMC  
NRMCD  
MRMCD  
SRMCD  
MSCF  
HEW - Bureau of Education for the Handicapped

**Professional Organizations:**

CED - Council on Education of Deaf  
 AECT - ASET Division  
 CMC - ERIC Division  
 ASHA  
 EPIE

**Educational Programs or Projects Related to the Deafness and/or Media:**

Deafness Research and Training Center  
 Computer Based Project for Evaluation of Media  
 CREED - Coop Research Endeavors for Education of Deaf  
 ZIA - Learning Systems  
 Gallaudet College - Library for Administration & Research  
 SUNY - Department of Educational Communications  
 Auburn University - University of Educational Media  
 Temple University - Department of Educational Communications

The numerous contacts and activities indicated above served a multitude of purposes directed toward:

- a. identifying existing resources
- b. specifying concerns upon which a plan for a viable delivery service could be based (see Appendix IV - minutes of June 4-5 Task Force Meeting).
- c. identifying concerns that would provide the basis for adapting or developing new programs and /or resources to fulfill the unmet needs.
- d. developing a model system applicable to futuristic goals.

The concerns of programs serving the deaf were identified as follows:

1. The role of media be viewed and included as an integral portion of the educational program.
2. In-service education in utilization and production of media be provided to teaching staff.
3. Locally produced materials be shared among programs serving the deaf.
4. Evaluation of materials and equipment be shared among programs desiring purchase of materials and equipment.
5. Budgetary information of the special schools pertaining to media, be used to support development of media programs.
6. The efforts of coordinating services to the schools be continued.

The most positive but yet intangible benefit derived from the Interlock person's activities is the sense of common cause and unity of direction of the persons involved in and charged with the responsibility of supporting the education goals through utilization of media in facilitating the learning process.

The following workscope has been proposed for the next year, FY 1975, and is contained in the ALRC #10 grant proposal for New York.

340.

OBJECTIVE:

Identify media resources, perform media needs analysis of the special schools and programs in New York State, and further develop and refine a viable delivery system model that will interlock appropriate resources with those needs.

ACTIVITIES

1. Consult with the various agencies whose concerns are in Special Education and/or media and whose goals would be in agreement with stated goal of strategy. Such agencies would be as follows:

SED Bureau for Physically Handicapped Children  
SED State Library Division of Library Development  
NCEMM and the four Specialized Offices

Information collected on efforts of the agencies consulted would be compiled and distributed to same.

2. Through SED and upon their request represent the ALRC at the presently existing advisory committee of Superintendents of the special schools and co-chair established Task Force on Media with specified Superintendent. As Task Force co-chairman establish an advisory committee on media with the Special School INC Directors.
3. As a part of a Statewide needs assessment effort compile and update inventories of media materials and perform a media needs analysis at the special schools, thus allowing for appropriate matching of resources to the identified needs and providing and/or coordinating delivery services.
4. Upon SED request, identify media used at the special schools to satisfy curriculum; promote evaluation of the media used to meet stated education objectives by supervising teachers, teachers and students; and give advice to SED as to applicable media for use with appropriate students in public school programs and classes.

PROJECTION:

This strategy will be continued with an increasing emphasis on programs for children in public schools.

35)

MINUTES - Interlock Media Coordinator-Media Task Force  
Ben Birdsell

March 1, 1974

10:30 a.m.

Albany

Ben Birdsell opened the meeting introducing himself as the Interlock Media Coordinator, and Sister Anne Behre, the liason person, representing and reporting to the Administrators of the Schools for the Deaf in New York State.

Ben presented the agenda for the meeting, previously sent to all the media persons.

I. Update '74

A. Interlock Position

The NRMCD and NYSEIMC are the funding sources for this position. A meeting was held March 23, 1973 with representatives from Washington, NRMCD, and BEC during which a "Position Description for the Interlock Coordinator" was shared. (transparency #1)

QUES. Why have the deaf been signaled out? Why not an Interlock for all handicaps? The Interlock person will begin with the State Schools for the Deaf, then include day care programs for the deaf, and eventually to a larger scope of handicaps.

B. Media Task Force

1. The enlarged schools meeting includes 9 State Schools for the Deaf, 3 State Schools for the Blind, P.S. 47 and 158, Learning Resource Centers.

2. Smaller Advisory Group to the above constituents asked that Sister Anne Behre be the mediator between the media personnel and the Advisory Group.

3. Task Force - to include - Interlock Coordinator, media personnel from the schools and Sister Anne. Their purpose is to: (1) review media needs in the schools for the deaf, and (2) develop a model delivery system.

QUES. Who makes the final decision? It is necessary to coordinate the efforts of the media personnel with the Superintendents'. Sister Anne will report the goals and findings of the Task Force to the Superintendents who will make the final decision.

C. M.S.C.F. Network Revision  
(transparency #2) - brief form

1. A L R C / N C E M M H

Network  
N C E M M H

A L R C  
Area Learning  
Resource Center

Specialized Efforts  
S<sub>1</sub> Visually Impaired  
S<sub>2</sub> Deaf & Hearing Imp.  
S<sub>3</sub> Other Handicapping  
Conditions  
S<sub>4</sub> Depository Functions

2. N.Y.S.E.I.M.C. bid for MSCF  
Grant - March 4, 1974

Proposal - Area 10 - New York State  
Merger of SEIMC and RMC  
Coordinate BEH and Projects in field  
ALRC and RRC - learning resource  
Uniformity in programs  
Sharing facilities among ALRC

3. Network - was explained - (transparency #3)

a. NCEMMH

ex. II A - Identify needed instructional  
materials.

II B - Make needs known to commercial and  
non-commercial materials

b. Specialized Offices (transparency #4)

S<sub>1</sub>, 2, 3

II C - Locate usable materials which exist and  
identified needs

S<sub>4</sub>

V B - In-Process accessions

V C - Maintain materials - collection acquired  
through NCEMMH

c. ALRC - NYS area 10 (transparency #5)

I A - local and State Materials - center service,  
stimulation or development

QUES. - What is ALRC relation to SEIMC?

The NYSEIMC is bidding for ALRC. NYSEIMC here in Albany will become ALRC if grant is accepted.

## II. Directions - Media and the Deaf in N.Y.S.

### A. Goal - Rationale

1. In December, 1972 - Meeting with Sinches, Hehir, Piccolino, Andareck, Faachus, Hoag, Norwood, Wyman, O'igley - State needed:

better delivery system  
 Superintendents involved in decision-making  
 Develop instrument of resources  
 Improve captioned films  
 Needed future goals and guidelines

2. Bureau

Provide educational materials through accessibilities.  
 More materials needed.  
 State-wide planning necessary

3. Special Ed. - ALRC (transparency #6)

To provide each physically handicapped child with educational services and materials appropriate to his needs by greater schools and programs accessibility to materials.

The rationale was given. (transparency #7)

- B. Objective - (transparency #8) Identify media resources, perform media needs, analysis of the special schools and programs in N.Y.S. and further develop and refine a viable delivery system model that will match appropriate resources with those needs.

### C. Strategies - 4 activities

1. Consult with various agencies (transparency #9)

SED Bureau  
 SED Library  
 NCEMMH and 4 specialized officers

2. Through SED and upon their request represent ALRC at the present existing Advisory Committee of Superintendents. (Transparency #10) Establish media advisory committee with special school IMC Directors.

- 3. Compile and update inventories of media materials and perform a media needs analysis at the Special Schools, allowing for appropriate matching of resources to identified needs/providing and/or coordinate delivery services. (transparency #11)
- 4. Identify media matched to curriculum; promote media evaluation.

Projection: increase emphasis on programs for children in public schools .

QUES. - Would this mean the leveling of materials in the schools? No, it would allow for the building up of materials.

What about the supplementary inflationary costs? In regard to unforeseen expenditures and increased utilities - an equitable adjustment will be made to each school.

- 5. Upon SED requests to identify media used at special schools. (transparency #12)

In media we must see the whole picture.

Target - Need - Resource (transparency #13)

Behavior targets

- Teacher
- Teacher/pupil - instruction
- Pupil - individualization

Resources

- SED
- ALRC
- NCEMMH
- S2
- S4
- IMCS

Task

To define Needs - necessary to have accountability.

QUES. - What is Interlock's position? Responsible to ALRC - filling the gap between ALRC Network and the schools. Production of materials through S2.

356A

### III. Strategy Review

#### A. Open Discussion

1. Hardware Inventory - allow Ben to see what each individual school has... This will in no way take away from what each school has. During Budget review, Ben will be questioned regarding "equipment replacement" and therefore be able to substantiate requests.

The Hardware Inventory Form should include:

- What condition the equipment is in
- Comments - add additional information
- Whether the equipment was donated or purchased through private funds.
- What type of program you're concerned with - ex. residential/day.

QUES. - (1) What about replacement or repair of equipment during the year not in the budget? There is an adjustment form for readjusting budgets.

(2) W. - about the inventories and reports from SEIMC. Ben will check to make sure that there is no duplication of requests from SEIMC and AIRC - ex. Annual update.

(3) Is AIRC going to be responsible for distribution of materials to schools? Not sure at this point.

Visitation to schools - try to get

- 1) total school picture
- 2) equipment
- 3) libraries

(4) Who is responsible to caption materials? S<sub>2</sub> - one central spot throughout the country to serve all schools.

(5) What about the new budget? Individual personnel must substantiate the reasons for replacement and/or new equipment.

(6) Are and Administrators aware of the needs for the Hardware Inventory? Sister Anne will explain it to the Administrators for their individual support.

### IV. Immediate Media Concern of Schools for the Deaf

In-service training of teachers and integration/utilization with media.

Meeting adjourned at this point and IV was to be first on agenda at next meeting. Ben is requesting time at the NRMCD-Media Director Conference in April to meet again as a group.

ASSOCIATE COMMISSIONER FOR  
INSTRUCTIONAL SERVICES

DIVISION FOR HANDICAPPED CHILDREN

MINUTES OF THE MEDIA TASK FORCE MEETING - JUNE 4 & 5, 1974

Present at Meeting: Frank Calidonna, Robert Taylor, Kenneth Tremaine, Katherine Eschbach, Sue Yanes, Gary Loysen, Leonard Novick, Joan Hebert, Lloyd Anderson, Karen Thomas, and Ben Birdsell.

ALRC/NCEMMH NETWORK:

Ben Birdsell explained that contracts had not yet been awarded by BII as had originally been planned. The negotiations are still in progress. Apparently problems arose in clarifying responsibilities within the new workscopes. New York ALRC #10- the present SEIMC- has not officially been awarded a contract but are without competition.

When decisions are reached Ben Birdsell will forward the information to the schools.

NRMCD:

Materials such as the revised Language Arts Transparencies and copies of the material from the material exchange program were distributed. Arrangements were made with Karen Thomas of NRMCD to fill requests for parent-child material and partial sets of Project LIFE filmstrips.

Karen Thomas reported that the media specialist training program at the University of Massachusetts would be continued next year. Plans are being formulated to expand the program to include all handicaps. Those schools interested in requesting a Media Specialist for next year were advised to write Dr. Wyman at the University of Massachusetts with a copy of the request sent to Ben Birdsell. To be included in the request is information on type of assistance needed, your expectations from the media specialist, and any provisions that the school could offer the student, such as lodging, etc.

CONCERNS:

Lengthy discussions of concerns and recommendations pertaining to those concerns ensued. The consensus was that recommendations made by the 'Media Task Force' be written in detail and presented to the Advisory Committee of Superintendents at their next meeting. This would allow for clarification of overall Task Force direction and indicate types of service requested of the Interlock Media Coordinator. In brief, discussions and recommendations pertained to the following topics.

ROLE OF MEDIA:

Media Departments in all schools presently perform a multitude of services. The concern was for realizing their total potential. An outline of what the role of the Media Director should entail was cooperatively developed to serve as a guide to the individual schools in establishing priorities for provision of media services. The thrust of the recommendations was toward early involvement of the media department in planning for program and activities related to 'media'.

IN-SERVICE EDUCATION:

Similar needs shared by all directors were for instruction in utilization of materials and equipment and the production of less complex materials by and for staff. It was felt that frequent training programs should be offered in these areas due to the annual staff turnover and the inability to retain a working knowledge of all equipment operation and production procedures from year to year. Other concerns that lent themselves to discussion of in-service training and would possibly require additional outside resources were instructional technology utilization and presentations on commercially produced programs or systems new on the market. The major need identified repeatedly in the discussion was for advanced planning and coordination of the media aspect of in-service training with the schools total in-service education program. Ben was asked to research the existing package materials that were available for teaching equipment operation and production techniques. A suggestion was made that all schools combine and cooperatively produce self-instructional programs to meet in-service needs. The criteria would be:

1. It is not presently available.
2. All schools could benefit from its use.

Various methods employed for assessing and meeting in-service needs were explained by the various directors.

MATERIAL EXCHANGE:

All participants were interested in implementing some form of a material and idea exchange program. There is presently no means by which locally produced materials can be shared among schools. An overwhelming amount of time and energy is put into creating materials especially for the deaf but distribution is limited. Several ideas suggested were as follows:

1. A school host a 'Materials Fair' and invite other schools to bring and display materials that they have produced. This idea has been successfully used in the past by the Austine School in Vermont and could serve as a model for New York Schools.
2. Include the 'Materials Fair' as part of the NYSAED Convention.
3. Institute a mobile materials display unit that would include materials locally adapted and produced and commercially produced materials proven to be useful in educating the deaf.

Ben was asked to follow up on the feasibility of instituting the ideas suggested.

EVALUATION:

Federal projects require program evaluation. Concern was expressed by the Media Directors involved in these projects as to the best way to provide the necessary justifications. The method suggested was to compile quantitative data to substantiate the fact that media was utilized, following the rationale that the program could not have existed without the funding.

EVALUATION: (con't)

Another idea of concern was the time involved in and lack of information available for evaluation of equipment and materials. Evaluation is essential in selecting appropriate media for purchase.

Ben was asked to compile evaluation data and serve as a resource person to all the schools. The IMC Directors agreed to supply Ben with evaluations of equipment and materials to build up an "Evaluation Bank". Every school could then easily access and benefit from evaluations conducted by other schools. Each Director agreed to suggest a format to be used. One standard format will then be selected for use in the "Evaluation Bank".

BUDGET:

In light of the recent SED request for the IMC-Library Budget Breakdown questions were raised to clarify the purpose and intent of the request. Ben supplied the following reasons for requesting this information:

1. My having a comprehensive understanding of the "total picture", especially of the media component at the schools, is essential in performing my job. Budget information is a part of this. The responsibility of meeting all the needs is difficult, and without thorough knowledge of all resources available both within the schools (especially for media) and outside the school, the task of meeting all those needs effectively and efficiently is impossible. Money is one of those 'resources' that can not, or rather should not, be overlooked.
2. Another point made was that requests for budget from the SED to the department of budget coordination requires justification and by reporting the total actual expenditures to the Bureau, including the Federal and private monies, a stronger case can be made supporting requests for additional monies. The budget request that you received did not ask that private monies be included or designated as such, but several schools supplied this additional information.
3. Due to the variety of the interpretation by each school as to what expenses are considered as a part of the media program, it was necessary to establish a listing of what was generally considered as media. This detailed breakdown was to serve several purposes.

One, this was the first time this information had been requested, therefore, by making the request very explicit the problems of interpretation should have been minimal.

Two, if you were going to take the time to complete the request for the Bureau it was felt that it might as well be of such a nature that it would be of benefit to you as a Media Director also. Directors indicated that this was or could be beneficial to their internal operation.

In summary, the basic concern about the budget request was, what benefit would come from sharing complete financial information with the Bureau, especially if private funds were included? Ben reassured everyone that as Interlock Media

BUDGET: (con't)

Coordinator he was working and would continue to work to meet the needs, in the financial needs of all schools and programs serving the deaf in the state, that everyone's continued cooperation would greatly assist him in doing so.

CERTIFICATION:

Questions were raised as to what types of certification were available to a media director at a school for the deaf. State and professional (CED- Council on Education of the Deaf and AECT-Association of Educational Communications and Technology) certifications were discussed as possibilities. The criteria for these certifications were not available for reference at the meeting so the discussion was tabled and Ben was asked to obtain information on this for discussion at the next meeting.

FUTURE MEETINGS OF THE MEDIA TASK FORCE:

This Fall two meetings have been scheduled, NYSAED and Crossingers. Both are considered to be of value to the group. Combination of the next Media Task Force meeting with one of those meetings was recommended since most of the directors are already planning to attend one or the other.

Ben agreed to plan the next meeting with this in mind and contact superintendents and IMC Directors the same as in the past when appropriate.

The meeting adjourned at 3:00 P.M. June 5, 1974

APPENDIX V

## CONNECTICUT SPEECH AND HEARING ASSOCIATION, INC.

*President*

Mari-Love Johnson  
P.O. Box 2026  
Vernon, Conn. 06066

May 31, 1974

*Vice-President*

Conne R. Pennell  
95 Chapel St.  
Sturford, Conn. 06197

Dear Exhibitor,

*Recording Secretary*

Sandra C. Holly  
215 Stinson Rd.  
New Haven, Conn. 06511

Thank you for your participation in our recent conference. We certainly enjoyed having you with us, and hope that the conference response was what you had anticipated.

*Corresponding Secretary*

Margaret Kennedy  
Hartford Public Schools  
219 High Street  
Hartford, Conn. 06103

A special invitation to join us again is extended for:

*Treasurer*

Kenneth Gist  
P.O. Box 512  
Westport, Conn. 06880

May 2 - 3, 1975  
Sheraton Hotel  
Hartford, Connecticut

Thank you again.

Sincerely yours,

*Alan B. Gould*

Alan B. Gould  
CSHA Exhibits Chairman

*ASHA Legislative Councilman*

Gene R. Powers, Ph.D.  
Dept. of Speech,  
Univ. of Connecticut  
Storrs, Conn. 06268

*ASHA Legislative Councilman*

Sandra C. Holly  
215 Stinson Rd.  
New Haven, Conn. 06511

*KAREN,*

*Thank you again  
for being with us. Hope you  
had a safe trip home.  
I certainly enjoyed meeting  
you. Have a fine summer.  
Aly.*

203



# State of New Jersey

## DEPARTMENT OF EDUCATION

225 WEST STATE STREET  
P. O. BOX 2019  
TRENTON, NEW JERSEY 08625  
July 23, 1974

Dr. Raymond Wyman, Director  
Northeast Regional Media Center for the Deaf  
Education Building  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Ray:

I thought I would take a minute to express my satisfaction with the output of the "Hi-Fi" project. I frankly did not think that in such a short period of time anyone could produce a document that could seriously address itself to the topic of integrating deaf children into regular classes. Obviously I underestimated Linda Nober and her project staff and had not anticipated the continued dedication of the N.R.M.C.D. staff either. Both sessions I attended were well organized and the topic, despite an obvious diverse group of people and their personal ideas, was not ever allowed to wander; so I guess I should not have been as surprised by the finished product as I was.

If I interpreted the comments made during the evaluation reports correctly, the criticism came almost solely on minor "rewrites" with only one or possibly two requests for any substantial revision and they were for additions. Again I feel that speaks for the great job the staff did in keeping to the purpose of the project and not turning it into some scholarly philosophical manuscript. I participated knowing the need for such material even within my own state and sorely anticipate our inability, because of timing, not to be able to proceed on wide spread dissemination. To this end I will approach our Department to see if supplied with a copy and masters we could reproduce two dozen or so kits for use in New Jersey and for loan to others. Naturally I will shoot for more than that but our needs should support at least such a request.

Once again it was a pleasure to see you and hopefully to have made some contribution to the "cause". Despite the coming to a close of the N.R.M.C.D. this last effort will certainly serve you proudly, as it is as worthwhile a professional contribution as any M.R.M.C.D. has produced.

Cordially,

HOLLIS W. WYKS/DIRECTOR  
DAY SCHOOL PROGRAMS FOR THE DEAF

CENTRAL PENNSYLVANIA  
SPECIAL EDUCATION RESOURCE CENTER  
5601 NORTH FRONT STREET • HARRISBURG, PENNSYLVANIA 17110  
TELEPHONE 717/599-5771



April 10, 1974

Miss Karen Thomas  
Northeast Regional  
Media Center for the Deaf  
Amherst, Mass. 01002

Dear Kren,

A sincere thank you for participating in our Hearing Clinician Workshop on Saturday. Even though our numbers were small, the response was excellent.

It was so nice seeing you again. Have a pleasant holiday. Good luck in your job hunting.

Sincerely yours,

A handwritten signature in cursive script that reads "Annette".

Annette L. Rich  
Director

R lg

205

From The Desk Of

Date 4-23-74**ELEANOR BROWN**

DEAR KAREN

IF PEOPLE CAN BE EVEN  
BETTER THAN THEIR WORD -  
YOU ARE.

WE HAVE RECEIVED THE  
MATS WHICH I REQUESTED,  
AND WE THANK YOU MUCHLY.  
I'M QUITE SURE THAT THE  
TEACHERS WHO COME IN TO  
MAKE TP'S WILL APPRECIATE  
BEING ABLE TO FINISH THEM  
ON THE SPOT.

THANK YOU SO MUCH  
FOR YOUR GOOD COOPERATION

SINCERELY,  
BROWNIE

## WESTERN PENNSYLVANIA



SPECIAL EDUCATION REGIONAL RESOURCE CENTER

5347 William Flynn Highway - Route 8

Gibsonia, Pennsylvania 15044 Phone (412) 443-7621



Mrs. Julia Snelson  
105 John Street  
Dalton, Massachusetts  
01226

355.

Dear Ms. Thomas;

This is to thank you for your assistance in finding us an interpreter for our open meeting in Pittsfield. It only adds to my established belief that people involved with the deaf are the most beautiful people on earth.

Be assured that this assistance will long be remembered.

Gratefully Yours,

  
Julia Snelson

207

# EDUCATIONAL MEDIA DISTRIBUTION CENTER

5034 WISCONSIN AVENUE, N.W.  
WASHINGTON, D.C. 20016

TELEPHONE  
202/363-1308

March 15, 1974

TO: LeRoy Aserlind  
Robert Carter  
John Dostal  
Victor Fuchs  
Larry Gloeckler

William Jackson  
William Pellant  
Robert Stepp  
Karen Thomas ✓

FROM: Howard M. Quigley, Chairman, Task Force, Area IV *HMQ*

The completed copy of the procedures manual for Area IV of the workscope has been turned in to the Network Office. So far as I know our assignment for this project has been carried out.

Your cooperation in the development of Volume IV is greatly appreciated.

Best wishes.

*Special thanks to you  
for your good work on the  
Sub-committee,  
- Howard*

Prof. Armin Löwe  
Institut für Hörgeschädigtenpädagogik

D 6900 Heidelberg 1, April 2, 1974.  
Zeppelinstraße 3.

Mrs. Karen Thomas  
Supervisor of Field Service  
N R M C D  
Thompson Hall  
University of Massachusetts  
A m h e r s t, Ma. 01002  
U. S. A.

Dear Mrs. Thomas,

many thanks for your kind letter of the 19 th of February and also for the transparency sets. Your letter was sent by sea mail and arrived here only about two weeks ago. The transparency sets arrived here this morning. I am really very much obliged to you and to Dr. Wyman for your assistance. I am sure that the transparencys will prove to be of great benefit to the two students who are going to prepare a dissertation on the use of overhead projectors and transparencies in the education of hearing-impaired children.

With best wishes and kindest regards to you and also to Dr. Wyman and his wife, I remain,

Yours sincerely,

*A. Löwe*

Prof. Armin Löwe  
Institut für Hörgeschädigtenpädagogik  
D 6900 Heidelberg 1  
Zeppelinstraße 76 a.



**MIDWEST REGIONAL MEDIA CENTER FOR THE DEAF**

Nebraska Hall 175

402-472-2141

Lincoln, Nebraska 68508

*April 22, 1974*

*Mrs. Karen Thomas  
Northeast Regional Media  
Center for the Deaf  
School of Education  
University of Massachusetts  
Amherst, Massachusetts 01002*

*Dear Mrs. Thomas:*

*Thank you for your willingness to be a more active participant in the Tenth Symposium on Research and Utilization of Educational Media for Teaching the Deaf by being a chairperson.*

*From all indications, the conference was an overwhelming success. Without your help, this success would not have been possible.*

*Your participation was greatly appreciated. THANK YOU!!*

*Sincerely yours,*

*Robert E. Stepp, Jr., Ph.D.  
Project Director*

*RES/edr*

# Virginia Beach City Public Schools

233 North Witchduck Road  
VIRGINIA BEACH, VIRGINIA 23462

E. E. BRICKELL  
Superintendent of Schools

Mrs. Karen Thomas  
Northeast Regional Media Center  
for the Deaf  
University of Massachusetts  
Amherst, MA 01002

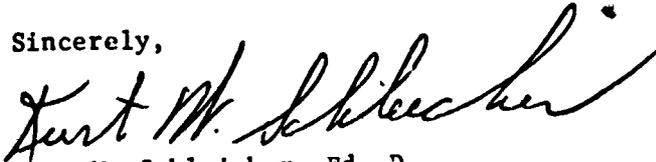
Dear Mrs. Thomas:

I wish to express my appreciation to you for the excellent and superbly conducted workshop for the Virginia Beach hearing impaired teachers and speech pathologists.

It is a joy to sponsor a workshop that is practical, refreshing, and stimulating for all those in attendance.

On the behalf of all the teachers, thank you.

Sincerely,



Kurt W. Schleicher, Ed. D.  
Supervisor, Special Education

KWS/ghp

cc: Director, Northeast Regional Media Center  
for the Deaf

27

THE DILENOWISCO EDUCATIONAL COOPERATIVE  
1032 VIRGINIA AVENUE NORTON, VIRGINIA 24273 TELEPHONE (703) 673-2130



17 December 1973

The Director  
Northeast Regional Media Center for  
the Deaf  
Thompson Hall  
University of Massachusetts  
Amherst, Mass. 01002

Dear Sir:

At the November DILENOWISCO Board Meeting, one Board member said,  
"If you appreciate someone, then you should let them know...."

NRMCD has made significant contributions to the development of  
Cooperative Programs in Southwest Virginia through the participation  
of Ms. Karen Thomas and Ms. Linda Matys in SEIMC meetings and the visits  
of Ms. Matys to the DILENOWISCO Title III Regional Program for Hearing  
Impaired Persons.

As a measure of acknowledgment and appreciation for your support, the  
DILENOWISCO Educational Cooperative Board of Directors extends to you  
this special letter of appreciation and Best Wishes for a Happy Holiday  
Season.

Sincerely yours,

Richard Gardner, Chairman  
DILENOWISCO Board of Directors

cb

Note: A roster of Board Members is enclosed for your information.

BEST COPY AVAILABLE

District Child Study Team  
AT BLAIRSTOWN TOWNSHIP PUBLIC SCHOOL  
BLAIRSTOWN, NEW JERSEY 07825

361.

NORTH WARREN REGIONAL HIGH SCHOOL  
FRELINGHUYSEN ELEMENTARY SCHOOL  
HARMONY ELEMENTARY SCHOOL  
BLAIRSTOWN ELEMENTARY SCHOOL

TELEPHONE:  
(201) 362-6111

November 14, 1972

Karen Thomas  
Field Coordinator  
NORTHEAST REGIONAL MEDIA CENTER  
FOR THE DEAF  
Thompson Hall  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Karen:

I would like to extend my thanks for the material that you sent. They will be quite helpful in programming for the student I have in mind.

I shall keep in mind the exchange of information and will forward to you any information that may be of help.

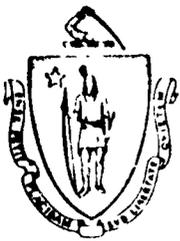
Again, thank you.

Sincerely,

*Eleanor Shaffer*  
Eleanor Shaffer, Chairman

ES:rl

375



JOSEPH P. RICE, Ph.D.  
Associate Commissioner

*The Commonwealth of Massachusetts*

362.

*Department of Education*

DIVISION OF SPECIAL EDUCATION

*182 Tremont Street, Boston, 02111*

November 6, 1973

Ms. Karen Thomas  
Northwest Media Center for the Deaf  
School of Education  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Karen:

Thanks so much for your participation in and planning of the media workshop for our teachers of the deaf. You and your colleagues are to be congratulated on both organization and format.

A number of the workshop participants have called to pass on favorable comments and also to tell me that they plan to make more use of your service. Keep up the good work.

Sincerely,

*Carolyn P. Scott (20)*

Carolyn P. Scott  
Supervisor in Education

CPS:lad

CC: Dr. Raymond Wyman

SCHOOL DISTRICTS

- Greenland
- New Castle
- Newington
- Portsmouth
- Rye

November 2, 1973

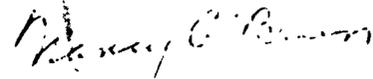
Ms. Karen Thomas  
Supervisor of Field Services  
Northeast Regional Media Center for the Deaf  
Thompson Hall  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Ms. Thomas:

Thank you for forwarding my request for information to New England Special Education, Instructional Materials Center.

I appreciate your interest and the time you took in this matter.

Sincerely,



Nancy O'Brien  
Reading Consultant

NO'B/rt



State of New Jersey  
 DEPARTMENT OF EDUCATION  
 Marie H. Katzenbach School for the Deaf  
 CHARLES M. JOCHEM, LIT., D. SUPERINTENDENT  
 WEST TRENTON, NEW JERSEY 08625  
 TELEPHONE 609-883-2600

ALAN K. SUMMERS  
 ASSISTANT SUPERINTENDENT

October 17, 1973

Ms. Karen Thomas  
 Supervisor of Field Services  
 Northeast Regional Media Center for the Deaf  
 University of Massachusetts  
 Amherst, Massachusetts

Dear Ms. Thomas:

I have received the information you sent and am very delighted with the services that are being made available. I appreciate the copies of sample materials as well as other materials.

Since our campus is so large, including the Nursery, Lower School-Unit I, Lower School-Unit II, Middle School and Upper School, and we have a staff of over 100 teachers, are there additional copies of this material available or should we duplicate this one for dispensation.

As requested in your memo of September 12, we will be happy to advise the staff of this information, and I do feel that we have teachers who create materials that can be shared with the center and other schools. I shall proceed to implement that.

Sincerely,

*Alan K. Summers*

Alan K. Summers  
 Assistant Superintendent

AKS:njc

376

ST. JOSEPH'S SCHOOL FOR THE DEAF  
1000 HUTCHINSON RIVER PARKWAY  
BRONX, N. Y. 10465

September 5, 1973

Dr. Raymond Wyman  
N.M.C.D.  
Thompson Hall  
University of Massachusetts  
Amherst, Mass.

Dear Dr Wyman,

We have officially begun our school year here at St. Joseph's School for the Deaf with staff orientation this week.

The Conference for Media Directors a couple of weeks ago gave me a renewed enthusiasm for beginning a new school year. Thank you for making the Conference possible. It was good to meet colleagues from our area and the program was stimulating.

It is good to have Sue Yanes with us. Already she is proving to be a big help in our program. The Media Specialists program at the University of Massachusetts is providing staff in a much needed area.

Best wishes to you for a good school year.

Sincerely,

*Brenda Axelsen*  
(Mrs.) Brenda Axelsen  
Media Director

BA:lp

377

# St. Mary's School For The Deaf

366.

2253 MAIN STREET • BUFFALO, NEW YORK 14214

August 28, 1973

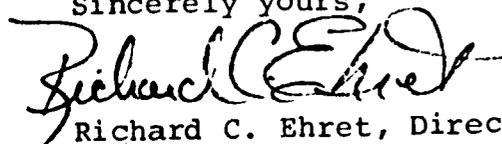
Ms. Karen Thomas  
Field Coordinator  
Northeast Regional Media  
Center for the Deaf  
Thompson Hall  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Karen,

This is just a short note to tell you how much I enjoyed the recent Media Directors Conference. It took me about two days to recover from the experience, but it was worth it. On the whole, it was an excellent program and you were delightful. I'm sorry we didn't get a chance to talk more, but don't worry, I'll still continue to think of you as tall, dark and lanky.

Please convey my appreciation to Dr. Wyman. I hope that this can become an annual event in the future.

Sincerely yours,



Richard C. Ehret, Director  
Instructional Media Center

RE/mm

cc: File

878



PENNSYLVANIA STATE ORAL SCHOOL FOR THE DEAF  
COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF EDUCATION  
SCRANTON, PENNSYLVANIA 18509

367.

September 27, 1973

Raymond Wyman, Ed. D.  
Director  
Northeast Regional Media Center  
for the Deaf  
Thompson Hall  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Dr. Wyman:

At the September meeting of the Board of Trustees of the Pennsylvania State Oral School for the Deaf, Dr. Gates, Superintendent, informed the Trustees of the many services the Northeast Regional Media Center for the Deaf is providing the School. This letter is in reference to Dr. Gates' report.

On behalf of the Board of Trustees, I would like to thank you and your staff for the equipment, consultation, and training which you have made available to our staff members. With such support, we would hope that we can better meet our responsibility to deaf youngsters and young adults in the Commonwealth of Pennsylvania.

Thanking you again, I remain,

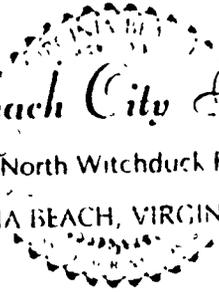
Sincerely yours,

*Annette R. Lloyd*  
(Mrs.) Annette R. Lloyd  
President, Board of Trustees

ARL:mf

*Lloyd*

879



Virginia Beach City Public Schools

233 North Witchduck Road  
VIRGINIA BEACH, VIRGINIA 23462

April 8, 1974

E. E. BRICKELL  
Superintendent of Schools

Mrs. Linda Matys  
Field Representative  
Northeast Regional Media Center for the Deaf  
University of Massachusetts  
Amherst, Ma. 01002

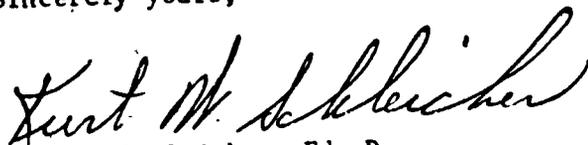
Dear Mrs. Matys:

On behalf of the Special Education Department of the Virginia Beach Public Schools, I wish to express appreciation for your fine presentation during our inservice workshop program on April 3, 1974.

As a result of your efforts, all of us have gained new knowledge and insights which will enable us to better meet the needs of exceptional children.

With many thanks and best regards, I remain,

Sincerely yours,



Kurt W. Schleicher, Ed. D.  
Supervisor, Special Education

KWS/cst

cc: Director, NRMCD



DIVISION OF INSTRUCTION

May 7, 1974

Mrs. Linda Matys  
Northeast Regional Media  
Center for the Deaf  
School of Education  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Linda;

On behalf of the Arlington Public Schools, I extend to you our sincere appreciation for the excellent workshop you presented on May 1st.

The teachers and clinicians have had extremely positive reactions from the techniques presented to them and the practicality of the information you gave. We are also disappointed that the Media Center will be closing. During this year for the first time, we have had immediate technical assistance resources.

Please express our appreciation to your entire staff for the work they have done in improving the education of speech and hearing.

Sincerely,

Elizabeth L. Johns, Supervisor  
Language, Speech and Hearing Programs

ELJ/rec



# Chesapeake Public Schools

School Administration Building  
Post Office Box 15204  
Chesapeake, Virginia 23320

April 10, 1974

Ms. Linda Matys  
Field Representative  
NRMCD  
Thompson Hall  
University of Massachusetts  
Amherst, MA 01002

Dear Linda:

The workshop was magnificent!

The speech therapists' and reading resource teachers were so enthusiastic, and the prevailing thought seemed to be, "What a PROFITABLE day"!

I certainly hope we can find a way to have you come to Chesapeake again. We are all grateful to you for sharing your time and talents with us.

Cordially,

(Mrs.) Evelyn L. Reel  
Elementary Supervisor and  
Coordinator of Speech Education

EER:m

88

*Virginia Beach City Public Schools*

233 North Witchduck Road  
VIRGINIA BEACH, VIRGINIA 23462

E E BRICKELL  
Superintendent of Schools

March 5, 1974

Miss Linda Matys  
Field Representative  
Northeast Regional Media Center  
for the Deaf  
University of Massachusetts  
Amherst, MA 01002

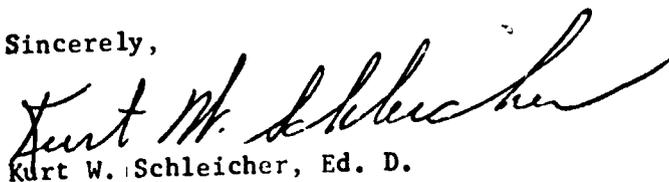
Dear Miss Matys:

I wish to express my appreciation to you for the excellent and superbly conducted workshop for the Virginia Beach hearing impaired teachers and speech pathologists.

It is a joy to sponsor a workshop that is practical, refreshing, and stimulating for all those in attendance.

On the behalf of all the teachers, thank you.

Sincerely,



Kurt W. Schleicher, Ed. D.  
Supervisor, Special Education

KWS/ghp

cc: Director, Northeast Regional Media Center  
for the Deaf

Speech and Language Dept.  
The Archway School  
Jackson Road  
Atco, New Jersey 08004

Ms. Sandra Zallen  
Resource Librarian  
School of Education  
University of Mass.  
Amherst, Mass. 01002

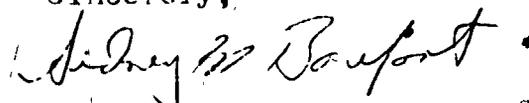
Dear Ms. Zallen,

I am returning in two packages the language curriculum for the deaf which you had loaned to us. It has been examined by several of our staff here and has been greatly appreciated. However, we have no specific feedback to offer as it was not sufficiently used in our program.

The bibliography we received from you has also been valuable to us. Your generous response to our request for information has helped us in our total program evaluation and has prompted improved attention to the needs of our deaf students.

We thank you again for your assistance.

Sincerely,



Sidney W. Barefoot M.S.  
Speech and Language Therapist

BOARD OF TRUSTEES

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SEAN M DUNPHY  
WALTER B FORD II



The Clarke School for the Deaf  
Northampton, Massachusetts

01060

TELEPHONE (413) 584-3450

*President*  
GEORGE T PRATT  
*Assistant to the President* 373.  
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*Administrative Assistant*  
*President's Office*  
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*Business Manager and Treasurer*  
EDWIN B. HUBBARD, JR  
*Assistant Treasurer*  
ERMA J SISCO

February 19, 1974

Ms. Sandra Zallen  
Resource Librarian  
NRMCD  
Thompson Hall  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Sandra:

This is just a quick note to let you know how much I appreciate the time and effort you put into the list of Religious material that you compiled for me. I'm sure that it will be quite helpful. I will let you know if the teacher wants any titles on specific Bible characters.

Again, many thanks!

*Heidi Sanders*

Heidi Sanders  
Media Secretary

285

UNIVERSITY AFFILIATED  
EXCEPTIONAL CHILD CENTER

January 3, 1974

Ms. Sandra Zallen  
Resource Librarian  
Northeast Regional Media Center  
for the Deaf  
University of Massachusetts  
Amherst, Massachusetts 01003

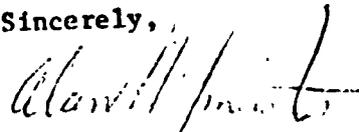
Dear Ms. Zallen:

We wish to thank you for your response to our request for help concerning the library that is being set up here at the Exceptional Child Center for parents of handicapped children.

We hope to have a model of the library in service by late spring, and we will put your name on the mailing list to receive a copy of the catalog as soon as it is published.

Thanks again for your interest.

Sincerely,



Alan Hofmeister  
Research Director  
Exceptional Child Center

AH:nh

66 Strong Avenue  
Pittsfield, Mass. 01201  
May 31, 1974

Ms. Sandra Zallen  
Resource Librarian  
NRECD  
Education Building  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Sandra,

Thank you very much for the materials. You can be certain they will be put to excellent use. When I attended the media workshop held at Clarke, I noticed a packet compiled by the Pennsylvania School for the Deaf. I believe the artist was R. Newby. I used this when I student taught at the Rochester School for the Deaf. If this is available, I would also like to receive a copy. I found it was very good to teach tenses, abstracts, verbs, etc.

Again, thank you very much for the materials and information. I will be looking forward to hearing from you again.

Sincerely,

*Arline Liscove*

## WESTERN MARYLAND COLLEGE

WESTMINSTER, MD 21157

DEPARTMENT OF  
EDUCATION

March 19, 1974

Dr. Raymond Wyman  
University of Massachusetts  
Thompson Hall  
Amherst, Massachusetts 01002

Dear Dr. Wyman:

I meant to write to you earlier, but I have been winding up the semester, and preparing for a program evaluation. I want you to know how much I appreciate your cooperation in providing the Western Maryland College program in deafness with a workshop in Media.

For the past three years, we were able to have a one day program and this year a three day workshop, which was very successful if student feedback is any indicator. This is the type of thing that we need on an annual basis and I feel sure that you would provide for the same needs. We have always been given a brief introductory course in Media which either whetted the appetite or frightened the student to death. Many of the loose ends and questions our students had at the end of the one day program were answered and they were able to pick an area of interest and develop some materials that could be used in their practice teaching.

I am not sure what the status of the RMC's are at this time, but if a letter from me and my 20 students would help, we would be most happy to write where you direct us. Thanks again for providing us with the most memorable, academic and practical experience of the current school year.

Sincerely,

*Britt M. Hargraves*  
Britt M. Hargraves, Director  
Teacher Preparation Program  
In Deafness

BMI:kp

## Beverly School For The Deaf

6 ECHO AVENUE

BEVERLY, MASSACHUSETTS 01915

Telephone 922-0906

Area Code 617

March 18, 1974

Dr. Raymond Wyman, Director  
Northeast Regional Media Center  
for the Deaf  
Thompson Hall  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Ray:

I received your recent letter in which you detailed the demise of the Regional Media Centers for the Deaf as of August 31. While I was aware that this was to be their ultimate fate from an earlier discussion with you in Framingham I truly regret that such innovative programs are being swallowed up into other types of resource centers where they will lose most of their identity and where so many of the unique supportive services will be curtailed, diminished, or eliminated.

You and your staff are to be commended along with those in other regional media centers for the deaf for demonstrating to deaf schools and classes throughout the country the vital role that-mediated learning can play in lives of deaf students. Professionals across the country will be forever indebted to you for having lit the candle that opened so many positive and creative doors to learning for deaf children in the United States. It is extremely difficult to see any justification for the demise of a federally funded program that has so clearly demonstrated accountability on any set of performance criteria one could devise.

I want you to know, personally, how many professionals within the northeast region have sung your praises over the past six or seven years. If nothing else, you can look with pride at the many accomplishments you and your staff have achieved in a relatively short period of time. You have enriched the professional life of the deaf community through your development of materials, your demonstrations, your research, and the contributions you have made to the literature in our field. Please know that there are many who feel that your return to full-time teaching and other activities outside of the field of deaf education will be a serious loss to those engaged in the education of the deaf. You have been a new-

Dr. Raymond Wyman  
March 18, 1974  
Page 2

found friend and colleague whom we will truly miss in years ahead. It's been great having the opportunity of making both your personal and professional acquaintance and I hope that, regardless of what the future holds, that we will still have occasion to utilize the tremendous knowledge that you have gained in your close working relationships with professionals in the field. I'll look forward to seeing you from time to time.

You might also be interested in knowing that the Alexander Graham Bell Association has just made a decision to hold its biennial summer meeting for 1976 in Boston. Hopefully there will be an opportunity for involving you at that time, should you be open to such a possibility.

I'll be calling Karen in the next day or two to see if we can still arrange a time for scheduling a one or two-day workshop in developing behavioral objectives for our staff here at the school. I discussed this with her briefly before our two-week winter break which just ended a week ago. At that point in time she seemed quite optimistic about being able to work us into your schedule. I hope this is still true.

Most sincerely,



Richard W. Flint  
Executive Director

RWF/new



# STATE OF CONNECTICUT

MYSTIC ORAL SCHOOL

MYSTIC, CONNECTICUT 06355



379.

TEL. 536-4221

February 27, 1974

Dr. Raymond Wynn, Director  
Northeast Regional Media Center  
For The Deaf  
University of Massachusetts

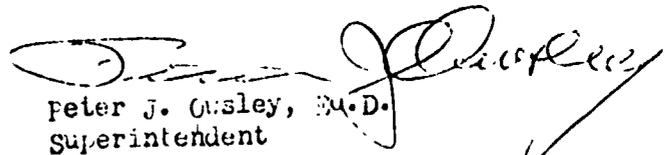
Dear R y:

Thank you for your very nice letter of February 19th, in which you advise me that the Regional Media Center at University of Massachusetts is closing. I had heard rumors to this effect, but, when I was in Tucson, Arizona last week the rumors are now confirmed. I am very sorry to hear that these regional centers are going out of existence. We have enjoyed working with you and hope that our paths cross again in the near future.

I have just received approval for a media position at the Mystic Oral School and in the event you know of anyone in your present program who is looking for a position, I would be pleased to hear from them. This position is open immediately and I would be interested in hearing from someone as soon as possible.

With best personal regards, I remain

sincerely yours,

  
Peter J. Casley, Ed.D.  
Superintendent

PJC:emb

# The Virginia School for the Deaf and the Blind

380.

FOUNDED IN 1878



JOE R SHINPAUGH, A.B., M.A.  
Superintendent

JOHN T FLOYD, B.A.  
Business Manager

Staunton, Virginia 24401

February 25, 1974

Dr. Raymond Wyman, Director  
Northeast Regional Media Center  
for the Deaf  
University of Massachusetts  
Amherst, Mass. 01002

Dear Ray:

Your letter of February 19, 1974 has been received and I was very distressed to learn that the Northeast Regional Media Center for the Deaf is nearing the end of its existence. Through the years you and your colleagues have rendered such outstanding services to the deaf and I am very sorry to see this come to an end. I do want to take this opportunity to thank you for a job "well done" and I wish there were something we could do to see that the services are continued.

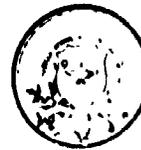
I note that you are expecting to take up full-time teaching next year and I extend to you my best wishes in your new endeavor. Again, many, many thanks for all that you and your staff have done in the area of the media for the deaf.

Sincerely yours,

Joe R. Shinpaugh  
Superintendent

JRS/adr

c.c. Mr. John S. Shipman, Principal



# American School for the Deaf

ESTABLISHED 1817

135 NORTH MAIN STREET  
WEST HARTFORD, CONNECTICUT 06107BEN E. HOFFMEYER  
EXECUTIVE DIRECTOR

February 26, 1974

Dr. Raymond Wyman, Director  
Northeast Regional Media Center for the Deaf  
Thompson Hall  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Ray:

I just returned from a meeting of Superintendents of Schools for the Deaf and heard that the R.M.C.'s were going to be discontinued. It certainly makes one wonder if education of the deaf will suffer from the loss of these four centers which so ably served us. Bill Jackson was there and he hopes to stay in Knoxville but at this time has no definite position.

We have certainly profited by having you and your staff at our service. It seemed you were always available for services requested and we will miss this.

I am happy you are staying in the University. Be sure to come by often before and after you close out the program.

Sincerely,

Ben E. Hoffmeyer  
Executive Director

BEH/vsv



LEO E. CONNOR, Ph.D.  
Executive Director  
100th AVENUE and 75th STREET  
JACKSON HEIGHTS, N. Y. 11370  
Telephone: (212) 899-8800

March 1, 1974

Dr. Raymond Wyman  
Northeast Regional Media Center  
for the Deaf  
Thompson Hall  
University of Massachusetts  
Amherst, Massachusetts 01002

Dear Ray,

Many thanks for your letter of February 19 concerning the Northeast Regional Media Center and your work in the education of deaf children. The recent BEH changes in the Media network were rather sudden and at best may be of dubious value in the future for the Lexington School. What the new RFP will create, will be of interest to all of us.

Your own contributions to the RMC-IMC program is more secure and valuable. You have been able to work into a specialized field like ours with a great deal of dignity and effectiveness. I have appreciated these qualities and the products, services and ideas which have flowed from the University of Massachusetts. I will be sorry to see their demise.

Best personal wishes.

Sincerely yours,

Leo E. Connor  
Executive Director

LEC/cc

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**The Clarke School for the Deaf**  
**Northampton, Massachusetts**

01060

TELEPHONE (413) 584-3450

March 1, 1974

**President**  
**GEORGE T PRATT** 383.

**Assistant to the President**  
**BILL G BLIVINS**

**Administrative Assistant**  
**President's Office**  
**IRENE JOHNSTON**

**Business Manager and Treasurer**  
**EDWIN B HUBBARD, JR**

**Assistant Treasurer**  
**ERMA J SINCO**

Dr. Raymond Wyman  
 Director  
 Northeast Regional Media Center for the Deaf  
 School of Education  
 University of Massachusetts  
 Amherst, Massachusetts 01002

Dear Ray:

Thank you for your letter of February 19. Yes, I had heard rumors of the approaching end of the existence of the Northeast Regional Media Center for the Deaf and appreciate your giving me an official statement. You have put in a great deal of thought and energy as well as many innovative ideas into the NR/MCD since 1966, and it is too bad to see it being closed out. However, you can take satisfaction in knowing that you made a substantial contribution to the profession and to the lives of many youngsters who came through the program. I, and a number of staff members here at Clarke School who know you and have studied under you in some cases, join in extending to you our best wishes as you terminate a major segment of your professional life and return to fulltime teaching and related activities in September 1974. You and your students have certainly cooperated in many ways with us, especially in Steve White's media program. You have also made quite an impact on the professional life of Barbara Wyman, who continues to be one of our most excellent teachers.

Sincerely yours,

George T. Pratt  
 President

GTP:IJ

NEW YORK SCHOOL FOR THE DEAF

555 KNÖLLWOOD ROAD  
WHITE PLAINS, NEW YORK 10603

(914) 949-7310



March 4, 1974

ROY M. STELLE  
SUPERINTENDENT

Dr. Raymond Wyman, Director  
Northeast Regional Media Center  
for the Deaf  
Thompson Hall, University of Massachusetts  
Amherst, Massachusetts 01002

Dear Ray:

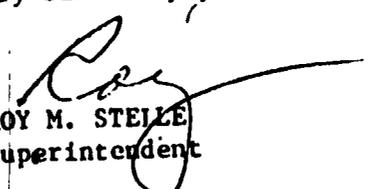
I have your letter of February 19, 1974 with the sad news that the Northeast Regional Media Center for the Deaf will be closing at the end of this school year. We had heard of this in various ways, and you can be assured that we are sorry to see this program come to an end.

The New York School for the Deaf has thoroughly appreciated the service that you and your dedicated staff have rendered in the past eight years and it appears to be a tragedy, too, that all of these services as well as the training opportunities you offered to young people wishing to go into this type of work will come to an end.

I know Mr. Taylor plans to come to your meeting in the near future at which time I am sure further information will be given concerning the closing of the facility.

I wish to personally thank you and your staff for your ever ready cooperation and assistance that you have given us during these years. Also, on behalf of the entire school I wish to extend our best wishes to you as you return to full time teaching and related activities at the University this coming summer.

Very sincerely yours,

  
ROY M. STELLE  
Superintendent

RMS:fp



State of New Jersey

DEPARTMENT OF EDUCATION

Marie H. Katzenbach School for the Deaf

CHARLES M. JOCHEM, LITT.D. SUPERINTENDENT

WEST TRENTON, NEW JERSEY 08625

TELEPHONE 609 883 2600

March 6, 1974

Dr. Raymond Wyman, Director  
Northeast Regional Media Center  
for the Deaf  
Thompson Hall  
University of Massachusetts  
Amherst, Mass. 01002

Dear Ray:

Although there have been rumors that your program would be terminated this year, the verification from you leaves me "cold".

Only those of us who have so richly profited from the efforts and accomplishments of you and your staff, can fully appreciate what a loss we will suffer. It almost seems that we no sooner get a good program established and for some reason have to terminate it for something else. I question very much the substitute program.

Please accept from everyone at Katzenbach, especially the students and staff, our sincere appreciation for the unusually great contribution you have made to the education of the deaf.

Needless to say, my personal thanks are included, and I shall always cherish the times we have spent together. You have done a great job and you have been a joy to know and work with.

Gratefully,

C. M. Jochem  
Superintendent

CMJ/jhr