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ABSTRACT

Three introductory chapters discuss evaluation and identify relevant studies on three different perspectives: purposes for evaluation, focus of the evaluation, and methods of evaluation. Studies are divided into a number of categories under each of the broad topics, and listed alphabetically by author if one is given; if there is no personal author, they are listed by title. A single item is listed in as many categories as are deemed appropriate, and the ED or EJ number is indicated for each one. The full bibliographic citation and abstract or annotation are provided for each citation in a single alphabetical listing in the main body of the bibliography. The procedures used in the inquiry are outlined, and additional work needed is considered. (Author/JEG)

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A CLASSIFICATION OF EVALUATION STUDIES  
OF INSTRUCTIONAL TECHNOLOGY INCLUDED  
IN THE ERIC SYSTEM

by

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1978

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## ORGANIZATION OF THIS BIBLIOGRAPHY

Three introductory chapters discuss evaluation and identify relevant studies on three different perspectives -- purposes for evaluation, focus of the evaluations, and methods of evaluation.

These studies are divided into a number of categories under each of the broad topics, and listed alphabetically by author if one is given; if there is no personal author, they are listed by title. A single item is listed in as many categories as are deemed appropriate, and the ED (ERIC Document) or EJ (ERIC Journal) number is indicated for each one.

The full bibliographic citation and abstract or annotation are provided for each citation in a single alphabetical listing in the main body of the bibliography. As in the chapter listings, the arrangement is by author or title. The only exceptions to this rule are several sets of reports or articles which would be widely separated in a strict alphabetical arrangement. These are treated as single units; in the chapter lists, only the first item is given, and in the bibliography, all of the related reports are listed with the first one. Such sets are indicated in the bibliography by a vertical line in the left margin.

Most of the documents with ED numbers are available in the ERIC microfiche collection, and single copies may be ordered from the ERIC Document Reproduction Service; see page 193 for details. Those items which are not available from EDRS are indicated by a single asterisk and another source is provided. Those which may be ordered from EDRS in microfiche but not in paper copy are indicated by two asterisks.

While citations with EJ numbers are not available through EDRS, these journals are widely available in libraries, and copies of articles from many of the journals indexed in Current Index to Journals in Education (CIJE) are now available through University Microfilms International. Information for ordering, including prices, is provided in each issue of CIJE beginning with September 1977, and those journals for which this service is available are indicated on the list of titles covered which also appears in each issue.

## INTRODUCTION

This paper represents an attempt to develop a useful system for classifying evaluation studies of instructional technology programs, materials, and/or procedures. Both researchers and practitioners have noted the paucity of examples of actual evaluation studies that might serve as guides to other evaluation efforts. There are suspicions that, while the quantity of literature on evaluation has been steadily increasing, most of this literature is of a broad conceptual or advocacy nature, not altogether useful in advancing the effectiveness of evaluation practice. At the very least, there seems to be a need for a compilation or catalog of actual evaluation reports from which insights about both evaluation methodology and the state of various educational and social programs might be gained.

Similar frustrations exist for those seeking to study instructional technology. Here, too, the literature seems to be primarily advocacy (technology is the answer) in nature. Some attempts have been made to synthesize data about instructional technology, but the efforts to do so have been hampered by the absence of reported evaluation studies of instructional technology.

Because the ERIC system is intended to be a depository for a range of materials on education often not available from any other source, it seemed appropriate to examine the holdings of ERIC to: (a) determine what kind and how many evaluation studies of instructional technology were included in the system, and (b) to develop a way of classifying those studies in ways that might be useful to both the researcher and practitioner of evaluation and instructional technology. This paper reports the results of efforts to accomplish these tasks.

) The paper contains five sections. First, the procedures used in this inquiry are outlined. An understanding of these procedures is vital to meaningful use of the results.

The second section consists of citations from ERIC classified according to the purposes for which evaluation studies were conducted. The third section contains citations of evaluation studies classified according to the primary focus of the studies. The fourth section classifies evaluation studies according to the methods purportedly used in those studies. The paper concludes with some remarks on additional work needed.

This paper must be viewed primarily as a reference work. No attempts have been made here to assess the quality or worth of the reports of evaluation studies cited. Such an assessment should follow. As a reference work, this paper may be useful in making materials in ERIC related to instructional technology and evaluation more accessible to interested scholars and practitioners.

#### Procedures

Two procedures were undertaken concurrently by the researcher: developing a preliminary classification schema for evaluation studies, and searching the ERIC data base for reports of such studies.

The ERIC data base contains many documents and journal article citations included within the broad subject categories of evaluation and instructional technology. A search using the descriptor "Evaluation" yielded 7142 citations; "Instructional Technology" yielded an additional 3406 citations. In an attempt to obtain a manageable number of citations that would reflect appropriate interactions between evaluation and technology, a computer search was undertaken in the following manner:

two sets of terms were formed, one representing evaluation and the other representing instructional technology. The broad terms "Evaluation" and "Instructional Technology" were themselves eliminated as being too general; ERIC documents and articles tend to be indexed at a more specific level of subject matter covered.

The terms chosen for inclusion in the evaluation set were:

- Formative Evaluation
- Summative Evaluation
- Program Evaluation
- Equipment Evaluation

A total of 8361 citations was found in this set. Other terms considered for the evaluation set, but not included in the first search, were:

- Evaluation
- Course Evaluation
- Curriculum
- Needs Assessment
- Educational Assessment
- Educational Status Comparison
- Peer Evaluation
- Personnel Evaluation
- Profile Evaluation
- Relevance (Education)
- Student Evaluation
- Case Studies (Education)
- Evaluation Methods
- Evaluation Needs
- Evaluation Criteria
- Educational Accountability
- Comparative Analysis
- Intermode Differences

Terms chosen for inclusion in the instructional technology set were:

- Computer Assisted Instruction
- Instructional Media
- Programed Instruction
- Instructional Design
- Instructional Materials
- Media Technology
- Multimedia Instruction
- Programed Materials
- Individualized Instruction
- Computer Managed Instruction
- Audiovisual Instruction
- Simulation
- Games

- Instructional Improvement
- Instructional Innovation
- Educational Television
- Educational Radio
- Communication Satellites
- Instructional Aids
- Instructional Films
- Television Curriculum
- Children's Television
- Educational Games
- Instructional Programs
- Instructional Materials Centers
- Programed Texts
- Media Selection

A total of 27,319 citations was found in this set. Other terms considered for the instructional technology set, but not included in the search, were:

- Instructional Technology
- Educational Technology
- Computer Oriented Programs
- Educational Development
- Educational Research
- Performance Based Education
- Curriculum Development
- Game Theory
- Systems Approach
- Systems Analysis
- Audiovisual Aids
- Films
- Phonograph Records
- Projection Equipment
- Radio
- Tape Recordings
- Autoinstructional Aids
- Autoinstructional Methods
- Audiovisual Centers
- Resource Centers
- Teaching Methods
- Mass Media
- Learning Laboratories
- Learning Modules
- Educational Facilities
- Instructional Aids
- Slides
- Visual Aids



In conducting the search, each of the descriptors in the evaluation set and the instructional technology set was designated as a major descriptor. This served to exclude documents and articles wherein evaluation or instructional technology were determined by the abstractor to be of only peripheral interest.

The next step was to identify those citations which included at least one major descriptor from the evaluation set and at least one major descriptor from the instructional technology set. While it is not essential to this paper to describe technically the logic of the computer search itself, it is important to point out that the system eliminates multiple counting of any single citation. That is, if a particular citation listed "Formative Evaluation" as a major descriptor (from the evaluation set), and listed "Instructional Media" and "Programed Materials" as major descriptors from the instructional technology set, the citation would not be counted as two citations.

The search yielded 713 citations which contained at least one term from each set. A further restriction was then added: citations would be accepted only for those materials announced in ERIC from January, 1970 - November, 1978. The final number of citations to be reviewed for inclusion in this study was 589.

A printout, including ED (ERIC Document) or EJ (ERIC Journal) number, author, title, abstract, and various other information, was generated for the 589 entries. The researcher reviewed this printout to eliminate those citations which appeared to fall outside the researcher's guidelines for this study. The guidelines, while quite general, did result in the elimination of 132 citations. These citations were not, in the judgment of the researcher: evaluation studies, papers about evaluation problems related



to instructional technology, or about instructional technology. In some cases, the decision to eliminate was clear. In other cases, it was not so clear that the citations should be eliminated; the researcher simply made a judgement.

Following the elimination of the citations cited above, the researcher had a total of 457 citations to review.

Concurrently with steps 1-3 as outlined above, the researcher developed a tentative classification schema to use in analyzing the citations. Three broad classifications were proposed, together with some categories within each classification. The schema is contained in Figure 1.

The intent was to analyze each citation according to each of the three classifications. In so doing, the researcher would essentially be developing a different system according to which ERIC documents might be retrieved. The system would permit the user to access examples of evaluations done for different purposes, with different foci; and with different methods.

The classification system suggested in Figure 1, then, was to provide guidelines for the next step in the process. To facilitate this step, each citation was placed on a 5 x 8 index card, and assigned an identification number for this project. The researcher then began to go through the cards, to sort citations into the categories suggested by Figure 1.

As this sorting process began, however, difficulties emerged. The problem was that the classification scheme in Figure 1 assumed that the citations being analyzed represented reports of evaluation studies. Upon more careful examination, however, this assumption was found to be erroneous. Consequently, the researcher, based on the substance of the

### Purpose of the Evaluation

1. Gathering data to revise materials/program
2. Gathering data to make materials/program selections
3. Gathering data to make materials/program continuation decisions
4. Gathering data to inform external audiences about performance
5. Gathering data to inform policy development
6. Gathering data to build theory or make generalizations
7. Gathering data to sell or justify materials/programs

### Focus of the Evaluation

#### A medium

1. Radio
2. Television
3. Computer assisted instruction
4. Computer managed instruction
5. Slide/tape
6. Audio tape
7. Programed instruction
8. Audio-tutorial
9. Satellites

#### A system/program/process

10. A series
11. A course
12. A pedagogical approach (e.g., individualized instruction)

#### A development/evaluation process

13. Instructional development
14. Materials development
15. Evaluation methodology

### Methods Reportedly Used

1. Survey
2. Questionnaire
3. Interviews
4. Observations
5. Content analysis
6. Simulation
7. Controlled experiment (research design)
8. Standardized testing
9. Local testing

Figure 1. Initial classification schema proposed for analysis of evaluation studies

### Citations to be excluded

Consists of citations which, upon more careful review, do not meet minimal criteria for inclusion in study, or for which insufficient information exists by which classifications can be made.

### Scope/focus inappropriate

Includes citations of studies or papers in which the evaluation is focused on projects/programs not readily identifiable as instructional technology.

### Method critique

Consists of papers or studies which are either critiques of a methodology or technique, specification of a plan for evaluation, or a list of evaluation criteria, but are not reports of evaluation studies.

### Analysis of a study

Includes papers or reports which analyze evaluation studies for purposes of drawing inferences about design, methodology, etc.; attempt to aggregate/summarize data across evaluation studies; respond to evaluation studies; or summarize activities of an evaluation institute or center.

### Conceptual papers

Includes papers of a general conceptual or theoretical nature related to evaluation of instructional technology, but not a critique of a particular methodology. Includes attempts to construct models of evaluation.

### Evaluation studies

Includes papers or reports of actual evaluations of instructional technology.

Figure 2. Intermediate classification schema

citations being reviewed, developed yet another way of classifying the citations.

The intermediate classification system consisted of six categories, as outlined in Figure 2. The figure contains a brief explanation of each category. Sorting the citations into these categories yielded the following distribution:

Citations to be excluded	33
Scope/focus inappropriate	35
Method critique	43
Analysis of a study	30
Conceptual papers	66
Evaluation studies	224

In addition, there were 13 instances in which multiple citations existed for a single evaluation study. Those multiple citations were combined where appropriate, and treated as a single citation.

While the categories "method critique," "analysis of a study," and "conceptual papers" are not germane to the central purpose of this inquiry, the citations in these categories do contain material of potential interest to the student or practitioner of evaluation. Appendices A, B, and C contain the accession number, author(s), and title of the citations in each of these categories.

Following this step, the researcher sorted the citations (N=224) of the evaluation studies according to the three major classifications included in Figure 1. The results of these sorts are contained in the sections that follow.

## PURPOSES FOR EVALUATION

Evaluations are done for many reasons. Some evaluate because they are told they must. Those who provide funds for projects often insist that those projects be evaluated as one of the conditions for receiving funds. Others evaluate because they hope to justify a program or product. Still others evaluate because they hope to gather data needed to improve a program or product.

In this study, the researcher sought to identify the primary purposes, either stated or implied, for each evaluation study included in the search. Seven categories were identified. The number of citations relevant to each category is also indicated below. Six citations could not be categorized due to insufficient data.

### Category 1: Evaluation for revision (21 citations)

The purpose of evaluations in this category is primarily to collect and report data useful in revising/changing materials, programs, or procedures. These studies are generally not intended to gather or make judgments about the worth or value of the program being evaluated.

### Category 2: Evaluation for selecting (27 citations)

The purpose of evaluations in this category is primarily to gather data that enable decision makers to make more informed selections of programs or materials for use in their settings. Many of the studies conducted for this purpose attempt to delineate the commonalities and differences among various approaches to the same problem (e.g., selection of competing individualized instruction systems).

### Category 3: Evaluation for termination/continuation (24 citations)

The purpose of evaluations in this category is primarily to gather data useful in making decisions about terminating, continuing, or expanding a program, project, or the use of particular instructional materials.

Category 4: Evaluation for reporting status

(118 citations)

The purpose of evaluations in this category is primarily to report on the outcomes and effectiveness of programs or materials, most often for use by people or agencies external to the project. In many respects, these evaluations are done to provide general information rather than data for any particular decision. The results of the evaluation may be used in a variety of ways by different audiences, but the initial intent of the evaluation is general information.

Category 5: Evaluation for policy development

(5 citations)

The purpose of evaluations in this category is primarily to gather data useful in making or analyzing policy decisions, decisions that are generally applicable beyond the specific program or materials being evaluated. Such evaluations may focus on the aggregation of data and its application to particular policy decisions.

Category 6: Evaluation for generalization or theory building

(13 citations)

The purpose of evaluations in this category is primarily to build generalizations or theories about programs or procedures. These evaluations tend to include syntheses of findings from multiple evaluation studies, and attempts to relate these findings to existing theories or conceptualizations. Some argue that such evaluations are better labeled research; nonetheless, some studies called evaluations seem to be done for this purpose.

Category 7: Evaluation for sales

(2 citations)

The purpose of evaluations in this category is primarily to report data supportive of a program or materials for the express purpose of selling those materials to consumers. This category might be thought of as evaluation for marketing.

The majority of studies included in this inquiry fell into Category 4: Evaluation for reporting status. In some respects this is not surprising, since most evaluations purport to be studies of the effectiveness of a given program or materials. Nonetheless, given the fact that instructional technology tends to focus on development processes as part of its domain, it might have been predicted that more studies would be

placed in Category 1: Evaluation for revision. The results of this inquiry tend to support the suspicion that most formative evaluation efforts are not reported in any formal sense, but operate on a more informal basis.

Again, it must be emphasized that the classification of studies according to evaluation purpose was not done on the basis of how the studies were actually used, but on the basis of implied or explicit purpose as determined from titles and abstracts.

Accession number, author(s), and title of studies classified by evaluation purpose follow.

Purpose Category 1: Evaluation for revision

<u>Author(s)</u>	<u>Title</u>	<u>Accession No.</u>
Baker, Eva L.	Practicum for Instructional Developers. Final Report.	ED098266
Branson, Robert K.	Formative Evaluation Procedures Used in Designing a Multi-Media Physics Course.	ED050140
Dickerson, Larry R. and Roberts, Ralph R., Jr.	The Effectiveness of Prepackaged Instructions for the Inservice Training of Rehabilitation Counselors.	EJ108966
Gaddis, G. Warren	Evaluation of Televised Electronics Instruction Program.	ED086186
Hall, Keith A. and others	Inservice Mathematics Education for Elementary School Teachers via Computer-Assisted Instruction (California). Interim Report.	ED076043
Harlen, Wynne	A Critical Look at the Classical Strategy Applied to Formative Curriculum Evaluation.	EJ131787



Author(s)	Title	Accession No.
Heflin, Virginia A. and others	The Formative Period of LISTEN LOOK LEARN, A Multi-Media Communication Skills System.	ED049019
Hsia, Jayjia and Strand, Theresa	WTTW-ESSA Television Pilot, "TCR '77," : Formative Evaluation.	ED129889
Kaufman, Maurice	The Effect of the DISTAR Instructional System: An Evaluation of the 1972-1973 Title I Program of Winthrop, Massachusetts.	ED110171
Laosa, Luis M. and others	An Evaluation of Non-Formal Education in Ecuador. Volume 3: Findings.	ED116881
Lewis, Richard F.	A Survey of 1972 Teacher Opinion. Observational Report No. 7217.	ED092101
Liebert, Roland J.	"The Electric Company" In-School Utilization Study. Volume Two: The 1972-73 School and Teacher Surveys and Trends since Fall 1971.	ED094775
Mitzel, Harold E. and others	A Commonwealth Consortium to Develop, Implement and Evaluate a Pilot Program of Computer-Assisted Instruction for Urban High Schools. Final Report.	ED059604
O'Bryan, K. G.	Monkey Bars Research Report. Report No. 46.	ED098974
Owens, Thomas R. and others	Annual Evaluation Report of the Hawaii English Project for 1968-1969.	ED050121
Parker, Reese	The Development and Evaluation of a System for the Design of Instructional Plans and Resource Allocation.	ED074099
Speedie, Stuart M. and Sanders, Susan	Data Management & Decision Making. Technical Report No. 14.	ED135058
Tira, Daniel Edward	An Introduction to the Theory and Application of the Product-Moment Family of Correlations via a Computer Assisted Instructional System.	ED052627



<u>Author(s)</u>	<u>Title</u>	<u>Accession No.</u>
Uthe, Elaine F.	Assessing the Teaching Effectiveness of an Audio-Visual Program Relating to the Intensive Office Program in Business Education.	ED155191
Valencia, Atilano A.	The Relative Effectiveness of Three Video Oral English Instructional Conditions for Illiterate or Undereducated Non-English Speaking Adults, Spanish Speaking Adults. A Report of Statistical Findings and Recommendations Based on a Field Testing Study.	ED050615

Purpose Category 2: Evaluation for materials selection

Adler, Leta McKinney and others	Evaluation of Programmed Instruction Techniques in Medical Interviewing. Final Report, June 15, 1966 to June 15, 1968.	ED059345
	Analyses of Basic and Supplementary Reading Materials. An In-Depth Report.	EJ107290
Banathy, Bela H. and others	The Analysis and Reporting of Evaluation Training Materials Developed by R&D Laboratories and Centers. Final Report.	ED150166
Brickner, Ann and Senter, Donald R.	Follow-Up Study of LISTEN LOOK LEARN First Year Students Who Used Traditional Basal Programs in Second Year.	ED049018
Caldwell, Robert M.	Literacy Development Using a Programmed Text and Computer Assisted Instruction.	ED089216
Clausing, Gerhard and others	Individualized German Instruction at the College Level: A Follow-Up Report.	EJ088050
	Computer Aided Learning Project: Report, Trial 3.	ED129281

Author(s)	Title	Accession No.
Hsiao, J. O.	The Learning Effectiveness of Microeconomic Simulation.	EJ116969
Katzenmeyer, Conrad G. and others	Evaluating IGE: An Initial Literature Review and Exploratory Study. Technical Report No. 404.	ED134606
Kepler, F. Laurence and Rizzo, William A.	An Evaluation of Microfiche Reader Types for Use with Programmed Instruction. Phase I, March 1976 - August 1976.	ED128006
Kelly, F. Donald and Byrne, Thomas P.	The Evaluation of Filmed Excerpts of Rogers, Perls, and Ellis by Beginning Counselor Trainees.	EJ156778
Kumro, Thomas and Camp, William L.	Applying Programmed Instruction.	EJ049093
Lenn, Peter D. and Maser, Thomas F.	Computer Assisted/Programmed Instruction on the Law. Final Report.	ED058724
Longo, Alexander A.	A Summative Evaluation of Computer Assisted Instruction in U. S. Army Basic Electronics Training. Technical Report.	ED074699
	Modern Consumer Education. Consumer Education Materials.	EJ046804
Morgan, Virginia Richardson	A Cost Study Analysis of Measured Gains in a Reading Program Utilizing Individualization of Instruction.	ED103534
Moriber, George	The Effects of Programmed Instruction in a College Physical Science Course for Nonscience Students.	EJ013595
Radlick, Michael S. and O'Reilly, Robert P.	Learning from Television: A Television Based Learning System as a Capable School Resource.	ED129254
Romaniuk, E. W.	A Summative Evaluation of the CAI Course "Comps."	ED153604

<u>Author(s)</u>	<u>Title</u>	<u>Accession No.</u>
Ryckman, David B. and others	Do Structured Reading Programs Hamper Intellectual Development?	EJ148674
Scheier, Elaine and Senter, Donald R.	Evaluation of Learning 100: An Adult Basic Education Project in Bedford-Stuyvesant, 1967-68.	ED044551
	Selector's Guide for Elementary School/Junior High School Science Programs.	EJ157022
Sohn, David A. and Stucker, Melinda	Film Study in the Elementary School: Grades Kindergarten through Eight. A Curriculum Report to the American Film Institute.	ED032316
Sovik, Nils	Individual Instruction in Norwegian (The Podin Project).	EJ177005
Stevens, R. and others	AIMLO: Auto-Instructional Media for Library Orientation. Final Report.	ED105882

Purpose Category 3: Evaluation for continuation decisions

Bravo, Anne	An Evaluation of the Urban Education Program "Multi-Sensory Stations Program." District 10, New York City Board of Education.	ED059024
Brightman, Richard W.	Computer Assisted Instruction Program for Police Training.	ED067858
Brown, Edward K.	The Nongraded Program at the Powell Elementary School: Evaluative Phase II.	ED049298
Dallman, Brian E. and others	Evaluation of PLATO IV in Vehicle Maintenance Training.	ED153638
Dunn, Alex, Ed. and others	Computer-Assisted Instruction Program. A Three Year Report Covering July 1, 1971 through June 30, 1974.	ED100361

Author(s)	Title	Accession No.
Eastmond, Nick	Instructional Development under the Microscope: Perceptions of Faculty Members.	ED112882
	An Evaluation of Educational Media Programs in Kansas Unified School Districts.	ED070291
	A Feasibility Study of Computer Assisted Instruction in U. S. Army Basic Electronics Training. Final Report.	ED095923
	Individually Guided Education (IGE) Program. 1974-1975 Final Report.	ED154493
	Initial Evaluation of Operation Wordpower.	ED041977
Litman, George H.	CAI in Chicago.	ED087423
Longo, Alexander A. and Giunti, Frank E.	A Sequential Evaluation of Computer Assisted Instruction in U. S. Army Basic Electronics Training.	ED082472
Moodie, Allan G.	An Evaluation of the "Drugs Are Like That" Program.	ED077951
Murphy, Richard T. and Appel, Lola Rhea	Evaluation of the PLATO IV Computer-Based Education System in the Community College. Final Report.	ED146235
O'Keefe, Ruth Ann	Reports on the STARTER/101 Pilot Project in the Reading Center of the D. C. Public Schools.	ED045316
Palmer, Henry	Three Evaluation Reports of Computer Assisted Instruction in Drill-and-Practice Mathematics.	ED087422
Rowell, John and Heidbreder, M. Ann	Educational Media Selection Centers. Identification and Analysis of Current Practices.	ED050545

Author(s)	Title	Accession No.
Rubin, Martin L. and others	Evaluation of the Experimental CAI Network (1973-1975) of the Lister Hill National Center for Biomedical Communications, National Library of Medicine. Final Report No. ED-75-1.	ED115225
Stice, James E.	Expansion of Keller Plan Instruction in Engineering and Selected Other Disciplines: A Final Report.	ED122723
Stocker, H. Robert and others	MOE: A Progress Report on Mobile Simulation.	EJ028863
Tamir, P. and Amir, R.	Teaching Science to First and Second Grade Pupils in Israel by the Audio-Tutorial Method.	EJ121403
	Visual Concepts Program: An Evaluation Report.	ED129872
Williams, Frederick and others	Carrascolendas: National Evaluation of a Spanish/English Educational Television Series. Final Report.	ED078679
Woods, Nancy A.	Instructional Development Services: A Project Evaluation.	ED154886

Purpose Category 4: Evaluation to inform external audiences

All, Stephen A. and Stegeman, William H., Eds.	To Establish, Operate and Maintain Supplementary Educational Services: Instructional Television Experience Development and Distribution. An Evaluation of San Diego Area Instructional Television Authority Educational Program Activities: September 1, 1968 to June 30, 1969.	ED038031
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Author(s)	Title	Accession No.
Altschuld, James W. and others	The Health and Welfare Module: An Evaluation Report for the Occupational Exploration Program.	ED106509
Altschuld, James W. and Pritz, Sandra	Planning Educational Programs: An Evaluation Report for the Occupational Exploration Program.	ED106503
Anastasio, Ernest J.	Survey of Instructor Activities and Attitudes.	ED072071
Anastasio, Ernest J. and Alderman, Donald L.	Evaluation of the Educational Effectiveness of PLATO and TICCIT.	ED088934
Anderson, Beverly L.	Kodiak Island Borough School District Title IV Project. Final Evaluation Report, July 1977.	ED142359
Appel, Marilyn and others	Cognitive and Affective Out- comes in Children as a Function of Participation in SCIL, An Individualized Version of the SCIS Program.	ED097379
Ardi, Dana B.	New Avenues of Teaching Resources--Sesame Street Programs for the Mentally Retarded Child.	ED139197
Bailek, Hilton M. and Castro, Barbra.	A Second Year Evaluation of Individualized Prescribed Instruction (IPI).	ED036157
Ball, Samuel and Bogatz, Gerry Ann	Research on Sesame Street: Some Implications for Compensatory Education.	ED068155
Ball, Samuel and Bogatz, Gerry Ann	Sesame Street Summative Re- search: Some Implications for Education and Child Development.	ED057914
Ball, Samuel and others	The First Year of Sesame Street: An Evaluation. Final Report, Volume III of V Volumes.	ED047823



Author(s)	Title	Accession No.
Ball, Samuel and others	Reading with Television: A Follow-Up Evaluation of the Electric Company.	ED122798
Ball, Samuel and others	Reading with Television: An Evaluation of the Electric Company. A Report to the Children's Television Workshop. Volumes 1 and 2.	ED073178
Banks, Henry A.	Evaluation of an Instructional Program in Training Teachers to Analyze Educational Materials for Possible Racial Bias.	ED090307
Barry, Roger D. and Carter, Robert A.	Evaluation of General Chemistry Slide/Audio-Tape Programs.	ED066124
Bartholomew, Robert and Meyer, Bonnie	Developing and Evaluating Learning Devices for Exceptional Children.	ED132779
Bennie, Frances	Pupil Attitudes toward Individually Prescribed Lab Programs.	EJ085878
Beyer, Barry K. and others	Evaluation of Africa South of the Sahara. An Inquiry Program for Grades 7-10.	ED038545
Blackburn, Susan Fleming	The Construction, the Implementation, and the Evaluation of a Title I Primary Grade Listening Program.	ED127626
Bramble, William J. and others	On the Beam: The Appalachian Education Satellite Project	EJ139835
Bramble, William J. and others	Performance of AESP Transmission/ Reception Equipment: Summer and Fall, 1974 Technical Report No. 5.	ED114063
Brickner, Ann and others	Summative Evaluation of LISTEN LOOK LEARN 2nd Year Students, Cycles R-70, 1968-69.	ED049016
Bunger, Marianna	Two American Studies on Literacy through Television: Operation Alphabet in Florida.	EJ028470
Caldwell, Kathryn S.	The Veterans Administration Experiments in Health Communications on the Applications Technology Satellite (ATS-6). Final Report.	ED119719

Author(s)	Title	Accession No.
Carpenter, C. R. and others	Educational and Instructional Television Facilities Evaluation: Preliminary Practical Procedures.	ED037101
Chitayat, Linda	An Evaluation of Computer-Managed Education Technology at New York City Community College.	ED144524
Clarke, Wentworth	A Research Note on Simulation in the Social Studies.	EJ035774
Collet, Leverne S. and others	Formative and Summative Evaluation of the FEHR-Practicum Training Module. Final Report.	ED131055
Conger, D.; Stuart, Comp. and others	Evaluations of Life Skills Training.	ED108034
Cratty, Bryant J. and Szczepanik, Sister Mark	The Effects of a Program of Learning Games upon Selected Academic Abilities in Children with Learning Difficulties, 1970-1971.	ED057119
Culp, George	Computer-Assisted Instruction in Undergraduate Organic Chemistry Design, Application, and Evaluation. Technical Report 10.	ED072630
Cusano, Bernard	Children Learn to Read through Cooperative Teaching of Paraprofessionals and Teachers.	ED142626
Deihl, Ned C. and Zeigler, Ray H.	Evaluation of Computer-Assisted Instruction in Instrumental Musicianship. Final Report.	ED067897
	Determining the Effects of "Developing Readiness for Pre-School Children via Television": A Title III Project.	ED093484
Devitt, Joseph J.	Do Federally Funded Programs Really Work? The State View.	EJ078922
Dougherty, Knowles and Herbert, Martin	Evaluation Report 2-A-1. Final Summary Report, Year 2.	ED142439



Author(s)	Title	Accession No.
Durward, M. Lynne	The Evaluation of Computer-Based Instruction in Vancouver Secondary Schools.	ED088919
Ellson, Douglas G. and others	The Tech Programme: A Self-Instructional Programme for English Listening Comprehension. Final Report.	ED084929
Engler, Nick	An A for AESP.	EJ184030
	Evaluation of and Information Concerning Individually Prescribed Instruction in Mathematics (IPI): 1967-1968, Friends School, Wilmington, Delaware.	ED036161
	An Evaluation of the Instructional Television Program Basic Education: Teaching the Adult.	ED128579
	An Experimental Approach to Developing Model Programs for Early Childhood Education. Final Report.	ED088559
Fisher, Kathleen M. and others	The Effectiveness of Video-Autotutorial Instruction for a Very Large Enrollment University Course in Science.	ED143694
Flaugher, Ronald L. and Knapp, Joan	Report on Evaluation Activities of the Bread and Butterflies Project.	ED097921
Fletcher, J. D. and Atkinson, R. C.	Evaluation of the Stanford CAI Program in Initial Reading.	EJ068074
Ford, John D., Jr. and Slough, Dewey A.	Development and Evaluation of Computer Assisted Instruction for Navy Electronics Training. 1. Alternating Current Fundamentals.	ED042950
Fruchter, Dorothy A. and Higginson, George M.	An Evaluation Report of Project INTERACT: A Teacher Inservice Training Course on Career Education Using Two-Way TV in Texas to Several Groups Simultaneously.	ED110076

Author(s)	Title	Accession No.
Goolsby, Thomas M., Jr. and Stoltman, Joseph P.	Report on an Individualized Reading Skills and Social Science Program in Progress.	ED069654
Graf, David L.	An Evaluation of the Educational Media Service Programs in the Universities of the Big Eight Conference.	ED130630
Grant, William D. and Clark, Norma	A National Survey of Current and Anticipated Media Equipment in Residential and Day Programs for the Hearing Impaired.	ED100073
Gropper, George L.	Development of Course Content and Instructional Materials/Aids for the Training of Educational Research, Development, Diffusion, and Evaluation Personnel. Supplementary Final Report.	ED085349
Hall, Keith A. and others	The Development, Implementation and Evaluation of a Pilot Program of Computer-Assisted Instruction for Urban High Schools: General Mathematics and Algebra I. Summary Report.	ED076053
	Helping Leaders Help Youth. An Evaluation Report of a Program for Illinois Volunteer 4-H Leaders, 1973-75.	ED141000
Hezel, Richard T. and Neubert, Nancy Malecek	The Allegheny Educational Broadcast Council: Instructional Television in Central Pennsylvania.	ED156168
Hornik, Robert C. and others	Television and Educational Reform in El Salvador. Final Report.	ED084810
	Individually Guided Education: Description of IGE. Evaluating Instructional Systems.	EJ092657
	Individually Prescribed Instruction: Developmental Phase. Evaluating Instructional Systems.	EJ092658
	Instructional Materials in Manufacturing for Junior High School Industrial Arts. Final Report and Parts I-IV.	ED065731

Author(s)	Title	Accession No.
Ixonside, Roderick A.	The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools. -A Process Evaluation.	ED066623
Johnson, Bruce A. and Pierce, John	Research Brings Proof of Value, Future Direction to Sales Training.	EJ105447
Johnson, Lary and Ostrum, Donald R.	Second Year Evaluation, IPI Mathematics Project: Hall School, 1970-71.	ED067874
Johnson, Lary	Minneapolis IPI Mathematics Project 1971-72: Third Year Evaluation. A Title I ESEA Project.	ED083290
Johnson, Lary	The Fourth Year of IPI Mathematics at Minneapolis Hall School: 1972-73. A Title I ESEA Project.	ED114430
Kastner, Sheldon	Skin, Scale, Feather, and Fur.	ED141486
Kidder, Steven J. and Guthrie, John T.	The Training Effects of a Behavior Modification Game.	ED057613
Klecka, Joseph A.	An Overview of Chanute Lessons.	ED140776
Klein, Stephen P. and others	A Progress Evaluation of Four Bilingual Children's Television Shows.	ED109260
Kreimer, Osvaldo and others	Health Care and Satellite Radio Communication in Village Alaska. Final Report of the AIS-1 Biomedical Satellite: Experiment Evaluation.	ED094721
Kulm, George	The Effects of the Two Summative Evaluation Methods on Achievement and Attitudes in Individualized Seventh-Grade Mathematics.	ED090279
Lambrecht, Judith J. and others	An Evaluation Through Field Testing of Individualized Instruction Materials in Wisconsin Post-Secondary Institutes. Final Report and Appendices.	ED069851

Author(s)	Title	Accession No.
Laosa, Luis M.	Carrascolendas: A Formative Evaluation.	ED090968
Lasater, Mary Beth	Design and Evaluation of a CAI Program in Chemical Equilibrium. Technical Report Number 8.	ED073613
Levine, Hard G. and others	Evaluation of a Modularized System of Instruction in Pediatrics.	EJ155315
Lysiak, Pae and others	Computer Assisted Instruction. 1975-76 Evaluation Report. A Title I Program. Revised.	ED140495
McGuigan, F. J. and others	A National Field-Test of Selected Programmed Reading Materials for Undereducated Adults. Center Research Monograph No. 3.	ED109594
Mack, Herschel and Littlejohn, Stephen	PSI as an Approach to the Teaching of Empirical Research Methods.	ED149408
McKeown, James G.	PLATO Instruction for Elementary Accounting.	ED123467
Mays, Luberta and others	An Evaluation Report on Vegetable Soup: The Effects of a Multi-Ethnic Children's Television Series on Intergroup Attitudes of Children.	ED120204
Mock, Ronald L. and others	Northern California Post-graduate Medical Television: An Evaluation.	EJ015978
Moench, Laurel	The Effectiveness of an Individually-Organized Computer-Managed Program (PLAN) with Educationally Disadvantaged Students in Middle Elementary Grade Mathematics.	ED121874
Mohrmann, Jeanne and Wise, Wilmer E.	Evaluation of Closed Circuit Educational Television in Delaware: Emphasis on Utilization, Program Series Content, and Commitment. Preliminary Report.	ED038033

Author(s)	Title	Accession No.
Miller, Leonard A. and others	Studies in Continuing Education for Rehabilitation Counselors. Report No. 3, October 1971.	ED134850
	Missouri Environmental Studies Approach (MESA) Interim Evaluation Report. July 1, 1972 - June 30, 1973.	ED093895
Nolan, Jeanne and Gross, John	Mulligan Stew: An Evaluation of the Television Series.	ED105889
O'Bryan, K. G. and others	Quest into Matter. Final Report.	ED116690
	One Nation, Indivisible? A Summary of Evaluation Findings.	ED045460
Paden, Donald W. and others	A Decade of Computer-Assisted Instruction.	EJ174487
Paden, Jon S.	How Is ICE Doing in the Elementary Schools? A Four-Year Survey of ICE Principals.	ED144221
Peterson, Betty L.	A Comparison between Achievement Gains in Multimedia Instruction and Conventional Lecture Method of Instruction of Nursing Courses at Northern Virginia Community College.	ED129282
	Phase I Report. Economic Analysis Course.	ED073657
Piper, Richard M. and Shoemaker, David M.	Formative Evaluation of a Kindergarten Music Program Based on Behavioral Objectives.	EJ081153
	Pre-Kindergarten Prescriptive Teaching Program for Disadvantaged Children. Pre-School Program 1972-73: End of the Year Evaluation.	ED091061
	Program for Learning in Accordance with Needs: Developmental Phase. Evaluating Instructional Systems.	EJ092656

Author(s)	Title	Accession No.
Reeback, Robert T. and Osterreich, Helgi	Progress Report on the Oral Language Program.	ED056578
	Research and Evaluation of Computer-Based Resource Units.	ED073589
Roman, Richard A.	The Word Problem Program: Summative Evaluation.	ED113212
St. Aubin, Raymond	Evaluation of C.A.I. as Used by Various Handicaps.	ED136775
Samuels, Bruce, Comp.	The First Year of Sesame Street: A Summary of Audience Surveys. Final Report, Volume IV of V Volumes.	ED047824
Sasscer, Monica Flynn	1976-77 TICCIT Project. Final Report.	ED148430
Scheier, Elaine and Senter, Donald R.	Evaluation of Learning 100: ABC Center, White Plains, N.Y. January - June, 1968.	ED036718
	Science Programming and the Audiences for Public Tele- vision: An Evaluation of Five Programs in the NET "Spectrum" Series.	ED034933
Shapiro, Bernadette Nelson	Comprehension of Television Programming Designed to Encour- age Socially Valued Behavior in Children: Formative Research on "Sesame Street" Programming with Social and Affective Goals.	ED122863
Shapiro, Sydelle Stone	An Evaluation of the Mulligan Stew 4-H Television Series for Extension Service, USDA. Volume I: Executive Summary.	ED134618
Sharman, Heather and Dorward, George	Evaluation of the Manitoba Schools Computer Network.	EJ119715
Silverstein, Leonard	Project Turnabout, School Year 1975-1976.	ED142640

Author(s)	Title	Accession No.
Singer, Frank A.	Self-Instructional Materials for Topics in Elementary Accounting--A Means to the Demonstration of Pay-Offs from Individualizing Time-to-Complete. Final Report.	ED082291
	State Wide Demonstration-Dissemination of Drug Education Materials through a Training Center and Local School Workshop Experiences. Narrative Evaluation.	ED151649
Stefanides, Gilbert Albert	An Evaluation of Achievement and Attitudes of Students and Teachers Using an Individualized Spelling Approach.	ED127613
Stice, James E.	Seventeen PSI Projects at the University of Texas at Austin.	ED108665
	A Summary of the Formative Research Conducted on Pilot Shows 02 and 03 Produced by Bilingual Children's Television.	ED086180
Tatham, Elaine L. and others	Evaluation of College Learning Center Instruction in Six Subject Areas, Spring 1975.	ED110141
Thompson, John F. and others	Evaluation of Educational Television in University Extension Youth Programming.	ED044639
	Topical Modules in Secondary Mathematics. Final Project Report.	ED107478
Trojcak, Doris A.	Training in Programming Instruction and Student Achievement.	EJ100017
VanWart, Geraldine	Carrascolendas: Evaluation of a Spanish/English Educational Television Series within Region XIII. Final Report. Evaluation Component.	ED092089
Vaughn, John W. and Duncan, Robert C.	Evaluation of Merrimack Education Center's Project League 1973.	ED114367



Author(s)	Title	Accession No.
Vinci, Thomas G. and DeVita, Christina	An Evaluation of the State Urban Education Program "Living Science Center" District 10, New York City Board of Education.	ED059881
	Vocabulary Development Project. Evaluation Report 2.	ED059838
	Vocational Campus Multimedia Learning Laboratory Program- Extension. VEA Project Number 72-2-179 Final Report.	ED079476
Weinstein, Sanford	Diagnostic and Remediation Program to Ameliorate the Reading Disabilities of JHS CRMD Pupils, February-June, 1975. Evaluation Report.	ED136487
Weiss, James	More Advanced Reading Develop- ment, 1975-76 School Year.	ED142631
Williams, Frederick and Natalicio, Diana S.	Evaluating Carrascolendas: A Television Series for Mexican- American Children.	ED062367
Williams, William Watts	An Experimental Investigation of Individualized Instruction in the Teaching of Quantitative Physical Science.	ED052015
Wolf, Judith G. and Sylves, David	Evaluation of a Bilingual Tele- vision Series Villa Alegre: Final Report.	ED103511
Wolvek, Joseph	Bread and Butterflies: Evalu- ation of the IEBN-DPI Iowa Educational Broadcasting Net- work--Department of Public Instruction 1974-75 Inservice Training Workshops.	ED114493
Wood, Dean A.	The Development and Diagnostic Evaluation of the Monte Carlo Integration Computer as a Teaching Aid.	ED065303
Zachert, Martha Jane K. and Pantelidis, Veronica	SIBE: A Sequential In-Basket Exercise Technique.	ED056469



Purpose Category 5: Evaluation to inform policy development

Kaufman, Maurice	The Effect of the DISTAR Instructional System: An Evaluation of the 1973-1974 Title I Program of Winthrop, Massachusetts.	ED110170
Martin, Thomas H. and others	A Policy Assessment of Priorities and Functional Needs for the Military Computer-Assisted Instruction Terminal.	ED116672
	Media Implementation through Teamed Supervision. Evaluation: Title Three, ESEA.	ED049598
Petty, Bruce Alan	An Evaluation of Selected Instructional Media Programs in Kansas Colleges and Universities.	ED070290
Pinsky, Paul D.	Achievement Monitoring of Individually Paced Instruction. Final Report.	ED092175

Purpose Category 6: Evaluation to build theory

Amarel, Marianne and others	The Introduction of Innovative Instructional Systems: Implementation and Program Evaluation. Section 1. The Practitioner: Selection, Training, and Program Evaluation: Section 2. Degree of Implementation and Classroom Observation.	ED118619
Fehrle, Carl C.	Individualized Prescribed Instruction: A Critique.	ED041462
Felsenthal, Norman A.	Sesame Street: Socialization by Surrogate.	ED105987
Fowles, Barbara R.	Black and White and Read All Over: Acquiring Literacy in Two Media.	ED126941

<u>Author(s)</u>	<u>Title</u>	<u>Accession No.</u>
Gailitis, Maris M.	The Costs of Information Retrieval Television. A Case Study in the Cost-Effectiveness of Educational Media.	ED073706
Gohring, Ralph and Chiarelott, Leigh	The Use of a Simulation Game to Assess and Influence the Leadership Styles of Elementary Principals: The Principal Game.	ED137362
Jacobsen, David A. and Gerlach, Vernon S.	A Comparison of the Effects of Textual and Televised Modes of Instruction in Teacher Education.	ED074773
Klausmeier, Herbert J. and others	A Report on the Utilization of Individually Guided Motivation. Technical Report No. 388.	ED134559
Leinhardt, Gaea	Program Evaluation: An Empirical Study of Individualized Instruction.	ED131092
Olien, C. N. and others	A Systems Evaluation of a Purposive Message: The "Mulligan Stew" ETV Project.	ED122794
Ronan, Franklin Delano	A Study of the Effectiveness of a Computer When Used as a Teaching and Learning Tool in High School Mathematics.	ED072615
Suppes, Patrick and Morningstar, Mona	Computer-Assisted Instruction at Stanford, 1966-68: Data, Models, and Evaluation of the Arithmetic Programs.	ED070246
Yamamoto, Toru	Sesame Street around the World: The Japanese Experience.	EJ139255

Purpose Category 7: Evaluation to sell or justify materials

Buffer, James J. and others	A Junior High School Industrial Technology Curriculum Project: A Final Evaluation of the Industrial Arts Curriculum Project (IACP), 1965-1971.	ED054389
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Author(s)	Title	Accession No.
Ross, Harvey L.	An Evaluation of the Effectiveness of the Allen Teaching Machine at the Federal Correctional Institution, Lompoc, California. Final Report.	ED043830

Purpose Category 8: Miscellaneous

Doyle, Charles P. and Fenton, Dorothy	Teacher Involvement as Correlated to Degree of Acceptance of In-Service Television Programs.	EJ051764
Freedman, Morris	New York City's Decentralized Media Program.	EJ104574
Herbert, Budd	The New Town Game: An Evaluation Based on Instructional Experience.	EJ069844
Kline, James A.	Evaluation of a Multimedia Drug Education Program.	EJ066205
Matthews, Bonnye L.	Training More Employees for Less Money.	EJ167245
Peerson, Nell	Two American Studies on Literacy Through Television: A Television Experiment in Alabama.	EJ028469

## FOCUS OF THE EVALUATIONS

Having identified various purposes for conducting evaluations of instructional technology programs and materials, the researcher sought to identify the focus of these evaluations. That is, what kinds of media or procedures were being evaluated? This classification should be useful for those people seeking information about the results of evaluations directed at a certain kind of medium or pedagogical strategy, and for those looking for methods useful in evaluating a given medium.

The categories in this classification were derived from the citations themselves. Once again, the researcher reviewed the title and abstract of each citation previously judged to be a report of an evaluation study. The initial classification scheme for focus in Figure 1 was modified as a result of a review of the citation abstracts.

Twenty-eight (28) of the citations did not contain sufficient information to determine the focus of the evaluation study. Sixteen categories were included in the "Focus" classification. These categories, together with the number of citations germane to each, are as follows:

Category 1:	Radio	( 1 citation)
Category 2:	Television/video	(51 citations)
Category 3:	Computer assisted instruction	(39 citations)
Category 4:	Computer managed instruction	( 4 citations)
Category 5:	Slide/tape programs	(23 citations)
Category 6:	Audiotape programs	( 1 citation)
Category 7:	Programmed instruction	( 6 citations)
Category 8:	Audio-tutorial	( 3 citations)
Category 9:	Satellites	( 5 citations)
Category 10:	Print (texts, etc.)	( 6 citations)
Category 11:	Simulation/games	(12 citations)
Category 12:	Use of computers for administration/evaluation	( 4 citations)
Category 13:	Multi-media programs (other than slide/tape)	(21 citations)
Category 14:	Film	( 3 citations)
Category 15:	Microfiche	( 1 citation)
Category 16:	Individualized instruction programs (e.g., IPI, ICE, etc.)	(37 citations)

Television, computer-assisted instruction, individualized instruction systems, and various multi-media programs or packages dominated the

focus of the evaluation studies included in this review. Sesame Street and The Electric Company were the television programs most frequently evaluated, as might be expected from the vast population these programs reach. PLATO tended to be the focus of many of the CAI programs being evaluated. IPI and IGE were the focus of many evaluation studies as well.

While caution must be exercised in drawing conclusions from the distribution of evaluation studies across focus areas, it is tempting to infer that attention during the late 1960's and early-to-middle 1970's has been given primarily to high-technology educational approaches within the instructional technology community. This distribution may reflect little more than the distribution of available R & D funds, and the relative costs of utilizing the various technological approaches at our disposal. Whatever the reasons, the focus of evaluation efforts, as reflected in studies of instructional technology in ERIC, is clear.

Author(s), title, and accession numbers of citations classified by evaluation focus follow.

<u>Author(s)</u>	<u>Title</u>	<u>Accession No.</u>
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Focus Category 1: Radio

Vocabulary Development Project.	ED059838
Evaluation Report 2.	

Focus Category 2: Television

Adler, Leta McKinney and others	Evaluation of Programmed In- struction Techniques in Medical Interviewing. Final Report, June 15, 1966 to June 15, 1968.	ED059345
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Author(s)	Title	Accession No.
All, Stephen A. and Stegeman, William H., Eds.	To Establish, Operate and Maintain Supplementary Educational Services: Instructional Television Experience Development and Distribution. An Evaluation of San Diego Area Instructional Television Authority Educational Program Activities: September 1, 1968 to June 30, 1969.	ED038031
Ardi, Dana B.	New Avenues of Teaching Resources--Sesame Street Programs for the Mentally Retarded Child.	ED139197
Ball, Samuel and Bogatz, Gerry Ann	Research on Sesame Street: Some Implications for Compensatory Education.	ED068155
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Ball, Samuel and others	The First Year of Sesame Street: An Evaluation. Final Report, Volume III of V Volumes.	ED047823
Ball, Samuel and others	Reading with Television: An Evaluation of the Electric Company. A Report to the Children's Television Workshop. Volumes 1 and 2.	ED073178
Ball, Samuel and others	Reading with Television: A Follow-Up Evaluation of the Electric Company.	ED122798
Bunger, Marianna	Two American Studies on Literacy Through Television: Operation Alphabet in Florida.	EJ028470
Carpenter, C. R. and others	Educational and Instructional Television Facilities Evaluation: Preliminary Practical Procedures.	ED037101



Author(s)	Title	Accession No.
	Determining the Effects of "Developing Readiness for Pre-School Children via Television": A Title III Project.	ED093484
Doyle, Charles P. and Fenton, Dorothy	Teacher Involvement as Correlated to Degree of Acceptance of In-Service Television Programs.	EJ051764
	An Evaluation of the Instructional Television Program Basic Education: Teaching the Adult.	ED128579
Felsenthal, Norman A.	Sesame Street. Socialization by Surrogate.	ED105987
Fisher, Kathleen M. and others	The Effectiveness of Video-Autotutorial Instruction for a Very Large Enrollment University Course in Science.	ED143694
Flaughter, Ronald L. and Knapp, Joan	Report on Evaluation Activities of the Bread and Butterflies Project.	ED097921
Fowles, Barbara R.	Black and White and Read All Over: Acquiring Literacy in Two Media.	ED126941
Fruchter, Dorothy A. and Higginson, George M.	An Evaluation Report of Project INTERACT: A Teacher Inservice Training Course on Career Education Using Two-Way TV in Texas to Several Groups Simultaneously.	ED110076
Gaddis, G. Warren	Evaluation of Televised Electronics Instruction Program.	ED086186
Gailitis, Maris M.	The Costs of Information Retrieval Television. A Case Study in the Cost-Effectiveness of Educational Media.	ED073706
Hezel, Richard T. and Neubert, Nancy Malecek	The Allegheny Educational Broadcast Council: Instructional Television in Central Pennsylvania.	ED156168



Author(s)	Title	Accession No.
Hornik, Robert C. and others	Television and Educational Reform in El Salvador. Final Report.	ED084810
Hsia, Jayjia and Strand, Theresa	WTTW-ESSA Television Pilot, "TCR '77," : Formative Evaluation.	ED129889
Jacobsen, David A. and Gerlach, Vernon S.	A Comparison of the Effects of Textual and Televised Modes of Instruction in Teacher Education.	ED074773
Klein, Stephen P. and others	A Progress Evaluation of Four Bilingual Children's Television Shows.	ED109260
Laosa, Luis M.	Carrascolendas: A Formative Evaluation.	ED090968
Liebert, Roland J.	"The Electric Company" In-School Utilization Study. Volume Two: The 1972-73 School and Teacher Surveys and Trends since Fall 1971.	ED094775
Mays, Luberta and others	An Evaluation Report on Vegetable Soup: The Effects of a Multi-Ethnic Children's Television Series on Intergroup Attitudes of Children. Precís and Overview.	ED120204
Mock, Ronald L. and others	Northern California Postgraduate Medical Television: An Evaluation.	EJ015978
Mohrmann, Jeanne W. and Wise, Wilmer E.	Evaluation of Closed Circuit Educational Television in Delaware: Emphasis on Utilization, Program Series Content, and Commitment. Preliminary Report.	ED038033
Nolan, Jeanne and Gross, John	Mulligan Stew: An Evaluation of the Television Series.	ED105889
O'Bryan, K. G.	Monkey Bars Research Report. Report No. 46.	ED098974

Author(s)	Title	Accession No.
O'Bryan, K. G. and others	Quest into Matter. Final Report.	ED116690
Olien, C. N. and others	A Systems Evaluation of a Purposive Message: "The Mulligan Stew" ETV Project.	ED122794
	One Nation, Indivisible? A Summary of Evaluation Findings.	ED045460
Peerson, Nell	Two American Studies on Literacy through Television: A Television Experiment in Alabama.	EJ028469
Radlick, Michael S. and O'Reilly, Robert P.	Learning from Television: A Television Based Learning System as a Capable School Resource.	ED129254
Rockman, Saul and Auh, Taiksup	Formative Evaluation Report of Self Incorporated Programs.	ED119712
Samuels, Bruce, Comp.	The First Year of Sesame Street: A Summary of Audience Surveys. Final Report, Volume IV of V Volumes.	ED047824
	Science Programming and the Audiences for Public Television: An Evaluation of Five Programs in the NET "Spectrum" Series.	ED034933
Shapiro, Bernadette Nelson	Comprehension of Television Programming Designed to Encourage Socially Valued Behavior in Children: Formative Research on "Sesame Street" Programming with Social and Affective Goals.	ED122863
Shapiro, Sydelle Stone and others	An Evaluation of the Mulligan Stew 4-H Television Series for Extension Service, USDA. Volume I: Executive Summary.	ED134618
	A Summary of the Formative Research Conducted on Pilot Shows 02 and 03 Produced by Bilingual Children's Television.	ED086180

Author(s)	Title	Accession No.
Thompson, John F. and others	Evaluation of Educational Television in University Extension Youth Programming.	ED044639
Valencia, Atilano A.	The Relative Effectiveness of Three Video Oral English Instructional Conditions for Illiterate or Undereducated Non-English Speaking Adults, Spanish Speaking Adults. A Report of Statistical Findings and Recommendations Based on a Field Testing Study.	ED050615
VanWart, Geraldine	Carrascolendas: Evaluation of a Spanish/English Educational Television Series within Region XIII. Final Report. Evalu- tion Component.	ED092089
Williams, Frederick and Natalicio, Diana S.	Evaluating Carrascolendas: A Television Series for Mexican- American Children.	ED062367
Williams, Frederick and others	Carrascolendas: National Evalu- ation of a Spanish/English Educational Television Series. Final Report.	ED078679
Wolf, Judith G. and Sylves, David	Evaluation of a Bilingual Tele- vision Series Villa Alegre: Final Report.	ED103511
Wolvek, Joseph	Bread and Butterflies: Evalu- ation of the IEBN-DPI Iowa Educational Broadcasting Net- work--Department of Public Instruction 1974-75 Inservice Training Workshops.	ED114493
Yamamoto, Toru	Sesame Street around the World: The Japanese Experience.	EJ139255

Focus Category 3: Computer assisted instruction

Amarel, Marianne and others	The Introduction of Innovative Instructional Systems: Imple- mentation and Program Evaluation; Section 1. The Practitioner: Se- lection, Training, and Program Eval- uation. Section 2. Degree of Imple- mentation and Classroom Observation.	ED118619
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Author(s)	Title	Accession No.
Anastasio, Ernest J.	Survey of Instructor Activities and Attitudes.	ED072071
Anastasio, Ernest J. and Alderman, Donald L.	Evaluation of the Educational Effectiveness of PLATO and TICCIT.	ED088934
Brightman, Richard W.	Computer Assisted Instruction Program for Police Training.	ED067858
Caldwell, Robert M.	Literacy Development Using a Programmed Text and Computer Assisted Instruction.	ED089216
	Computer Aided Learning Project: Report, Trial 3.	ED129281
Culp, George	Computer-Assisted Instruction in Undergraduate Organic Chemistry: Design, Application, and Evaluation. Technical Report 10.	ED072630
Dallman, Brian E. and others	Evaluation of PLATO IV in Vehicle Maintenance Training.	ED153638
Deihl, Ned C. and Zeigler, Ray H.	Evaluation of Computer-Assisted Instruction in Instrumental Musicianship. Final Report.	ED067897
Dunn, Alex and others, Eds.	Computer-Assisted Instruction Program. A Three Year Report Covering July 1, 1971 through June 30, 1974.	ED100361
Durward, M. Lynne	The Evaluation of Computer-Based Instruction in Vancouver Secondary Schools.	ED088919
	A Feasibility Study of Computer Assisted Instruction in U. S. Army Basic Electronics Training. Final Report.	ED095923
Ford, John D., Jr. and Slough, Dewey A.	Development and Evaluation of Computer Assisted Instruction for Navy Electronics Training. 1. Alternating Current Fundamentals.	ED042950
Hall, Keith A. and others	Inservice Mathematics Education for Elementary School Teachers via Computer-Assisted Instruction (California). Interim Report.	ED076043

Author(s)	Title	Accession No.
	Initial Evaluation of Operation Wordpower.	ED041977
Klecks, Joseph A.	An Overview of Chanute Lessons.	ED140776
Lasater, Mary Beth	Design and Evaluation of a CAI Program in Chemical Equilibrium. Technical Report Number 8.	ED073613
Longo, Alexander A.	A Summative Evaluation of Computer Assisted Instruction in U. S. Army Basic Electronics Training. Technical Report.	ED074699
Longo, Alexander A. and Giunti, Frank E.	A Sequential Evaluation of Computer Assisted Instruction in U. S. Army Basic Electronics Training.	ED082472
Lysiak, Fae and others	Computer Assisted Instruction. 1975-76 Evaluation Report. A Title I Program. Revised.	ED140495
McKeown, James C.	PLATO Instruction for Elementary Accounting.	ED123467
Martin, Thomas H. and others	A Policy Assessment of Priorities and Functional Needs for the Military Computer-Assisted Instruction Terminal.	ED116672
Mitzel, Harold E. and others	A Commonwealth Consortium to Develop, Implement and Evaluate a Pilot Program of Computer-Assisted Instruction for Urban High Schools.	ED059604
Murphy, Richard T. and Appel, Lola Rhea	Evaluation of the PLATO IV Computer-Based Education System in the Community College. Final Report.	ED146235
Paden, Donald W. and others	A Decade of Computer-Assisted Instruction.	EJ174487
Palmer, Henry	Three Evaluation Reports of Computer Assisted Instruction in Drill-and-Practice Mathematics.	ED087422

<u>Author(s)</u>	<u>Title</u>	<u>Accession No.</u>
Roman, Richard A.	The Word Problem Program: Summative Evaluation.	ED113212
Romaniuk, E. W.	A Summative Evaluation of the CAI Course "Comps."	ED153604
Ronan, Franklin Delano	A Study of the Effectiveness of a Computer When Used as a Teaching and Learning Tool in High School Mathematics.	ED072615
Rubin, Martin L. and others	Evaluation of the Experimental CAI Network (1973-1975) of the Lister Hill National Center for Biomedical Communications, National Library of Medicine. Final Report No. ED-75-1.	ED115225
St. Aubin, Raymond	Evaluation of C.A.I. as Used by Various Handicaps.	ED136775
Sasscer, Monica Flynn	1976-77 TICCIT Project. Final Report.	ED148430
Sharman, Heather and Dorward, George	Evaluation of the Manitoba Schools Computer Network.	EJ119715
Suppes, Patrick and Morningstar, Mona	Computer-Assisted Instruction at Stanford, 1966-68: Data, Models, and Evaluation of the Arithmetic Programs.	ED070246
Tira, Daniel Edward	An Introduction to the Theory and Application of the Product- Moment Family of Correlations via a Computer Assisted Instruc- tional System.	ED052627
Wood, Dean A.	The Development and Diagnostic Evaluation of the Monte Carlo Integration Computer as a Teaching Aid.	ED065303
Zachert, Martha Jane K. and Pantelidis, Veronica	SIBE: A Sequential In-Basket Exercise Technique.	ED056469

Focus Category 4: Computer managed instruction

Chitayat, Linda	An Evaluation of Computer-Managed Education Technology at New York City Community College.	ED144524
Fletcher, J. D. and Atkinson, R. C.	Evaluation of the Stanford CAI Program in Initial Reading.	EJ068074
Coolsby, Thomas M., Jr. and Stoltman, Joseph P.	Report on an Individualized Reading Skills and Social Science Program in Progress.	ED069654
Hall, Keith A. and others	The Development, Implementation and Evaluation of a Pilot Program of Computer-Assisted Instruction for Urban High Schools: General Mathematics and Algebra I. Summary Report.	ED076053
Moench, Laurel	The Effectiveness of an Individually-Organized Computer-Managed Program (PLAN) with Educationally Disadvantaged Students in Middle Elementary Grade Mathematics.	ED121874
	Program for Learning in Accordance with Needs: Developmental Phase. Evaluating Instructional Systems.	EJ092656

Focus Category 5: Slide/tape

Barry, Roger D. and Carter, Robert A.	Evaluation of General Chemistry Slide/Audio-Tape Programs.	ED066124
Uthe, Elaine F.	Assessing the Teaching Effectiveness of an Audio-Visual Program Relating to the Intensive Office Program in Business Education.	ED155191



Author(s)	Title	Accession No.
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Focus Category 6: Audiotape

Ellison, Douglas G. and others	The Tech Programme: Self-Instructional Programme for English Listening Comprehension. Final Report.	ED084929
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Focus Category 7: Programmed instruction

Gropper, George L.	Development of Course Content and Instructional Materials/Aids for the Training of Educational Research, Development, Diffusion, and Evaluation Personnel. Supplementary Final Report.	ED085349
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Kumro, Thomas and Camp, William L.	Applying Programmed Instruction.	EJ049093
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Lenn, Peter D. and Maser, Thomas F. /	Computer Assisted/Programmed Instruction on the Law. Final Report.	ED058724
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McGuigan, F. J. and others	A National Field-Test of Selected Programmed Reading Materials for Undereducated Adults. Center Research Monograph No. 3.	ED109594
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Moriber, George	The Effects of Programmed Instruction in a College Physical Science Course for Non-science Students.	EJ013595
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Singer, Frank A.	Self-Instructional Materials for Topics in Elementary Accounting--A Means to the Demonstration of Pay-Offs from Individualizing Time-to-Complete. Final Report.	ED082291
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Focus Category 8: Audio-tutorial

Ross, Harvey L.	An Evaluation of the Effectiveness of the Allen Teaching Machine at the Federal Correctional Institution, Lompoc, California. Final Report.	ED043830
Stevens, R. and others	AIMLO: Auto-Instructional Media for Library Orientation. Final Report.	ED105882
Tamir, P. and Amir, R.	Teaching Science to First and Second Grade Pupils in Israel by the Audio-Tutorial Method.	EJ121403

Focus Category 9: Satellites

Bramble, William J. and others	On the Beam: The Appalachian Education Satellite Project.	EJ139835
Bramble, William J. and others	Performance of AESP Transmission/Reception Equipment: Summer and Fall, 1974 Technical Report No. 5.	ED114063
Caldwell, Kathryn S.	The Veterans Administration Experiments in Health Communications on the Applications Technology Satellite (AT-6). Final Report.	ED119719
Engler, Nick	An A for AESP.	EJ184030
Kreimer, Osvaldo and others	Health Care and Satellite Radio Communication in Village Alaska. Final Report of the ATS-1 Biomedical Satellite: Experiment Evaluation.	ED094721

Author(s)	Title	Accession No.
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Focus Category 10: Print (texts, etc.)

Baker, Eva L.	Practicum for Instructional Developers. Final Report.	ED098266
Banks, Henry A.	Evaluation of an Instructional Program in Training Teachers to Analyze Educational Materials for Possible Racial Bias.	ED090307
Harlen, Wynne	A Critical Look at the Classical Strategy Applied to Formative Curriculum Evaluation.	EJ131787
	Instructional Materials in Manufacturing for Junior High School Industrial Arts. Final Report and Parts I-IV.	ED065731
O'Keefe, Ruth Ann	Reports on the STARTER/101 Pilot Project in the Reading Center of the D. C. Public Schools.	ED045316
Speedie, Stuart M. and Sanders, Susan	Data Management & Decision Making. Technical Report No. 14.	ED135058

Focus Category 11: Simulation/games

Altschuld, James W. and Pritz, Sandra	Planning Educational Programs: An Evaluation Report for the Occupational Exploration Program.	ED106503
Altschuld, James W. and others	The Health and Welfare Module: An Evaluation Report for the Occupational Exploration Program.	ED106509
Bartholomew, Robert and Meyer, Bonnie	Developing and Evaluating Learning Devices for Exceptional Children.	ED132779

Author(s)	Title	Accession No.
Clarke, Wentworth	A Research Note on Simulation in the Social Studies.	EJ035774
Collett, Leverne S. and others	Formative and Summative Evaluation of the FEHR-Practicum Training Module. Final Report.	ED131055
Crafty, Bryant J. and Szczepanik, Sister Mark	The Effects of a Program of Learning Games upon Selected Academic Abilities in Children with Learning Difficulties, 1970-1971.	ED057119
Gohring, Ralph and Chiarelott, Leigh	The Use of a Simulation Game to Assess and Influence the Leadership Styles of Elementary Principals: The Principal Game.	ED137362
Hébert, Bédé	The New Town Game: An Evaluation Based on Instructional Experience.	EJ069044
Kidder, Steven J. and Guthrie, John T.	The Training Effects of a Behavior Modification Game.	ED057613
Laosa, Luis M. and others	An Evaluation of Non-Formal Education in Ecuador. Volume 3: Findings. Final Report.	ED116881
Scheier, Elaine and Senter, Donald R.	Evaluation of Learning 100: An Adult Basic Education Project in Bedford-Stuyvesant, 1967-68.	ED044551
Stocker, H. Robert and others	MOE: A Progress Report on Mobile Simulation.	EJ028863

Focus Category 12: Use of computers for administration/evaluation

Lewis, Richard F.	A Survey of 1972 Teacher Opinion. Observational Report No. 7217.	ED092101
	Media Implementation through Teamed Supervision. Evaluation: Title Three, ESEA.	ED049588

Author(s)	Title	Accession No.
Pinsky, Paul D.	Achievement Monitoring of Individually Paced Instruction. Final Report.	ED092175
	Research and Evaluation of Computer-Based Resource Units.	ED073589

Focus Category 13: Multi-media programs (other than slide/tape)

Barry, Roger D. and Carter, Robert A.	Evaluation of General Chemistry Slide/Audio-Tape Programs.	ED066124
Branson, Robert K.	Formative Evaluation Procedures Used in Designing a Multi-Media Physics Course.	ED050140
Bravo, Anne	An Evaluation of the Urban Education Program "Multi-Sensory Stations Program." District 10, New York City Board of Education.	ED059024
Brickner, Ann and Senter, Donald R.	Follow-Up Study of LISTEN LOOK LEARN First Year Students Who Used Traditional Basal Programs in Second Year.	ED049018
Brickner, Ann and others	Summative Evaluation of LISTEN LOOK LEARN 2nd Year Students, Cycles R-70, 1968-69.	ED049016
Buffer, James J. and others	A Junior High School Industrial Technology Curriculum Project: A Final Evaluation of the Industrial Arts Curriculum Project (IACP), 1965-1971.	ED054389
Devitt, Joseph	Do Federally Funded Programs Really Work? The State View.	EJ078922
Ellson, Douglas G. and others	The Tech Programme: A Self-Instructional Programme for English Listening Comprehension. Final Report.	ED084929
	An Evaluation of Educational Media Programs in Kansas Unified School Districts.	ED070291

Author(s)	Title	Accession No.
Heflin, Virginia A. and others	The Formative Period of LISTEN LOOK LEARN, a Multi-Media Communication Skills System.	ED049019
	Helping Leaders Help Youth. An Evaluation Report of a Program for Illinois Volunteer 4-H Leaders, 1973-75.	ED141000
Johnson, Bruce A. and Pierce, John	Research Brings Proof of Value, Future Direction to Sales Training.	EJ105447
Kline, James A.	Evaluation of a Multimedia Drug Education Program.	EJ066205
Peterson, Betty L.	A Comparison between Achievement Gains in Multimedia Instruction and Conventional Lecture Method of Instruction of Nursing Courses at Northern Virginia Community College.	ED129282
	Phase I Report. Economic Analysis Course.	ED073657
Scheier, Elaine and Senter, Donald R.	Evaluation of Learning 100: ABC Center, White Plains, N.Y. January-June 1968.	ED036718
Vinci, Thomas G. and DeVita, Christina	An Evaluation of the State Urban Education Program "Living Science Center"-District 10, New York City Board of Education.	ED059881
	Visual Concepts Program: An Evaluation Report.	ED129872
	Vocational Campus Multimedia Learning Laboratory Program-Extension.	ED079476
<u>Focus Category 14: Film</u>		
Kelly, F. Donald and Byrne, Thomas P.	The Evaluation of Filmed Excerpts of Rogers, Perls, and Ellis by Beginning Counselor Trainees.	EJ156778

<u>Author(s)</u>	<u>Title</u>	<u>Accession No.</u>
Moodie, Allan G.	An Evaluation of the "Drugs Are Like That" Program.	ED077951
Sohn, David A. and Stucker, Melinda	Film Study in the Elementary School: Grades Kindergarten through Eight. A Curriculum Report to the American Film Institute.	ED032316

Focus Category 15: Microfiche

Keller, F. Laurence and Rizzo, William A.	An Evaluation of Microfiche Reader Types for Use with Programmed Instruction. Phase I, March 1976-August 1976.	ED128006
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Focus Category 16: Individualized instruction programs

Anderson, Beverly L.	Kodiak Island Borough School District Title IV Project. Final Evaluation Report, July 1977.	ED142359
Appel, Marilyn and others	Cognitive and Affective Outcomes in Children as a Function of Participation in SCIL, an Individualized Version of the SCIS Program.	ED097379
Bailek, Hilton M. and Castro, Barbara	A Second Year Evaluation of Individualized Prescribed Instruction (IPI).	ED036157
Bennie, Frances	Pupil Attitudes toward Individually Prescribed Lab Programs.	EJ085878
Brown, Edward K.	The Nongraded Program at the Powell Elementary School: Evaluative Phase II.	ED049298
	Evaluation of and Information Concerning Individually Prescribed Instruction in Mathematics (IPI): 1967-1968, Friends School, Wilmington, Delaware.	ED036161



Author(s)	Title	Accession No.
	An Experimental Approach to Developing Model Programs for Early Childhood Education. Final Report.	ED088559
Fehrle, Carl C.	Individualized Prescribed Instruction: A Critique.	ED041462
	Individually Guided Education: Description of IGE. Evaluating Instructional Systems.	EJ092657
	Individually Guided Education (IGE) Program. 1974-1975 Final Report.	ED154493
	Individually Prescribed Instruction: Developmental Phase. Evaluating Instructional Systems.	EJ092658
Ironside, Roderick A.	The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools. A Process Evaluation.	ED066623
Johnson, Lary	The Fourth Year of IPI Mathematics at Minneapolis Hall School: 1972-73. A Title I ESEA Project.	ED114430
Johnson, Lary	Minneapolis IPI Mathematics Project 1971-72: Third Year Evaluation. A Title I, ESEA Project.	ED083290
Johnson, Lary and Ostrum, Donald R.	Second Year Evaluation, IPI Mathematics Project: Hall School, 1970-71.	ED067874
Katzenmeyer, Conrad G. and others	Evaluating IGE: An Initial Literature Review and Exploratory Study. Technical Report No. 404.	ED134606
Kaufman, Maurice	The Effect of the DISTAR Instructional System: An Evaluation of the 1972-1973 Title I Program of Winthrop, Massachusetts.	ED110171
Kaufman, Maurice	The Effect of the DISTAR Instructional System: An Evaluation of the 1973-1974 Title I Program of Winthrop, Massachusetts.	ED110170

Author(s)	Title	Accession No.
Klausmeier, Herbert J. and others	A Report on the Utilization of Individually Guided Moti- vation. Technical Report No. 388.	ED134559
Kulm, George	The Effects of the Two Summa- tive Evaluation Methods on Achievement and Attitudes in Individualized Seventh-Grade Mathematics.	ED090279
Lambrecht, Judith J. and others	An Evaluation through Field Testing of Individualized Instruction Materials in Wisconsin Post-Secondary Institutes. Final Report and Appendices.	ED069851
Leinhardt, Gaea	Program Evaluation: An Empir- ical Study of Individualized Instruction.	ED131022
Mack, Herschel and Littlejohn, Stephen	PSI as an Approach to the Teaching of Empirical Re- search Methods.	ED149408
Miller, Leonard A. and others	Studies in Continuing Educa- tion for Rehabilitation Coun- selors. Report No. 3, October 1971.	ED134850
Morgan, Virginia Richardson	A Cost Study Analysis of Measured Gains in a Reading Program Utilizing Individuali- zation of Instruction.	ED103534
Paden, Jon S.	How Is ICE Doing in the Elemen- tary Schools? A Four-Year Survey of ICE Principals.	ED144221
	Pre-Kindergarten Prescriptive Teaching Program for Disadvan- taged Children. Pre-School Program 1972-73: End of the Year Evaluation.	ED091061
Ryckman, David B. and others	Do Structured Reading Programs Hamper Intellectual Development?	EJ148674

Author(s)	Title	Accession No.
Sovik, Nils	Individual Instruction in Norwegian (The Podin Project).	EJ177005
Stefanides, Gilbert Albert	An Evaluation of Achievement and Attitudes of Students and Teachers Using an Individualized Spelling Approach.	ED127613
Stice, James E.	Expansion of Keller Plan Instruction in Engineering and Selected Other Disciplines: A Final Report.	ED122723
Stice, James E.	Seventeen PSI Projects at the University of Texas at Austin.	ED108665
Tatham, Elaine L. and others	Evaluation of College Learning Center Instruction in Six Subject Areas, Spring 1975.	ED110141
Vaughn, John W. and Duncan, Robert C.	Evaluation of Merrimack Education Center's Project League 1973.	ED114367
Weinstein, Sanford	Diagnostic and Remediation Program to Ameliorate the Reading Disabilities of JHS CRMD Pupils, February-June, 1975. Evaluation Report.	ED136487
Weiss, James	More Advanced Reading Development, 1975-76 School Year.	ED142631
Williams, William Watts	An Experimental Investigation of Individualized Instruction in the Teaching of Quantitative Physical Science.	ED052015

## METHODS OF EVALUATION

Many researchers and practitioners are interested in the use of a particular method for gathering evaluation data. In an attempt to serve the needs of these individuals, the researcher analyzed the abstracts for each citation identified as an evaluation study, for purposes of classifying the studies according to method(s) used.

The researcher again developed categories of methods by a review of abstracts. This time, 20 categories were identified, each representing a different method of gathering evaluation data. This time, however, the sorting process proceeded somewhat differently, due to the fact that many of the studies cited multiple methods used in the study. Thus, for each method cited within a given study, the researcher noted the number of that study in the appropriate methods category. Some studies were mentioned in as many as a half-dozen methods categories.

Classifying studies by method turned out to be the most difficult task, for several reasons. Many study abstracts included results of the evaluation, but failed to include a description of methods used. An examination of the full evaluation report would undoubtedly yield an inventory of methods used; because the researcher used only abstracts, some studies will not appear in the categories. In addition, some abstracts mentioned methods, but often in an ambiguous way. In some of those cases, the researcher could infer from the context of the abstract what method had been used. Mistakes in categorization were thus inevitably made. Within the framework of these cautions, however, the user of this document may find some helpful guidance through the ERIC evaluation studies.

A brief description of each methods category, together with a tally of how many times the method was reported used, follows.

Category 1: Standardized tests

(34 citations)

Refers to the use of a "test designed to provide a systematic sample of individual performance, administered according to prescribed directions, scored in conformance with definite rules, and interpreted in reference to certain normative information. Some would further restrict the usage of the term 'standardized' to those tests for which the items have been chosen on the basis of experimental evaluation, and for which data on reliability and validity are provided. Others would add 'commercially published' and/or 'for general use.'<sup>1</sup>

Category 2: Teacher-made tests

(61 citations)

Refers to tests of knowledge or skills developed by a teacher, administrator, or developer of a program or materials, unique to a particular setting, objective, or instructional program. Such tests are seldom normed on large samples, if at all. Such tests need not be pencil-and-paper tests.

Category 3: Questionnaire/survey

(78 citations)

Refers to instruments designed to gather perceptions, opinions, judgments, etc. from a group of people about a particular topic or issue. Included here are attitude surveys, questionnaires for teachers, parents, community members, students, etc.

Category 4: Rating forms

(11 citations)

Refers to instruments which require the respondent to rate, according to some scale or procedure, the materials, program, etc. being evaluated.

Category 5: Interviews

(22 citations)

Refers to oral questioning, either structured or unstructured, usually in an attempt to gather in depth descriptions or opinions from the respondent. May be face-to-face or by telephone, exchange of audio/video tapes, etc.

Category 6: Observation

(18 citations)

Generally refers to observation of participants engaged in a learning activity. This observation may be done obtrusively or unobtrusively, and may use a structured observation schedule or unstructured approach.

Category 7: Expert review

(13 citations)

Refers to assessments of a material or program by someone regarded as an expert in some facet of the thing being evaluated, or in

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<sup>1</sup>From Mehrens, William and Lehmann, Irvin, Measurement in Education and Psychology. New York: Holt, Rinehart and Winston, Inc., 1973, p. 696.

the evaluation process. Included are site visits, teacher anecdotal assessment of learners, etc.

Category 8: Document review (14 citations)

Refers to examination of existing documents (e.g., curriculum guides, histories, etc.) for data relevant to a program being evaluated. Document review is generally an unobtrusive data gathering method.

Category 9: Content analysis (6 citations)

Refers to systematic analysis of various forms of communication (e.g., curriculum materials, memos, speeches/lectures, etc.) to provide data relevant to the program being evaluated.

Category 10: Cost analysis (13 citations)

Refers to a variety of methods used to determine the cost (however defined) of developing and/or implementing programs, materials, or systems. Often used in an effort to relate costs to benefits.

Category 11: Case study (4 citations)

An in depth study of a given program in an effort to thoroughly understand that program. Tends to include a variety of methods of data gathering and analyses.

Category 12: Record tracking (5 citations)

Refers to analyses of records of interaction, usually between computer and learner as in some CAI systems, as stored in the computer.

Category 13: Response systems (1 citation)

Refers to the use of automated response systems, wherein the respondent can indicate preferences or choices, usually through a button system.

Category 14: Simulation (1 citation)

Evaluator observes or examines respondents' actions or choices during simulation exercises.

Category 15: Physiological responses (2 citations)

Refers to efforts to gather evaluation data by observing or measuring physiological responses to a stimulus, such as a television program. Includes eye movement analyses, GSR, etc.

Category 16: Ranking procedures (1 citation)

Respondents are asked to rank order the importance, value, or desirability of a group of items.



Category 17: Consensus methods (1 citation)

Refers to attempts to obtain consensus from a group about a need, future event, etc., based on an iterative survey (e.g., Delphi technique).

Category 18: Distracter technique (1 citation)

Attempts are made to record the influence of a distracting element on the behavior of individuals watching a television program.

Category 19: Audience rating systems (1 citation)

Refers to audience survey techniques such as the Nielsen rating scheme.

Category 20: Essays/personal statements (1 citation)

Respondents are asked to write essays or personal statements on a topic specified by the evaluator. Results are analyzed for evidence of change or growth.

The classification by evaluation method produced few surprises. Questionnaires/surveys were the single most popular methods used in the evaluation studies included in this analysis. The (relative) ease with which they are constructed and used makes them invaluable methods for data-gathering. Teacher-made tests (broadly defined) and, to a somewhat lesser extent, standardized tests are the cornerstones of attempts to describe outcomes and effectiveness. Interviews and observations are also popular methods for evaluating instructional technology.

What is somewhat surprising, however, is that evaluators of instructional technology programs and materials do not appear to be pioneering many new data-gathering methods. It is interesting, for example, that so few studies report using simulations or distracter techniques. The conclusion must be tentative; those studies for which abstracts did not describe methods may have used such techniques.



Following are the author(s), title, and accession number of those citations identified in each methods category.

Author(s)	Title	Accession No.
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Methods Category 1: Standardized tests

Anderson, Beverly L.	Kodiak Island Borough School District Title IV Project. Final Evaluation Report, July 1977.	ED142359
Ball, Samuel and Bogatz, Gerry Ann	Research on Sesame Street: Some Implications for Compensatory Education.	ED068155
Ball, Samuel and others	Reading with Television: A Follow-Up Evaluation of the Electric Company.	ED122798
Blackburn, Susan Fleming	The Construction, the Implementation, and the Evaluation of a Title I Primary Grade Listening Program.	ED127626
Brickner, Ann and Senter, Donald R.	Follow-Up Study of LISTEN LOOK LEARN First Year Students Who Used Traditional Basal Programs in Second Year.	ED049018
Brickner, Ann and others	Summative Evaluation of LISTEN LOOK LEARN 2nd Year Students, Cycles R-70, 1968-69.	ED049016
Brightman, Richard W.	Computer Assisted Instruction Program for Police Training.	ED067858
Brown, Edward K.	The Nongraded Program at the Powell Elementary School: Evaluative Phase II.	ED049298
	Determining the Effects of "Developing Readiness for Pre-School Children via Television": A Title III Project.	ED093484

Author(s)	Title	Accession No.
Ford, John D., Jr. and Slough, Dewey A.	Development and Evaluation of Computer Assisted Instruction for Navy Electronics Training. 1. Alternating Current Fundamentals.	ED042950
Hall, Keith A. and others	The Development, Implementation and Evaluation of a Pilot Program of Computer-Assisted Instruction for Urban High Schools: General Mathematics and Algebra I. Summary Report.	ED076053
Heflin, Virginia A. and others	The Formative Period of LISTEN LOOK LEARN, A Multi-Media Communication Skills System.	ED049019
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Johnson, Lary	The Fourth Year of IPI Mathematics at Minneapolis Hall School: 1972-73. A Title I ESEA Project.	ED114430
Johnson, Lary	Minneapolis IPI Mathematics Project 1971-72: Third Year Evaluation. A Title I, ESEA Project.	ED083290
Kaufman, Maurice	The Effect of the DISTAR Instructional System: An Evaluation of the 1972-1973 Title I Program of Winthrop, Massachusetts.	ED110171
Leinhardt, Gaea	Program Evaluation: An Empirical Study of Individualized Instruction.	ED131092
Lysiak, Fae and others	Computer Assisted Instruction. 1975-76 Evaluation Report. A Title I Program. Revised.	ED140495
Moench, Laurel	The Effectiveness of an Individually-Organized Computer-Managed Program (PLAN) with Educationally Disadvantaged Students in Middle Elementary Grade Mathematics.	ED121874

Author(s)	Title	Accession No.
O'Keefe, Ruth Ann	Reports on the STARTER/101 Pilot Program in the Reading Center of the D.C. Public Schools.	ED045316
Palmer, Henry	Three Evaluation Reports of Computer Assisted Instruction in Drill-and-Practice Mathematics.	ED087422
Peterson, Betty L.	A Comparison between Achievement Gains in Multimedia Instruction and Conventional Lecture Method of Instruction of Nursing Courses at Northern Virginia Community College.	ED129282
Pinsky, Paul, D.	Achievement Monitoring of Individually Paced Instruction. Final Report.	ED092175
	Pre-Kindergarten Prescriptive Teaching Program for Disadvantaged Children. Pre-School Program 1972-73: End of the Year Evaluation.	ED091061
Roman, Richard A.	The Word Problem Program. Summative Evaluation.	ED113212
Scheier, Elaine and Senter, Donald R.	Evaluation of Learning 100: An Adult Basic Education Project in Bedford-Stuyvesant, 1967-68.	ED044551
Scheier, Elaine and Senter, Donald R.	Evaluation of Learning 100: ABC Center, White Plains, N.Y. January-June 1968.	ED036718
Shapiro, Sydelle Stone and others	An Evaluation of the Mulligan Stew 4-H Television Series for Extension Service, USDA. Volume I: Executive Summary.	ED134618
Silverstein, Leonard	Project Turnabout, School Year 1975-1976.	ED142640
	Topical Modules in Secondary Mathematics. Final Project Report.	ED107478

Author(s)	Title	Accession No.
	Vocabulary Development Project. Evaluation Report 2.	ED059838
Weinstein, Sanford	Diagnostic and Remediation Program to Ameliorate the Reading Disabilities of JHS CRMD Pupils, February-June, 1975. Evaluation Report.	ED136487
Weiss, James	More Advanced Reading Development, 1975-76 School Year.	ED142631
Williams, William Watts	An Experimental Investigation of Individualized Instruction in the Teaching of Quantitative Physical Science.	ED052015

Methods Category 2: Teacher-made tests

Adler, Leta McKinney and others	Evaluation of Programmed Instruction Techniques in Medical Interviewing. Final Report, June 15, 1966 to June 15, 1968.	ED059345
Altschuld, James W.	The Health and Welfare Module: An Evaluation Report for the Occupational Exploration Program.	ED106509
Bailek, Hilton M. and Castro, Barbra	A Second Year Evaluation of Individualized Prescribed Instruction (IPI).	ED036157
Ball, Samuel and Bogatz, Gerry Ann	Sesame Street Summative Research: Some Implications for Education and Child Development.	ED057914
Ball, Samuel and others	The First Year of Sesame Street: An Evaluation. Final Report, Volume III of V Volumes.	ED047823
Ball, Samuel and others	Reading with Television: An Evaluation of the Electric Company. A Report to the Children's Television Workshop. Volumes 1 and 2.	ED073178

Author(s)	Title	Accession No.
Blackburn, Susan Fleming	The Construction, the Implementation, and the Evaluation of a Title I Primary Grade Listening Program.	ED127626
Bravo, Annie	An Evaluation of the Urban Education Program "Multi-Sensory Stations Program." District 10, New York City Board of Education.	ED059024
Brightman, Richard W.	Computer Assisted Instruction Program for Police Training.	ED067858
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Gailitis, Maris M.	The Costs of Information Retrieval Television. A Case Study in the Cost-Effectiveness of Educational Media.	ED073706
Hornik, Robert C. and others	Television and Educational Reform in El Salvador. Final Report.	ED084810
Kreimer, Osvaldo and others	Health Care and Satellite Radio Communication in Village Alaska. Final Report of the ATS-1 Biomedical Satellite: Experiment Evaluation.	ED094721

Author(s)	Title	Accession No.
Lenn, Peter D. and Maser, Thomas F.	Computer Assisted/Programmed Instruction on the Law. Final Report.	ED058724
Mitzel, Harold E. and others	A Commonwealth Consortium to Develop, Implement and Evaluate a Pilot Program of Computer-Assisted Instruction for Urban High Schools. Final Report.	ED059604
Morgan, Virginia Richardson	A Cost Study Analysis of Measured Gains in a Reading Program Utilizing Individualization of Instruction.	ED103534
Romaniuk, E. W.	A Summative Evaluation of the CAI Course "Comps."	ED153604
Sasscer, Monica Flynn	1976-77 TICCIT Project. Final Report.	ED148430
Speedie, Stuart M. and Sanders, Susan	Data Management & Decision Making. Technical Report No. 14.	ED135058

Methods Category 11: Case study

	Helping Leaders Help Youth. An Evaluation Report of a Program for Illinois Volunteer 4-H Leaders, 1973-75.	ED141000
Rubin, Martin L. and others	Evaluation of the Experimental CAI Network (1973-1975) of the Lister Hill National Center for Biomedical Communications, National Library of Medicine. Final Report. No. ED-75-1.	ED115225
Shapiro, Sydelle Stone and others	An Evaluation of the Mulligan Stew 4-H Television Series for Extension Service, USDA. Volume 1: Executive Summary.	ED134618
Singer, Frank A.	Self-Instructional Materials for Topics in Elementary Accounting--A Means to the Demonstration of Pay-Offs from Individualizing Time-to-Complete. Final Report.	ED082291

Author(s)	Title	Accession No.
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Methods Category 12: Record tracking

Lasater, Mary Beth	Design and Evaluation of a CAI Program in Chemical Equilibrium. Technical Report No. 8.	ED073613
Litman, George H.	CAI in Chicago.	ED087423
Moench, Laurel	The Effectiveness of an Individually-Organized Computer-Managed Program (PLAN) with Educationally Disadvantaged Students in Middle Elementary Grade Mathematics.	ED121874
Stevens, R. and others	AIMLO: Auto-Instructional Media for Library Orientation. Final Report.	ED105882
Zachert, Martha Jane K. and Pantelidis, Veronica	SIBE: A Sequential In-Basket Exercise Technique.	ED056469

Methods Category 13: Response systems

Chitayat, Linda	An Evaluation of Computer-Managed Education Technology at New York City Community College.	ED144524
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Methods Category 14: Simulation

Shapiro, Sydelle Stone and others	An Evaluation of the Mulligan Stew 4-H Television Series for Extension Service, USDA. Volume 1: Executive Summary.	ED134618
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Methods Category 15: Physiological responses

Ardi, Dana B.	New Avenues of Teaching Resources--Sesame Street Programs for the Mentally Retarded Child.	ED139197
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<u>Author(s)</u>	<u>Title</u>	<u>Accession No.</u>
Laosa, Luis M.	Carrascolendas: A Formative Evaluation.	ED090968

Methods Category 16: Ranking procedures

Hsia, Jayjia and Strand, Theresa	WTTW-ESAA Television Pilot, "TCR '77 ": Formative Evaluation.	ED129889
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Methods Category 17: Consensus methods

Martin, Thomas H. and others	A Policy Assessment of Priorities and Functional Needs for the Military Computer-Assisted Instruction Terminal.	ED116672
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Methods Category 18: Distractor technique

Hsia, Jayjia and Strand, Theresa	WTTW-ESAA Television Pilot, "TCR '77 ": Formative Evaluation.	ED129889
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Methods Category 19: Audience rating systems

Samuels, Bruce, Comp.	The First Year of Sesame Street: A Summary of Audience Surveys. Final Report, Volume IV of V Volumes.	ED047824
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Methods Category 20: Essays/personal statements

Hsia, Jayjia and Strand, Theresa	WTTW-ESAA Television Pilot, "TCR '77 ": Formative Evaluation.	ED129889
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## SOME ADDITIONAL WORK

This document represents an initial step toward making evaluations of instructional technology more accessible to researchers and practitioners.

It is in many ways a rather crude step, dependent as it was on abstracts.

Unfortunately, merely classifying information has limited value in answering questions such as:

1. What is the status of our use of instructional technology, both domestically and internationally? What works, for whom, under what conditions, and with what costs?
2. How effective are our efforts to evaluate?
3. What remains to be investigated, and with what approaches?

Perhaps the global nature of these questions precludes meaningful responses.

Pursuing such inquiries may succeed only in frustrating developers and consumers alike.

There are, however, some intermediate questions that could be pursued more reasonably, although not without difficulty. For example:

1. To what extent do the evaluation studies of instructional technology included in ERIC meet standards of quality? Where might such standards originate?
2. To what extent and in what ways might these studies be useful, and to whom? What characteristics must such studies possess if they are to be useful to those not included as original audiences for the evaluations? And if such studies cannot be rendered useful, should they be in the ERIC system?
3. How successful has ERIC been in getting important evaluation studies into the system?
4. Do the categories used in this paper represent possible new descriptors for the ERIC system?

It may be useful to conduct at least two additional activities related to this project. First, it would be most interesting to sample, from the universe of evaluation studies reviewed herein, 50 - 75 of the studies for

more in depth analyses. And second, it may be useful to conduct a small evaluation of the usefulness of this small reference work.

## APPENDIX A

### Citations related to critiques of evaluation methods or evaluation plans

This appendix lists documents identified as reviews or critiques of an evaluation method/technique thought useful in evaluating instructional technology, but not (as documents) evaluation studies of instructional technology. Evaluation plans and/or research designs are included, as well as specific assessment criteria.

Author(s)	Title	Accession No.
Black, James	Individualized Instruction-- A Rating Profile.	EJ076415
Bramble, William J., Ed.	Formative Evaluation Study for AESP Diagnostic and Prescrip- tive Reading Course. Technical Report Number Three.	ED103008
Breland, Hunter M.	Planning for the Evaluation of the Plato Computer-Based Instruc- tional System: Attitudinal and Performance Evaluation in the Elementary Schools.	ED091448
Burt, Gordon	Detailed Evaluation and Content Analysis.	EJ153917
Call-Himwich, Eileen	An Assessment of Lesson Review as a Formative Evaluation Tool.	ED140775
Coldevin, Gary D.	Spaced, Massed, and Summary Treatments as Review Strategies for ITV Production.	EJ136438
Connolly, A. J.	The Contribution of an Internal Review Panel to the Development of Educational Programming. Satellite Technology Demonstra- tion, Technical Report No. 0213.	ED115231

Author(s)	Title	Accession No.
	A Design to Study the Effectiveness of Individualized Instruction in the Teaching of Reading and Mathematics.	ED117217
Dole, Phyllis W.	The Product Improvement Process.	ED101692
EPIE	Looking Ahead: Selection Kits Will Blunt Buying Blunders.	EJ034497
	Evaluating Media Programs: District and School.. A Method and an Instrument.	ED136832
	Field Manual for Administration of the Individualized Instruction Scale; February 1974 Revision.	ED090986
Frase, Larry E.	Product Validation: Pilot Test or Panel Review.	EJ102922
Fulton, W. R.	Evaluative Checklist: An Instrument for Self-Evaluating an Educational Media Program in Colleges and Universities.	ED078653
Fraley, Lawrence E., Jr.	Chart-Recorded Capillary Pulse Pressure Measurement as an Unobtrusive Means of Detecting Unspecified Frame-Specific Flaws in Programmed Instruction Sequences: An Experimental Study. Final Report.	ED032784
Georgiades, Constance	Individualized Evaluation for Individualized Learning.	EJ076196
Harvey, William	A Yardstick for Individualized Instruction.	EJ076416
Hillelsohn, Michael	Student-Initiated Reports: Operational Analysis in the Evaluation of CAI Curricula. Professional Paper No. 15-74.	ED076005
Jones, Les A.	A Plan for the Evaluation of a Project to Develop Basic Medical Sciences Lessons on Plato IV.	ED127929

Author(s)	Title	Accession No.
Jung, Steven M.	Evaluative Uses of Unconventional Measurement Techniques in an Educational System.	EJ042347
Kandawamy, Subramaniam	Learner Verification and Revision: An Experimental Comparison of Two Methods.	EJ153932
Kemelfield, Graeme	The Evaluation of Schools' Broadcasts: Piloting a New Approach.	ED066870
Krus, Patricia H.	Summative Evaluation of Instructional Materials.	EJ174739
Lawson, Tom E.	Formative Instructional Product Evaluation; Instruments and Strategies.	ED089765
Light, Judy A.	The Method of "Strong Inference" in the Design of Evaluation Studies.	ED091441
Longo, Alexander A.	Preliminary Evaluation Plan for U. S. Army Computerized Training System Report No. CTS-TR-74-1.	ED094736
McConnell, David	Stimulated Recall: A Method for the Analysis and Improvement of Individualized Instructional Systems.	ED154833
Nathenson, Michael B.	Developmental Testing Really Does Work.	EJ183764
Niedermeyer, Fred C.	Observation Procedures for Classroom Tryout of Instructional Materials and Procedures.	ED106887
Parer, Michael S.	Formative Evaluation and Instructional Television; The Need, Problems, and Instruments.	ED124166
	Pilot Guidelines for Improving Instructional Materials through the Process of Learner Verification and Revision.	ED112822
	Preliminary Data from the Progress Testing.	ED122818

Author(s)	Title	Accession No.
	Proposed Research Program (Part A: Technical Narrative) on Assessment and Analysis of Education Satellite Communica- tions Demonstration. Phase III.	ED095815
Sabar, Naama	The Utility of Various Kinds of Evaluation Data in the Proc- ess of Developing New Biology Science Curriculum.	EJ156104
Sanner, Richard L.	Evaluation of Educational Media Programs--By Faculty.	EJ104571
Sherman, Thomas M.	A Formative Approach to Student Evaluation of Instruction.	ED088954
Stolovitch, Harold D.	Shaping Special Education through the Intermediate. Technology of Learner Verifica- tion and Revision.	ED143309
	A Study of the Effectiveness of Individualized Instruction in the Teaching of Reading and Mathematics. Final Report: The Study Design.	ED115717
Thiagarajan, Sivasailam	Learner Verification and Re- vision: What, Who, When and How.	EJ131257
Unks, Nancy	A Plan for Evaluating the IPI Testing Program.	ED036188
Valdes, Alice L.	A Design to Study the Effec- tiveness of Well-Implemented Individualized Instruction in Compensatory Reading and Mathe- matics Programs. Final Report.	ED117215
Walton, Wesley W.	Selection of Exemplary Educa- tional Products. Panel Review of Products, 1972-1973.	ED083291
Yawkey, Thomas D.	Evaluating Instructional Goals of Developmental Programs in Early Childhood Education.	EJ130513



APPENDIX B

Citations related to critiques  
of evaluation studies

This appendix lists documents which provide an analysis of an evaluation study, for purposes of drawing inferences about design, methodology, etc.; an attempt to aggregate data across evaluation studies; or a response to an evaluation study.

Author(s)	Title	Accession No.
Ball, Samuel	A Summary of the Major Findings from "Reading with Television: An Evaluation of the Electric Company."	ED115679
Bertou, Patrick	An Analysis of the Relative Efficacy of Advanced Organizers, Post Organizers, Interspersed Questions, and Combinations Thereof in Facilitating Learning and Retention from a Televised Lecture.	EJ059153
Blanton, Bill	How Effective Is Sesame Street?	EJ057095
Bogatz, Gerry Ann	Some Things You've Wanted to Know about Sesame Street.	EJ034482
Bogatz, Gerry Ann	A Summary of the Major Findings in "The Second Year of Sesame Street: A Continuing Evaluation."	ED122802
Brightman, Richard W.	Strategies for Change: A Case Study of Innovative Practices at the Coast Community College District.	ED051806
Cooney, Joan Ganz	Five Years of "The Electric Company."	ED122805

Author(s)	Title	Accession No.
Cooney, Joan Ganz	Sesame Street at Five; The Changing Look of a Perpetual Experiment.	ED122804
Cowlan, Bert	The ATS-6--American Case Studies.	EJ133000
	Epielogue. Evaluating Instructional Systems.	EJ092659
	Evaluating Instructional Systems; EPIE Educational Product Report.	ED097304
Friedlander, Bernard Z.	New England Instructional Television Research Center.	ED109981
Gill, Clark C.	Development of Guidelines and Resource Materials on Latin America for Use in Grades 1-12.	ED033143
Hamilton, Jack A.	Communicating Current Information on Career Education by Audio Cassette.	EJ178915
	Implications of the Alaska Education Satellite Communications Demonstration for Telecommunications & Education Policymakers.	ED144572
Leinhardt, Gaea	Program Evaluation: An Empirical Study of Individualized Instruction.	EJ180514
Lumsden, D. Barry	Programed Instruction: Too Many Unanswered Questions.	EJ127192
Mueller, Daniel J.	The Mastery Model and Some Alternative Models of Classroom Instruction and Evaluation: An Analysis.	EJ079044
Nitko, Anthony J.	Measurement of Instructional Outcome vs. Measurement for Instruction: A View of IPI Testing Procedures.	ED036185
Oettinger, Anthony G.	Educational Technology: New Myths and Old Realities.	ED034423

Author(s)	Title	Accession No.
	Programmed Instructional Materials for Adult Basic Education: An Empirically-Based Evaluation of Materials Developed by the Adult Learning Center. Final Report.	ED103569
Royce, George	Scorecard for Individualized Instruction.	EJ128430
Ruff, Frances K.	Problematic Issues Related to Systematic Teaching of Affective Skills.	ED151362
Schoen, Harold	Self-Paced Mathematics Instruction: How Effective Has It Been in Secondary and Post-secondary Schools?	EJ140102
Springle, Herbert	Who Wants to Live on Sesame Street?	EJ071399
	State Education Department Comment on "Educational Television in New York State."	ED083827
Stutzman, W. L.	A Multimedia Approach to Remote Classroom Instruction.	EJ086904
	Summary of Closed Circuit Television Activities in Medical Education.	ED031918
Wykes, James	Taking Stock.	EJ022402
Zimmer, A. L.	Community College Users' Report, Fall 1975.	ED122901

APPENDIX C

Citations related to conceptual  
papers in evaluation

These documents are concerned with general conceptual or theoretical issues related to the evaluation of instructional technology rather than critiques of particular methodologies. Attempts to construct models of evaluation are included.

Author(s)	Title	Accession No.
Abedor, Allan J.	Development and Validation of a Model for Formative Evaluation of Self-Instructional Multi-Media Learning Systems.	ED064327
Abedor, Allan and Fustafson, Kent	Evaluating Instructional Development Programs: Two Sets of Criteria.	EJ051771
Alderman, Donald	Framework for the Educational Evaluation of Computer-Assisted Instruction.	ED103488
Alkin, Marvin C. and Wingard, Joseph	User Oriented Product Evaluation.	ED067899
Alkin, Marvin C. and Woolley, Dale C.	A Framework for Evaluation of TESOL Programs.	ED038648
Aversa, Frances M. and Forman, David C.	Issues in the Evaluation of Educational Television Programs.	EJ179589
Aviss, Julian	The Description of a Faculty and Course Evaluation Scheme.	ED146862
Bailey, K. V.	Evaluating School Radio and Television: Some Problems and Methods.	EJ079070
Baker, Eva L.	Formative Evaluation of Instruction.	ED123239

Author(s)	Title	Accession No.
Baker, Eva and Alkin, Marvin	ERIC/AVCR Annual Review Paper: Formative Evaluation of Instructional Development.	EJ091462
Barbatsis, Gretchen Schoen	The Nature of Inquiry and Analysis of Theoretical Pro- gress in Instructional Tele- vision from 1950-1970.	ED119276
Bjerstedt, Ake	System Modification and Evalu- ation in Instructional Pro- gramming: The Final Phase of the Program Construction Process.	ED051676
Blaney, John P.	The Application of Formative and Summative Evaluation Techniques to Short Term Adult Education Courses.	ED062608
Boucher, Brian G. and others	Handbook and Catalog for Instructional Media Selection.	ED077218
Carpenter, C. R. and Froke, Marlowe	Description of a Practical Procedure for Assessing Instructional Film and Tele- vision Programs.	ED037102
Clark, R. J. and others	A Case Study in Canadian Curriculum Materials Analysis.	EJ174930
Cooley, William	Methods of Evaluating School Innovations.	ED057087
Cunningham, Donald	Formative Evaluation of Replicable Forms of Instruc- tion.	ED051263
Day, Joseph A.	The Pitfalls of Evaluating Instructional Materials.	EJ139698
Day, Michael	The Use of Formative Evalu- ation in the Art Classroom.	EJ092235
Deprospro, Ernest R. and Liesener, James W.	Media Program Evaluation: "A Working Framework.	EJ136468
Epstein, Kenneth I.	Sequential Plans and Formative Evaluation.	ED109186

Author(s)	Title	Accession No.
Everly, Jack C.	The Evaluation of Continuing Education via Television.	EJ042336
	Guidelines for Analyzing Kits/Sets of Early Learning Materials.	EJ058898
Henderson, Evan C. and Nathenson, Michael B.	Developmental Testing: An Empirical Approach to Course Improvement.	EJ153916
Herrel, Jean G. V.	Instructional Television in Belgium. Proposal and Experimental Evaluation of an Appropriate Design for Effectiveness Research and Possibilities for a New Strategy in Program Evaluation.	EJ065912
Hodgkinson, Harold L.	Evaluating Individualized Learning.	EJ119679
Ingersoll, Gary M.	Sesame Street Can't Handle All the Traffic.	EJ045817
Klein, M. Frances	A Perspective on Improving the Effectiveness of Curriculum Materials.	ED107218
Klein, Stephen	Procedures for Comparing Instructional Programs.	ED061271
Komoski, P. Kenneth	Statement before Select Subcommittee on Education.	ED059612
Kreimer, Osvaldo	Open, Sesame: A Key to the Meaning of the Educational Broadcast Message.	ED102964
Krus, Patricia H. and others	Formative Evaluation Design for Assessing Instructional Materials.	EJ143961
Lewis, Richard F.	How to Improve a Television Series by Formative Evaluation.	EJ170995
Light, Judy A.	Formative Evaluation Procedures for the In-Context Development of Instructional Materials.	ED065557
Lindvall, C. M.	The IPI Evaluation Program.	ED036194

Author(s)	Title	Accession No.
Lindvall, C. M. and Cox, Richard C.	The Role of Evaluation in Programs for Individualized Instruction.	ED035302
Lindvall, C. M. and Cox, Richard C.	A Rationale and Plan for the Evaluation of the Individually Prescribed Instruction Project.	ED036179
Lohnes, Paul R.	Planning for Evaluation of the LRDC Instruction Model.	ED061776
Mace, Ellie	"Rolling, Remake": An Alterna- tive Approach to Course Design at the Open University.	EJ153915
Markle, David G.	In Which It Is Demonstrated That a Program That Works May Well Be Worthless.	EJ089802
McCoy, David	Continuous Evaluation of Instructional Media Services at Eastfield College.	EJ104572
McGuigan, F. J.	How to Select and Evaluate Programmed Instructional Materials.	ED051455
Mitzel, Harold E.	How to Evaluate Computer Assisted Instruction.	ED047005
Moomaw, W. Edward	Practices and Problems in Evaluating Instruction.	EJ159075
Myers, Sheldon S.	Issues and Technical Problems in Research and Evaluation Related to Innovative Mathe- matics Projects.	ED047004
Niedermeyer, Fred C., Ed.	Prototype Testing in Instruc- tional Development. SWRL Work- ing Papers: 1972.	ED133337
Olien, C. N. and others	A Social Systems Approach to Evaluation Research.	ED114431
Palmer, Edward	Formative Research in the Production of Television for Children.	ED071434



Author(s)	Title	Accession No.
Passmore, David Lynn	Information Needs for Formative Evaluation of Career Education Products.	EJ178898
Popham, W. James	Program Fair Evaluation-- Summative Appraisal of Instructional Sequences with Dissimilar Objectives.	ED110514
	Second Seminar on Direct Teaching by Television.	ED038590
Shaw, Morley W.	Philosophy and Methodologies for the Evaluation of Innovative and Nontraditional Programs. A Report of the National Dissemination Project for Post- Secondary Education.	ED092190
Singh, Jai P. and Morgan, Robert P.	Computer-Based Instruction: A Background Paper on Its Status, Cost Effectiveness and Tele- communications Requirements.	ED055429
Skager, Rodney W.	Student Entry Skills and the Evaluation of Instructional Programs: A Case Study.	ED054232
Stolovitch, Harold D.	Formative Evaluation of Instructional Games.	EJ143315
Swisher, Ginny and others, Eds.	Evaluation: Processes and Practices.	ED036913
	Symposium: Perspectives on Formative Evaluation of Children's Television Programs.	ED144978
Tognetti, Ann	The Evaluation of Instructional Programs.	ED140457
Wager, Walter	The Formative Evaluation Outcomes Matrix.	EJ148469
Ward, Marjorie Ellen	Examination and Application of Formative Evaluation for Author Utilization during the Preparation of a CAI Course.	ED076056

Author(s)	Title	Accession No.
Ward, Marjorie E. and Cartwright, G. Phillip	Some Contemporary Models for Curriculum Evaluation.	ED081236
Webster, William J. and Mendro, Robert L.	The Investigation of Aptitude Treatment Interactions as an Integral Part of Program Evaluations.	EJ106864
Wiersma, William	Evaluating Instructional Effectiveness.	EJ148986
Wile, Marcia Z.	An Evolving Product Evaluation: Formative and Summative Components.	ED093909
Willoughby, Stephen S.	Individualization.	EJ140100

## BIBLIOGRAPHY

Adler, Leta McKinney and others. Evaluation of Programmed Instruction Techniques in Medical Interviewing. Final Report, June 15, 1966 to June 15, 1968. University of Southern California, Los Angeles, Department of Psychiatry. 1972. 6p. ED 059 345.

Since the medical interview is usually considered to be the basis of all diagnosis and treatment in medicine, this study investigated alternative ways of improving medical interview techniques. To test the hypothesis that the visual (videotape) technique would be more effective than the lecturing or audiotape technique, 12 videotaped interviews were conducted between a physician and various professional models who served as patients, and a post-graduate course in medical interviewing was developed. At the end of the course, an evaluation was made of the content-learning gain and also of the attitudinal changes in training. The programmed instruction in medical interviewing was found to be as effective as two alternative instructional methods in meeting its teaching goals, and the evidence suggested that it was more effective.

All, Stephen A. and Stegeman, William H., Eds. To Establish, Operate and Maintain Supplementary Educational Services: Instructional Television Experience Development and Distribution. An Evaluation of San Diego Area Instructional Television Authority Educational Program Activities; September 1, 1968 to June 30, 1969. San Diego Area Instructional Television Authority, CA, 1969. 299p. Available from Stephen All, San Diego Area Instructional Television Authority, 5164 College Ave., San Diego, CA 92115. ED 038 031.\*

The contents of this report represent a digest of activities from the organization's inception in 1966 to 1969 when the Title III grant expired. Each year the authority provided instructional television to some 250,000 students and teachers. The report includes such information relating to organizational structure as the joint powers agreement that supplied a legal framework for authority activities, an organizational chart, and minutes from the various committee meetings. Program selection and production procedures are reviewed. Statistics concerning the increases in television equipment and information reflecting the manner in which production and broadcast of programs have been handled are provided. The results of an authority-conducted program evaluation study are analyzed, and samples of the various types of information disseminated to educators concerning the program are given. Background information is supplied on a series on drug abuse produced for the San Diego Unified School District and a series on physical geology produced for three local junior colleges. Further plans for the project are discussed, and letters of commendation received by the authority are presented.

Altschuld, James W. and Pritz, Sandra. Planning Construction Projects: An Evaluation Report for the Occupational Exploration Program. Ohio State University, Columbus, Center for Vocational and Technical Education, 1974. 156p. ED 106 504.

The evaluation report is one of seven produced for the Occupational Exploration Program (OEP), a series of simulated occupational experiences designed for junior high school students. Describing the pilot testing of the simulation dealing with construction, the report contains sections describing the simulation context, evaluation procedures, results, and a Reviser's Information Summary (RIS). In the simulation, students planned a new junior high athletic facility. Occupational roles included architect, junior architect, civil engineer, draftsman, community representative, board of education representative, and superintendent of schools. The experimental design involved two Colorado schools, with a total of four experimental and four control groups involving 92 eighth and ninth graders. Instrumentation included knowledge and affective testing, student and teacher questionnaires, and a panel review. Analysis of variance and other descriptive statistics were employed, and reliability estimates were calculated. Analysis of variance results revealed that the simulation had a positive impact on student occupational knowledge, but no statistically significant impact on occupational preferences. The RIS records and extrapolated trends relate to the strengths, weaknesses, and recommendations from all data sources. Appended materials include the evaluation instruments used and the teacher log.

Altschuld, James W. and Pritz, Sandra. Planning Educational Programs: An Evaluation Report for the Occupational Exploration Program. Ohio State University, Columbus, Center for Vocational and Technical Education, 1974. 140p. ED 106 503.

The evaluation report is one of seven produced for the Occupational Exploration Program (OEP), a series of simulated occupational experiences designed for junior high school students. Describing the pilot testing of the simulation dealing with education, the report contains sections describing the simulation context, evaluation procedures, results, and a Reviser's Information Summary (RIS). In the simulation, students worked on the design and development of a school for spaceship Scorpio, about to take a long voyage in space. The occupational roles simulated included educational researchers, consultants, community members, and other student-selected educational roles. The experimental design involved two Colorado schools, with a total of four experimental and four control groups involving 97 eighth and ninth graders. Instrumentation included knowledge and affective testing, student and teacher questionnaires, and a panel review. Analysis of variance and other descriptive statistics were employed and reliability estimates were calculated. Analysis of variance results revealed that the simulation had a positive impact on student occupational knowledge, but no impact on student occupational preferences. The RIS records and extrapolated trends relate to the strengths, weaknesses, and recommendations from all data sources. Appended materials include the evaluation instruments used and the teacher log.

Altschuld, James and others. Creating an Advertising Campaign: An Evaluation Report for the Occupational Exploration Program. Ohio State University, Columbus, Center for Vocational and Technical Education, 1974. 134p. ED 106 507.

The evaluation report is one of seven produced for the Occupational Exploration Program (OEP), a series of simulated occupational experiences designed for junior high school students. Describing the pilot testing of the simulation dealing with advertising, the report contains sections describing the simulation context, evaluation procedures, results, and a Reviser's Information Summary (RIS). In the simulation, students utilized market research findings to develop magazine advertisements and radio and television commercials for the product, Baddle, an indoor skill game. Occupational roles included account executive, market/media research positions, graphic/layout artists, TV/radio producers, and audio technician. The experimental design involved two Colorado schools, with a total of four experimental and four control groups involving 82 eighth and ninth graders. Instrumentation included knowledge and affective testing, student and teacher questionnaires, and a panel review. Analysis of variance and other descriptive statistics were employed, and reliability estimates were calculated. Analysis of variance results revealed that the simulation had a positive impact on student occupational knowledge and preferences. The RIS records and extrapolated trends relate to the strengths, weaknesses, and recommendations from all data sources. Appended materials include the evaluation instruments used, observer form, and an example of student product.

Altschuld, James W. and others. The Health and Welfare Module: An Evaluation Report for the Occupational Exploration Program. Ohio State University, Columbus, Center for Vocational and Technical Education, 1974. 126p. ED 106 509.

The evaluation report is one of seven produced for the Occupational Exploration Program (OEP), a series of simulated occupational experiences designed for junior high school students. Describing the pilot testing of the simulation dealing with health and welfare, the report contains sections describing the simulation context, evaluation procedures, results, and a Reviser's Information Summary (RIS). In the simulation, students assumed the responsibilities of health and welfare workers in a drug treatment center. The occupational roles included a director, physician, psychologist, medical technician, pharmacologist, nurse, probation officer, and social workers. The experimental design involved two Colorado schools, with a total of four experimental and four control groups involving 73 eighth and ninth graders. Instrumentation included knowledge and affective testing, student and teacher questionnaires, and a panel review. Analysis of variance and other descriptive statistics were employed, and reliability estimates were calculated. Analysis of variance results revealed that the simulation had a positive impact on student occupational knowledge. No statistically significant results or changes in occupational preference were noted. The RIS records and extrapolated trends relate to the strengths, weaknesses, and recommendations from all data sources. Appended materials include the evaluation instruments used and an observer form.



Altschuld, James W. and others. Insurance: An Evaluation Report for the Occupational Exploration Program. Ohio State University, Columbus, Center for Vocational and Technical Education, 1974. 146p. ED 106 508.

The evaluation report is one of seven produced for the Occupational Exploration Program (OEP), a series of simulated occupational experiences designed for junior high school students. Describing the pilot testing of the simulation dealing with the insurance field, the report contains sections describing the simulation context, evaluation procedures, results, and Reviser's Information Summary (RIS). In the simulation, students operated an automobile insurance company, processing the claim resulting from a "client's" automobile accident. Occupational roles included agent, client, reviewer, inspector, underwriter, witness, rater, claims adjuster, claims examiner, and actuary. The experimental design involved two Colorado schools, with a total of four experimental and four control groups involving 79 eighth and ninth graders. Instrumentation included knowledge and affective testing, student and teacher questionnaires, and a panel review. Analysis of variance and other descriptive statistics were employed, and reliability estimates were calculated. Analysis of variance results revealed that the simulation had a positive impact on student occupational knowledge and preferences. The RIS records and extrapolated trends relate to the strengths, weaknesses, and recommendations from all data sources. Appended materials include the evaluation instruments used and an observer form.

Altschuld, James W. and others. Manufacturing Production: An Evaluation Report for the Occupational Exploration Program. Ohio State University, Columbus, Center for Vocational and Technical Education, 1974. 153p. ED 106 506.

The evaluation report is one of seven produced for the Occupational Exploration Program (OEP), a series of simulated occupational experiences designed for junior high school students. Describing the pilot testing of the simulation dealing with manufacturing production, the report contains sections describing the simulation context, evaluation procedures, results, and a Reviser's Information Summary (RIS). In the simulation, students set up and put into operation a 38-step assembly line producing extension speakers for transistor radios. Safety rules, administrative procedures, and job training were introduced. Occupational roles included supervisory positions and assembly line production. The experimental design involved two Colorado schools, with a total of four experimental and four control groups involving 77 eighth and ninth graders. Instrumentation included knowledge and affective testing, student and teacher questionnaires, and a panel review. Analysis of variance and other descriptive statistics were employed and reliability estimates were calculated. Analysis of variance results revealed that the simulation did not have a positive impact on student occupational preferences. The RIS records and extrapolated trends relate to the strengths, weaknesses, and recommendations from all data sources. Appended materials include the evaluation used and a teacher evaluation log.

Altschuld, James W. and others. Product Services Module: An Evaluation Report for the Occupational Exploration Program. Ohio State University, Columbus, Center for Vocational and Technical Education, 1974. 124p. ED 106 505.

The evaluation report is one of seven produced for the Occupational Exploration Program (OEP), a series of simulated occupational experiences designed for junior high school students. Describing the pilot testing of the simulation dealing with product services, the report contains sections describing the simulation context, evaluation procedures, results, and a Reviser's Information Summary (RIS). In the simulation dealing with bench electrical repair, students had the opportunity to repair defective transistor radios, provide supplies to product service personnel, or direct other product service workers. Occupational roles included foreman, repairman, and supplyman. The experimental design involved two Colorado schools, with a total of four experimental and four control groups involving 87 eighth and ninth graders. Instrumentation included knowledge and affective testing, student and teacher questionnaires, and a panel review. Analysis of variance and other descriptive statistics were employed, and reliability estimates were calculated. Analysis of variance results revealed that the simulation had a positive impact on both the student's occupational knowledge and occupational preferences. The RIS records and extrapolated trends relate to the strengths, weaknesses, and recommendations from all data sources. Appended materials include the evaluation instrument used and the observer form.

Amarel, Marianne and others. The Introduction of Innovative Instructional Systems: Implementation and Program Evaluation. Section 1. The Practitioner: Selection, Training, and Program Evaluation; Section 2. Degree of Implementation and Classroom Observation. Presented at the annual meeting of the American Educational Research Association, Washington, DC, March 30 - April 3, 1975. 51p. ED 118 619.

The University of Illinois' PLATO Elementary Program, which was observed and evaluated for two years, was the focus of Part 1. The major PLATO features were described and the PLATO elementary reading and mathematics demonstrations, representing attempts at sequential and concurrent hardware, software, curriculum, and implementation development of tutorial computer assisted instruction, were emphasized. The PLATO staff was composed of volunteers because of the perceived importance of teacher commitment to the program. This method of selection caused several problems. The orientation of PLATO staff varied with implementer's views of proper teacher contribution to the program. Judgments on the effectiveness of teacher orientation and the relationship between that process and the eventual development of the innovation were inconclusive. In Part 2, the theoretical components of the degree of PLATO implementation and classroom observation were discussed. An effort to sketch the evolution of one of the observation instruments being employed to observe the effects of PLATO on the life of elementary classrooms, includes the conditions and hypotheses under which it had been developed and used, and one illustrative result concerning implementation.



Analyses of Basic and Supplementary Reading Materials. An In Depth Report, Educational Product Report: No. 64 v8, n1, p5-109. Sep-Oct 1974.  
EJ 107 290.

Analyzes 76 commercially marketed reading materials and provides descriptions of the curriculum role (whether basic or supplementary), the target population, the instructional approach, and the product's components. A summary of the findings includes the analysts' overall opinions of the materials. A price list is provided.

Anastasio, Ernest J. and Alderman, Donald L. Evaluation of the Educational Effectiveness of PLATO and TICCIT. Educational Testing Service, Princeton, NJ, 1973, 13p. ED 088 934.

This evaluation of the Programmed Logic for Automatic Teaching Operations (PLATO) and Time-Shared Interactive Computer-Controlled Information Television (system) (TICCIT) programs focuses on their costs, performance and educational effectiveness. The cost component attempts to measure the costs and assess the economic effects of each of the systems on the participating educational institutions. The technical component monitors the performance of each of the two systems so as to discover and explain strengths, weaknesses, and implications for further use. The educational component focuses on evaluation of the effect of computer assisted instruction (CAI) upon student performance and behavior; assessment of the impact of the CAI upon instructors, administrators, and the institution itself; and appraisal of the potential and effect of the methods used to produce, operate, and maintain the course materials. These cost, technical, and educational analyses identify strengths and weaknesses of PLATO and TICCIT, and begin to assess the extent to which the promise of instructional technology has been fulfilled.

Anastasio, Ernest J. Survey of Instructor Activities and Attitudes. Educational Testing Service, Princeton, NJ, 1972, 18p. Not available separately, see ED 072 070 (84p.). ED 072 071.

A survey questionnaire of the daily activities and attitudes of instructors participating in demonstrations of the University of Illinois and Mitre computer-assisted instruction (CAI) systems is provided. The first section of the questionnaire concerns the instructor's background, present status, and teaching practices. The second section asks for opinions regarding computers and CAI, and the final section focuses upon opinions regarding various educational practices that may be influenced by these projects. The questionnaire is comprised of a total of 83 questions. (For related documents, see ED 072 070, 072, and 119.)

Anderson, Beverly L. Kodiak Island Borough School District Title IV Project. Final Evaluation Report, July 1977. Kodiak Island Borough School District, AK; Northwest Regional Educational Lab, Portland, OR, 1977. 133p. ED 142 359.

Presenting a formative evaluation of the 1976-77 Kodiak Island Borough School District Title IV Elementary Secondary Education Act Project involving 4 schools, 8 teachers, and 50 students in grades 9 and 10, this program evaluation addresses a model based on a philosophy of individualized and independent instruction employing self-paced and prepackaged curriculum materials, community resources, a learning manager approach to teaching, student open entry-open exit, and an overall management/teacher support system. Data sources for this report include a 1976 evaluation report of the preservice teacher training workshop; a first quarter evaluation summary (December, 1976); a summary of rural secondary schools project coordinator's activities and time; data from interviews with parents, students, school board members, teachers and administrators; quarterly reports from each of the schools; teacher unit rating forms on each teaching unit used during the year; student unit rating forms on each unit studied during the year; school visit checklist summary; and the Iowa Test of Basic Skills (pre- and post-tests). Structured according to evaluation questions devised in the August 1976 design, the evaluation results are presented in terms of answers to questions regarding the overall program, materials, teaching methods, teacher training, and the managerial system.

Appel, Marilyn and others. Cognitive and Affective Outcomes in Children as a Function of Participation in SCIL, an Individualized Version of the SCIS Program. Research for Better Schools, Inc., Philadelphia, PA. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL, April 1974. 20p. ED 097 379.

An overview and rationale for the Science Curriculum for Individualized Learning (SCIL) are provided. SCIL is the result of the individualization of the SCIS program. The SCIL management system is based on the exploration, invention, and discovery concepts of Piagetian theory. An evaluation study of two SCIL units, including interactions, systems, subsystems, and variables, is presented. It was found that over 90 percent of the SCIL students in grades 3-6 achieved cognitive goals as measured by completed discovery lessons. Students in the SCIL program chose more positive responses when compared to students in teacher-made traditional curriculum. The SCIL students also chose more positive responses when compared with nonindividualized programs. Third grade SCIL students chose more positive responses than did SCIL students in grades 4, 5; and 6, suggesting that the units were well suited for the third grade students' developmental level. The parents of SCIL students chose highly positive responses when asked their perceptions of their children in relation to SCIL and science activities.

Ardi, Dana B. New Avenues of Teaching Resources--Sesame Street Programs for the Mentally Retarded Child. Paper presented at the annual international convention, Council for Exceptional Children, Atlanta, GA, April 11-15, 1977. 13p. ED 139 197.

The Sesame Street "Play to Grow" materials, designed to foster a positive self-image in retarded children, were evaluated with 173 mentally retarded (MR) children (4 to 12 years old), 45 day care program children (mean age 4.3 years), and 45 second graders. During sample tape presentations, children's visual attention, verbal comments, and motoric behavior were recorded. Among findings were that attention of both MR and normal samples averaged from "high moderate" to "very attentive"; that MR children were more involved with their viewing; that children's comprehension of "Play to Grow" segments was excellent; and that although normal second graders were very aware of the differences in the way the MR children went about performing "Play to Grow" activities, bias and prejudice could not be detected. A list of the program's values and a sample segment outline are provided.

Bailak, Hilton M. and Castro, Barbra. A Second Year Evaluation of Individualized Prescribed Instruction (IPI). Research for Better Schools, Inc., Philadelphia, PA, 1969. 80p. ED 036 157.

This evaluation report of IPI in its second year concentrates on three main points: student attitudes towards IPI, teacher and student classroom activity and interaction, and student achievement during the school year. An account of overall impressions concludes the report which does not attempt to formalize any conclusions. It stresses, however, the point that IPI is still in its infancy and has a long way to go before it matches the model of individualization of instruction envisioned by its developers. So far it does not begin to do so; for the second year, measured achievement in IPI is less than that observed in non-IPI classes. If this turns out to be the finding in other areas where IPI is being tried out, further development might be needed before the program could merit nationwide dissemination.

Baker, Eva L. Practicum for Instructional Developers. Final Report. 1975. 73p. ED 098 266.

The report describes the development of a project which produced an integrated set of materials on formative evaluation that are appropriate for use in graduate training, research and developmental settings, and public school personnel use. The objectives of the project were: (1) to identify relevant data sources for formative evaluation and to outline a plan that incorporated appropriate data sources; (2) to be able to display data from a variety of sources, to summarize information in nonstatistical ways, and to draw inferences about program components that require revision; and (3) to suggest revisions of instructional materials when provided with a program description and an unanalyzed data set. The materials were developed in the course of eight tryout and revision cycles and now meet the expectations of their designers.

Ball, Samuel and Bogatz, Gerry Ann. Research on Sesame Street: Some Implications for Compensatory Education. Educational Testing Service, Princeton, NJ, 1972. 30p. ED 068 155.

The first two years of Sesame Street were evaluated as to their effectiveness as compensatory education. The evaluation assessed progress along some 36 primary goals of the show, as well as transfer effects, home background variables, parental attitudes, and socioeconomic status factors. Over 1,300 preschool children were tested, and many were observed as they viewed the show. As Sesame Street was intended primarily for disadvantaged children at home who had received no educational intervention, the major concentration in the sampling was on that subpopulation. A content analysis was made of the show; a questionnaire was administered to teachers whose classes viewed the show; and the amount of viewing for all subjects was assessed using four assessment techniques. A follow-up study was carried out in the second year of the specific subpopulation of the first study. In addition, at-home disadvantaged children who had not viewed the show its first year were sampled. Results of the evaluation indicated that: (1) many tests of young children that are currently in use are not adequate; (2) among the subjects, there were no significant effects due to race; (3) the show had a marked effect not only in the areas of rote learning of basic skills but also in higher areas of cognitive activity, this effect being shown by both boys and girls; (4) amount of viewing was significant in gains made; (5) the disadvantaged tended not to view as much; (6) viewing of Sesame Street affected scores on the PPVT administered as a posttest; and (7) disadvantaged 3-year-olds learned much of the material taught during the first year of the show.

Ball, Samuel and Bogatz, Gerry Ann. Sesame Street Summative Research: Some Implications for Education and Child Development. Educational Testing Service, Princeton, NJ. Paper presented at the 79th annual convention of the American Psychological Association, Washington, DC, September 7, 1971. 12p. ED 057 914.

In an effort to evaluate the effects of Sesame Street, 943 3-, 4- and 5-year-olds, including disadvantaged children from the inner city, advantaged suburban children, children from rural areas, and disadvantaged Spanish-speaking children, were tested by adults from the children's own neighborhoods. Results indicated that: (1) the children who watched the most learned the most; (2) the skills that received the most time and attention on the program were, with some rare exceptions, the skills that were best learned; and (3) the program did not require adult supervision for the children to learn. The children viewing at home showed gains as great as, and sometimes greater than, children who watched at school supervised by the teacher. Various disadvantaged groups made as much progress as advantaged children in learning from television. Measuring techniques developed for the study proved especially valuable when combined with the services of coordinators and testers who lived in the communities being tested.



Ball, Samuel and others. The First Year of Sesame Street: An Evaluation. Final Report, Volume III of V Volumes. Educational Testing Service, Princeton, NJ, 1971. 442p. ED 047 823.

This study evaluates the impact of the first year of Sesame Street on preschool televiewing audiences in five sites (Boston, MA, Durham, NC, Phoenix, AZ, Suburban Philadelphia, and Northeastern California). Chapter I introduces evaluational questions and the research strategy. Chapter II presents sampling procedures for pretest and posttest data on 943 children, explains criteria for development and selection of measurement instruments assessing children's learning, program content, parent and teacher attitudes, and describes field operations. Chapter III analyzes results in three parts: (1) a descriptive analysis of the viewing population (age, sex, advantaged children, Spanish-speaking children, rural children, and disadvantaged at-home and in-school viewers); (2) a probing analysis investigating in depth the characteristics of at-home, disadvantaged, high-viewing children in relation to home background and high or low learning; (3) an inferential analysis examining the overall effectiveness of the television series in achieving its goals. Chapter IV presents the summary, conclusions, and recommendations. Extensive appendices include detailed information on "Sesame Street" goals and evaluation instruments.

Ball, Samuel and others. Reading With Television: An Evaluation of the Electric Company. A Report to the Children's Television Workshop. Volumes 1 and 2. Children's Television Workshop, New York, NY; Educational Testing Service, Princeton, NJ, 1973. 200p. ED 073 178.

An evaluation of the first year of The Electric Company is provided. Volume 1 is comprised of the following chapters: I. Introduction; II. Preparing for the Evaluation--Research Design and Sampling Procedures; Field Operations; The Treatment--The In-School Viewing Treatment, the At-Home Viewing Treatment, and the Content of The Electric Company; Measuring Instruments--General Considerations, Tests for Children, Parent Questionnaires, Teacher Questionnaires, Observations of the Classroom, Attendance Records, Viewing Records, and Content Analysis; III. Results--The Questions to be Asked; Descriptions of the Sample; Analyses of the In-School Viewing Experiments; and Analyses of the At-Home Viewing Experiments; and IV. Summary and Conclusions--Summary of Project Activities; Summary of Results; Conclusions; and Future Research. Appendices present: Goals of The Electric Company; Description of the Electric Battery and Sample Items; Pretest Teacher Questionnaire; Posttest Teacher Questionnaire; Observation Form; Viewing Record; and Content Analysis. Seven abstracts are provided of the six viewing experiments and of the overview of significance levels of tests and subtests for the in-school experiments in Fresno and Youngstown. Volume 2 consists of 57 tables which provide the study data.

Ball, Samuel and others. Reading With Television: A Follow-Up Evaluation of the Electric Company. Children's Television Workshop, New York, NY; Educational Testing Service, Princeton, NJ, 1976. 348p. ED 122 798.

The second-year evaluation of The Electric Company Children's Television series used reading tests to assess the skills and concepts addressed on the show. Tests were given in October and May, and teacher questionnaires were administered three times during the second year. Classroom atmosphere during the viewing time was observed as well. The positive impact of The Electric Company on reading skills and student attitudes was as favorable in the second year as in the first, though the size of the impact in the second year was less. One year's viewing seemed to provide the major benefits for students. No particular teacher attitudes or behaviors were consistently found to have a relationship with student reading skill gains as measured by this evaluation. A summary of the first-year evaluation is appended.

Banathy, Bela H. and others. The Analysis and Reporting of Evaluation Training Materials Developed by R&D Laboratories and Centers. Final Report. Far West Laboratory for Educational Research and Development, San Francisco, CA, 1976. 71p. ED 150 166.

Evaluation training materials developed by federally funded research and development laboratories were surveyed, analyzed, and described. This project included the collection and analysis of training materials, and the development of the Consumer's Guide to Evaluation Training Materials. This final report describes the rationale, purpose, and activities of the project and the Consumer's Guide, and includes a sample of the product descriptions included in the guide. The analysis of the evaluation training products and a description of the relationships between these products are also discussed. A list of titles evaluated in the guide, an index to these training materials, and an analysis of the training materials produced by each research and development laboratory are appended.

Banks, Henry A. Evaluation of an Instructional Program in Training Teachers to Analyze Educational Materials for Possible Racial Bias. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL, April, 1974. 31p. ED 090 307.

Content analysis of textbooks for black students in grades 1-3, a program for teachers of the first- through third-grades, was developed by the Far West Laboratory. The overall objective of the course was to develop teachers' skills in analyzing textbooks in terms of their appropriateness for black pupils. Data collected during an operational field test revealed that the course is effective in (1) increasing teachers' awareness of the need to analyze textbooks, and (2) bringing about an improvement in their ability to perform the analysis.

Barry, Roger D. and Carter, Robert A. Evaluation of General Chemistry Slide/Audio-Tape Programs. Northern Michigan University, Marquette. Institutional Research Office, 1972. 10p. ED 066 124.

This document presents an evaluation of an instructional system to assist students in the general chemistry course. These materials include a series of 16mm sound motion picture films that outline the required laboratory experiments, slide/tape programs for individual student use designed to teach the student how to analyze and draw conclusions from the laboratory data for each experiment, similar slide/tape programs covering many of the lecture topics, and an instructional booklet that contains sets of problems and learning exercises related to lecture topics and an outline of each laboratory experiment. Four major points can be cited as a result of the evaluation study: (1) the achievement of students who use the slide/tape programs was superior to the achievement of those who chose not to use them; (2) for those students who used the materials, achievement tended to increase slightly as the amount of time devoted to the slide/tape programs increased; (3) a slightly higher proportion of low than high ability students chose to use the slide/tape materials; and (4) lower ability students who chose to use the materials tended to spend slightly more time on them than did high ability students.

Bartholomew, Robert and Meyer, Bonnie. Developing and Evaluating Learning Devices for Exceptional Children. Tompkins-Seneca-Tioga Board of Cooperative Educational Services, Ithaca, NY, 1977. 23p. ED 132 779.

A research project was conducted to develop and evaluate learning products that would assist exceptional children in learning specific skills. To investigate the learning processes of exceptional children, data were gathered from site visits, interviews, observations, relevant literature, copies of curriculum and evaluation forms for exceptional children, and inquiries to 43 toy and educational equipment manufacturers. Differences in learning processes between normal and exceptional children were examined, and various skill development areas were outlined. A list of desired product attributes (such as simplicity and ease of manipulation) were drawn up as an initial step in product development. Five of the learning devices developed (the visual discrimination puzzle, perceptual development cards, body parts puzzle, number puzzle, and measuring device) were tested with 17 children (5 $\frac{1}{2}$ -13 years old) attending primary and intermediate classes for the trainable mentally retarded. Results indicated that use of each of the learning devices increases Ss ability to perform on these devices as well as to apply the skills and concepts to similar, more practical situations. In addition, performance improvement was maintained over time without further contact with four of the five devices (some forgetting over time did occur with the measuring device).



Bennie, Frances. Pupil Attitudes toward Individually Prescribed Lab Programs, Journal of Reading, v17, n2, p108-12. Nov 1973. EJ 085 878.

Assesses a learning lab program while measuring student's attitudes toward individually prescribed reading instruction through a 10-item questionnaire.

Beyer, Barry K. and others. Evaluation of Africa South of the Sahara. An Inquiry Program for Grades 7-10. Carnegie-Mellon University, Pittsburgh, PA, Project Africa, 1969. 139p. ED 038 545.

Project Africa, a social studies curriculum research and development project, is primarily engaged in testing new materials and techniques for teaching about Africa south of the Sahara in American secondary schools. The purpose of this technical report is to highlight the program's strengths and weaknesses from a variety of viewpoints--those of scholars, teachers, and students. Evaluation data were collected by a variety of instruments and procedures for use in designing new materials and techniques for teaching about Africa. The document should be used as a working paper with constant reference to the instructional materials and teaching guides. The project materials are now available to interested educators to refine further and to adapt to the specific needs, interests, and abilities of their own particular students.

Blackburn, Susan Fleming. The Construction, the Implementation, and the Evaluation of a Title I Primary Grade Listening Program. Ph.D. Dissertation, The University of Mississippi, 1977. Available from University Microfilms, P. O. Box 1764, Ann Arbor, MI 48106 (Order No. 76-20-519). 167p. ED 127 626.\*

The purpose of this study was to determine the effect of a structured listening program on 220 first-, second-, and third-grade students enrolled in Title I schools in Albuquerque, NM, public school system. All of the students were given the Educational Testing Services' Cooperative Primary Tests: Listening, and the author's own Listening Rating Scale. Half of the subjects then received one 15-minute listening lesson daily for a period of 20 days. Analysis of post-tests revealed that the improvement in listening ability of the overall experimental group was significantly superior to the listening ability of the overall control group, as measured by both instruments. However, no significant improvement was noted in listening ability for the second-grade group, the third-grade group, or for first-through-third-grade girls, as measured by the standardized test alone.

Bramble, William J. and others. On the Beam: The Appalachian Education Satellite Project, Appalachia, v9, n5, p11-17, April-May 1976. EJ 139 835.

Preliminary evaluation of a year's operation indicates the Appalachian Education Satellite Project is providing education courses to teachers at a reasonable cost, and is proving that such an operation is feasible.

Bramble, William J. and others. Performance of AESP Transmission/Reception Equipment; Summer and Fall, 1974. Technical Report No. 5. Appalachian Education Satellite Project, Lexington, KY, 1975. 63p. ED 114 063.

The Appalachian Education Satellite project (AESP), using the ATS-6 Satellite, has designed a variety of multi-media learning activities intended to upgrade the quality of instruction in Appalachia. Four modes of communication (televised programs, four-channel audio review, four-channel data collection and analysis, and VHF-teletype relay system) were each evaluated according to the following criteria: uses, equipment requirements, organizational requirements, and the quality of communication. This is the fifth of 12 volumes in the technical report series on AESP.

Branson, Robert K. Formative Evaluation Procedures Used in Designing a Multi-Media Physics Course. Paper presented at the annual meeting of the American Educational Research Association, New York, NY, February 1971. 20p. ED 050 140.

This research, conducted at the U. S. Naval Academy as part of a total effort to design a multi-media physics course, collected data on the learning materials used in Fall 1969, investigated the technical characteristics of the criterion-referenced test items used, and studied student preferences for the alternative study approaches. The ultimate intention was to develop an effective and efficient physics course which could be readily modified by the various course instructors. Seven alternative teaching/learning approaches were developed, based on objectives derived from four widely used physics textbooks. These approaches included two forms of lectures, a study guide, videotapes, and other audiovisual aids. Results demonstrated that the method of instruction was not the critical element in student performance, that students could achieve good results on their own if provided with the necessary instruction and materials, and that if data are collected systematically and used to revise course components, considerable improvements can be made at each iteration.

Bravo, Anne. An Evaluation of the Urban Education Program "Multi-Sensory Stations Program." District 10, New York City Board of Education. Fordham University, Bronx, NY, Institute for Research and Evaluation, 1972. 12p. ED 059 024.

The objectives of this program were to provide reading remediation and curriculum enrichment through the use of audiovisual resources and to train teachers in using new instructional media and developing new instructional techniques. The program was coordinated by a full-time teacher with the help of one paraprofessional assistant in each participating school. Mobile carts housing different equipment and materials were moved by the assistants from one classroom to another to provide individual, small group, and whole-group instruction. The target pupils were those evaluated to be below grade level. Evaluation was done through interviews, questionnaires, observations, and

analysis of test results for an experimental group from four schools and a control group from six schools. The following findings were obtained: (1) the majority of children who participated in the program liked it, (2) there was a need for better communication with the children as to the methods and goals of the lessons, (3) the general performance was significantly lower in comprehension than in word recognition, (4) the experimental group made significantly greater gains over the control group ( $P < .01$ ) on the Metropolitan Reading Achievement Test, and (5) teachers had mixed reactions to the program-- the major problem identified was the relationship between teachers and the paraprofessional assistants. Recommendations were made for improvement and continuation of the program.

Brickner, Ann and Senter, Donald R. Follow-up Study of LISTEN LOOK LEARN First Year Students Who Used Traditional Basal Programs in Second Year. Educational Developmental Laboratories, Inc., Huntington, NY, 1971. 13p. ED 049 018.

For those school districts who wished an evaluation of the LISTEN LOOK LEARN (LLL) System at grade 1 before expanding it into higher grades, a small study was conducted to determine what effect the transition to a basal reader would have on the child taught beginning reading in the LLL program. Two school districts submitted end-of-first-grade Metropolitan Achievement Tests data and end-of-second-grade Stanford Achievement Tests (SAT) data for five classes of children who were taught reading by the LLL methods and techniques in grade 1 and a basal reading program in grade 2. For both districts the means for SAT word meaning and paragraph meaning were somewhat above the national norms. A third district used the LLL system in a corrective and remedial experiment classroom with third-grade children. At the end of the third grade, 35 children took Houghton Mifflin Achievement Tests. For more than 90 percent of 18 possible scores, the children scored at or above the critical score (80 percent or above), thus showing they were ready to re-enter any fourth-grade classroom and read on or above grade level. Reports of two large-scale comparative research projects of LLL and basal programs may be found in ED 049 019 and ED 027 166. Graphs and tables are included.

Brickner, Ann and others. Summative Evaluation of LISTEN LOOK LEARN 2nd Year Students, Cycles R-70, 1968-69. Educational Developmental Laboratories, Inc., Huntington, NY, 1970. 48p. ED 049 016.

This study represents the second segment of the 3-year longitudinal study to test the effectiveness of the LISTEN LOOK LEARN (LLL) multimedia communication skills system. Data were analyzed for the 1968-69 school year for 159 students who participated in LLL instruction during both their first and second year, 113 second-year students who used a traditional reading program during their first year, and 240 control students who had two years of reading instruction in a traditional program. The data were collected by questionnaires completed by teachers and by standardized tests. The subjective evaluation of the teachers showed that 11 of the 12 cooperating teachers enjoyed using LLL, nine of the 12 believed it to be superior to other programs with which



they had had experience, and a difference of opinion existed as to the ability level with which LLL was most effective. Analysis of the objective data revealed that the LLL students scored significantly above control students on the word meaning, paragraph meaning, and word study skills subtests of the Stanford Achievement Test and at a significant level above control students on the Cooperative Primary Tests, Listening. Tables are included.

Brightman, Richard W. Computer Assisted Instruction Program for Police Training. Coast Community College District, Costa Mesa, CA; Los Angeles Police Department, CA, 1971. 63p. Available from Superintendent of Documents, U. S. Government Printing Office, Washington, DC, 20402 (N-2700-0081). ED 067 858.

A project was devised to develop study materials for a computer-assisted instruction (CAI) course in police training, to develop computerized case problems, and to evaluate the effectiveness of the learning materials as compared with conventional classroom instruction in the same subject areas. Both an experimental group (police cadets at the Golden West Police Academy who studied the course materials through use of a syllabus and CAI) and a control group (police cadets at Los Angeles Police Academy who studied the same subject through conventional classroom instruction) took intelligence tests and personnel tests; results of these tests allowed 23 matched pairs from control and experimental groups to be formed. At the conclusion of the training program, all subjects completed a written examination. Results of analyses of performance scores on the examination showed that the experimental group performed significantly better than the control group. Apparently, CAI and independent study are effective techniques for police training and should be investigated further and expanded.

Brown, Edward K. The Nongraded Program at the Powell Elementary School: Evaluation Phase II. Philadelphia School District, PA, 1970. 39p. ED 049 298.

Nongraded programs attempt to individualize instruction through the systematic assignment and reassignment of the pupil to classes consistent with his performance level. This evaluation of the nongraded program at Powell Elementary School (grades 1-6) indicated that individualization of instruction did occur at Powell and that the pupils' performance in reading and arithmetic on the Iowa Test of Basic Skills was significantly improved over the previous year. In addition, nongraded pupils attained higher levels of independent study skills than most of their peers in graded schools. Instructional modifications suggested for implementation at Powell include upgrading program offerings and materials for the upper-level pupils, reassigning pupils on a more frequent basis, and increasing intra-teacher conferences. To provide greater program effectiveness, additional inservice training and preparatory periods, supplies, and secretarial services are recommended. An administrative-roster chairman and a full-time instructional materials center assistant are additional enabling recommendations.

Buffer, James J. and others. A Junior High School Industrial Technology Curriculum Project: A Final Evaluation of the Industrial Arts Curriculum Project (IACP), 1965-1971. Ohio State University, Columbus, Research Foundation, 1971. 395p. ED 054 389.

The objective of the Industrial Arts Curriculum Project (IACP) was to develop, refine, and institutionalize a new and relevant two-year junior high industrial arts program. The study focused on "Industrial Technology," the knowledge of management, production, and personnel practices used by men to produce goods to satisfy their needs through construction and manufacturing activities. As a result of a six-year program of intensive research and development, field testing, evaluations, and revisions, two one-year courses were developed. These courses are entitled "The World of Construction" and "The World of Manufacturing." The instructional packages for each include textbooks, laboratory manuals, teacher's guides, achievement tests, related hardware, and audiovisual materials. The materials were field-tested over a four-year period with 20,000 students in 13 states and were coordinated through 124 headquarters and field staff members. Workshops have been conducted in 45 colleges and universities for preparing teachers to adopt or adapt the IACP system. The instructional packages are available through McKnight and McKnight Publishing Co., Bloomington, IL, and are adaptable to existing industrial arts facilities.

Bunger, Marianna. Two American Studies on Literacy through Television: Operation Alphabet in Florida, Literacy Discussion, v1, n3, p129-42. Summer 1970. EJ 028 470.

A statewide concentrated literacy campaign using Operation Alphabet Telecasts was launched in Florida in 1963. This article relates the history of the campaign, describes Operation Alphabet, and evaluates some of the instructional procedures used.

Caldwell, Kathryn S. The Veterans Administration Experiments in Health Communications on the Applications Technology Satellite (ATS-6). Final Report. Applied Communication Research, Stanford, CA; Foundation for Applied Communications Technology, Los Angeles, CA, 1976. 68p. ED 119 719.

Because many of the Veterans Administration hospitals in Appalachia are located great distances from medical teaching facilities, high powered communication satellites have been employed to facilitate quality two-way communication between medical personnel scattered throughout the region. To achieve diagnostic, therapeutic, and educational purposes, the National Aeronautics and Space Administration's (NASA) Applications Technology-6 satellite was field-tested in five different modes: (1) video seminars, (2) teleconsultations, (3) grand rounds, (4) out-patient clinics, and (5) computer-mediated events. All five modes provided clear communication and significantly altered the climate of the 10 hospitals involved in the experiment. The video seminars were particularly well received. Details of the program evaluation are provided.

Caldwell, Robert M. Literacy Development Using a Programmed Text and Computer Assisted Instruction. Paper presented at the annual meeting of the American Educational Research Association, Chicago, April 15-19, 1974. 23p. ED 089 216.

The purposes of this study were to evaluate the effectiveness of a literacy development program using the computer as a means of adjusting reading instruction to the varying abilities of illiterate and semi-literate adolescents and adults, and to compare the effectiveness of the literacy materials presented through the computer system with the effects achieved by identical materials presented through a programmed text. Subjects used in this investigation were enlisted from five high schools in Centre County, PA; they ranged from 14- to 18-years-old and read below fifth grade level. Some of the findings were that reading materials sequenced for instruction in both the programmed text and a computer-based display unit were successful in producing significant differences between pretest and posttest achievement; the programmed text and the computer-based display unit were equally effective; further study needs to be made into the effect of mechanical problems encountered in the use of computer systems as they influenced student achievement; students using the computer-assisted reading materials were more positive in their attitudes toward that medium than students using the programmed text; and students using the computer system spent an average of 18 minutes longer at the instructional task than those using the programmed text.

Carpenter, C. R. and others. Educational and Instructional Television Facilities Evaluation: Preliminary Practical Procedures. Pennsylvania State University, University Park, Department of Psychology, 1968. 86p. ED 037 101.

Leaning heavily on national educational television affiliates for its information, this survey of instructional television production units and the relationship of their facilities to the quality of television courses which they produce, found that instructional television was fairly well off in terms of hardware and only slightly lacking in more highly trained personnel; the future, however, with its inevitable expansion of need for more and more instruction via television, did not hold a happy prospect. (ED 037 099, 100, and 102 are related documents.)

Chitayat, Linda. An Evaluation of Computer-Managed Education Technology at New York City Community College. City University of New York, Institute for Research and Development in Occupational Education, 1976. 51p. ED 144 524.

The Computer-Managed Education Technology (COMET) program was designed to improve group instruction through the use of technological aids in the classroom. Specific objectives included (1) improving feedback on student comprehension during a class period, (2) facilitating the administration and grading of homework and quizzes, (3) providing for the use of multimedia equipment, and (4) providing effective methods for student self-study for remedial purposes. Two classrooms and supplementary facilities were equipped with a student response system



(SRS), five audiovisual response (AVR) stations, multimedia equipment, a minicomputer (NOVA 840), and a card reader and line printer for inputting data and retrieval of print-outs from the computer. The courses taught using the COMET facilities were mostly technical or skills oriented and primarily involved lower classmen in introductory or developmental classes. Sixteen instructors and six classes were administered questionnaires designed to measure (1) degree of program implementation; (2) accuracy, speed, and ease of use of various hardware and software components; and (3) teacher and student reactions to the program. The SRS was found to be a valuable instructional aid; however, the AVR stations, multimedia equipment, and computerized capabilities of the program received little usage. Questionnaires are appended.

Clarke, Wentworth. A Research Note on Simulation in the Social Studies, Simulation and Games, v1, n2, p203-10. Jun 1970. EJ 035 774.

The use of a game simulating a political convention was found to improve both students' and parents' attitudes toward social studies.

Clausing, Gerhard and others. Individualized German Instruction at the College Level: A Follow-up Report, Foreign Language Annals, v7, n2, p237-42. Dec 1973. EJ 088 050.

Evaluates student achievement in second year individualized language programs at the University of California at Berkeley and contrasts data with results of student achievement in basic courses.

Collet, Leverne S. and others. Formative and Summative Evaluation of the FEHR-Practicum Training Module. Final Report. 1975. 303p. ED 131 055.

The purpose of this project was to evaluate the FEHR (Formative Evaluation and Heuristic Research) practicum training model, a computerized simulation providing practical experience in decision-oriented educational research and evaluation. The report is organized into five chapters. Chapter 1 contains an introductory discussion of the needs and purposes served, a description of a practicum session, and specifications for each of the physical components of the system. Chapter 2 contains a description of the computer program which generates FEHR practicum data, and presents evidence of its portability and adaptability. Chapter 3 describes the evolution of the present set of simulation problems and provides evidence of the internal validity of each problem. Chapter 4 presents the results of the empirical evaluation of the FEHR practicum system in a variety of instructional roles. The fifth and final chapter provides a summary of the evidence regarding the system's effectiveness and discusses the implications for its dissemination and use. The findings provide evidence that, correctly used, the FEHR system can be useful in teaching research/evaluation skills. Its flexible form has proven quite effective for creative instructors who are willing to adapt their methods to the problem-solving mode that is most compatible with the FEHR system. The definitive finding of the evaluation was

that FEHR projects are most effective when they are an integral part of a training curriculum teaching research/evaluation techniques and principles in a problem-solving discovery mode.

Computer Aided Learning Project; Report, Trial 3. London Borough of Havering (England), 1973. 36p. ED 129 281.

In a third study of the Computer Aided Learning (CAL) system of the London Borough of Havering, the performance of students taught biology by a teacher using the CAL system was compared with that of students taught by the same teacher without the CAL system. Students were divided into two matched groups and compared using a pretest/posttest design. Students of all ability levels who used CAL appeared to gain a higher score on the posttest than equivalent students taught by conventional methods. About 75 percent of the students thought the CAL method was a satisfactory way to learn.

Conger, D. Stuart, Conger, and others. Evaluations of Life Skills Training. Training Research and Development Station, Prince Albert (Saskatchewan), 1974. 173p. Available from Information Canada, Box 1565, Prince Albert, Saskatchewan, Canada. ED 108 034.

Life skills are problem-solving behaviors applied appropriately and responsibly in the management of one's life. The purpose of this book is to make available evaluation reports on the use of the life skills course conducted by a variety of organizations. Each evaluation study was based on a different experimental design and in some cases the evaluation was done by the implementer. The evaluation report on the course conducted by Mental Health/Alberta represents one of the most thorough psychometric evaluations of a life skills course to date. The reports in this book indicate some of the variety of applications being made of the life skills course: mental health, probation, and housing. Since the purpose of evaluation is to provide information to decision makers whether they be potential adopters, adapters, or developers, it is appropriate that this book on life skills evaluation should include a plan for re-developing the life course.

Cratty, Bryant J. and Szczepanik, Sister Mark. The Effects of a Program of Learning Games upon Selected Academic Abilities in Children with Learning Difficulties, 1970-1971. California University, Los Angeles, 1971. 87p. ED 057 119.

First graders (105 males and 152 females) from 16 central city schools within the Catholic Archdiocese of Los Angeles were selected because they were diagnosed as poorly prepared for regular classroom activities. Following the administration of a 6-category test battery, the children were placed within two groups: Group 1, containing 84 children, was exposed during the first half of the school year to one-half hour daily enrichment classes composed of learning games intended to improve the academic operations previously evaluated; group 2, with 73 children, remained within the regular classroom environment during the first half of the year. Following a second testing using the 6-category battery,

the children in group 2 were exposed to the daily program of learning game enrichment, while group 1 remained in the classroom. The learning games, in general, are activities which require an active response on the part of the child and the content of the enrichment program was unique to each school and flexible. Analysis of the data involved intra-group correlations of the test scores, inter-group comparisons of rates of change, and other similar procedures.

Culp, George. Computer-Assisted Instruction in Undergraduate Organic Chemistry: Design, Application, and Evaluation. Technical Report 10. Texas University, Austin, Computer-Assisted Instruction Laboratory, 1971. 11p. ED 072 630.

The Computer-Assisted Instruction (CAI) program in undergraduate organic chemistry at the University of Texas was evaluated by an experimental design in 1969 and found to be successful. This report discusses in detail the formation of the design, its application, and the method of evaluation. The program itself included 15 teaching modules that dealt with a variety of organic chemistry topics.

Cusano, Bernard. Children Learn to Read through Cooperative Teaching of Paraprofessionals and Teachers. New York City Board of Education, Brooklyn, NY, Office of Educational Evaluation, 1976. 17p. ED 142 626.

This report evaluated a cooperative teaching program designed to provide supplementary diagnostic and prescriptive reading instructional services to New York City elementary school students who were more than one grade level behind in reading. Three hundred students in grades three through six received reading instruction in reading laboratories. Specific skill needs were identified and an individualized program of reading instruction was devised for each student. Students were tested on a pre and post basis. Paraprofessionals were rated for performance, and teachers were interviewed. This report concluded that posttest reading scores of students increased significantly over the anticipated posttest scores. Paraprofessionals perceived their program experiences as contributing toward improved performance. Interview data reflected positive reactions to the programs on the part of classroom teachers, paraprofessionals, and students. The reading and language rating scale used in the program is included in the appendix.

Dallman, Brian E. and others. Evaluation of PLATO IV in Vehicle Maintenance Training. Air Force Human Resources Laboratory, Lowry AFB, Colorado Technical Training Division, 1977. 146p. ED 153 638.

The implementation and subsequent evaluation of the PLATO IV system in an Air Force vehicular maintenance training program are described. Outcomes of this project, which was designed to test the effectiveness of the PLATO IV instructional system in a technical training environment, indicate that PLATO could be successfully incorporated into the technical training process, and that its training effectiveness, impact on attitudes, reliability, and utility are acceptable. The

only major drawback found was the relatively high cost of PLATO as compared with costs for other forms of training for similar applications. Appendices contain survey forms and course development plans used in this project.

Deihl, Ned C. and Zeigler, Ray H. Evaluation of Computer-Assisted Instruction in Instrumental Musicianship. Final Report. Pennsylvania State University, University Park, 1972. 46p. ED 067 897.

A project was devised to extend the applicability of a previously developed computer-assisted instruction (CAI) course in instrumental musicianship (see ED 035 324), and to assess its effects through the development and implementation of criterion referenced measures. Twenty-five intermediate level students of treble clef wind instruments participated as subjects in the evaluation phase of the project. All students were given a listening pretest involving aural and aural-visual discrimination and a performance pretest; attended a CAI lab twice weekly which included online listening and coordinated offline practice; and completed posttests which were the same measures administered previously as pretests. Group gains in both listening and performance were significant and dramatic; since the students had been playing these instruments for five or more years, it is presumed that the results can be attributed to the experimental treatment even without comparison with a control group.

Determining the Effects of "Developing Readiness for Pre-School Children via Television": A Title III Project. Lake Central School Corporation, St. John, IN, 1973. 119p. ED 093 484.

This report attempts to measure the first year effects of a local television series designed to increase reading readiness. Kindergarten children enrolled in the Lake Central Schools were subjects for testing the effectiveness of the TV readiness program. Other evaluation inputs included kindergarten teacher rater judgments and a survey of Lake Central School Corporation parents in the viewing area of channel 50. Data were collected and analyzed to provide an evaluation of (1) the overall effectiveness of the approach as measured by results upon kindergarten children, (2) the specific effects upon children by pupil types (i.e., sex, socio-economic status, and I.Q.), (3) the apparent quality of each of the 48 films to develop readiness skills, (4) the apparent receptivity of parents of young children in the channel 50 viewing area to the project, and (5) the basis for needed changes and revisions to improve the effectiveness of the project during its development period. Rating scales, test results, and a complete analysis of evaluation material are included in the appendices which comprise most of this document.



Devitt, Joseph J. Do Federally Funded Programs Really Work? The State View, School Media Quarterly v1, n4, p288-90. Summer 1973. EJ 078 922.

The Waterville, ME, High School Media Center, an ESEA Title III project, was studied to determine the effect it had had on Maine schools. Questionnaires were sent to superintendents and state librarians. This article reports the results.

Dickerson, Larry R. and Roberts, Ralph, R., Jr. The Effectiveness of Pre-packaged Instructions for the Inservice Training of Rehabilitation Counselors. Counselor Education and Supervision v14, n2, p133-39. Dec 1974. EJ 108 966.

The results suggest that a voluntary packaged instructional approach to the conceptual training of rehabilitation counselors appears promising, but greater effort is needed in developing the training materials if the program is to be effective.

Dougherty, Knowles and Herbert, Martin. Evaluation Report 2-A-1. Final Summary Report, Year 2. Central Midwestern Regional Educational Laboratory, Inc., St. Louis, MO, 1975. 35p. ED 142 439.

The Comprehensive School Mathematics Program (CSMP) is a program of Cenrel, Inc., one of the National Educational Laboratories, and is funded by the National Institute of Education. Its major purpose is the development of curriculum materials in mathematics for grades K-6. Beginning in September, 1973, CSMP began an extended pilot trial of its elementary program, the Comprehensive School Mathematics Program. This report is an attempt to summarize the information collected during the second year, 1974-75, when 30 school districts were involved in the use of some combination of kindergarten, first, and second grade materials. The report includes data on the school sites, review of formal written reports, and a review of evaluation questions.

Doyle, Charles P. and Fenton, Dorothy. Teacher Involvement as Correlated to Degree of Acceptance of In-service Television Programs. Illinois School Research v8, n1, p53-6. Feb 1971. EJ 051 764.

Dunn, Alex, Ed., and others. Computer-Assisted Instruction Program. A Three Year Report Covering July 1, 1971 through June 30, 1974. Montgomery County Public Schools, Rockville, MD, 1974. 203p. ED 100 361.

The Montgomery County Public Schools Computer Assisted Instruction (CAI) program, which began in 1968, was federally funded for its first three years; since 1971, its activities have been supported through local funds and an outside grant covering the lease of the computer for the project. During the last three years, validated CAI materials developed during the first phase of the project have been placed in classrooms, and evaluation studies have been undertaken. Although small instructional packages were developed during this period, most of the emphasis was on implementation of more than 40 modular instructional packages. CAI capabilities were extended

to a junior high school and to a first grade classroom at one elementary school. The instructional objectives and CAI applications for each grade level and subject area are described in this report, as are the evaluation findings and suggestions for further research and development. Some comments on possible future directions for CAI in public schools are also included.

Durward, M. Lynne. The Evaluation of Computer-Based Instruction in Vancouver Secondary Schools. Vancouver Board of School Trustees (British Columbia). Department of Planning and Evaluation, 1973. 119p. ED 088 919.

This study was undertaken to examine the status of computer-based instruction in Vancouver Secondary Schools for both computer science courses and traditional courses which use the computer merely as a problem-solving and learning aid. Ten schools participated in an examination of the computer science courses. This aspect of the study consisted of five parts: a questionnaire to teachers, a questionnaire to students, a set of problems for students to measure their problem-solving ability, observation of three computer science classes in progress, and administration of the computer programmer aptitude battery to one computer class. This study summarized the findings of the teacher and student questionnaires regarding computer based instruction. Observation of three computer science classes generally supported the results of these questionnaires. The performance of the students on the programming problems indicated that they were capable of at least fundamental programming. Examination of student performance in one class on the computer programmer aptitude battery demonstrated that the computer science course had helped to improve the students' reasoning ability. Included in the appendices are the student and teacher questionnaires, problem sets, computer games, and examples of computer programs written by students. For related documents, see ED 088 913 and 920.

Eastmond, Nick. Instructional Development under the Microscope: Perceptions of Faculty Members. Utah State University, Logan, Merrill Library and Learning Resources Program, 1976. 65p. ED 112 882.

The 1974-75 school year marked the fifth year of operation for the Division of Instructional Development at Utah State University. The model for instructional development (ID) consists of four parts: (1) developing faculty awareness; (2) capitalizing on faculty initiative, primarily through small-scale funding under a program of minigrants; (3) conducting faculty support activities where participating faculty members are released full-time for one quarter to work intensively on a project of their own choosing; and (4) working with an entire department to revise particularly important steps in the curriculum for its graduates. Through a series of survey techniques and interviews, this study gathers data about the program as perceived by faculty members. The conclusions are that there is considerable awareness of the ID programs across campus; that ID should not move entirely from individual-centered to department-centered activities; and that the program is generally held in high regard by USU faculty. One-third of the document consists of instruments used in the survey and responses of participants.



Debloois, Mike. Reflections on Instructional Development at Utah State University. Candid Comments on an ID Center's Beginnings. Utah State University, Logan, Merrill Library and Learning Resources Program, 1975. 15p. ED 112 881.

An on-going evaluation is being made of Utah State University's instructional development endeavor; this paper has emerged from a question answer interview with the director of the program by an external evaluator. The director describes the instructional development program, which is designed to improve the teaching/learning process by developing in professors an interest in learning theory, team teaching, computer-assisted instruction, simulations, seminars, the lecture, and self-paced instruction. The model chosen for implementing the instructional improvement program consists of three stages: (1) awareness level, for which the literature on instructional renewal was surveyed and pertinent information sent to professors; (2) initiative level, for which minigrants were awarded to professors who wanted to develop a new teaching strategy; and (3) the instructional development level where participating faculty members are released full-time for one quarter to work on a project of their own choosing. The director concludes that the model has enjoyed modest success, that they are in the process of modifying it, and that they are pleased that it is making some contribution toward improving teaching and learning at a small university.

Ellson, Douglas G. and others. The Tech Programme: Self-Instructional Programme for English Listening Comprehension. Final Report. Southeast Asian Ministers of Education Organization (Singapore), Regional Center for Educational Innovation and Technology, 1973. 45p. ED 084 929.

The Regional Center for Educational Innovation and Technology (INNOTECH) of the South East Asian Ministers of Education Organization (SEAMED) evaluates its self-instructional program for English listening comprehension in this final report. The program was designed for students whose English language proficiency does not enable them to follow courses at INNOTECH, which are conducted in English, and it was intended both to develop their listening skills in technical English and to expose them to part of the actual INNOTECH curriculum. The course consists of 50 units recorded on cassettes, each with an oral passage of 200-800 words lasting from two to eight minutes. The tapes are supplemented by printed material which includes questions, answer keys, transcriptions of the texts, and step-by-step instructions for the program. The course was found to be effective in improving the aural comprehension of technical English at least as much as the former program which involved five months of classroom instruction. In addition, the report emphasizes its economical aspects; programmed materials and cassettes are used rather than teacher time and more expensive recording equipment. Included with the report are two appendices; one gives the introduction and instructions from the program material and the other provides samples of the printed program material.

Engler, Nick. - An A for AESP, Appalachia v11, n5, p26-32. Apr-May 1978. EJ 184 030.

Maryland teachers rate the Appalachian Education Satellite Program (AESP) courses in remedial reading very highly.

An Evaluation of Educational Media Programs in Kansas Unified School Districts. Kansas State University, Manhattan, College of Education, 1972. 120p. ED 070 291.

A study was conducted to ascertain the level of sophistication of the educational media programs in the Unified Public School districts of Kansas. It was hoped that the resulting data would enable public school administrators to accurately evaluate their programs and to improve the total educational media program in their systems. Using the survey method and appraisal techniques, the investigators polled 311 districts. Fulton's Evaluative Checklist in revised form was the only instrument used to collect the data. The investigators concluded that many of the districts did not have adequate budget provisions for educational media and that there was not a wide variety of instructional materials being used.

Evaluation of and Information Concerning Individually Prescribed Instruction in Mathematics (IPI); 1967-1978, Friends School, Wilmington, Delaware. Research for Better Schools, Inc., Philadelphia, PA, 1968. 38p. Available from Research for Better Schools, Inc., 1700 Market St., Philadelphia, PA 19103. ED 036 161.\*\*

A self-evaluation of Individually Prescribed Instruction (IPI) in mathematics made by Friends School is justified and presented in this report. First, the establishment of six objectives (student independence, mastery of basic skills and concepts, achievement rate and level; teacher diagnostic functions, prescriptive functions, and interactive functions with students) for the IPI program is described. Then, the objectives are examined in detail, with statistical data, observations, and conclusions for each of the six.

An Evaluation of the Instructional Television Program Basic Education: Teaching the Adult. Curriculum & Evaluation Consultants, Merchantville, NJ; Maryland State Department of Education, Baltimore, Division of Instruction, 1976. 88p. ED 128 579.

A series of 30 telelessons and an accompanying manual designed to train teachers of adult basic education were developed by the Maryland State Department of Education and then utilized and evaluated in 25 colleges and universities throughout the United States. The purpose of the evaluation was to describe the types of courses, students, faculty, and instructional procedures involved; determine the effectiveness of the program; and survey the reactions of faculty, students, and state-level personnel to the program. Questionnaire survey forms were used to gather information about the nature of the courses, students, and instructors. Evaluation reports were used to gather

information from students and faculty about their reactions to each lesson. A criterion referenced test was administered prior to and at the completion of instruction. Of the 430 students in the 25 schools, 356 completed both pre- and posttests. State reports were received from 36 persons. Conclusions demonstrated the value of the program and the feasibility of implementing it in a variety of ways and settings. Complete findings, recommendations, and evaluation instruments are included.

An Experimental Approach to Developing Model Programs for Early Childhood Education. Final Report. Kern County Superintendent of Schools, Bakersfield, CA, 1971. 91p. ED 088 559.

To demonstrate that individualized prescriptive instruction would improve facility in oral language, a preprimary class for children three to five years of age was established in Bakersfield, and a primary class for children six through eight years of age was established in nearby Shafter. All pupils were of normal intelligence, had no observable physical or emotional problems, and were from a wide range of socioeconomic backgrounds. All pupils had deficits in specific oral language skills. The innovative method utilized individually prescribed instruction in oral language, in addition to a wide variety of teacher-made materials, tape recorders, telephones, flashcard readers, filmstrip-recorder combinations, 8mm loop projectors, and Polaroid cameras. Test results on a variety of measuring instruments showed gains in both the preprimary and primary classes.

A Feasibility Study of Computer Assisted Instruction in US Army Basic Electronics Training. Final Report. Army Signal Center and School, Fort Monmouth, NJ; International Business Machines Corporation, Gaithersburg, MD, Federal Systems Division, 1968. 198p. ED 095 923.

A study of computer-assisted instruction (CAI) for US Army basic electronics training at the US Army Signal Center and School establishes the feasibility of CAI as a training technique. Three aspects of CAI are considered: effectiveness, efficiency, and the applicability of CAI to basic electronics training. The study explores the effectiveness of the learning achieved by the student and the time required to complete the course material. An analysis of current training costs compared to estimates of CAI costs is used to establish the efficiency of a CAI training system. CAI is shown to be applicable to Army training methods and educational strategies as well as to new communication and electronics equipment maintenance training.



Fehrle, Carl C. Individualized Prescribed Instruction: A Critique. University of Missouri, Columbia, College of Education, 1970. 16p. ED 041 462.

The Learning Research and Development Center at the University of Pittsburgh has adopted instructional material in elementary mathematics and reading that are designed for instructing the individual pupil. The program is known as Individually Prescribed Instruction (IPI) and has been widely acclaimed as an important breakthrough in education. This monograph evaluates the IPI program, both from the standpoint of the student and of the teacher. It lays down guidelines for administrators who are considering using the program in their schools.

Felsenthal, Norman A. Sesame Street: Socialization by Surrogate. Paper presented at the annual meeting of the Speech Communication Association, Chicago, IL, December 30, 1974. 11p. ED 105 987.

This paper reviews some of the controversy surrounding Sesame Street's treatment of the socialization progress of preschool television viewers. Examined in detail are those portions of Sesame Street programs which contribute to children's learning of socially acceptable attitudes and behaviors. Some comparisons are made between programs aired during the initial 1969-70 season and a sampling of the more recent program segments. Research proposed by the Children's Television Workshop and the Harvard Center for Research should provide additional information concerning Sesame Street's ability to positively affect the behavior of young children.

Fisher, Kathleen M. and others. The Effectiveness of Video-Autotutorial Instruction for a Very Large Enrollment University Course in Science. Paper presented at the annual meeting of the Western Psychological Association, Los Angeles, CA, April 8-11, 1976. 6p. ED 143 694.

The effectiveness of video-autotutorial instruction in a large enrollment course was contrasted to more traditional instructional approaches. Subjects were 555 students enrolled in introductory genetics courses at three University of California campuses. The experimental approach used 25-minute videotape modules, a detailed syllabus, and a learning center staffed by faculty and teaching assistants. One-way analyses of variance on both pretest and final test scores indicated significant differences among the groups. Multiple regression analyses were performed to estimate the relative contributions of student background variables, pretest performance, and instructional treatment on final test scores as the criterion of achievement. Considered singly, the most potent predictor was instructional treatment, followed by grade point average, and then pretest performance.

Flaugher, Ronald L. and Knapp, Joan. Report on Evaluation Activities of the Bread and Butterflies Project. Educational Testing Service, Princeton, NJ, 1974. 103p. ED 097 921.

The Bread and Butterflies series of 15 television programs on career development for 9- to 12-year-olds was evaluated. The evaluation sought to answer these questions: Was the program appealing to the students? Did the students comprehend the program? Were the educational objectives met by the television program alone? And were the educational objectives met by the television program plus the classroom activities? The methodology of the evaluation included student questionnaires, student interviews, teacher questionnaires, expert judgment, attention measures, and observers. The series of television programs was proclaimed successful only if the goal was to provide an affective stimulus. No effect was observed on the achievement of specific behaviorally-defined educational objectives.

Fletcher, J. D. and Atkinson, R. C. Evaluation of the Stanford CAI Program in Initial Reading. Journal of Educational Psychology v63, n6, p597-602. Dec 1972. EJ 068 Q74.

Data suggested that computer instruction benefits both girls and boys, but that it is relatively more effective for boys.

Ford, John D., Jr. and Slough, Dewey A. Development and Evaluation of Computer Assisted Instruction for Navy Electronics Training. 1. Alternating Current Fundamentals. Naval Personnel Research Activity, San Diego, CA, Navy Training Research Laboratory, 1970. 38p. Available from the Clearinghouse for Federal Scientific and Technical Information, Springfield, VA 22151 (AD-706-728). ED 042 950.\*

The report presents results of the development and evaluation of the first computer assisted instruction (CAI) course segment for basic electronics. Following student tryout and revision, the CAI segment was evaluated by comparing achievement and time scores of students who received training on the CAI segment with those receiving normal classroom training. Fifty-one students were randomly selected from classes and assigned to CAI. The remaining 200 students in these classes served as the control group. At the end of the training, both groups took the Standard Army School Examination on this segment, and a supplementary test covering school objectives not tested by the particular school examinations in use at the time. Posttest performance and speed consistently favored the CAI group. (The document includes seven references and 18 tables and figures.)

Fowler, Barbara R. Black and White and Read All Over: Acquiring Literacy in Two Media. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 19-23, 1976. 16p. ED 126 941.

The Electric Company (TEC) uses a television format to introduce young viewers to the concepts of phonetics and word recognition. Though, its presentation is intended to strengthen fundamental reading skills, some presentations tend to confuse viewers because they mix the essential attributes of print code with the incidental attributes of the television presentation. This is especially true for preschool viewers. This monograph examines the instructional objectives of TEC and criticizes the format of the program by providing examples of misleading presentations.

Freedman, Morris. New York City's Decentralized Media Program. Audio-visual Instruction v19, n7, p18-19. Sep 1974. EJ 104 574.

An evaluation of the media programs in New York City's decentralized school system.

Fruchter, Dorothy and Higginson, George M. An Evaluation Report of Project INTERACT: A Teacher Inservice Training Course on Career Education Using Two-Way TV in Texas to Several Groups Simultaneously. Educational Development Corporation, Austin, TX, Needs Division, 1975. 66p. ED 110 076.

A third party evaluation was conducted of an experimental inservice training program (Project INTERACT) in career education using duplex (two-way) television to reach several groups in different cities simultaneously. Two main aspects of the project were under study: the particular curriculum content on career education and the use of the Texas Telecomputer Grid. The Texas Telecomputer Grid, a telecommunication network, is operated by Central Texas College in Killeen, with satellite facilities located in Dallas, Fort Worth, and San Antonio. The project evaluation relied on two main inputs: questionnaires completed periodically by the participating teachers and review of the programs by an advisory committee of media and career education experts. Results indicated that staff dedication was high, but that the program was impaired by mechanical failures of the grid. It was concluded that the grid is a useful teacher training device for certain purposes and under certain conditions. An appendix includes examples of all the instruments employed in the evaluation.

Gaddis, G. Warren. Evaluation of Televised Electronics Instruction Program. Utah State Board for Vocational Education, Salt Lake City, 1973. 30p. ED 086 186.

A research study in Utah had two objectives: (1) to determine the extent of the dissemination of a new vocational electronics curriculum guide among the state's electronics teachers, and (2) to measure the value of an instructional television program for teachers as a means of disseminating the guide. Questionnaire results, which must be



regarded as tentative due to limited returns, indicated that use of the guide was increasingly widespread and that it was employed mainly as a teaching guide and as a reference. Viewers responded that they were using new methods, materials, and equipment, and that they gave more attention to helping students to enter the labor market. Administrators were indifferent to the program and the electronics teachers remarked that other types of dissemination activities, such as workshops, were also needed. It was recommended that future dissemination and instruction programs be revised to facilitate the examination of specific behaviors, that better evaluative strategies be developed, and that alternative dissemination and teacher inservice methods be considered and experimentally tested.

Gailitis, Maris M. The Costs of Information Retrieval Television. A Case Study in the Cost-Effectiveness of Educational Media. Ontario Institute for Studies in Education, Toronto, 1972. 87p. (Occasional Papers Number 12.) ED 073 706.

The Information Retrieval Television (IRTV) system was a unique experimental media program initiated in several Ottawa, Canada, schools in the Fall of 1968. The program allowed teachers to select televised audio-visual programs for their classes at any time. This arrangement freed them from having to adapt to broadcast schedules or to the rigidities of existing film distribution methods. The IRTV system was tested for nearly three years and detailed records of the costs of the system were systematically kept. This report shows the type of considerations that must be taken into account by administrators and planners when organizing an efficient media system. Comprehensive in scope, the report concluded that it is unlikely that IRTV can ever be cost-efficient until it becomes a self-contained mode of instruction in some part of the learning environment. Though the conclusions about IRTV were not favorable, the methodology used to develop a cost-effective rationale should be of lasting value.

Gohring, Ralph and Chiarelott, Leigh. The Use of a Simulation Game to Assess and Influence the Leadership Styles of Elementary Principals: The Principal Game. Paper presented at the annual meeting of the American Educational Research Association, New York, NY, April 4-8, 1977. 34p. ED 137 362.

Results are reported of research to test whether a simulation game can be used to identify and to influence the leadership styles practiced by elementary school principals. The design assesses whether principals can become more skillful decision makers through heightened awareness of their leadership styles. The research and educational implications of the study contribute to "middle range" theorizing. Application lies between general managerial and systems theory, and the day-to-day decision making of the elementary school principal. "The Principal Game" simulation, and the research surrounding it, represent an attempt to bridge the gap between theory and practice.

Goolsby, Thomas M., Jr. and Stoltman, Joseph P. Report on an Individualized Reading Skills and Social Science Program in Progress. 1973. 13p. ED 069 654.

Development of the Individualized Reading Skills and Social Science program (IRSS) is described. This curriculum begins when most children start to read. If a child cannot read the page, the curriculum provides supplementary listening passages and readiness training assessment. Each child begins at his level of progress. The general structure of the materials is short passages followed by 4-response multiple choice questions. The social science content includes site, route, and boundary components; interdependence of components; economic, political, and social aspects of components; environmental quality of community; and comparison of communities in different parts of the world. The first segment of the IRSS program (1970-1971) was pilot-tested and analyzed in 1969-1970. Evaluation of an expanded field test in 1970-1971 indicates an absence of cooperation in administering the program at the classroom level.

Graf, David L. An Evaluation of the Educational Media Service Programs in the Universities of the Big Eight Conference. Ed.D. Thesis, University of Nebraska, 1977. 351p. Available from University Microfilms, P. O. Box 1764, Ann Arbor, MI 48106 (76-25902). ED 130 630.\*

As part of a study to determine the adequacy of educational media services programs at Big Eight Universities as perceived by faculty, department chairmen, and media directors, an instrument was developed which asked participants to evaluate 44 elements of media service programs. In general, responding groups were in agreement, and seven of the eight institutions were perceived as adequate. Local production of materials was assessed as the most adequate attribute, while budget and staffing provisions were judged most inadequate. This report describes in detail the background and procedures for the study, and the results are analyzed and summarized by institution and overall.

Grant, William D. and Clark, Norma. A National Survey of Current and Anticipated Media Equipment in Residential and Day Programs for the Hearing Impaired. Model Secondary School for the Deaf, Washington, DC, Office of Research and Evaluation, 1974. 95p. ED 100 073.

Five investigations sponsored by the Office of Research and Evaluation (ORE) of the Model Secondary School for the Deaf (MSSD) are reported. Presented first are results of a national survey (April 1974) of media equipment in 123 residential and day programs for the hearing impaired, in which the number of cassette video recorders and color video monitors was found to be increasing the most. The second report is an evaluation of the Computer Assisted Instruction Mathematics Strands Curriculum, based on its use (1971-73) with 86 students at MSSD whose achievement on the Strands did

not relate significantly to achievement on the Stanford Achievement Test math subtest. The third article consists of four suggestions (such as specifying objectives) to aid teachers in developing student attitude questionnaires. A manual which ORE has utilized to collect teacher generated data during formative evaluation of MSSD projects is provided. Reported last is formative evaluation (1973) of an in-house developed unit of General Art II which, when used to teach six basic terms describing texture to a sample group of eight MSSD students, resulted in all Ss attaining 100 percent level of accuracy on cognitive posttests.

Gropper, George L. Development of Course Content and Instructional Materials/Aids for the Training of Educational Research, Development, Diffusion, and Evaluation Personnel. Supplementary Final Report. American Institutes for Research in the Behavioral Sciences, Pittsburgh, PA, 1974. 116p. ED 085 349.

This report evaluates a program which trained participants in the instructional design process and indicates how effective it was for training instructional design personnel. The program was administered to three separate groups on separate occasions (N=8, N=6, N=3). The program, being self-instructional, allowed students to work at their own pace, but they did participate in group discussions. The following data were gathered: time to complete reading and exercise assignments, errors on workbook exercises (constituting criterion-like tasks), and student comments. Analysis of these data revealed that the program worked well. Student comments were generally favorable. The only revisions in the program were made on the instructions to students on how to use the program. Recommendations are made for further evaluation of the revised program. The appendices include information on workbook error rates; results of final exercises; and participants' comments on overall evaluation, other models, the handbook, and diagramming. Twelve tables of data are presented.

Hall, Keith A. and others. The Development, Implementation and Evaluation of a Pilot Program of Computer-Assisted Instruction for Urban High Schools: General Mathematics and Algebra I. Summary Report. Pennsylvania State University, University Park, Computer-Assisted Instruction Laboratory, 1971. 25p. ED 076 053.

Algebra I and general mathematics courses using tutorial instructional programs under computer control supplemented by "off-line" materials (included in the computer controlled testing) have been developed for a ninth grade student population. This summary report (preliminary reports are ED 076 045 and ED 076 048, and the teacher's manual is ED 076 052) describes the structure of the individually adaptive curriculum, the computer system, and the curriculum development. Evaluations involving both normed and non-normed achievement tests suggest that students achieve at least as well with the use of computer-assisted instruction as from conventional instruction alone.

Hall, Keith A. and others. Inservice Mathematics Education for Elementary School Teachers via Computer-Assisted Instruction (California). Interim Report. Pennsylvania State University, University Park, Computer-Assisted Instruction Laboratory, 1969. 59p. ED 076 043.

A field test of a computer-assisted instruction (CAI) program of inservice education in modern mathematics and mathematics teaching methods for elementary teachers was conducted at California, PA, in the summer of 1969. The course, called "elmsth" consisted of 80 percent mathematical content and 20 percent teaching methods, with the methods unit interspersed throughout so that each would be studied immediately following the presentation of related content. Results of various analyses of data gathered during the course from the 130 participants showed that the program was effective in providing inservice education for teachers of elementary school mathematics and other educators, that the program increased favorable attitudes toward mathematics, that the content of the course was probably learned faster in the CAI format than in a conventional classroom, that the course needed several revisions, and that both high and low achievers expressed favorable opinions toward CAI. Appended are a course description of "elmsth" and a student opinion questionnaire.

Harlen, Wynne. A Critical Look at the Classical Strategy Applied to Formative Curriculum Evaluation, Studies in Educational Evaluation vi, n1, p37-53. Spring 1975. EJ 131 787.

During a seven year period, science materials designed to promote discovery learning for children aged 5 to 13 were developed and revised on the basis of formative evaluation. Student and teacher data were analyzed in order to determine which curriculum materials contributed to cognitive and affective objectives.

Herbert, Budd. The New Town Game: An Evaluation Based on Instructional Experience, Simulation and Games v3, n3, p349-60. Sept 1972. EJ 069 044.

Heflin, Virginia A. and others. The Formative Period of LISTEN LOOK LEARN, a Multi-Media Communication Skills System. Educational Development Laboratories, Inc., Huntington, NY, 1971. 70p. ED 049 019.

A two-year study was conducted in 1965-67 for the following purposes: (1) to evaluate the materials and techniques of a new beginning reading program, the LISTEN LOOK LEARN (LLL) Multi-Media Communication Skills System, in order to make revisions where necessary and (2) to compare the LLL system in its formative stage with that of basal reader programs. Questionnaires and continuous feedback cards supplied to the teachers provided a detailed subjective evaluation of the materials and techniques. An objective evaluation was carried out during the second year by administering standardized tests to 570 pupils in 21 experimental classes taught reading by the LLL system



and 627 pupils in 25 control classes which used the basal reader. Metropolitan Readiness Testing in September 1966 showed no significant difference between the two groups. When the Metropolitan Achievement Tests, Primary I Battery, were administered in the spring of 1967, there was a significant difference favoring the experimental group on all subtests. Children with higher intelligence and greater readiness for reading were challenged by the LLL system and made greater achievement than similar children in the basal program. Tables are included.

Helping Leaders Help Youth. An Evaluation Report of a Program for Illinois Volunteer 4-H Leaders, 1973-75. Illinois University, Urbana, Cooperative Extension Service, 1975. 17p. ED 141 000.

Conceived by the staff of the University of Illinois Cooperative Extension Service as a means of aiding county extension advisors in working with volunteer 4-H leaders in Illinois, "Helping Leaders Help Youth" employed a combination of vinyl sound sheets for home study and a leader development meeting series supported by audio-visual aids and printed materials. Evaluation of the project involved: (1) 1973-74 phone surveys of the facilitating advisors; (2) 1974-75 case studies of five of the original 12 counties in the project (one urban, two rural, and two rural-urban categories), including interviews with volunteer leaders (N=81), others indirectly associated with 4-H activities (N=29), six youth advisors, and the project's on-campus director. Results indicated that youth staff quickly became advocates of the leader development series' ready-made package; volunteers could offer profound insights into the large demands facing leaders at the grassroots level; use of the vinyl sound sheets presented media orientation difficulties; major volunteer concerns were time and travel, leader recruitment, program planning, and social learning; and major staff concerns were lack of previous volunteer training, the facilitator role of county advisors, and the need for delivery systems to reach leaders in isolated areas.

Hezel, Richard I. and Neubert, Nancy Malecek. The Allegheny Educational Broadcast Council: Instructional Television in Central Pennsylvania. Agency for Instructional Television, Bloomington, IN, 1977. 26p. Available from the Agency for Instructional Television, Box A, Bloomington, IN 47401 (free while supply lasts). ED 156 168.

Instructional television (ITV) program evaluation interviews were conducted with administrators, teachers, and media specialists in a junior and a senior high school serviced by the Allegheny Educational Broadcast Council (AEBC). From these interviews, factors which contribute to the use or non-use of ITV in secondary schools were identified. Findings indicated that the effectiveness of the AEBC organization and services and the particular school administration's management of instructional television were the two principal factors governing ITV use. The background of AEBC and present organizational structure and responsibilities are described.

Hornik, Robert C. and others. Television and Educational Reform in El Salvador. Final Report. Stanford University, CA, Institute for Communication Research, 1973. 183p. ED 084 810.

Stanford University's Institute for Communication Research was asked in 1968 to conduct an evaluation of a new instructional television (ITV) system in El Salvador; to study the effects of ITV on El Salvador's school system; to derive conclusions from the experience that might help guide other nations interested in applying instructional technology; and to contribute through research to the development of the ITV system. The first chapter identifies the context of the evaluations and traces the origins of El Salvador's ITV system. The second chapter presents the results of four years of research on learning, while the third chapter presents a picture of student attitudes across the four years of research. Students' educational and occupational aspirations are summarized in the fourth chapter, and background information on the students, their schools, and their communities is presented in the fifth chapter. The next few chapters report studies of teacher attitudes and behavior, studies of the efficiency and cost of the new system, and an administrative history of ITV. A final chapter reviews El Salvador's ITV system and concludes with a brief discussion of some alternative strategies for the use of instructional technology to expand educational opportunity.

Hsia, Jayjia and Strand, Theresa. WTTW-ESAA Television Pilot, "TCR '77," Formative Evaluation. Educational Testing Service, Princeton, NJ, 1977. 95p. ED 129 889.

Formative evaluation of the WTTW-ESAA pilot television program, TCR '77, was conducted by Educational Testing Service. The pilot program, first of a planned television series intended to facilitate the desegregation process in our nation's high schools, was produced by television station WTTW in Chicago in cooperation with student co-producer teams. The students provided personalized statements on desegregation as it occurred in their schools and communities. The finished pilot program, based on three student scripts, was shown to 1,241 high school students. They were black and white, Asian-American, Hispanic-American and Native American, and lived in cities, suburbs, small towns, and rural areas in every region of the nation. Students who saw the pilot film knew more about, and expressed more favorable attitudes toward, desegregation than classmates who had not yet seen the film. Section 1 includes the findings of a literature search to provide background for the project. The design of the evaluation is described in section 2 and includes detailed information on subjects, instrumentation used, and data collection, processing, and analysis. Findings are reported in section 3. Results of questionnaire administrations are summarized for subjects who viewed the pilot film. The section also includes content analysis of the three pilot segment scripts, Q-sort, and distractor analysis findings. Implications of findings for future programming are also discussed. Section 4 presents the conclusions and recommendations.



Hsiao, J. C. The Learning Effectiveness of Microeconomic Simulation, Education v95, n3, p270-75. Spring 1975. EJ 116 969.

This paper reported an investigation in which student learning in an experimental class using a simulation was compared with a control class where the simulation was not used.

Individually Guided Education: Description of IGE. Evaluating Instructional Systems, Educational Product Report v7, n58, p23-35. Jan 1974. EJ 092 657.

Evaluates materials used for IGE, a program that calls for one-to-one and small group instruction plus much independent study. Emphasis is on reading and motivation materials, and program objectives and implementation features are described.

Individually Guided Education (IGE) Program. 1974-1975 Final Report. Austin Independent School District, Texas Office of Research and Evaluation, June 1975. 35p. ED 154 493.\*\*

This report is the continuation report of an evaluation of the implementation of the Individually Guided Education (IGE) program in the Austin (Texas) independent school district which began during the second year of the program implementation in 1973-74. The evaluation continued to focus this year on the achievement of program inputs, processes, and outcomes in 11 IGE and 11 matched comparison schools. The major emphasis of this evaluation was on determining program effects on student outcome behaviors. Utilized in the study were teacher and parent questionnaires; scores from the California Achievement Tests, the Piers Harris Children's Self Concept Scale, the School Sentiment Index, a reading attitude test, a math attitude test, and a student behavior rating scale; and classroom observations. Despite some positive effects demonstrated on objectives in the affective area, the lack of positive results on achievement led to the conclusion that the IGE program should be discontinued.

Individually Prescribed Instruction: Developmental Phase. Evaluating Instructional Systems, Educational Product Report v7, n58, p36-60. Jan 1974. EJ 092 658.

Evaluates IPI, an instructional system designed to individualize the teaching of subject content.

Initial Evaluation of Operation Wordpower. Instructional Dynamics, Inc., Chicago, IL, 1970. 74p. ED 041 977.

Operation Wordpower is a reading program reaching disadvantaged adults and operating in Chicago's urban community areas. The program accepts any person who is reading below the fifth grade level.

Instruction is by means of the Sullivan Reading Materials adapted to the Edison Responsive Environment teaching technology (called "Talking Typewriter") until the students' reading ability improves to the sixth grade level. At this point the students graduate from the program, often moving on to other educational programs. This report is an evaluation of Operation Wordpower, utilizing information already available in the files of each of the four center sites for a total of 372 students. Two questionnaires, one to determine student opinion and attitudes toward the program and the other to validate student attitudes by using staff responses, were administered to students and staff. These data were used to review student characteristics and attitudes, to determine why students drop out, and to evaluate program effectiveness. Findings indicate that the program is effecting an important function in the area of reading improvement, but that it must be made more cost effective by moving to more locations and by instituting a more effective recruitment and motivational program.

Instructional Materials in Manufacturing for Junior High School Industrial Arts. Final Report and Parts I-IV. Ohio State University, Columbus, 1967. 580p. ED 065 731.

This Title XI institute was designed and conducted to introduce the participants to inquiry and invention taking place in industrial arts curriculum across the United States. The institute participated in the inquiry stage through advanced study of manufacturing technology and industrial arts curriculum, and in the invention stage through the development of sample instructional materials based on this advanced study. This document provides an evaluation of the several facets of this institute plus the four volumes of instructional material developed. The sample instructional materials were designed so that participants could place into operation a program that would improve their industrial arts offerings.

Ironside, Roderick A. The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools. A Process Evaluation. Educational Testing Service, Princeton, NJ; 1972. 29lp. ED 066 623.

The process of installation of specified and instructional patterns in more than 200 elementary schools from ten states is evaluated. The findings of data gathered from questionnaires, site visits, training sessions, and interviews represent four major project procedures. Eight chapters cover the study as follows: (1) purposes, background, and summary; (2) instrument development; (3) school survey questionnaire; (4) district survey questionnaire; (5) detailed installation questionnaire; (6) site visits to multiunit-IGE schools; (7) installation models and designs; and (8) conclusions and recommendations. Included in four appendices are the questionnaires used in the project: (A) school survey; (C) district survey; (E) detailed installation; and (G) visit report forms. (For volume II of this study, see ED 066 624.)

Jacobsen, David A. and Gerlach, Vernon S. A Comparison of the Effects of Textual and Televised Modes of Instruction in Teacher Education. Paper presented at the annual convention of the Association for Educational Communications and Technology, 1973. 28p. ED 074 773.

Instructional television (ITV) has generally not shown significant differences in instructional effectiveness when compared to conventional instruction techniques. In an effort to gather more conclusive data about these previous findings, this study sought to compare two instructional modes, ITV and textual presentation. Eleven juniors in a teacher education program participated in the study. They received instruction in questioning techniques in preparation for the subsequent presentation of a videotaped microteaching lesson. The student teacher's performance was observed and analyzed from a variety of statistical viewpoints, and the results indicated that the more expensive ITV instruction failed to produce a criterion performance which differed significantly from that produced by the less expensive textual instruction.

Johnson, Bruce A. and Pierce, John. Research Brings Proof of Value, Future Direction to Sales Training, Training and Development Journal v28, n11, p25-30, 32. Nov 1974. EJ 105 447.

McGraw-Hill's behaviorally oriented multimedia sales training program uses pencil and paper exercises, tape recordings, and role-playing situations. Evaluation of the program indicates improved sales since 1972 when the program was introduced.

Johnson, Lary. The Fourth Year of IPI Mathematics at Minneapolis Hall School: 1972-1973. A Title I ESEA Project. Minneapolis Public Schools, Minnesota Department of Research and Evaluation, 1973. 29p. ED 114 430.

The Individually Prescribed Instruction (IPI) mathematics project at Hall Elementary School in Minneapolis completed its fourth year of operation in June 1973. The program is organized on a continuum of 415 math skills grouped into eight levels according to increased difficulty. Students progress through the continuum at their own rate as they master math skills. Children in grades 2-6 participated in the 1972-1973 project. Achievement scores on the modern math supplement to the Iowa Tests of Basic Skills have improved each year of the IPI project. Contrary to children in many disadvantaged areas, Hall students do not compare less favorably with publisher norms as they become older; the IPI students hold near the percentile rank they had as third graders as they progress through school. Hall students have expressed more positive attitudes toward math than those in comparison schools. Hall teachers have supported the IPI project, emphasizing the individualized approach and the students' positive attitudes. IPI was not to be continued in the 1973-74 school year.

Johnson, Lary. Minneapolis IPI Mathematics Project 1971-72: Third Year Evaluation. A Title I, ESEA Project. Minneapolis Public Schools, Minnesota Department of Research and Evaluation, 1972. 61p. ED 083 290.

The evaluation of the third year of the Individually Prescribed Instruction (IPI) mathematics project at the Hall school in Minneapolis (grades 1-6) is discussed, and the results for the three years are summarized. The process evaluation during the third year concentrated on three areas: group instructional methods, instructional materials other than the standard teaching sequence booklets, and prescription practices. To determine whether the IPI project was successful in raising the median raw scores on overall mathematics achievement, the basic evaluation techniques used during the third year were a standardized achievement test, a semantic differential attitude scale, a locally developed arithmetic basic skills test, a record of student progress in the IPI continuum, and teacher interviews. Students in grades 4-6 in two other Title I elementary schools were used as a comparison population. The evaluation data are tabulated and discussed. Results of the study showed that Hall students continued to make progress during the third year. Students in grades 3 and 4, who had had most of their formal math instruction with IPI, had higher percentile ranks than students in grades 5 and 6. Process evaluation of instructional activities indicated differences between classrooms in use of group instruction, variety of instructional materials, and prescription practices. Reactions of the teachers emphasized the value of the individualized approach for student achievement and attitude. Fourth and fifth grade students at Hall had a more positive attitude toward math than did students at the two comparison schools. Appendices provide the basic operational skills test for grades four and six and the semantic differential scale used with IPI in 1971-72.

Johnson, Lary and Ostrum, Donald R. Second Year Evaluation, IPI Mathematics Project; Hall School, 1970-71. Minneapolis Public Schools, MN, 1971. 60p. ED 067 874.

A pretest in mathematics determined the starting point for low-income elementary school students in a 3-year individually prescribed instruction (IPI) project, in which each student progressed through the IPI continuum of skills at his own rate as he proved his mastery of successive skills. The results of the first two years of this project indicate that the children gained mathematics skills as rapidly as average students throughout the county and much more rapidly than students in three comparable low-income schools. Students rated mathematics as one of their favorite subjects, while teachers preferred IPI over more traditional math programs.

Kastner, Sheldon. Skin, Scale, Feather, and Fur. New York City Board of Education, Brooklyn, Office of Educational Evaluation, 1976. 6p. ED 141 486.

The "Skin, Scale, Feather and Fur" program was designed to provide children in the New York City public schools with knowledge about



various animal species and their place in the animal world. Teachers and paraprofessional staff along with the Staten Island Zoo personnel developed activities and instructed children at the zoo. They also conducted exploratory learning activities at schools. The primary objective of the program was to determine whether, as a result of participation in the program 70 percent of the pupils would get 60 percent of the questions correct on a test measuring knowledge about various animal species. Five hundred pupils in grades three through nine participated in the program. Data were collected for students in grades two through four. A program-developed instrument measuring knowledge about various animal species was administered after the children had been exposed to the program. The findings of the report indicated that 98 percent of the pupils in grades two, three, and four (512 out of 519) received test scores above 60 percent.

Katzenmyer, Conrad G. and others. Evaluating IGE: An Initial Literature Review and Exploratory Study. Technical Report No. 404. Wisconsin University, Madison, Research and Development Center for Cognitive Learning, 1976. 198p. ED 134 606.

The results of an initial evaluation study of Individually Guided Education (IGE) are presented. A matched sample of IGE and non-IGE schools was compared on a variety of direct and indirect outcome measures. Findings indicated general support for the achievement of direct outcomes, with few differences between IGE and control schools shown on indirect outcome measures. Conclusions and recommendations are directed toward further evaluation efforts as well as to identifying issues in furthering research and development on IGE.

Kaufman, Maurice. The Effect of the DISTAR Instructional System: An Evaluation of the 1972-1973 Title I Program of Winthrop, Massachusetts. 1973. 21p. ED 110 171.

This report describes comparative evaluations of the DISTAR I (first grade) and DISTAR II (second grade) programs which were carried out in 1972-1973. Results showed: (1) the DISTAR program for first grades had no conclusive advantage over traditional instruction for the development of oral language or reading achievement; and (2) second grade DISTAR pupils scored below grade placement in word meaning, word study, paragraph meaning, language, and arithmetic skills. Since children were initially selected for the DISTAR program on the basis of low readiness scores, performance below grade level was not expected. The DISTAR pupils overcome the discrepancy between grade placement and achievement that existed at the end of second grade, and as a group performed at grade level at the end of third grade. It was suggested that instruction with the DISTAR system might be improved by providing greater opportunity for children to develop comprehension and sight vocabulary.

Kaufman, Maurice. The Effect of the DISTAR Instructional System: An Evaluation of the 1973-1974 Title I Program of Winthrop, Massachusetts. 1974. 45p. ED 110 170.

This report describes the evaluation of the 1973-1974 DISTAR I and DISTAR II programs, which were used as Title I programs for the first and second graders. DISTAR I was used with two first grade classes; DISTAR II was used with two second grade classes. Children who had completed two years of DISTAR instruction received traditional instruction in third grade. The possible advantages (achievement in arithmetic computation) and disadvantages (inadequate word-meaning, paragraph-meaning, and arithmetic concept skills development), which were indicated in past comparative analyses of the DISTAR I and II programs, were reexamined. Findings suggest that: (1) the DISTAR program for first graders had no advantage over conventional instruction in developing oral language ability; (2) the second grade DISTAR program was strong in spelling, word study skills, and possibly in arithmetic computation; and (3) at the end of the third grade, DISTAR pupils appeared to perform approximately at grade level with distinct strength in arithmetic computation. Recommendations, including proposed steps toward redefining Title I populations and programs, are suggested. Appendices contain data tables and other supportive material.

Keeler, F. Laurence and Rizzo, William A. An Evaluation of Microfiche Reader Types for Use with Programmed Instruction. Phase I, March 1976-August 1976. Naval Training Equipment Center, Orlando, FL, Training Analysis and Evaluation Group, 1976. 34p. ED 128 006.

The first phase of a 4-phase study on the effectiveness of microfiche as a medium for onboard training systems examined a variety of microfiche readers with respect to ease-of-use, loading and unloading characteristics, and branching to specific microfiche frames. Some 60 Navy recruits performed branching tasks to simulate the branching requirements of programmed instruction. Based on equipment evaluations and recruit performance, five indexing methods and four types of readers were rank-ordered. Recruits did not experience difficulty with any of the readers; however, the Realist/Vantage I reader with a grid map index for branching was most highly rated.

Kelly, F. Donald and Byrne, Thomas P. The Evaluation of Filmed Excerpts of Rogers, Perls, and Ellis by Beginning Counselor Trainees, Counselor Education and Supervision v16, n3, p166-170. Mar 1977. EJ 156 778.

Students (N=29) viewed three stimulus films and rated therapeutic effectiveness of the therapists. Students were subsequently rank-ordered on the basis of skill development and assigned to one of three groups (high, middle, or low). Results revealed an overall higher evaluation for Rogers as compared to either Perls or Ellis.



Kidder, Steven J. and Guthrie, John T. The Training Effects of a Behavior Modification Game. Johns Hopkins University, Baltimore, MD, Center for the Study of Social Organization of Schools, 1971. 36p. ED Q57 613.

A game designed to teach some of the skills used in behavior modification with slow learners was evaluated. The game, called "Modifying," was developed to increase the range of experience for students preparing to be special education teachers. The randomized posttest-only design employed incorporated three treatments: conventional lecture, game and short discussion, and game with longer discussion and replay of the game. Two measures of the treatments' effects were utilized: a situational test of a special education classroom and a performance test which required each subject to teach a special education child a simple paper construction task using behavior modification. A recording was made of the number of positive reinforcements the subjects used in teaching the child. Preliminary results of the study suggest that there is a main treatment effect in favor of the game-discussion-game treatment level.

Klausmeier, Herbert J. and others. A Report on the Utilization of Individually Guided Motivation. Technical Report No. 388. Wisconsin University, Madison, Research and Development Center for Cognitive Learning, 1976. 89p. ED 134 559.

This report describes the results of two surveys designed to gain information about conditions of implementation and extent of utilization of Individually Guided Motivation (IGM) in schools across the country. The objectives and motivational principles of the IGM system and the instructional programming model on which it is based are presented in chapter I. Each of the four motivational-instructional procedures that comprise the IGM system is also described: (1) adult-child conferences to encourage independent reading; (2) teacher-child conferences for goal-setting; (3) guiding older children in tutoring younger children; and (4) small group conferences to encourage self-directed conduct. In chapter II, the purpose, method, and results of the first survey are reported. Conducted in the spring of 1975, it was designed to gather in depth information from schools in which the IGM system was a viable part of the instructional program. Detailed descriptions of actual use of each of the motivational-instructional procedures were solicited, as well as information about those factors that school personnel judged important to successful implementation, factors that caused problems in using the IGM procedures in the school, and the methods used to cope with these problems. Chapter III reports the results of the second survey, conducted in the fall of 1975. Designed to obtain broad information about IGM utilization from a much more extensive number of school personnel, as well as teacher educators, the specific focus was on access to, use of, and reactions to the various IGM print and film materials. The final chapter summarizes the findings of the two surveys and discusses their implications.

for the implementation and utilization of the IGM system. Appendices include a bibliography of IGM materials and reports, and interview schedules for the surveys.

Klecks, Joseph A. An Overview of Chanute Lessons. Illinois University, Urbana, Computer-Based Education Laboratory, 1977. 78p. ED 140 776.

A survey of current lesson development was considered essential to determine the quality and effectiveness of instructional material produced on the PLATO IV computer-assisted instruction system. The trial period lasted for several years. Both civilian and military personnel developed the lessons, in consultation with the Military Training Centers Group at the Computer-Based Education Research Laboratory, University of Illinois, for the Defense Advanced Research Projects Agency. Eight representative lessons were selected by a Chanute staff member. Then an evaluator prepared in depth reviews of each, both in the formative and summative stages. Data gathered from the individual analyses formed the basis for the final report; they indicated general trends and isolated problem areas in the instructional design. The study resulted in an assessment of the instructional effectiveness and utilization of the pedagogical capabilities of the PLATO system in one training environment.

Klein, Stephen P. and others. A Progress Evaluation of Four Bilingual Children's Television Shows. Paper presented at the annual meeting of the American Educational Research Association, 1975. 18p. ED 109 260.

An evaluation of a bilingual education TV series was conducted involving 6-year-old English speaking, Spanish speaking, and bilingual children at four sites. Children were assigned to control and experimental groups with the latter group seeing four 30-minute shows. A pretest-posttest design was employed with the pretest serving as the covariate in the analyses of the data. Results indicated statistically but not educationally significant effects of the shows for certain objectives. The implications of these findings and the factors that may have influenced them are discussed.

Kline, James A. Evaluation of a Multimedia Drug Education Program. Journal of Drug Education v2, n3, p229-239. Sep 1972. EJ 066 205.

A 2-week multimedia drug education program for junior high school students was evaluated. Twenty-five percent of professed users claimed to have stopped using.

Kreimer, Osvaldo and others. Health Care and Satellite Radio Communication in Village Alaska. Final Report of the ATS-1 Biomedical Satellite: Experiment Evaluation. Lister Hill National Center for Biomedical Communications, Bethesda, MD; Stanford University, CA, Institute for Communication Research, 1974. 429p. ED 094 721.

The executive summary is the first section of this final report of the evaluation of the ATS-1 medical communication system in Alaska. The second section introduces the background of these studies and the sociogeographic setting and health situation of the Alaska natives. The third section presents the main research findings about both the aides-to-doctor and doctor-to-doctor exchanges, about use of the system for medical education, and about its social impact on bush Alaska. A fourth section is devoted to a cost analysis of alternative systems and recommendations. The attachments (charts, tables, data gathering instruments, etc.) comprise a fifth section.

Kulm, George. The Effects of the Two Summative Evaluation Methods on Achievement and Attitudes in Individualized Seventh-Grade Mathematics. 1973. 18p. ED 090 279.

One hundred fifty-nine seventh grade mathematics students were divided into four treatment groups: (1) traditional, tested after each unit; (2) individualized, tested after each unit; (3) individualized, tested after each objective; and (4) individualized, chose to be tested after each objective. Each group was divided into high and low math ability and the achievement and attitude data were analyzed using analyses of variance. No achievement differences were found, but significant interactions indicated that low ability students with a choice of testing methods, individualized instruction, and tested after each unit had better attitudes toward math than other groups of low ability students. High ability students preferred objective testing and were satisfied with the status quo.

Kumro, Thomas and Camp, William L. Applying Programmed Instruction, Man/Society/Technology--A Journal of Industrial Arts Education v30, n7, p228-230. Apr 1971. EJ 049 093.

No significant difference was found between programmed instructed and conventionally instructed groups in this study of industrial education students.

Lambrech, Judith J. and others. An Evaluation through Field Testing of Individualized Instruction Materials in Wisconsin Post-Secondary Institutes. Final Report and Appendices. Wisconsin University, Madison, 1972. 278p. ED 069 851.

To determine the relative levels of achievement of students enrolled in courses designed to permit individualized instruction and to determine those courses or instructional aspects considered effective or

ineffective in achieving objectives, achievement data on 1,204 students within the post-secondary institutes of the Wisconsin vocational education system were gathered from school records, and background data were obtained by questionnaire. Critical incidents were obtained through personal interviews with 224 students and 28 teachers. Analyses were performed contrasting student achievement and the critical incidents across subject areas, across technical school districts, within separate subject areas, and across five models of individualized instruction and four class scheduling patterns. Some principal findings were: (1) higher grades and fewer course incompletes or withdrawals were received by students who had previous experience in the subject, were high school graduates, and were enrolled in an associate degree program; and (2) course characteristics which were most effective included student-pacing of their own programs, use of pretesting to place students within a course, student selection of special study topics, and use of different types of testing procedures.

Laosa, Luis M. Carrascolendas: A Formative Evaluation, California University, Los Angeles, 1974. 203p. ED 090 968.

A formative research project sought to test viewer reactions to two pilot programs of the Carrascolendas series. A total of 360 Puerto Rican-American, Cuban-American, Mexican-American, and Anglo-American children in grades 1, 2, and 3 were observed as they watched the programs. Results indicated that there was high eye contact during the presentation and that viewers frequently smiled and laughed. Verbal modeling, physical modeling, and program-related verbalizations were relatively infrequent. Posttests showed that, on the average, students comprehended and recalled two-thirds of the material. Girls manifested more eye contact than boys, and eye contact was found to be correlated positively with the individual's level of perceptual-cognitive development and with comprehension and recall, but negatively with verbalization and modeling. In addition, significant intergroup differences were discovered for the variables of eye contact, verbal modeling, smiles, and laughter.

Laosa, Luis M. and others. An Evaluation of Non-Formal Education in Ecuador. Volume 3: Findings. Final Report. California University, Los Angeles, Center for the Study of Evaluation, 1975. 205p. ED 116 881.

As the third in a 4-volume evaluation report on the University of Massachusetts Non-Formal Education Project (UMASS NFEP) initiated in rural Ecuador in 1973, this volume presents an in-depth analysis of the evaluation findings. Since UMASS NFEP was initiated for purposes of developing new materials and methodologies in conjunction with and in support of existing Ecuadorian non-formal education programs, these findings are presented in terms of 13 basic evaluation questions relative to the following materials and methodologies: (1) the implementation process; (2) the degree to which project objectives were met;



(3) the intent of the project; (4) the learning outcomes of educational games designed to promote numerical skills, literacy, and critical consciousness; (5) the characteristics of the more and less effective materials; (6) the characteristics of materials that worked well with learners of specific characteristics; (7) the facilitator/teacher variables; (8) the motivational attributes of each of the four games selected for in depth experimental evaluation; (9) the change in attitudes and behaviors produced by each of the selected non-formal education games; (10) the importance of game sequencing factors; (11) the effect of replay possibilities for the project; and (13) the components for development of materials and programs in countries similar to Ecuador.

Laosa, Luis M. and others. An Evaluation of Non-Formal Education in Ecuador. Volume 2: Overview and Evaluation Plan. Final Report. California University, Los Angeles, Center for the Study of Evaluation, 1975. 98p. ED 116 880.

As the second in a 4-volume evaluation report on the University of Massachusetts Non-Formal Education Project (UMASS NFEP) in rural Ecuador, this volume details the evaluation design. Cited as basic to the evaluation design are questions which ask: (1) What kinds of effects (changes) can be observed? and (2) What are characteristics of the materials and procedures as they can be logically and/or empirically related to the desirable outcomes? Cited as major components of the design are the experimental field implementation and concurrent evaluation of the UMASS NFEP education games that were among the most widely used/accepted education games, and the UMASS Non-Formal Education Intervention Impact Study (an impact profile, a qualitative analysis of intervention based on observations and interviews, and individual testing of game session participants). Additionally, this report describes (1) materials selected for University of California at Los Angeles field implementation and evaluation; (2) instruments (a set of individually administered tests given in a pre-second-post basis to measure literacy, numerical skills, and critical consciousness or attitudes); (3) staffing (selection criteria, training, and procedures); (4) implementation procedures (selection of communities and control and experimental groups); and (5) criteria for field supervision and quality control.

Laosa, Luis M. and others. An Evaluation of Non-Formal Education in Ecuador. Volume I: Executive Summary. California University, Los Angeles, Center for the Study of Evaluation, 1975. 27p. ED 116 879.

As the first of a 4-volume report evaluating the University of Massachusetts Non-Formal Education Project (UMASS NFEP) in rural Ecuador, this volume presents summary responses to the following evaluation questions: (1) What does UMASS NFEP purport to do? (2) How does UMASS NFEP go about implementing its goals? (3) To what extent is UMASS NFEP carrying out its intended objectives effectively? (4) What are the learning outcomes of selected non-formal education

materials developed by UMASS NFEP? (5) What are the characteristics of the more and less effective materials developed by the project? (6) What are the characteristics of materials that work well with learners of what characteristics? (7) What facilitator/teacher variables have affected the relative effectiveness of various materials? (8) What are the motivational attributes of each of the four educational games selected for in depth experimental analysis? (9) What changes in attitudes and behaviors (critical consciousness) are produced by each of the selected non-formal educational games? (10) What sequencing factors/prerequisites are important for the four non-formal education games? (11) What are the effects of replay frequency for each of the games? (12) Can UMASS NFEP be replicated in other countries? (13) What is needed to develop effective non-formal education materials/programs in countries similar to Ecuador?

Lasater, Mary Beth. Design and Evaluation of a CAI Program in Chemical Equilibrium. Technical Report Number 8. Texas University, Austin, Computer-Assisted Instruction Laboratory, 1971. 45p. ED 073 613.

The design, development, and evaluation of a computer-assisted instruction (CAI) program in first-year college chemistry is described in this report. The program was centered around the concept of chemical equilibrium and used a systems approach with explicitly stated guidelines. The purpose of this experiment was not to measure the effectiveness of the course content, but rather to investigate the usefulness and effectiveness of the particular developmental processes and design techniques that were employed. The results of the program revealed basically that students with low mathematical capabilities upon entering the course take longer to finish the prescribed sequences and that a student's criterion score is inversely related to his path length through the course.

Leinhardt, Gaea. Program Evaluation: An Empirical Study of Individualized Instruction. Pittsburgh University, PA, Learning Research and Development Center, 1976. 62p. ED 131 092.

The results of three years of evaluative investigation of the university of Pittsburgh Learning Research and Development Center's program of individualized education are described. The study was conducted in seven follow-through sites and three Pittsburgh area schools. Standardized tests were used as input and outcome measures; questionnaires and videotapes were used to gather information about the classroom processes. The results indicate that over the 3-year period the implementation of the program continued to move toward ideal goals. Extensive data reduction procedures were used and the rationale of usage discussed. Results also point to input as the primary explanation of student end-of-year performance, though classroom processes contribute a small but consistent amount. The data indicate greater ease in identifying negative factors in successful classroom processes than in determining the positive factors.



Lenn, Peter D. and Maser, Thomas F. Computer Assisted/Programmed Instruction on the Law. Final Report. American Analysis Corporation, San Francisco; Oakland Police Department, CA, 1971. 51p. ED 058 724.

Four programmed instruction courses developed in the form of printed texts covered the California penal code, the laws of arrest, search and seizure, evidence, and dangerous weapons control laws. The programmed courses were used as self-study instructional material for recruit training and for in-service training for policemen. The courses proved to be effective and economical. The presentation of the programmed lessons at a computer terminal was evaluated and found to be equally effective as the printed material. However, the computer was found to be less efficient in terms of student time and to be more costly than the workbook format.

Levine, Hard G. and others. Evaluation of a Modularized System of Instruction in Pediatrics, Journal of Medical Education v52, n3, p213-5. Mar 1977. EJ 155 315.

The Department of Pediatrics at the University of Texas Medical Branch developed a method of presenting the didactic information in pediatrics in a series of instructional modules. Student acceptance of the modules has been very high.

Lewis, Richard F. A Survey of 1972 Teacher Opinion. Observational Report No. 7217. Syracuse City School District, NY, 1972. 16p. ED 092 101.

The Computer Based Project for the Evaluation of Media for the Handicapped conducted a study to determine teachers' attitudes toward the project and their knowledge of project operations. Twenty-three teachers participated in interviews focused on three major areas: the student, the teachers, and the project. An interview checklist of 12 items was used by the interviewers to record the frequency of teacher comments. Completed interviews were analyzed using three predetermined attitude categories: positive, indifferent, and negative to the project as defined in criteria for judgment of teacher comments. The interviews produced 32 recommendations aimed at improving interaction between the project and the teachers. Recommendations concerned information desired by teachers, teacher involvement, and input in some aspects of the project to facilitate student experiences, and procedures which may assist teachers in understanding project services.

Liebert, Roland J. "The Electric Company" In-School Utilization Study. Volume Two: The 1972-1973 School and Teacher Surveys and Trends since Fall 1971. Florida State University, Tallahassee, Institute for Social Research; Research Triangle Institute, Durham, NC; Statistics Research Division, 1973. 238p. ED 094 775.

A second-year study was made of the in-school utilization of "The Electric Company" television series. The findings reported here provide feedback to the series' users and producers. As in the first year study, the data update information on the technical capabilities of schools to use television, on applications of educational television, and on the attitudes of students, teachers, school administrators, and the educationally involved public toward television as an instructional medium. The data are based largely on information provided by sample surveys of elementary school principals and teachers who were questioned nationwide during the 1972-73 school year. Three mailed surveys were involved. The results of the surveys showed that in-school utilization expanded considerably in most areas of the nation, with the series being used by an increasingly diversified range of schools. Some but not all of this expansion was due to improvements in the technical capabilities of schools. At the same time, pupil viewing patterns shifted somewhat to give even greater exposure to slow reading target pupils, and to provide more selective use of the series for a limited number of grade levels in an adopter school. Rural and private schools have gradually achieved utilization levels equal to urban schools.

Litman, George H. CAI in Chicago. Paper presented at the annual convention of the Association for Educational Data Systems, 1973. 3p. ED 087 423.

A computer-assisted instructional system has been implemented in 21 elementary schools in Chicago. The system runs on a Univac 418-III computer which processes concurrently the reading, language arts, and mathematics drill and practice strand programs of the Computer Curriculum Corporation. All students participating qualified under the elementary and secondary education act Title I Guidelines for Compensatory Education and all were achieving at least one year below grade level upon entering the program. Results of the project after the first year showed it to have been highly successful. Individualized instruction was provided, and teachers were freed from drill activities for more creative work. Most importantly, students showed gains to nearly one month for each month in the program, a figure substantially better than the national average for compensatory education students, which stood at 5.6 months for every 8 months of instruction. As a consequence, further expansion of the program to 11 new schools was planned for the following year.

Longo, Alexander A. A Summative Evaluation of Computer Assisted Instruction in US Army Basic Electronics Training. Technical Report. Army Signal Center and School, Fort Monmouth, NJ, 1972. 57p. Available from National Technical Information Service, Springfield, VA 22151 (AD-749 470). ED 074 699.\*

Presented in this report is an extension of the feasibility and follow-up studies on computer-assisted instruction (CAI) in the US Army's basic electronic training course. The report is oriented toward demonstrating the variability of CAI coping with a large block (102 hours) of material under real-time training conditions. This evaluation is a comparative analysis of the effectiveness of CAI as a teaching system relative to the conventional mode of instruction. Included in the study are data on student achievement and attitudes toward CAI.

Longo, Alexander A. and Giunti, Frank E. A Sequential Evaluation of Computer Assisted Instruction in US Army Basic Electronics Training. Paper presented at the annual convention of the Association for the Development of Instructional Systems, 1972. 17p. ED 082 472.

The computer assisted instruction (CAI) division of the US Army Signal Center and School (USASCS) at Fort Monmouth evaluated CAI's success in teaching basic electronics. An initial feasibility study, interim assessments, and a summative evaluation assessed the value of the developmental, user-oriented, individualized CAI programs created by the USASCS. The CAI material was presented in the tutorial mode on the IBM-1500 system, utilizing the IBM coursewriter language, an IBM 1510 display console, and an IBM 1512 image projector. CAI and conventional instruction were compared with respect to student achievement in the first four weeks of the electronics course and their achievement in the fifth and sixth weeks; attitudes toward CAI were also assessed. A matched group statistical design was employed, and fixed effects analysis of variance and T-tests for equivalent groups used to analyze data. The results indicated that CAI is as effective as, or better than, conventional instruction in teaching basic electronics, demonstrated CAI's capability to reduce training time by 35 percent, and revealed student satisfaction with the CAI methods. These favorable findings have contributed to the recommendation that the Army continue to expand its CAI capabilities.

Lysiak, Fae and others. Computer Assisted Instruction 1975-76 Evaluation Report. A Title I Program. Revised. Fort Worth Independent School District, TX, Department of Research and Evaluation, 1976. 101p. ED 140 495.\*\*

The computer assisted instruction (CAI) program studied was implemented in eight elementary and four middle schools. The drill and practice program focused on reading and mathematics skills using a computerized curriculum developed by the Computer Curriculum Corporation. Students in grades 3-7 qualifying under Title I guidelines were provided with ten minutes of practice daily. The weight of the data supports CAI. Students made at least a month gain per month of instruction on the computer curricula; middle school CAI students

made significantly higher standardized test gains than did non-CAI students. Both CAI and control programs were equally effective in achieving reading gains. Elementary mathematics gains generally favored CAI students. Elementary teacher responses to questionnaires indicated that the teachers perceive CAI as beneficial to student achievement; middle school teachers were less positive but still moderately supportive. Student responses to questionnaires indicated that they perceived CAI drill and practice as personally beneficial and as an enjoyable activity.

Mack, Herschel and Littlejohn, Stephen. PSI as an Approach to the Teaching of Empirical Research Methods. Paper presented at the annual meeting of the Speech Communication Association, 1977. 34p. ED 149 408.

This paper describes a field study of the "Personalized System of Instruction" (PSI) as it was used in an undergraduate communications research course. On the basis of statistics from two years of the program's implementation and from student responses after completing the course, the study draws five conclusions. (1) Most students did not make optimal progress in passing the sequential unit mastery tests. (2) Most students found that they had difficulty in understanding or remembering course material, even in the self-paced format. (3) The PSI approach produced a lower grade distribution than did the traditional lecture-discussion method. (4) Many of the students were not satisfied with the PSI approach and considered that no significant learning had taken place. (5) Although some students seemed to learn well and were satisfied with the PSI method, the instructors could not tell if it was the method that helped or if these were merely good students. The paper concludes that PSI has many advantages as an instructional method but must be carefully adapted to fit the needs of particular teaching situations or course objectives.

Martin, Thomas H. and others. A Policy Assessment of Priorities and Functional Needs for the Military Computer-Assisted Instruction Terminal. University of Southern California, Los Angeles, Annenberg School of Communications; University of Southern California, Marina Del Rey, Information Sciences Institute, 1975. 108p. ED 116 672.

A policy study was conducted in four rounds to assess the anticipated payoff of investment by the Advanced Research Projects Office in the development of a new family of terminals for use by the military in computer-assisted instruction. Members of the panel of experts proposed features, rated them, and reacted to the resulting ratings. Of the 24 features, those rated as most needed were seen by these experts as likely to be in commercial production five to ten years from now in a form usable by the military. Experts generally agreed that investments in innovative pedagogical software and in innovative course writing are likely to have greater payoff than an investment in terminal development. Of 14 software features, those rated as most needed were ones for particularizing instruction online to the course-related needs of individual students. The report is a thorough description of the conduct of the study.



Matthews, Bonnye L. Training More Employees for Less Money, Training and Development Journal v31, n10, p42-46. Oct 1977. EJ 167 245.

Provides job skills needed by a PACT (Programmed Audio Cassette Training) course writer, a PACT course development flow chart, example frames and script, and discusses objectives and an evaluation of a PACT course.

Mays, Luberta and others. An Evaluation Report on Vegetable Soup: The Effects of a Multi-Ethnic Children's Television Series on Intergroup Attitudes of Children. Precis and Overview. New York State Educational Department, Albany, Bureau of Mass Communications, 1975. 47p. ED 120 204.

This report presents the summative evaluation of Vegetable Soup, a multi-ethnic children's television series designed to reduce and/or eliminate the adverse effects of racial isolation in elementary school students of white, black, Asian, Puerto Rican, Chicano, and Native American backgrounds. It was the purpose of the research to test the predetermined objectives of the programs in order to assess the effect of the programs in bringing about attitudinal change on the part of those children who viewed them, compared with those children who did not. Data were collected by three methods: recording verbal responses as children viewed programs, analyzing verbal responses in terms of educational gains, and administering a formal test by using an interview technique. Positive verbal responses, attainment of objectives, and significant difference in intergroup attitudes of viewers compared to non-viewers were strong indicators of program effectiveness. The series had an effect on all children who viewed it, although some of the measures showed greater gains for some children, particularly in the areas of acceptance or rejection of others. Spontaneous responses generally indicated feelings of warmth, understanding, sympathy, and empathy for children of other ethnic groups.

McGuigan, F. J. and others. A National Field-Test of Selected Programmed Reading Materials for Undereducated Adults. Center Research Monograph No. 3. North Carolina State University, Raleigh, Adult Learning Center, 1972. 161p. Available from the Adult Learning Center, P. O. Box 5096, North Carolina State University at Raleigh, Raleigh, NC 27607. ED 109 594.

In the summer of 1971, the Adult Learning Center decided to conduct a one-year, research-based field test of programmed instructional materials specifically designed to teach disadvantaged adults to read. The four programs tested for effectiveness were Programmed Reading for Adults, Building Reading Power, Reading Series, and Building Your Language Power. An attempt was made to assess the effectiveness of each program as a function of such student characteristics as intelligence, degree of motivation to study, ethnic group, and whether English was the student's first language. Additionally, students and proctors were asked to evaluate the program each used. The general impression gained from examining the learning data--the primary criterion used--is that none of the programs was positively evaluated on all measures.



However, the use of Building Reading Power and Programmed Reading for Adults leads to a satisfactory amount of learning. On the criteria of student evaluations, proctor evaluations, and error ratings, only Programmed Reading for Adults may be judged to be a successful program. Complete testing data and detailed descriptions of the study design, results, and conclusions are included in the document.

McKeown, James C. PLATO Instruction for Elementary Accounting. Illinois University, Urbana, Computer-Based Education Laboratory, 1974. 25p. ED 123 467.

A progress report of a study using computer assisted instruction (CAI) materials for an elementary course in accounting principles is presented. The study was based on the following objectives: (1) improvement of instruction in the elementary accounting sequence, and (2) help for transfer students from 2-year institutions. The materials under development are part of the programmed logic for Automatic Teaching Operation IV System (PLATO IV). One feature of the system which is extensively used in the accounting materials is provision for the student to enter arithmetic or algebraic expressions as a response to a question. The expression can then be evaluated and the result compared to the correct answer. This feature allows the student to concentrate on the method of solution. The advantages and potential disadvantages of the CAI system are discussed. Twenty-six lessons were developed for the first semester and 17 for the second semester of a course in financial accounting, and their testing and implementation are described. Examination results and an analysis of student time and completion of homework revealed significant differences in favor of the PLATO IV instruction.

Media Implementation through Teamed Supervision. Evaluation: Title Three, ESEA. Boardman Local School District, Youngstown, OH, 1969. 61p. Available from Boardman Local School District, 7410 Market St., Boardman, OH 44512. ED 049 598.\*

The procedures and techniques developed to evaluate a project to implement media in elementary schools are discussed. To describe the decision-making setting, two necessary conditions--understanding (high or low) and amount of change (large or small)--were paired against each other, resulting in four possible evaluation settings. The situation in question was determined to be like the "neomobilism" setting characterized by large change and low understanding. Four types of decisions are considered in the evaluation: planning, structuring, implementing, and recycling. By matching the decision structure with the setting, a logic for the evaluation design is worked out which is translated into a 28-step PERT network. Eight means of collecting data were identified and modified, including the McLaughton Instrument for Communication Examination, the Oklahoma Self-Administering Media Evaluation Test, and teacher evaluation reports. A computer data

management program was developed for manipulation of the input data. The results are discussed in generalized (non-statistical) terms in relation to the project's objectives. Some of the necessary conditions for adapting this model to other projects are suggested.

Miller, Leonard A. and others. Studies in Continuing Education for Rehabilitation Counselors. Report No. 3, October 1971. Iowa University, Iowa City, College of Education, 1971. 76p. Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22151, Order No. PB-215634. ED 134 850.\*

An experiment (January-December 1969), applying a packaged learning program consisting of 30 individual units on a variety of subjects in a voluntary continuing education program in state rehabilitation agencies, demonstrated significantly increased information about the counseling job among those counselors who actually took one or more units, and indicated differential effectiveness of the units, with 17 associated with significantly higher gains in knowledge. Individual motivation to take the units, however, was not high. Two other experiments (June-December 1970) with different types of specially developed learning packages were also reported. Appendices detail research materials; 39 references are listed.

Missouri Environmental Studies Approach (MESA) Interim Evaluation Report. July 1, 1972-June 30, 1973. Kirksville R-3 School District, MO; Northeast Missouri State University, Kirksville, 1973. 57p. ED 093 895.

This interim evaluation of the Missouri Environmental Studies Approach (MESA) for a one-year period measured attainment of three objectives, which state that (A) participating teachers will use environmental studies (ES) materials in their teaching as a result of two intensive workshops during the summer of 1972; (B) the teacher's role will change so that students will take more responsibility for learning, and the teacher will tend to use the open classroom approach; and (C) students will learn to use the total environment as resource material. The first objective, which was measured by the number of assignments teachers gave directly from, or modeled on, ES materials, was attained. The second objective was evaluated by an outside consultant who reported that teachers' roles had indeed changed as a result of implementation of the environmental studies approach. The third objective was measured by two tests: the "About Me Test" and the "Positive-Negative Adjective List." The results of both of these tests showed that children's self-concept and self-esteem were improved. A national evaluator of the ES approach commented that MESA project results were more pronounced than the national results which showed that students using ES learned more content pertaining to environment than control students and that ES materials fostered more decision making on the part of both students and teachers and helped to improve students' self-image.

Mitzel, Harold E. and others. A Commonwealth Consortium to Develop, Implement and Evaluate a Pilot Program of Computer-Assisted Instruction for Urban High Schools. Final Report. Pittsburgh University, PA, School of Education, 1971. 213p. ED 059 604.

The school districts of Pittsburgh and Philadelphia, the Department of Education of the Commonwealth of Pennsylvania, and Pennsylvania State University formed the Computer-Assisted Instruction Consortium to develop and evaluate two high school mathematics programs utilizing the medium of computer-assisted instruction. The first 18 months of the project (until fall of 1969) was spent in curriculum development activities. A full-year trial of the materials provided feedback for course revision and blocking of exercises into units. During the school year 1970-71 the Consortium worked on a major evaluation effort, dissemination activities, and polishing the curriculum materials in general mathematics and algebra. The predominant theme for the curriculum was teacher-monitored independent study for each student. Two main types of material composed the individual study curriculum: an online or computer-mediated component involving student/content interaction at the computer terminal and an off-line component consisting of self-study in a variety of modes, such as workbooks, filmstrips, puzzles, games, and textbooks. Both the general mathematics and the algebra material were designed to appeal to urban youth. The course development, summative evaluation, and a cost analysis of the system are presented along with summaries of the courses and the materials prepared for them.

Mock, Ronald L. and others. Northern California Postgraduate Medical Television: An Evaluation, Journal of Medical Education v45, n1, p40-46. Jan 1970. EJ 015 978.

Evaluation of several levels of northern California's post-graduate medical television indicates that neither the information level nor the behavior of target audiences were affected by the programs. More definitive approaches to evaluation were proposed.

Modern Consumer Education. Consumer Education Materials, Educational Product Report: Number 37 v5, n1, p6-18. Oct 1971. EJ 046 804.

Accent/Consumer Education Series. Consumer Education Materials, Educational Product Report: Number 37 v5, n1, p19-31. Oct 1971. EJ 046 805.

Consumer Mathematics. Consumer Education Materials, Educational Product Report: Number 37 v5, n1, p32-40. Oct 1971. EJ 046 806.

Teaching Consumer Education. Consumer Education Materials, Educational Product Report: Number 37 v5, n1, p41-51. Oct 1971. EJ 046 807.

These comprehensive in depth reports on instructional materials programmed packages provide selection data for school systems based on multiple criteria assessing instructional processes and content, difficulty of implementation, and ease of incorporation into an ongoing curriculum design.

An Epilogue. Consumer Education Materials, Educational Product Report: Number 37 v5, n1, p52-55. Oct 1971. EJ 046 808.

An analysis of four instructional packages as possible additions to an ongoing educational program, and possible consequences of their adoption and use in a variety of curriculums.

Moench, Laurel. The Effectiveness of an Individually-Organized Computer-Managed Program (PLAN) with Educationally Disadvantaged Students in Middle Elementary Grade Mathematics. Ph.D. Dissertation, National College and Graduate School, 1975. 165p. ED 121 874.

The Program for Learning in Accordance with Needs (PLAN) is characterized by a completely individualized pattern of organization. It employs multiple textbooks and materials which cross grade level lines, subject matter area lines, and teacher-pupil lines. It places emphasis on a high concentration of modern mathematics content. The computer performs four major managerial functions, i.e., test scoring, diagnosis, prescribing, and reporting. Traditional or non-PLAN schools follow a class-as-a-whole or team teaching arrangement in which a single textbook series is followed according to prescribed grade level lines with standardized concentration on modern mathematics content. Performance differences between PLAN and non-PLAN middle elementary grade mathematics students were analyzed on the basis of results obtained in the Otis Lennon Intelligence Test and the Metropolitan 1970 Standard Achievement Test, Intermediate Battery. The sample was drawn from a single district of a highly mobile, educationally disadvantaged population in a northern Illinois city during the 1972-73 school year. Overall, the non-PLAN schools did as well or better than the PLAN schools. This may have been due to the high percentages of minority students, high percentages of low IQ students, and high student mobility in PLAN schools.



Mohrmann, Jeanne W. and Wise, Wilmer E. Evaluation of Closed Circuit Educational Television in Delaware: Emphasis on Utilization, Program Series Content, and Commitment. Preliminary Report. Delaware State Department of Public Instruction, Dover, Division of Research, Planning, and Evaluation, 1970. 264p. ED 038 033.

The basic aim of this study was to determine the effectiveness of closed circuit educational television in Delaware public elementary and secondary schools. At the time of the study, the budget for educational television in the state had been eliminated. The major points for review were program scheduling and selection, utilization of program series televised between September 15 and November 19, analysis of program series content, and the extent of local district commitment. Four groups were studied--teachers, principals, other administrators, and pupils. Data were gathered by questionnaires and interviews. The findings were analyzed and the results are presented and discussed. A bibliography is provided. Appended to the report are a collection of background information on the research methodology of the study and tabulated questionnaires.

Moodie, Allan G. An Evaluation of the "Drugs Are Like That" Program. Vancouver Board of School Trustees, British Columbia, Department of Planning and Evaluation, 1972. 27p. ED 077 951.

The purpose of this study is to assess in selected Vancouver elementary schools the drug education program utilizing the film "Drugs Are Like That." Questionnaire responses are summarized for (1) parents who attended the advanced showings of the film with the subsequent discussions on drug abuse, and (2) principals, teachers, counsellors, nurses, and Junior League volunteers who assisted with the drug education program for grades 4-7 at seven elementary schools. Analysis of responses showed that: (1) the majority of parents and resource personnel gave a "good" rating to the film, the evening program, classroom discussion, and the kit of drug information booklets; (2) most parents and resource personnel indicated that the film was suitable primarily for grade 4 and secondarily for grade 5; and (3) both groups agreed overwhelmingly that schools should share with parents the drug education of children.

Morgan, Virginia Richardson. A Cost Study Analysis of Measured Gains in a Reading Program Utilizing Individualization of Instruction. Ph.D. Dissertation, Florida State University, 1974. 92p. ED 103 534.

The problems stated for this study were: (1) to determine the additional cost per month of reading gain in the Dougherty County Reading Program--funded under Title I of the 1965 Elementary Secondary Education Act--for elementary students (grades 1-6); (2) to compare the previous cost per month of gain for students enrolled in the Title I program with cost per month of gain in innovative reading activities; and (3) to determine the rate of increase in reading growth which may be attributed to the Title I program in Dougherty County, GA, 1973-74. Subjects included 1,120 students in 12 elementary schools in Dougherty



who were enrolled in a Title I reading project utilizing the center concept and individually prescribed instruction with 13 teachers and 13 aides. Since these students were pulled from the bottom of the lowest academic strata there was no control group available for comparison; therefore, history of previous gain as calculated from the pretest means was used as a basis for determination of difference. Teachers were trained and supervised throughout the school year in both reading skills and management techniques. All data indicated significant improvement in the ratio of reading gains for all grade levels. It was concluded that it cost less to teach better when cost is based on amount of reading gain per dollar expenditure.

Moriber, George. The Effects of Programmed Instruction in a College Physical Science Course for Nonscience Students, Journal of Research in Science Teaching v6, n3, p214-216. 1969. EJ 013 595.

Describes procedures, results, and conclusions of a study designed to compare the effectiveness of a 3-week programmed unit in atomic theory and chemical bonding for nonscience students with a conventional lecture-demonstration method of instruction. The unit and evaluation instruments were author-constructed. The study involved 240 students. Immediate gains favored students using programs. There was no significant difference in retention. A bibliography is included.

Murphy, Richard T. and Appel, Lola Rhea. Evaluation of the PLATO IV Computer-Based Education System in the Community College. Final Report. Educational Testing Service, Princeton, NJ, 1977. 446p. ED 146 235.

PLATO IV (Programmed Logic for Automatic Teaching Operations) is the fourth generation of a computer-assisted instructional system developed at the University of Illinois. The use of PLATO IV at five community colleges, and an evaluation of its educational impact on participating students, instructors, and colleges are described. The PLATO system was found to be operating essentially as planned by its developers. The system provided a medium for instruction with substantial appeal to both students and instructors, but it had no consistent positive or negative effects on student achievement or attrition. The cooperative effort between instructors and developers was successful in that a substantial number of PLATO lessons were designed, developed and integrated into ongoing community college courses in the five targeted subject areas: accounting, biology, chemistry, English, and mathematics. The usage of PLATO by students and instructors exceeded initial expectations although the extent of usage in classes was somewhat less on the average than had been projected originally. According to the evaluators, the critical factor which accounted for the high acceptance and usage of PLATO was the control that instructors had over its use. The attitude surveys and tabulated results are appended.

Nolan, Jeanne and Gross, John. Mulligan Stew: An Evaluation of the Television Series. Missouri University, Columbia, Extension Education Department, 1975. 23p. ED 105 889.

To evaluate the effects of the public-television series on nutrition, Mulligan Stew, a survey was conducted of 4,332 fourth, fifth and sixth-grade students in four areas of Missouri. Children were asked if they had voluntarily watched the program and pre- and post-tested for nutrition knowledge. Comparisons were also made between teacher-reinforced lessons and no reinforcement, and children were questioned whether they believed additional programs would be helpful. Results showed that a large percentage of children watched the show at home, but a smaller percentage watched all six programs. Children who watched the program at school scored higher in post-test nutrition knowledge; girls scored higher than boys, and fourth and sixth graders higher than fifth. Teacher reinforcement significantly increased nutrition knowledge. Both teachers and students evaluated the series positively. Appendices include summaries of the six programs in the series, and the student questionnaire.

O'Bryan, K.C. Monkey Bars Research Report. Report No. 46. Ontario Educational Communications Authority, Toronto, Research and Planning Branch, 1974. 84p. Available from Ontario Communications Authority Publications, PO Box 19, Station R, Toronto, Ontario M46 3Z3, Canada. ED 098 974.\*\*

A study of 64 Canadian 7- to 12-year-olds and of adults who might influence their television viewing habits was made to measure the receptivity and acceptability of "Monkey Bars," a children's television program created as an alternative for Saturday morning viewing. A 50-minute composite tape of program segments was shown, after which observation sheets, questionnaires, and interviews were used to learn children's character preferences, ability to grasp the educational concepts, attention span, and scheduling preferences. Ninety-eight percent of 7- to 9-year-olds and 84 percent of 10- to 12-year-olds said they enjoyed the program and 75 percent would watch it if offered for home viewing. Adults were evenly divided when asked if they would recommend "Monkey Bars" to children. Two-thirds of the 7- to 9-year-olds preferred a Saturday morning viewing time, while 10- to 12-year-olds preferred afternoon. Results showed that younger children overall enjoyed the program, but were not able to grasp all its humor, as older children could. Appendices include the original observation sheets, questionnaires, and interview schedules.

O'Bryan, K.C. and others. Quest into Matter. Final Report. Ontario Educational Communications Authority, Toronto, Research and Planning Branch, 1975. 25p. ED 116 690.

"Quest into Matter," produced by Ontario (Canada) instructional television, aimed to investigate the "heart of matter" at the

college freshman level of chemistry. Specifically, its purpose was to demonstrate the relevance of "shape" in relation to the properties of matter from the molecular level to the galactic. Some 180 students enrolled in a first year chemistry course and 17 freshman chemistry teachers took part in the evaluation of the program, which involved responding to a set of questions after viewing the program. The students found the programs stimulating, informative, and neither boring nor confusing. Most found the analogies in the program very or somewhat helpful in understanding the various properties of matter and very or somewhat relevant to their chemistry course. Teachers responded even more favorably than students. Over 90 percent found the program somewhat to very stimulating and neither boring nor confusing. Most teachers also found it very informative. Like the students, the teachers found the analogies very or somewhat helpful in understanding the various properties of matter and very or somewhat relevant to a first year chemistry course. They also preferred a combination of both the method used in the program and a conventional lecture-type method and stated they would like to see more programs of this type used in their classes. The findings suggest that programs like "Quest into Matter" would be readily welcomed as supplementary material to textbook information.

O'Keefe, Ruth Ann. Reports on the STARTER/101 Pilot Project in the Reading Center of the D.C. Public Schools. Washington School of Psychiatry, Washington, DC, 1970. 34p. ED 045 316.

Eight reading specialists and seven classroom teachers in Washington, DC., taught the STARTER/101 Reading Program to 98 elementary school children in 1969-70. The children were chosen because they had experienced considerable difficulty in learning to read. The program, designed as a beginning reading program for urban children, consists of workbooks promoting individual work with the occasional help of a reader (teacher, tutor, etc.) and can be used with individuals or with groups. Results of this study showed mean gains of 6.6 months on the Wide Range Achievement Test and similar gains on the Botel Word Opposites Test, on the informal reading inventory (Sheldon Series), and on the Illinois Test of Psycholinguistic Abilities, Auditory Association subtest. Reports of teachers and children were favorable, indicating the effectiveness and the appropriateness of STARTER/101. Recommendations were made for extension and further study of the program. Tables are included.

Olien, C. N. and others. A Systems Evaluation of a Purposive Message: The "Mulligan Stew" ETV Project. 1975. 111p. ED 122 794.

The Mulligan Stew television series on nutritional principles for elementary school students was evaluated using a systems model. The study included student responses in eight schools and evaluation of responses from nutrition specialists, information specialists,

television station personnel, and teachers. Agricultural college information specialists gave the most optimistic responses, and the most accurate estimates of audience reaction came from television station personnel. The greatest knowledge gain came in schools that used video tapes and in-class exercises together. Learning appeared to be a consequence of organized concentration on the concepts in a school setting. Further, this concentration was an outcome of an organized system that produced and delivered the series as a package to broadcast stations and schools. The results of this study generally support a systems model of information control for evaluating educational television programs.

One Nation, Indivisible? A Summary of Evaluation Findings. Education Development Center, Inc., Newton, MA, 1969. 56p. Available from Social Studies Curriculum Program, Education Development Center, 15 Mifflin Place, Cambridge, MA 02138. ED 045 460.\*

In 1968 a television-based course of study on racial conflict was used in hundreds of schools nationwide. Five 30-minute films were shown to students in grades 7-12. Other materials were teacher and student manuals, and three teacher training films; the latter showed other teachers going through the film-discussion program in real situations. More than 4,000 students (18 percent black) in 200 classrooms in cities and towns in eight states were pre- and post-tested. More data were obtained by 300 student and 20 teacher interviews, 49 classroom observations, and 83 teacher questionnaire evaluations of the course. The program was evaluated in terms of five general goals: (1) increased awareness of the racial problem; (2) increased awareness of the student's own feelings; (3) increased willingness on both sides to consider the feelings and attitudes of the other race; (4) less rationalization of race prejudice; and (5) more dialogue about the racial problem, making it a legitimate topic for classroom study. The statistical analyses are reported in narrative form. Many implications of this program and others using film to stimulate discussion of controversial issues are discussed.

Owens, Thomas R. and others. Annual Evaluation Report of the Hawaii English Project for 1968-1969. Hawaii University, Honolulu, Curriculum Center, 1969. 48p. ED 050 121.

The English project of the University of Hawaii Curriculum Center, begun in 1966, has as its objective the production of a tested curriculum in English for all grades, together with a plan for installing it in the Hawaiian schools and disseminating it to other schools. During the reporting period covered, evaluation activities were carried out according to a specific evaluation model. Data collected during the evaluation are analyzed, and the results of the analysis are given. It is recommended that: (1) objectives in the area of self-directed learner skills be clarified; (2) materials and instructional procedures in the literature and language systems be planned to accommodate the self-directed learners currently in the language skills subprogram;



(3) each unit in all three subprograms be reexamined as to soundness and relevance; (4) the student behavior expected upon termination of the programs be more clearly defined; (5) new experiments in peer tutoring be conducted; and (6) means for providing more systematic and timely information feedback be developed.

Paden, Donald W. and others. A Decade of Computer-Assisted Instruction, Journal of Economic Education v9, n1, p14-20. Fall 1977. EJ 174 487.

Describes a computer-assisted instructional course in economics at the University of Illinois. The course employed the PLATO system, which makes use of a display panel and a typewriter-like keyset which enables students to communicate with the computer. Results of a study management system indicated that use of the PLATO system did facilitate learning.

Paden, Jon S. How is IGE Doing in the Elementary Schools? A Four-Year Survey of IGE Principals. Institute for Development of Educational Activities, Dayton, OH, 1977. 17p. ED 144 221.

This report summarizes the responses of principals of elementary schools participating in the I/D/E/A Change Program to a survey questionnaire that focuses on program implementation and selected efforts that may be associated with Individually Guided Education (IGE). Survey data are presented for the school years 1973-74, 1974-75, 1975-76, and 1976-77. The number of respondents for each year varied from a high of 466 in 1973-74 to a low of 294 in 1976-77; the 1976-77 respondents were a selected stratified sample of principals drawn from the 1,700 elementary schools that have been involved with IGE since 1970. The survey questionnaire was the same all four years. The report consists mainly of tables that summarize the respondents' answers to questions about how IGE has affected budgets, student achievement, student discipline, and general school operations.

Palmer, Henry. Three Evaluation Reports of Computer Assisted Instruction in Drill-and-Practice Mathematics. Paper presented at the Association for Educational Data Systems annual convention, 1973. 22p. ED 087 422.

Three separate evaluations of a computer-assisted instructional (CAI) drill and practice program were conducted. The CAI was provided by the Los Angeles County superintendent to 14 districts as a means of improving students' math abilities and to help teachers manage diagnostic and prescriptive information. The California Test of Basic Skills (CTBS) and the California Arithmetic Test (CAT) were administered before and after instruction to both experimental (i.e., CAI) and control groups. In general, the results indicated that: (1) the mean post-test scores for the experimental groups exceeded those of the control groups; (2) a higher percentage of experimental than of control students exceeded their expected growth rates for the period; and (3) the students receiving CAI experienced growth rates



substantially beyond normal expectations. Control group students performed better on tests of reasoning ability, perhaps because the CAI did not stress this skill. Since the program was of moderate cost, promoted student learning, reduced the teacher's remedial work, and aided in diagnosis and prescription of student academic needs, it was recommended that it be expanded.

Parker, Reese. The Development and Evaluation of a System for the Design of Instructional Plans and Resource Allocation. Paper presented at the annual meeting of the American Educational Research Association, 1973. 27p. ED 074 099.

The development and evaluation of a system for designing instructional plans and resource patterns for those plans are described. Development of the system, which was in three stages, was based on the premise that decisions concerning efficient allocation of resources and the use of resources for effective instruction cannot realistically be made in isolation from one another. Brief descriptions of the conceptual and procedural stages of development are given, but the focus is on the first formative evaluation and revision of the system. The initial version of the unit design component subjected to formative evaluation and revision consisted of eight steps: (1) setting the frame of reference for planning and checking planning materials; (2) selecting and sequencing objectives; (3) assigning objectives to domains of learning; (4) selecting instructional procedures; (5) formulating an instructional strategy; (6) allocating resources; (7) delivering plans to administrative and clerical personnel for costing; and (8) removing constraints regarding implementation of the instructional strategy. Teachers performed these eight steps, and their efforts and resulting plans were analyzed to determine whether the procedures were effective and all objectives were met. Revisions were made in the procedures based on the analysis.

Peerson, Nell. Two American Studies on Literacy through Television: A Television Experiment in Alabama, Literacy Discussion v1, n3, p122-129. Summer 1970. EJ 028 469.

In Alabama, 98 statewide television programs were offered using the Laubach method and supplementary group discussion.

Peterson, Betty L. A Comparison between Achievement Gains in Multimedia Instruction and Conventional Lecture Method of Instruction of Nursing Courses at Northern Virginia Community College. Northern Community College, Annandale, 1974. 42p. ED 129 282.

An evaluation was conducted at Northern Virginia Community College to assess the effectiveness of courses in nursing education presented in two distinctly different styles: the traditional lecture method; and a multimedia approach employing textbooks, audiovisual aids, study guides, and lectures. Using State Board of Nursing Examination

scores as a measure of instructional outcomes, comparisons were made which demonstrated that students were equally likely to master nursing skills regardless of the mode of instruction. This report provides background information on the study, outlines the research methodology, reviews relevant literature, analyzes data, and summarizes results.

Petty, Bruce Alan. An Evaluation of Selected Instructional Media Programs in Kansas Colleges and Universities. Kansas State University, Manhattan, 1972. 84p. ED 070 290.

Suspecting that two-year public colleges are more committed to instructional media programs than four-year institutions and that higher educational institutions in general are lacking in commitment to media programs, the author surveyed 34 Kansas colleges and universities by using the evaluative checklist for self-evaluating an educational media program. The data, categorized into a 2x2 block design (2-year, 4-year) vs. (public, private), confirmed the hypotheses. The author recommends higher education institutions re-evaluate their commitment to instructional media.

Phase I Report. Economic Analysis Course. Sterling Institute, Washington, DC, Educational Technology Center, 1968. 16p. Available from Educational Technology Center/Sterling Institute, The Watergate, 2600 Virginia Ave., Washington, DC 20037. ED 073 657.\*

The key findings of Phase I relative to the Sterling Institute curriculum development model being used in the preparation of a multimedia, individualized course in economic analysis for the United States Naval Academy are presented in this paper. The current status (October, 1968) and planned activities of the project are also outlined. The segments of the actual course, the behavioral objectives involved, and various working papers are available as ED 073 633 through ED 073 669. The final evaluation report can be found under ED 043 790, and the model developed for designing systems of individualized instruction is reported in ED 043 791.

Preliminary Tryouts. Economic Analysis Course. Sterling Institute, Washington, DC, Educational Technology Center, 1969. 28p. Available from Educational Technology Center/Sterling Institute, The Watergate, 2600 Virginia Ave., Washington, DC 20037. ED 073 659.\*

Preliminary tryouts of the multimedia, individualized course in economic analysis prepared for the United States Naval Academy were conducted. An illustration of how the data collected was used for making decisions on materials revisions is also included.

Validation Report. Economic Analysis Course. Sterling Institute, Washington, DC, Educational Technology Center, 1969. 47p. Available from Educational Technology Center/Sterling Institute, The Watergate, 2600 Virginia Ave., Washington, DC 20037. ED 073 662.\*

A multimedia course in economic analysis was developed and used in conjunction with the United States Naval Academy. (See ED 043 790 and ED 043 791 for the final reports of the project evaluation and development project.) This report describes the prevalidation trials, the materials validation, and the validation of the operational instructional system.

Preliminary Validation Report for Multi-Media Economics Course. Economic Analysis Course. Sterling Institute, Washington, DC, Educational Technology Center, 1969. 9p. Available from Educational Technology Center/Sterling Institute, The Watergate, 2600 Virginia Ave., Washington, DC 20037. ED 073 663.\*

A multimedia course in economic analysis was developed and used in conjunction with the United States Naval Academy (See ED 043 790 and ED 043 791 for the final reports of the project evaluation and development model.) This report describes the preliminary findings from the analysis of data produced by the validation tryouts. Student achievement and study-time-taken are among the areas discussed.

Final Validation Report. Economic Analysis Course. Sterling Institute, Washington, DC, Educational Technology Center, 1970. 76p. Available from Educational Technology Center/Sterling Institute, The Watergate, 2600 Virginia Ave., N.W., Washington, DC 20037. ED 073 666.\*

The results of the tryouts of a multimedia, individualized course in economic analysis are reported. Findings discussed include number of objectives learned, mean time required, and the percentage of students attaining various goals. The final evaluation report can be found under ED 043 790, and the model developed for designing systems of individualized instruction is reported in ED 043 791.

Pinsky, Paul D. Achievement Monitoring of Individually Paced Instruction. Final Report. Sequoia Union High School District, Redwood City, CA, 1973. 31p. ED 092 175.

A study was conducted to monitor achievement of individually paced instruction. The project concentrated on designing testing procedures in group-paced instructional programs to provide information to student, teachers, parents, and administrators, which could be used in both a formative and summative evaluation. The three objectives of the project were to: (1) adapt the Comprehensive Achievement Monitoring (CAM) design for an individually paced program of instruction that contains a series of units through which students progress in sequence; (2) explore the applicability of the computer-assisted

instruction evaluation technique to criterion referenced testing (CRT) for individually paced instruction; and (3) field test the adopted CAM design in a high school earth science course. The results showed quite strongly that the students whose learning activities were controlled the most showed the greatest gains in achievement levels. Gains were measured by the CAM tests and by standardized tests given at the beginning and end of the course. The results show this population of students is not able to work independently with CRT data and direct its own study activities. This finding confirms less formal studies completed in previous years.

Piper, Richard M. and Shoemaker, David M. Formative Evaluation of a Kindergarten Music Program Based on Behavioral Objectives, Journal of Research in Music Education v21, n2, p145-152. Summer 1973. EJ 081 153.

The Kindergarten Music Program (KMP) is one of several instructional systems currently under development at the Southwest Regional Laboratory for Educational Research and Development. The purpose of this article is to describe the evaluation procedure and the concomitant results of the first version of the KMP.

Pre-Kindergarten Prescriptive Teaching Program for Disadvantaged Children. Pre-School Program, 1972-73: End of the Year Evaluation. Fargo Public Schools, ND, 1973. 87p. ED 091 061.

The basic goal of this program was to provide individually-tailored instruction for more than 70 4-year-old children identified as having potential learning handicaps. Children selected for the program attended small half-day sessions four times a week. Instruction in the areas of language arts, mathematics, science, health, motor skills, and social skills was given. Students were tested on a pre- and post-basis with both a locally devised test and the Stanford Binet Intelligence Test. Project participants scored higher on post-test assessments than did children in a control group.

Program for Learning in Accordance with Needs: Developmental Phase. Evaluating Instructional Systems, Educational Product Report v7, n58, p6-22. Jan 1974. EJ 092 656.

Evaluates PLAN, a computer-managed individualized learning program covering language arts, mathematics, science, and social studies for grade levels K-12.

Radlick, Michael S. and O'Reilly, Robert P. Learning from Television: A Television Based Learning System as a Capable School Resource. Paper presented at the American Educational Research Association annual meeting, 1976. 53p. ED 129 254.

An instructional television program, "Place of Doors," developed by the New York State Education Department's Bureau of Educational



Communication to teach science, ecology, health, social studies, and consumerism to fourth graders was evaluated. The program was used to provide mainline rather than supplemental instruction. Nine hundred and one students from nine school districts participated in the television-based program for two hours a day for 20 days. Three hundred and fifty matched control students were drawn from the same districts. Data were collected through criterion-referenced pretests, midtests, posttests, and retention tests developed from the cognitive objectives of the program. The mean test performance for experimental and control groups across test occasions showed greater improvement for the experimental groups. Other statistical analyses showed reading and pretest scores to be significant in predicting posttest scores. The science and social studies areas of the program were influenced less by reading ability than other content areas. There was no relation shown between student liking for the program and student performance.

Reeback, Robert T. and Osterreich, Helgi. Progress Report on the Oral Language Program. Southwestern Cooperative Educational Laboratory, Albuquerque, NM, 1971. 110p. ED 056 578.

The Oral Language Program is a set of instructional materials in English as a second language for children aged five to seven. It is also an instructional system; in addition to 150 lessons for the children, there are pupil assessment devices, teacher training procedures and materials, program evaluation procedures, and installation and monitoring procedures. This report summarizes the progress of the Oral Language Program through the various stages of development. It concentrates on the instructional and assessment components for pupils and teacher training, and reports on program evaluation. Installation procedures are not covered. The three major sections of the report are a comparison between the Oral Language Program and its antecedent, a detailed review of the stages of developmental work on the program since 1967, and a report of the most recently completed field trials of the program, i.e., those conducted in the 1969-70 school year.

Research and Evaluation of Computer-Based Resource Units. State University of New York, Buffalo, Educational Research and Development Complex, 1972. 12p. ED 073 589.

Evaluated was the impact of computer-based resource units on teacher decision making and the teaching/learning process by analysis of 18 doctoral dissertations, a 1969 analysis of teacher reactions, and a continuing analysis of evaluation forms returned by teachers using the units (intended for normal and handicapped children). Among the findings of the evaluation process were that the resource guides help teachers individualize instruction and result in increased planning time and more efficient teaching time. Suggested was the development of a computer based resource unit as an inservice or preservice teacher training experience. Summarized were the responses given in



the evaluation forms received from October 1970 to July 1971. A bibliography lists 18 research studies, 12 related articles, and two books.

Rockman, Saul and Auh, Taiksup. Formative Evaluation Report of Self Incorporated Programs. Agency for Instructional Television, Bloomington, IN, 1976. 338p. Available from Agency for Instructional Television, Box A, Bloomington, IN 47401. 338p. ED 119 712.

Self Incorporated is a 15-program television/film series designed to stimulate classroom discussion of critical issues and problems of early adolescence. Formative evaluation of Self Incorporated was conducted in two phases: pre-production evaluation and extensive field tests of eight of the tentatively completed programs. Separate evaluations for these eight programs were designed to provide information to production personnel for decisions regarding each program. Results of the field tests showed that the programs were effective with student audiences, and teachers indicated a desire to use more programs. That some of the more sensitive programs caused teacher discomfort suggested the need for special preparation of teachers before extensive use of the series.

Rockman, Saul and Auh, Taiksup. Summary of the Formative Evaluation Report of Self Incorporated Programs. Agency for Instructional Television, Bloomington, IN, 1976, 17p. Available from Agency for Instructional Television, Box A, Bloomington, IN 47401. 17p. ED 119 712.

Self Incorporated is a 15-program television/film series designed to stimulate classroom discussion of problems and issues of early adolescence. This document provides an overall summary of a formative evaluation project and summary results of the evaluations of each of eight programs in the series.

Roman, Richard A. The Word Problem Program: Summative Evaluation. Pittsburgh University, PA, Learning Research and Development Center, 1975. 14p. ED 113 212.

A programmed sequence for teaching students to solve word problems was developed using a combination of the information processing and structural variables approaches. Students using the sequence proceeded individually through mastery of a sequence of objectives. In order to evaluate the program, fourth and fifth graders were randomly selected from classes; the remaining students in these classes served as controls. All students were given the appropriate level of the Stanford Achievement Test as a pretest. During the 11 weeks that experimental subjects completed the word problem program, control subjects received regular mathematics instruction. The computation and applications sections of the Stanford Achievement Test served as posttests. Both fourth- and fifth-grade experimental groups scored higher on their respective applications posttests than the comparable control groups.

Romaniuk, E. W. A Summative Evaluation of the CAI Course "COMPS."  
Alberta University, Edmonton, Division of Educational Research Services,  
1978. 18p. ED 153 604.

The COMPS course is a basic introductory computer course taken by first year computer systems students. Eighteen students took the course with computer assisted instruction (CAI), while the rest of the students took the course in the conventional classroom setting. Although there was no difference between the two groups' mean group performance scores, the CAI students on the average required only 80 percent of the time required by the other students to complete the course. Other aspects of the course discussed include examination of the mastery model, summary of student attitudes, associated costs, and the recommendations.

Ronan, Franklin Delano. A Study of the Effectiveness of a Computer When Used as a Teaching and Learning Tool in High School Mathematics. Thesis, School of Education, Michigan University, 1971. 212p. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. ED 072 615\*.

Suspecting that computer-assisted mathematics instruction helps students attain a higher level of achievement than normal instruction, the author conducted an experiment in two algebra-trigonometry classes. Fifty-one "middle ability" students were divided into two groups. The computer group used the computer both as a computational and teaching tool and as an experimental tool. The experiment revealed that the computer group had significantly higher achievement levels in the treatment of exponential functions, logarithms, and trigonometric identities and formulas; the understanding of mathematical concepts and skills; and logic and reasoning ability. However, there was no significant difference between the groups in problem-solving ability or in the application of mathematical concepts.

Ross, Harvey L. An Evaluation of the Effectiveness of the Allen Teaching Machine at the Federal Correctional Institution, Lompoc, California. Final Report. Human Interaction Research Institute, Los Angeles, 1970. 70p. Available from Human Interaction Research Institute, 10889 Wilshire Blvd., Suite 610, Los Angeles, CA 90024. ED 043 830.

This study evaluated the use of the Allen group teaching machines in a basic skills program (arithmetic, language arts, General Educational Development preparation) at a federal correctional institution (FCI). Out of 317 eligible inmates, 172 enrolled. The evaluator interviewed inmates, teachers, and prison administrators, and collected data for comparisons between the Lompoc program and other approaches. Machines displayed the special advantage of defining the teacher role as benign and supportive. The teachers, who became primarily observers of the learning process and evaluators of programing effectiveness, have tended to receive their new role favorably. The inmates clearly preferred machines for learning facts by rote. Student grade year gains ranged from .8 (on a 20-hour verbal skills course) to 2.4 (in

a 13.5-hour number facts course), with an overall mean gain of 1.4 grades for 24 hours of study. Results achieved in the FCI program seemed to compare favorably with those from other methods. Systematic dissemination of the Allen teaching machine throughout the Federal penal system was urged. (Included are educational statistics, special reports, questionnaires, and estimates of cost and personnel needs.)

Rowell, John and Heidbreder, M. Ann. Educational Media Selection Centers. Identification and Analysis of Current Practices. American Library Association, Chicago, 1971. 177p. Available from American Library Association, 50 East Huron St., Chicago, IL 60611. ED 050 545.\*

Phase I of this National Book Committee study surveyed existing educational media selection facilities and examined programs at the state, regional, and local levels. Facilities were located and identified, and their successful components were evaluated by means of questionnaires and on-site visits. This final report contains an introductory section which summarizes the initial study and describes the needs which prompted it, the role of the National Book Committee, the purpose of Phase I, and the Educational Media Selection Centers Program itself. The major findings are presented in more than 80 comprehensive tables, together with conclusions and recommendations for subsequent phases of the program. The conclusions cite the need for better communication programs, for more adequate financial bases, and for less duplication of effort among the centers, especially in the area of evaluating and selecting media. Some of the areas indicated for further study include budget, content and balance of media collections, handling of purchases and free media in centers; display and/or cataloging of material, and evaluation of audiovisual and print media. Samples of the forms used to gather data in the study are appended.

Rubin, Martin L. and others. Evaluation of the Experimental CAI Network (1973-1975) of the Lister Hill National Center for Biomedical Communications, National Library of Medicine. Final Report. No. ED-75-1. Human Resources Research Organization, Alexandria, VA, 1975. 85p. ED 115 225.

An evaluation was made of the Biomedical Computer Assisted Instruction (CAI) Network experiment, established by the National Library of Medicine in 1973 to test the feasibility of sharing CAI learning materials through a national computer network. The evaluation was designed to assist decision makers in planning a future mechanism for distributing biomedical CAI. The study focused on the institutions (95 as of October 1974) and people who use the network and the contractors who supplied the CAI library. Data sources included case studies, user reports, and interviews with hospital and medical school administrators, faculty, librarians, computer laboratory staff, and students. Network usage by program type, by user institution, and by class of user were analyzed. Also analyzed were the impact of the network on curricula, faculty, students, libraries, and media centers as well as the cost/benefits. The report includes a roster of the participants in the network experiment.

Ryckman, David B. and others. Do Structured Reading Programs Hamper Intellectual Development? Elementary School Journal v77, n1, p71-73. Sep 1976. EJ 148 674.

A study comparing the effect of the DISTAR Reading Program and the Lippincott Basic Readers on the cognitive and creative development of 136 kindergarten and first grade children. The major difference between these two approaches is degree of teacher control. Only one significant difference was found between the two approaches.

St. Aubin, Raymond. Evaluation of C.A.I. as Used by Various Handicaps. 1975. 12p. ED 136 775.

This paper summarizes a project undertaken by South Metropolitan Association for Low-Incidence Handicapped (SMA) in 1975 to provide handicapped children in the south suburban area of metropolitan Chicago with learning opportunities via computer assisted instruction. Students exhibiting hearing, visual, mental, or other learning disabilities were enrolled in math, reading, or language arts programs prepared by Computer Curriculum Corporation. Anecdotal and objective performance data on 198 students were collected for project evaluation. Subjective descriptions offered by participating teachers illustrate students' responses to and interactions with the computer, and their own positive feedback. Graphically presented performance data indicate growth by handicapping condition and total average in each area. It is suggested that student progress is correlated with the amount of online exposure to the program.

Samuels, Bruce, Comp. The First Year of Sesame Street: A Summary of Audience Surveys. Final Report, Volume IV of V Volumes. Children's Television Workshop, New York, 1970. 31p. ED 047 824.

Who watched "Sesame Street" and with what frequency at different socioeconomic levels? This utilization study provides answers to the question by compiling data from national ratings, special surveys commissioned by the Children's Television Workshop, and unsolicited, independently conducted surveys which were brought to the workshop's attention. Nine projects were reviewed and summarized into a viewing profile chart. The chart presents information on title and date of survey, surveyor, purposes of survey, character of sample, size of sample, availability on UHF, VHF, and cable TV, and percent of penetration. The results of the projects showed a highly encouraging rate of viewing and supported the need for special efforts to promote wider viewing, especially in low income neighborhoods and in communities served only by UHF stations.



Sasscer, Monica Flynn. 1976-77 TICCIT Project. Final Report. Northern Virginia Community College, Annandale, 1977. 150p. ED 148 430.\*\*

Northern Virginia Community College began utilizing a Time-Shared Interactive Computer-Controlled Information by Television (TICCIT) system in 1974 to present the entire course material for English 110 (College Grammar), Math 06 and 07 (Basic Algebra I and II), portions of English III (English Composition), and Math 182 and 183. Findings by the college and the Educational Testing Service (ETS) indicate: faculty members who taught in the TICCIT system were released from most preparation and administrative activities and could spend more time with the individual student, since tests, teaching modules, and grades were stored in the computer; no significant differences appeared in student performance among the TICCIT, lecture, and work book sections; non-TICCIT faculty were evenly divided in positive/negative attitudes toward the system; TICCIT faculty held generally positive attitudes; cost analysis findings were inconclusive; and future development and usage of TICCIT depends greatly upon faculty interest and awareness. Lengthy appendices present information regarding TICCIT instructional module development, TICCIT authoring capability, course revisions, statements and qualifications by TICCIT and non-TICCIT faculty, various survey instruments, faculty training, and student attitude survey.

Science Programming and the Audiences for Public Television; An Evaluation of Five Program in the NET "Spectrum" Series. National Educational Television, New York, 1969. 85p. ED 034 933.

Questionnaires returned by science teachers across the country and reaction forms completed by selected high school, college, and adult learners, were analyzed to judge the impact of, and acceptance by public television audiences, of five half-hour programs broadcast in the "Spectrum" science series, produced with financial support from the National Science Foundation. A general significant knowledge gain was achieved by all three groups of learners; science teachers and learners surveyed reported satisfaction that science programs should be broadcast for the general public and that in addition to gaining a high rate of acceptance by laymen, the programs encouraged and maintained interest in science. The document includes the questionnaire, study guides, selected questionnaire comments, adult sample responses on the seismology broadcast, and genetics reaction forms. One appendix removed because of poor reproducibility.

Scheier, Elaine and Senter, Donald R. Evaluation of Learning 100: An Adult Basic Education Project in Bedford-Stuyvesant, 1967-68. Educational Developmental Laboratories, Inc., Huntington, NY, 1969. 19p. ED 044 551.

This study compared the effectiveness of Learning 100 (L-100) with that of a conventional reading program in the Bedford-Stuyvesant section of Brooklyn. L-100 is a multimedia, multimodal, multilevel communication skills system designed for use with undereducated



adults, out-of-school youth, and potential dropouts. There were 49 in the experimental group and 47 in the control group; both groups met for nine hours per week. All students were given the Metropolitan Achievement Test, Reading Intermediate level, after 10 hours of instruction, and after 100 and 200 hours. To the extent that the sample is representative of the population from which it was drawn and that the teacher questionnaires, interviews, and testing instruments were valid for this population, it appears that significant differences in achievement favoring the L-100 group were attained. The L-100 system can be successfully managed by teachers who have had little previous experience with educational technology; for students, high interest and motivation are maintained and positive changes in attitude toward learning are exhibited as a result of the interest level of the reading selections and the instrumentation inherent in the system.

Scheier, Elaine and Senter, Donald R. Evaluation of Learning 100: ABC Center, White Plains, NY. January-June 1968. Educational Developmental Laboratories, Inc., Huntington, NY, 1969. 23p. Available from Educational Developmental Laboratories, Inc., 284 Pulaski Rd., Huntington, NY 11744. ED 036 718.\*

Learning 100 is a multimedia, multimodal, multilevel communication skills system; heavy stress is placed on filmstrips, tapes, and recordings; many of the materials are self-pacing; and a readiness stage and six graded levels of instruction have been developed. At the White Plains Learning Laboratory Center, Learning 100 was used with a group of 64 functionally illiterate adults whose reading levels ranged from readiness to fourth grade. Teachers were provided special instruction in how to use materials and equipment. At the end of the 23-week program, reading gains, as shown on the Stanford Achievement Test, were significant; the greater variability on posttest scores indicated that the system encourages individual development. The administrator felt that the system was manageable by teachers when they had special training; he saw a relationship between student achievement and teacher experience. Teachers were pleased with the structured systematic approach, high interest levels maintained, adult-oriented materials, varied modes of instruction, and positive motivational changes in the students. The students developed independent work habits, increased self-assurance, and saw improvement in their own educational growth.

Selector's Guide for Elementary School/Junior High School Science Programs, EPIE Report 77, v10, n2, p1-61. Nov/Dec 1976. EJ 157 022.

The analyses of ten elementary and five junior high school science programs are based on searches into the instructional design of the products by 26 analysts. Instructional design includes intent, content, methodology, and means of evaluation.

Shapiro, Bernadette Nelson. Comprehension of Television Programming Designed to Encourage Socially Valued Behavior in Children: Formative Research on "Sesame Street" Programming with Social and Affective Goals. 1975. 228p. ED 122 863.

A study assessed children's comprehension of Sesame Street programming that is designed to encourage socially valued behavior and whether the children relate the programming to their own living experiences. Material relating to four goal areas was tested: (1) entering social groups; (2) coping with failure; (3) coping with basic emotions; and (4) sex role stereotyping. Some 73 black, white, and Spanish-speaking children who were enrolled in Head Start Centers in inner city areas of Springfield and Holyoke, MA, were the viewers and respondents in the study. In general, the children's comprehension of the social goals material was good. About one third of the children seemed to be able to answer open-ended questions about most of the material without prompting. Another large proportion of the children appeared to be at least able to recognize the correct answers to questions when they were read lists of multiple choice alternatives which served as prompts. There were no striking differences in the responses of the male vs. female children or the black vs. white children. All of the children were attentive or very attentive to the program segments and appeared to enjoy themselves. Although older children performed significantly better than younger children on some questions, this finding did not occur consistently.

Shapiro, Sydelle Stone and others. An Evaluation of the Mulligan Stew 4-H Television Series for Extension Service, USDA. Volume I: Executive Summary. ABT Associates, Inc., Cambridge, MA, 1974. 40p. ED 134 618.

Conducted on over 3,000 fourth, fifth, and sixth grade children in six states, this study documents changes in nutrition-related knowledge and behaviors which can be related to participating in the Mulligan Stew television series. This volume contains a summary of the findings of the study and recommendations. After participating in the series, youth demonstrated more knowledge about nutrition-related activities, and exhibited a dramatic increase in their awareness of 4-H. The series generated only minimal changes in the nutrition behavior of youth; while those who viewed the series appeared to eat more for breakfast, their selections from the basic food groups seemed to remain unchanged. After participating in the series, youth in all three grades tended to select fewer empty calorie items when given free choice on a menu containing a large number of foods. As measured by reading ability, the series worked well with both the good student and the poorer student. While the series appeared to be effective with youth in all three grades, overall the program had a somewhat stronger impact on fourth and fifth graders than it did on sixth grade youth. The comic workbook and viewing situation appeared to be important variables; although at-home viewing was good, in-school viewing generated larger changes; and while the series worked well without the comic workbook, Mulligan Stew was more effective with the comic.

Shapiro, Sydelle Stone and others. An Evaluation of the Mulligan Stew 4-H Television Series for Extension Service, USDA. Volume II: Report of the Study. ABT Associates, Inc., Cambridge, MA, 1974. 230p: ED 134 619.

Conducted on over 3,000 fourth, fifth and sixth grade children in six states, this study documents changes in nutrition-related knowledge and behaviors which can be related to participating in the Mulligan Stew television series. This volume is a detailed elaboration of the study findings as well as a description of the study design, instrumentation, and procedures. The study consisted of three general segments: (1) impact evaluation of the series on children; (2) case studies of delivery system and associated cost data; and (3) content analysis. The impact evaluation explored the hypotheses that children who viewed the series would exhibit positive changes in knowledge about nutrition and changes in nutrition-related behaviors and that these children would show an increased amount of awareness of and interest in 4-H. Although the impact evaluation focused on children, information was also elicited from their teachers. The case studies segment focused on the distribution system associated with the program, i.e., delivery and costs. While the delivery system, organizational arrangements, and associated cost data were not critical to the impact study, they did serve to provide context data for other purposes. A content analysis of the films was conducted to assess the nutrition information contained in the films, the pedagogic approach used, and the production techniques employed. The three major sections of this volume examine each of the aforementioned segments separately. A concluding section presents a summary of major findings from each of the evaluation segments and recommendations based on these findings.

An Evaluation of the Mulligan Stew 4-H Television Series for Extension Service, USDA. Volume III: Case Studies. ABT Associates, Inc., Cambridge, MA, 1974. 88p. ED 134 620.

Conducted on over 3,000 fourth, fifth, and sixth grade children in six states, this study documents changes in nutrition-related knowledge and behaviors which can be related to participating in the Mulligan Stew television series. The case studies which comprise this volume function as a brief organizational analysis of the Mulligan Stew effort at six sites. The six case studies were structured to examine several components of organization within the constraints imposed by retrospective data. These components included: (1) examining the planning and training activities related to each site; (2) describing the delivery effort and activities undertaken by 4-H extension staff, along with problems encountered; and (3) assessing all costs associated with the Mulligan Stew program. This case study analysis, while soft, can provide useful data on techniques to improve delivery, cost in relation to numbers of children reached, errors to avoid, and activities to encourage.

Sharman, Heather and Dorward, George. Evaluation of the Manitoba Schools Computer Network, AEDS Monitor v13, n10, p6-9. May 1975. EJ 119 715.

Article describes the results of the evaluation of the Manitoba Schools Computer Network.

Silverstein, Leonard. Project Turnabout, School Year 1975-1976. New York City Board of Education, Brooklyn, NY, Office of Educational Evaluation, 1976. 14p. ED 142 640.

Students in this remedial reading program were given a chance to "turnabout" through the use of innovative materials and methods used in the program. Remedial instruction in reading and all the language arts was provided. The program utilized three paraprofessionals. The Random House High Intensity Training System was used with 180 fourth through sixth grade students selected to participate in the program because they were at least six months below grade level in reading. The Metropolitan Achievement Test was administered during the first and last week of the program as a diagnostic and assessment instrument. This evaluation report concluded that students in the program increased their reading performance as measured by the Metropolitan Achievement Test. Also, students used library resources more than they had the previous year and expressed favorable attitudes toward the program staff. The Reading Attitude Assessment Scale used for the evaluation is included as an appendix.

Singer, Frank A. Self-Instructional Materials for Topics in Elementary Accounting--A Means to the Demonstration of Pay-Offs from Individualizing Time-to-Complete. Final Report. Massachusetts University, Amherst. School of Business Administration, 1972. 389p. ED 082 291.

The materials in this report provide a case study of the development and validation of self-instructional lessons on four topics customarily included in a first college accounting course. For each topic, performance objectives were embodied in four criterion tests. The author provides documents relating to departmental curriculum decisions and to a personnel grievance that hampered the project. The project evaluation was accomplished by teaching elementary accounting both conventionally and by the system employing self-instructional materials during one semester and then comparing the performance scores of treatment groups on a number of subtests by analysis of variance. According to the report, those students who used the self-instructional materials did significantly better on subtests than did the conventionally taught students. The complete self-instructional materials and tests are contained in the document.



Sohn, David A. and Stucker, Melinda. Film Study in the Elementary School: Grades Kindergarten through Eight. A Curriculum Report to the American Film Institute. Evanston School District 65, IL, 1969. 290p. ED 032 316.

The first and major portion of this report of a film study project in Evanston lists films selected for use in grades 1-8, together with plot summaries of varying lengths, special uses for the films, suggested study questions and activities, sample student responses to questions and assignments, running times, appropriate age levels, and sources for ordering the films. The results of an evaluation of the film program as determined by questionnaires distributed to students and teachers are presented in Parts Two and Three. A brief conclusion on the overall response to the program and the addresses of film distributors conclude the publication.

Sovik, Nils. Individual Instruction in Norwegian (The Podin Project), Scandinavian Journal of Educational Research v21, n4, p197-232. 1977. EJ 177 005.

As the principle of integration instead of segregation has become dominant in the planning and organization of the Norwegian school (1st to 9th grade), different kinds of individualized instruction have been recommended to the teachers to use. This study investigates whether, and to what extent, an experimental program of individualized instruction within an ordinary school class would improve students' performance in oral and written Norwegian compared with traditional instruction.

Speedie, Stuart M. and Sanders, Susan. Data Management & Decision Making. Technical Report No. 14. Northwest Regional Educational Laboratory, Portland, OR, 1974. 208p. ED 135 058.

"Data Management and Decision Making" is a set of instructional materials designed to teach practicing and potential educational administrators about the uses of operations research in educational administration. It consists of five units--"Operations Research in Education," "PERT/CPM: A Planning and Analysis Tool," "Linear Programming," "Queueing Theory," and "Computer Simulation." The first unit is an introduction. Each of the subsequent four units introduces a specific operations research technique and provides instruction on the basic terminology and skills involved in the technique. These materials were subjected to extensive testing and revision as part of the developmental project. The evaluation included a needs assessment, field testing, and cost-benefit analysis. Information on the evaluation is included along with the needs assessment instrument.



State Wide Demonstration-Dissemination of Drug Education Materials through a Training Center and Local School Workshop Experiences. Narrative Evaluation. 1975. 26p. ED 151 649.\*\*

This evaluation tested the effectiveness of a drug education program among primary and intermediate level students in a Wisconsin area. While the outcomes of this report are significant to educators in Wisconsin, the specificity of methodology and instrumentation is of potential value to other groups wishing to determine the effectiveness of their own drug education programs.

Stefanides, Gilbert Albert. An Evaluation of Achievement and Attitudes of Students and Teachers Using an Individualized Spelling Approach. Ed.D. dissertation, University of Pittsburgh, 1976. 140p. Available from University Microfilms, P. O. Box 1764, Ann Arbor, MI 48106 (Order No. 76-19, 935). ED 127 613.\*

In order to assess the effectiveness of the Continuous Progress in Spelling program, an individualized approach to spelling mastery, this study investigated the relationships among grade level, reading ability, spelling achievement, and attitude changes in third- and fourth-grade participants in the program. A total of 689 students from five elementary schools in Kent County, MD, were tested on spelling achievement, reading ability, and attitudes toward spelling. The experimental group, consisting of 323 students, then received individualized spelling instruction according to program specifications. Posttesting revealed significant differences in achievement between grade levels and treatment groups. Across all levels, students in the experimental group showed greater spelling ability than did those in the traditional spelling program. The fact that both teachers and students showed more positive attitudes toward spelling in the experimental situation suggests a possible relationship between those attitudes and spelling achievement.

Stevens, R. and others. AIMLO: Auto-Instructional Media for Library Orientation. Final Report. Colorado State University, Ft. Collins, Libraries, 1974. 27p. ED 105 882.

In October, 1971, AIMLO (Auto-Instructional Media for Library Orientation) was initiated at Colorado State University Libraries. AIMLO is an innovative approach to undergraduate library instruction, providing on-demand, point-of-use programs about three basic library tools: periodical indexes, the card catalog, and U.S. government documents. To keep student usage of AIMLO on a strictly voluntary basis, three unobtrusive evaluation techniques were initially tried: counters on the machines to record use totals, optional questionnaires, and a telephone survey. When these results proved insufficient, it was decided to evaluate AIMLO instruction by means of a library use quiz, administered to three sections of an introductory psychology course in the fall of 1973. Section 1 of the class was encouraged to use AIMLO for library orientation, section 2 was given printed guides,

and section 3 received no library instruction. One week later, the unannounced quiz was administered. Fifty-two percent of the 502 students had made no use of library instruction and only 15 percent had made any use of the machines. Since the students using AIMLO scored high on the quiz in comparison to all other groups, continuation of the program was recommended. Appendices include the questionnaire, the quiz, and the printed library guides.

Stice, James E. Expansion of Keller Plan Instruction in Engineering and Selected Other Disciplines: A Final Report. Texas University, Austin, Center for Teaching Effectiveness, 1975. 180p. Available from author, Center for Teaching Effectiveness, Room 2404, Main Building, University of Texas, Austin, TX 78712.

The Alfred P. Sloan Foundation Personalized System of Instruction (PSI) project developed 17 courses in various fields at the University of Texas from January 1, 1973 through December, 1975. Data collected on comparisons between PSI students and ~~control~~ students indicated that: (1) PSI students learned as much or more than others; (2) higher PSI grades in this study were not justified; (3) PSI students did not do better in subsequent courses; (4) the majority of PSI students improved their study habits; and (5) knowledgeable teachers can utilize well-developed PSI material in other locales. It was also found that if proctors were paid, PSI course costs were higher than for conventional instruction. If proctors were not paid, only the first units cost more. Further cost studies were recommended. An easy first unit, weekly reinforcement, and rapid course revision were recommended to minimize student procrastination.

Stice, James E. Seventeen PSI Projects at the University of Texas at Austin. Paper presented at the National Conference on Personalized Instruction in Higher Education, 1975. 10p. ED 108 665.

Progress on the University of Texas Personalized System of Instruction (PSI) Project is described. Twelve courses in the College of Engineering and five in other colleges were developed for PSI under a grant from the Alfred P. Sloan Foundation. Each of those courses has now been offered at least once, thus making it possible to begin evaluating the program. Nine questions on the effectiveness, efficiency, student and faculty acceptance, and longer term utility of PSI are discussed.

Stocker, H. Robert and others. MOE; A Progress Report on Mobile Simulation, Journal of Business Education v46, n2, p52-53. Nov 1970. EJ 028 863.

The feedback from former students, the enthusiasm of the present students, and the favorable administrative atmosphere make Mobile Office Education a program which will definitely expand in the future.

A Summary of the Formative Research Conducted on Pilot Shows 02 and 03  
Produced by Bilingual Children's Television. Bilingual Children's  
Television, Oakland, CA, 1973. 153p. ED 086 180.

A research project investigated parent and teacher perceptions of the appeal and utility of two bilingual children's television shows and studied the appeal and comprehensibility of the shows to children. A total of 250 parents, 244 teachers, and 800 children in eight cities responded to questionnaires. Returns showed that better than 90 percent of the parents had positive attitudes toward the programs and felt that they fostered cross-cultural understanding. More than 80 percent of the teachers sampled considered the shows useful, reinforcing to their curriculum, and appropriate for children through grade 2. Almost 99 percent of the children liked the shows, and test results showed that the content was 75 percent comprehensible and that it promoted language development. It was recommended that additional research be undertaken to establish the programs' long-term learning effects, their utility in the classroom setting, and the learning differences which occur between groups of children who have been exposed to the programs and those who have not.

Suppes, Patrick and Morningstar, Mona. Computer-Assisted Instruction at Stanford, 1966-68: Data, Models, and Evaluation of the Arithmetic Programs. Stanford University, CA, Institute for Mathematical Studies in Social Science, 1972. 533p. Available from Academic Press, Inc., 111 Fifth Ave., New York, NY 10003. ED 070 246.\*

The 1966-68 Stanford mathematics programs in computer-assisted instruction (CAI) is reported in this book. The first part describes in detail the 1966-68 arithmetic drill and practice program which followed the similar program run in 1965-66. Part II describes the tutorial program in first and second grade mathematics at Brentwood School in East Palo Alto. Each of the two parts emphasizes three main aspects of the program: the curriculum, the operation of terminals in schools, and the behavioral analysis of student response data. An introductory chapter considers some of the issues raised by CAI and overviews the operation during 1966-68. Sections in the first part describe the curriculum and students, regression models and response data, automation models of student performance, and data on learning and evaluation. Sections in the second part cover the Stanford-Brentwood Laboratory and program, the curriculum and operation of the laboratory, analysis of response data, and analysis of individual student data. Appended are more detailed supplementary materials.

Tamir, P. and Amir, R. Teaching Science to First and Second Grade Pupils in Israel by the Audio-Tutorial Method, Science Education v59, n1, p39-49. Jan-Mar 1975. EJ 121 403.

Reports the extent to which audio-tutorial United States science programs can be adapted for Israel, effect of maturation on pupil's

- learning, effect of socio-economic status of pupils, effect of classroom composition, achievement differences between boys and girls, and benefit of using different modes of performance for student evaluation.

Tatham, Elaine L. and others. Evaluation of College Learning Center Instruction in Six Subject Areas, Spring 1975. Johnson County Community College, Overland Parks, KS, 1975. 31p. ED 110 141.

This study evaluated the success of Johnson County Community College's College Learning Center (CLC) in helping students to improve specific skills in six areas--spelling, vocabulary, English, mathematics, reading comprehension, and reading rate. The CLC offers individualized programs which employ a combination of self-instructional materials and individual tutoring. Data were analyzed separately for the spring 1972-summer 1973 and fall 1973-summer 1974 periods in order to detect any difference in the success patterns of CLC instruction. Evaluation was based on analysis of gains in performance for every student participating during either period. The average gains represented significant improvement from pretest to posttest in all six areas; the improvement was similar for both time periods. Statistical data is presented graphically for each subject. Appendix A describes the six courses and their pre- and posttests. Appendix B lists supplementary instructional materials for the six programs.

Thompson, John F. and others. Evaluation of Educational Television in University Extension Youth Programming. Wisconsin University, Madison, College of Agricultural and Life Sciences, 1970. 15p. ED 044 639.

This study tested the effectiveness of the 4-H TV action series broadcast over several Wisconsin commercial stations for school children in grades 4-6. Data were sought on patterns of participation, effects of related classroom activities and personal maturity on learning, and the extent to which youth can learn about emergency preparedness through television. In addition to broadcasts in 16 western Wisconsin counties beginning in January 1967, the program was televised on Saturday mornings in the fall by commercial stations in Green Bay, Rhinelander, and Wausau. Teachers in Lacrosse County administered pretests and posttests and agreed to discuss each program in class and to have the students complete the suggested projects. (Teacher responses and university extension agent reactions included data from a much wider area.) These were among the conclusions reached: (1) university extension can use educational television (ETV) effectively with grade 4-6 children during nonschool time; (2) they will view ETV and learn from it; (3) grade 4 pupils like the program better than grade 5 or 6 pupils, but the latter learn more; (4) supplementary classroom activities tend to increase learning; (5) teachers respond favorably to ETV programs and will use them.



Tira, Daniel Edward. An Introduction to the Theory and Application of the Product-Moment Family of Correlations via a Computer Assisted Instructional System. Ohio State University, Columbus, College of Education, 1970. 222p. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI (Order No. 70-19, 372). ED 052 627.\*

A developmental study was conducted to produce a computer-assisted instruction (CAI) program on the product-moment family of correlations. The first phase in the development was the definition of the requirements of the developmental process which serve as guidelines. In the design phase, the specific topics to be treated in the program were compiled and expressed in narrative form. The production phase transformed the narrative of the design stage into an interactive dialogue characteristic of CAI. An evaluation phase sought to determine the conceptual inadequacies of the program and its effectiveness in presenting the statistical concepts. Ten students reviewed the course and completed an evaluative questionnaire. These students were divided into three classes, depending on their level of understanding of fundamental statistical concepts. The CAI course proved effective for the two lowest classes of students, although certain of the concepts in the program were identified as being unclearly presented.

Topical Modules in Secondary Mathematics. Final Project Report. Fresno City Unified School District, CA, 1973. 80p. Available from ERIC/SMEAC, The Ohio State University, 400 Lincoln Tower, Columbus, OH 43210 (on loan). ED 107 478.\*

Summative evaluation of an ESEA Title III project designed to raise the mathematics achievement scores of low achievers in grades 10 and 11 is reported. In a summer writing project, teachers developed 21 arithmetic modules and 11 algebra modules for use by students on an individual basis. Students used the modules at their own pace and stayed with a module until criterion performance was achieved. Evaluation was based on pretest and posttest scores on the Comprehensive Tests of Basic Skills (CTBS), Form Q, Level 4, and an attitude survey instrument developed by the project; comparisons with a control group were made. The objective of raising CTBS scores by 1.2 months per month in the program was achieved for the algebra modules group, but not for the total group. There was no significant difference between the gains on CTBS total score made by experimental and control groups; there were, however, some differences on subscale scores. Experimental students had a more positive attitude toward mathematics at the time of posttesting than at pretesting, while the reverse was true for controls.

Trojcek, Doris A. Training in Programming Instruction and Student Achievement. Journal of Research in Science Teaching v11, n1, p39-44. 1974. EJ 100 017.

Reports the results of a study designed to determine the influence of five stages of instruction on the prospective teachers' ability to construct programmed science activities for fourth grade students.



Uthe, Elaine F. Assessing the Teaching Effectiveness of an Audio-Visual Program Relating to the Intensive Office Program in Business Education. 1977. 14p. ED 155 191.

The effectiveness of a teacher-made slide-tape presentation for training experienced business teachers to teach the Intensive Office Program (IOP)--a high school course incorporating office practice, office machines, advanced typewriting and shorthand--was field tested. Three groups were involved: undergraduate non-business education students, undergraduate business education students, and graduate business education teachers enrolled in the 1976 summer course to become IOP teachers. All were given a 43-item true-false quiz and written guidelines for IOP, before and after viewing the presentation. Pretest-posttest differences were significant for all three groups. Item analysis was made to identify test items needing revision. Those 15 concepts answered incorrectly by at least 20 percent on the posttest were reviewed for slide and script clarity, as well as test item content. In conclusion, the present slide-tape was found to be effective, but certain areas needed improvement. Additional development is recommended.

Valencia, Atilano A. The Relative Effectiveness of Three Video Oral English Instructional Conditions for Illiterate or Undereducated Non-English Speaking Adults, Spanish Speaking Adults. A Report of Statistical Findings and Recommendations Based on a Field Testing Study. Southwestern Cooperative Educational Laboratory, Albuquerque, NM, 1969. 65p. ED 050 615.

The instructional effectiveness of videotaped instruction in basic oral English to non-English speaking, adult speakers of Spanish is the focus of this report. A field testing program involving subjects who had been exposed to the films developed by the Southwestern Cooperative Educational Laboratory ascertains the effectiveness of the lessons in each of the films in terms of predetermined behavioral objectives. Three testing conditions were envisaged and are examined in this study: a classroom condition with video exposure only; a classroom condition with video exposure and followup drills by an instructor; and a home condition with video exposure only. This four-part report covers: (1) principal features of the field testing program, (2) criterion variables and statistical design, (3) statistical analysis and findings, and (4) summary, conclusions, and recommendations. Appendices contain a sample field testing instrument and various statistical tables.

Ván Wart, Geraldine. Carrascolendas: Evaluation of a Spanish/English Educational Television Series within Region XIII. Final Report. Evaluation Component. Education Service Center Region 13, Austin, TX, 1974. 234p. ED 092 089.

This fourth year evaluation reports the effects and usage of "Carrascolendas," a children's television series in Spanish and English. Research was conducted in Texas schools and encompassed three phases: a field experiment to measure learning effects;

attitudinal surveys among teachers, parents, and children; and a process evaluation of the Education Service Center Carrascalendas staff members. The field experiments consisted of viewer and non-viewer groups of Mexican-American children, grades K-3. Criterion referenced instruments designed in Spanish and English were administered which compared viewer and nonviewer scores. Combined viewers made a significant gain score increase in the Spanish areas of history, culture, and reading; and in the English areas of history, culture, and science. The content areas which had the least impact in Spanish and English were math and self-concept. Survey elicited attitudes indicate increased improvement in the use of Spanish and English by children and greater pride in the Mexican-American culture. Attitude items on which viewers made significant gains over nonviewers dealt with speaking Spanish and teacher approval of school work. The process evaluation summarizes activities and describes the services and interaction which were provided.

Vaughn, John W. and Duncan, Robert C. Evaluation of Merrimack Education Center's Project League 1973. Indiana University, Bloomington, Center for Administrative Studies, 1973. 184p. ED 114 367.

This report presents an evaluation study of Project League which is currently implementing Individually Guided Education (IGE) through the auspices of the Merrimack Education Center in Chelmsford, MA. The purpose of the evaluation was to determine the degree of IGE goal-oriented impact that Project League has had on participating elementary schools relative to (1) IGE outcome achievement, (2) IGE role perception congruency, (3) Project League activity orientation, and (4) identification of successful practices in participating schools. The first two sections of the report discuss both the outcome achievement questionnaire and the role clarification questionnaire. These sections contain descriptions of the instruments; information concerning administration, scoring, and the population; and analyses of the data. The following section contains the computer analyses. Student interview results are discussed in the next section which consists of representative replies given to specific questions by the interviewees. A discussion of the on-site observations of league schools is the topic of the following section. The last three sections include preliminary and final recommendations, as well as a list of the successful education practices of the league schools. Six appendices containing the proposal, questionnaires, the interview schedule, and the successful practices by schools complete this report.

Vinci, Thomas G. and DeVita, Christina. An Evaluation of the State Urban Education Program "Living Science Center." District 10, New York City Board of Education. Fordham University, Bronx, NY, 1970. 16p. ED 059 881.

A program of stimulation, motivation, and cultural enrichment for children in New York City's School District 10 is evaluated in this report. The Bronx Zoological Gardens were used for living laboratory experiences, coordinated with classroom activities in different curriculum areas. Employing zoo visits, lectures, films, and classroom

demonstrations, the Living Science Center program reached over 800 fifth grade students. Effectiveness of the program was evaluated with three instruments: interviews with students, questionnaires to teachers, and observation. Findings from the evaluations are reported under the following topics: (1) project materials and implementation, (2) program observation, (3) personnel evaluation of the program, (4) student reaction to the program; (5) post-program test results, and (6) program coordination and administration. Recommendations for program continuation and improvement are also given.

Visual Concepts Program: An Evaluation Report. Phoenix Union High School District, Arizona Department of Research and Planning, 1977. 18p. ED 129 872.

Starting with the second semester of the 1971-72 school year, the Phoenix Union High School system accepted a performance contract with Educators Service Incorporated of Edina, MN. The contract enabled the district to implement a one-semester program, which was a multimedia course consisting of 36 30-minute videotaped sessions which were divided into eight skill progression phases: initial testing, preview skill, recall skill, learning techniques, re-focus and review evaluation, memory skills, vocabulary and depth reading skills, and achievement tests and evaluation. The performance contract guaranteed certain increases in reading rate and reading comprehension. These guarantees were not entirely met, but there was significant improvement in these reading skills, and the evaluation report recommended the purchase of the videotapes used.

Vocabulary Development Project. Evaluation Report 2. St. Louis Public Schools, MO, 1971. 56p. ED 059 838.

The St. Louis Vocabulary Development Project was developed to help children cope with the increasing vocabulary demands in content area textbooks encountered in the fourth grade. The project was presented over the school radio system for 30 minutes daily, three days weekly, for 30 weeks in about 150 schools. The fifth and sixth graders were taught 1,800 words, and the fourth graders received 585. The Iowa Tests of Basic Skills and the Lorge-Thorndike Intelligence Tests were administered before and after the project. Test results were factor analyzed and correlated with gains in vocabulary development. A teacher questionnaire was also administered. It was found that (1) the Vocabulary Development Project had positive effects on measured achievement growth in general vocabulary and spelling; (2) it had a small, but positive, effect on measured changes in reading achievement and intelligence; (3) the effects on achievement variables were greatest for students in predominately black schools; and (4) teachers generally favored the project. Tables and references are included.

Vocational Campus Multimedia Learning Laboratory Program-Extension. VEA  
Project Number 72-2-179. Final Report. State University of New York,  
Alfred, Agricultural and Technical College, 1972. 30p. ED 079 476.

A multimedia learning laboratory program was developed at a post-secondary vocational campus to: (1) provide help in reading, math, and study skills for students with inadequate educational backgrounds, (2) provide a means by which students may enter a program at times other than the start of the school year, (3) facilitate articulation of students from secondary vocational-technical programs, and (4) provide for student self-development. This publication discusses the development of the facility along with a discussion of the staffing, program development, and development of curriculum oriented materials. An evaluation of the program by students and faculty revealed that: (1) the number of students utilizing the laboratory increased 37 percent over the first year of operation, (2) over 70 percent of the students felt that their experience in the laboratory had made them more confident and had improved their academic standing, and (3) over 80 percent of the faculty felt that their students had benefited from the laboratory. A listing of the laboratory equipment and software along with student and faculty evaluation questionnaires and tabulations is appended.

Weinstein, Sanford. Diagnostic and Remediation Program to Ameliorate the Reading Disabilities of JHS CRMD Pupils, February-June, 1975. Evaluation Report. New York City Board of Education, Brooklyn, New York Office of Educational Evaluation, 1975. 25p. ED 136 487.

Evaluated was a project designed to provide a supplementary individualized reading remediation program for 1,221 educable mentally retarded students (12-16 years old) from 41 intermediate or junior high schools in New York City. The project goal was to diagnose the reading disabilities of the students, raise their level of reading proficiency, and ameliorate their reading disabilities. Teaching methods included one-to-one and small group instruction, and the use of multisensory instructional materials and equipment. Using pre- and posttest evaluation, it was determined that student participants in the program succeeded in raising their levels significantly beyond the level anticipated had they not participated. It was also found that diagnostic procedures were universally applied and utilized. And finally, it was found that delays in funding shortened the treatment period, and that difficulties in hiring prevented much contribution by psychological support personnel to the success of the program. The aspects of the program which were observed to account for the highly positive results were the individually tailored remediative efforts made possible by small group and one-to-one instruction, and the skill with which teachers executed both diagnostic and remediative tasks.



Weiss, James. More Advanced Reading Development, 1975-76 School Year. New York City Board of Education, Brooklyn, Office of Educational Evaluation, 1976. 11p. ED 142 631.

This report evaluated the advanced reading program designed to enrich reading instruction for 360 junior high students in New York City who were reading two or more years below grade level. Students received individualized reading instruction for four 45-minute periods per week. Students were pre-tested in October 1975 and posttested at the end of March 1976. As a result of participation in the more advanced reading development program, seventh graders achieved a mean reading grade growth of .11 months, and ninth graders achieved a mean reading grade growth of .26 months. The report concluded that students in the program did progress beyond their recorded entrance achievement. However, only the seventh graders progressed beyond their expected achievement scores.

Williams, Frederick and Natalicio, Diana S. Evaluating Carrascolendas: A Television Series for Mexican-American Children. Paper presented at the annual meeting of the American Educational Research Association, 1972. 19p. ED 062 367.

The development of "Carrascolendas," a television series designed for Mexican-American children, is summarized. Emphasis is placed upon strategies for evaluation. Evaluation evidence indicates that "Carrascolendas" may be an alternative or an addition to the Sesame Street approach to dealing with the education of the disadvantaged.

Williams, Frederick and others. Carrascolendas: National Evaluation of a Spanish/English Educational Television Series. Final Report. Texas University, Austin, Center for Communication Research, 1973. 416p. ED 078 679.

A field experiment, attitude surveys, and a process evaluation were conducted in order to evaluate the third year of Carrascolendas, a kindergarten-second grade bilingual series carried nationwide on the Public Broadcasting Service. Test scores showed that material presented in Spanish had a significant impact on learning in history and culture. First graders showed marked improvement in English and Spanish language skills. Several content areas were affected: history, culture, English and Spanish language skills, and math. Second graders benefited least, showing significant gains only in the Spanish content area of history and culture and in English fluency. There was little impact upon the Spanish content areas of science, phoneme/grapheme relations, and language mixing. Attitudes of teachers, parents, and children toward the series were positive, and a growth of pride in Mexican culture and increased use of the Spanish language were noted. The process evaluation found improvement in the management of the program, although insufficient dissemination of information about the series to potential viewers was regarded as a salient shortcoming.



Williams, William Watts. An Experimental Investigation of Individualized Instruction in the Teaching of Quantitative Physical Science. Duke University, Durham, NC, 1969. 101p. Available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106 (Order No. 70-8839). ED 052 015.\*

An investigation of the effectiveness of individualized versus group instruction in ninth grade science is reported. Six classes were matched on the basis of Lorge-Thorndike Nonverbal Intelligence Test scores and placed into three groups: control, experimental, and reference (taking a different science course). The conclusion was that individualized instruction was more effective than group instruction for achievement, retention, amount of activities completed, and positive student attitudes.

Wolf, Judith G. and Sylves, David. Evaluation of a Bilingual Television Series, Villa Alegre: Final Report. State University of New York, College at Buffalo, Educational Research and Development Complex, 1974. 65p. ED/103 511.

The purpose of this evaluation study was to determine students' and classroom personnel's perceptions of and reactions to "Villa Alegre"--a television series produced by Bilingual Children's Television, Inc. and shown in various locations in the U.S. during the fall of 1974--when utilized in a classroom setting, in order to ascertain whether the use of this series would be a worthwhile addition to bilingual classrooms. There were 135 student and 23 adult participants in two bilingual summer school projects. The TV series consists of five strands each containing 13 video taped programs. A learning guide is available for each program. Three surveys, written by the researchers, were utilized in the study. These questionnaires were translated into Spanish. The pupil evaluation instrument was administered twice during the study: after the children had viewed four tapes (pupil evaluation 1) and again following the fifteenth tape (pupil evaluation 2). Reactions to each individual tape were elicited from classroom personnel immediately after the tape had been viewed in the classroom and reactions to the total series at the end of the summer session. The responses from these surveys were extremely positive. On this basis, it would seem that the use of this series would be a worthwhile addition to bilingual classrooms.

Wolvek, Joseph. Bread and Butterflies: Evaluation of the IEBN-DPI Iowa Educational Broadcasting Network--Department of Public Instruction 1974-75 Inservice Training Workshops. Iowa State Department of Public Instruction, Des Moines, 1975. 61p. ED 114 493.

The document presents a discussion and evaluation of the training workshop program developed by the Iowa Educational Broadcasting Network and the Iowa State Department of Public Instruction to help teachers incorporate the Bread and Butterflies television series on career development into fourth, fifth, and sixth grade curricula. The Bread and Butterflies series is described as a quality product

with extensive training aids, including a comprehensive curriculum guide, individual program analysis, before-viewing readiness plan, program summaries, and suggestions for classroom discussion and activities. Workshop goals included informing teachers of the program and its content, incorporating it into existing curricula throughout Iowa, and fostering a positive teacher attitude. A one-day, inservice training workshop was developed for 14 regions of Iowa. A group of teacher trainers selected by region from school systems throughout the state received the training and, in turn, provided inservice training to faculties in their respective school systems. Evaluation was made of the teacher training workshops, career development attitude of upper elementary teachers, and cost effectiveness. A detailed discussion of evaluation findings is presented, and tables and figures supplement the material.

Wood, Dean A. The Development and Diagnostic Evaluation of the Monte Carlo Integration Computer as a Teaching Aid. Paper presented at the annual meeting of the National Association for Research in Science Teaching, 1972. 16p. ED 065 303.

This document outlines the operation of the Monte Carlo Integration Computer (MCIC), which is capable of simulating several types of chemical processes. Some data obtained through the MCIC simulation of physical processes are presented in graphs. After giving reasons for not using the initially contemplated summative research procedures for evaluation of the MCIC as a teaching aid, the author chooses to use a diagnostic or formative evaluation. Evaluation occurred over three lecture/demonstrations of the MCIC to high school chemistry students in Philadelphia. Sample problems from one problem area--understanding the presentation of the MCIC--are presented to illustrate that formative evaluation of instructional materials might be more profitable than more traditional evaluations.

Woods, Nancy A. Instructional Development Services: A Project Evaluation. Kalamazoo Valley Community College, MI, 1978. 35p. ED 154 886.

The Kalamazoo Valley Community College Instructional Development Services (IDS) program was designed to provide consultation services for faculty wanting to develop and refine instructional strategies; to review grant proposals, award grants, and monitor faculty grant progress; and to provide faculty on-campus seminars for specific purposes or issues. An evaluation project was aimed at answering four major questions about IDS: what IDS planned to accomplish, what procedures and criteria were employed in carrying out objectives, what activities and accomplishments directly resulted from IDS, and what impact IDS had on administrators, faculty, and students. Data came from a faculty survey, interviews with grant recipients who had finished their projects, interviews with IDS committee members, observations, and a review of documents. Although overall IDS success was found, IDS plans for 1975-76 were not specific and criteria for selection of faculty proposals were not established. IDS primarily

affected administrators by increasing the time they devoted to instructional development activities, and also increased faculty knowledge and skills. IDS impact on students was not adequately measured, although faculty and administrators generally perceived students as benefitting from IDS activities. Appendices present IDS project implementation processes, evaluation report summaries, selected IDS grants, and an IDS proposal outline.

Yamamoto, Toru. Sesame Street around the World: The Japanese Experience, Journal of Communication v26, n2, p136-37. Spring 1976. EJ 139 255.

Suggests that Japanese children's lack of exposure to spoken English poses critical problems in their comprehension of the program content of Sesame Street. Concludes that these problems are responsible for Sesame Street being treated mainly as an English study program for older students rather than as an educational program for young children.

Zachert, Martha Jane K. and Pantelidis, Veronica. SIBE: A Sequential In-Basket Exercise Technique. Florida State University, Tallahassee, Computer-Assisted Instruction Center, 1971. 153p. ED 056 469.

SIBE (Sequential In-Basket Exercise) is a computer-assisted program designed to provide library science students with decision-making experience via simulated library administration problems. An initial problem is presented online by a teletype; it is followed by two derived problems, dependent on the student's initial response selected from five action choices. A pilot study was planned to determine to what extent library science students choose the same decision pathway in the resolution of an administrative problem, to what extent elapsed time varies among students in making these decisions, whether such an in-basket exercise would stimulate class discussion, and whether library science students would find the SIBE a useful learning mode. Among the 33 students in the pilot study, concurrence in the pathway choice ranged from one to six students per problem, with a mean of 1.88 students in agreement. The total time for completion of the 4-problem exercise ranged from 26 to 63 minutes, with a mean of 42.9. Considerable classroom discussion was generated by the programs, and 96 percent of the students answering an affective questionnaire felt that they learned "some" or "a lot" from the SIBE.