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Output, Mass Media, Telecommunication

ABSTRACT

The identification of literature relevant to the development of a comprehensive information system was the purpose for which this bibliography was compiled. The following sources were utilized: "Use of Resource Material and Decision Processes Associated with Educational Innovation: A Literature Survey, ": Berkeley California Far West Laboratory for Educational Research and Development, 1969; and "Educational Resources Information Center (ERIC) Indices, 1968-1971," Washington, D.C.: Office of Education National Center for Educational Communication. ERIC descriptors were used in classifying the sources. (Author/NH)



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INFORMATION SYSTEMS:

ANNOTATED BIBLIOGRAPHY OF RELATED LITERATURE

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INTRODUCTION

This bibliography was compiled for the purpose of identifying literature relevant to the development of a comprehensive information system.

The following sources were utilized in compiling the bibliography:

Use of Resource Material and Decision Processes Associated with Educational Innovation: A Literature Survey, Berkeley, California Far West Laboratory for Educational Research and Development, 1969.

Educational Resources Information Center (ERIC) Indices, 1968-1971. Washington, D.C.: Office of Education National Center for Educational Communication.

The following ERIC descriptors were used in classifying sources:

ADOPTION (IDEAS) COMMUNICATIONS COMMUNICATIONS

(COMMUNICATION SKILLS)
(INPUT-OUTPUT)
(INTERSCHOOL COMMUNICATIONS)
(INFORMATION NETWORKS)
(FACSIMILE COMMUNICATION SYSTEMS)
(TELEPHONE COMMUNICATIONS SYSTEMS)
(MASS MEDIA)
(INTERCOMMUNICATIONS)
(INFORMATION THEORY)

DIAL ACCESS INFORMATION SYSTEMS
DIFFUSION
DIFFUSION (EDUCATIONAL INNOVATIONS)
DIFFUSION (INNOVATIONS)
INFORMATION DISSEMINATION



Alleyne, E. Patrick and Verner, Collie. <u>Personal Contacts and the Adoption of Innovations</u>. Vancouver: University of British Columbia, 1969. Ed 039 432 *

This paper deals with a study undertaken among strawberry growers in the Fraser Valley of British Colombia, Canada, and defines the network of personal contacts used by farmers to obtain information relevant to growing practices.

Carlson, Richard O. Adoption of Educational Innovations. Eugene, Oregon: University of Oregon Center for the Advanced Study of Educational Administration, 1965.

Carlson's report includes the results of a series of small studies dealing with factors affecting the adoption of educational innovations.

Carter, Launor F. From Research to Development to Use, Santa Monica

System Development Corporation. American Educational Research Association, 1966.

This paper discusses the current interest in problems associated with affecting the transition of research findings from development through utilization.

Carter Launor F. Knowledge Production and Utilization in Contemporary
Organizations, in Conference on Knowledge Production and Utilization
in Educational Administration.

Carter's discussion of knowledge production and utilization reviews three major studies of utilization.

Ebel, Robert L. <u>Some Limitations of Basic Research in Education</u>. New York: Meeting of the American Educational Research Associations, 1967.

This paper offers the thesis that basic educational research shows little promise for improvement in the process of educations.

Flanagan, John C. <u>Using Research and Development to Improve Education</u>. New York: Meeting of the American Educational Research Association, 1967.

Flanagan's paper appeals for a more efficient use of research funds and more systematic study and planning of educational system improvements.

^{*} ED denotes inclusion in the ERIC information system.



(Cont'd.)

Glasser, E. M. <u>Utilization of Applicable Research and Demonstration Results</u>. Los Angeles, California: Human Interaction Research Institute, 1967.

Glasser's study deals with the use of empirical evidence and research in the adoption of innovations.

Goldhammer, Keith, and Farmer, Frank. <u>The Jackson County Story</u>. Eugene, Oregon: Center for the Advanced Study of Educational Administration, 1964.

Source not available for annotation.

Guba, Egon G. The <u>Basis for Educational Improvement</u>. Bloomington, Indiana: <u>National Institute for the Study of Education Change</u>, 1967. ED 027 600

Guba develops a model of the process of educational change, discusses the ability of existing agencies and institutions to meet this model's mandates, and deals specifically with Title III programs' role in instituting the model.

Guba, Egon G. <u>Development</u>, <u>Diffusion</u>, <u>and Evaluation</u>. Portland, Oregon: University of Oregon Council for Educational Administration, 1967.

A thorough and encompassing paper, this discussion deals with implementation of research and development and with various evaluation methods.

Kentucky State Department of Education.

Public Schools. Frankfort, Kentucky: State Department of Education,

1964.

This dated report deals with innovations in Kentucky schools in the early 1960's.

Miles, Matthew. <u>Data Feedback and Organizational Change in a School System</u>. New York: American Sociological Association Meeting. 1966.

The text of this paper was not available for annotation.

Mort, Paul R. <u>Educational Adaptability</u>. New York: Metropolitan School Study Council, Teachers College, Columbia University.

Source not available for annotation.



(Cont'd.)

National Association of Secondary School Principals. "Changing Secondary Schools", <u>The Bulletin of the National Association of Secondary School Teachers</u>. Vol. 47, No. 283. May 1963.

This article reviews innovations in secondary schools in the early 1960's.

Nielson, James. "The Change Agent and the Process of Change", Research Bulletin 17. Lansing, Michigan. Michigan State University, 1967. ED 029 180

Nielson's article, which discusses the results of a Michigan township agricultural extension program to encourage farmers' adoption of technology, reviews the process of change that took place and evaluates the impact of the experiment.

Research Report No. 07-01; Improvement of Instruction in Washington Schools. Olympia, Washington: Department of Public Instruction, 1962.

This report summarizes the findings of a questionnaire assessing improvement in Washington state school districts over a three year period.

Research Report NO. 07-09A; Washington State 1966 Inventory of Educational Change, Part One: A Look Back Olympia, Washington: Department of Public Instruction, 1967.

Part One of this report, which requires additional data for significant benefit, discusses the degree of change in Washington schools over a four year period.

Research Report No. 07-09B; Washington State 1966 Inventory of Educational Change, Part Two: Preliminary Report. Olympia, Washington: Department Of Public Instruction, 1967.

Part Two discusses specific innovations in Washington state schools over a four year period.

Research Utilization Committee. (Various working papers distributed by the Committee.) Washington, D.C.: American Educational Research Association.

Committee working papers generally contain highly useful information on innovation adoption.

Rogers, Carl. "Toward a Science of the Person," <u>Journal of Humanistic Psychology</u>,1963

Source not available for annotation.



(Cont'd.)

Ross, Donald H. (ed.) Administration for Adaptability, New York: Metropolitan School Study Council, Teachers College, Columbia University, 1958.

Ross's study discusses administrative innovation.

Theory into Practice. Columbus, Ohio: Onio State University.

Published five times yearly, this journal stresses the integral relationship between educational theory and practice, focusing each issue on a specific educational area.



COMMUNICATIONS

Holden, Louis Edward. $\underline{\underline{Board-Superintendent}}$ $\underline{\underline{Relations:}}$ $\underline{\underline{A}}$ $\underline{\underline{Case}}$ $\underline{\underline{Study}}$. $\underline{\underline{Dissertation}}$

Holden's study deals with communication of school policy development between school superintendent and board of education, utilizing empirical material gathered in two case studies.



COMMUNICATION (COMMUNICATION SKILLS)

Boyles, Marion P. "Evaluation of the Communication Skills Laboratory Program, 1967-1968." Research and Development Report, Volume II, Number 9. Atlanta: Atlanta Public Schools, 1969 ED 030 533

This report deals with the successful results of a language skills course designed for underachieving eighth grade students in Atlanta public schools.

Council of Organizations Serving the Deaf. Proceedings of the Teacher Institute. Washington D.C.: 1969, ED 039 654

The proceedings of the Deaf Teacher Institute held in Frederick, Maryland in 1969 include discussion of the need for a total communication system and the further development of psycholinguistics.

Schmuck, Richard A. & Runkel, Philip J. <u>Organizational Training for a School Faculty</u>. Eugene, Oregon: University of Oregon Press, 1970. ED 037 832

This report deals with an intervention which sought to improve organizational development and the flexible problem solving ability of a junior high school faculty and discusses the difficulty of improving of organizational functions while conducting the normal business of school.

Taylor, Calvin W. and others. Exploratory Research on Communication Abilities and Creative Abilities. Arlington, Virginia: Air Force Office of Scientific Research, 1967. ED 020 544

Taylor's report seeks to identify variables in effective communication in military operations in order to develop tests to classify personnel on the basis of broad Air Force communication abilities.



COMMUNICATIONS (FACSIMILE COMMUNICATION SYSTEM)

Busha, Charles H., and Landrum, John H. <u>Telefacsimile Communications with the Xerox Magnavox Telecopier in Reference and Interlibrary Loans: Report of a Three Month Experimental Demonstration Conducted by the South Carolina State Library Board. Columbia, South Carolina, 1967. ED 026 074</u>

This report deals with a three month demonstration with a Xerox Magnavox Telecopier, a telefacsimile communication device adopted in the attempt to find a suitable system for reducing the time span in handling referred information and interlibrary loan requests from public libraries in South Carolina.

Scharz, Sharon. <u>Facsimile Transmission in Libraries -- A State of the Art Survey</u>. Washington, D.C.: Library of Congress, 1967. <u>ED 016 491</u>

Scharz's report which deals with five systems that have or are in the process of investigating uses of facsimile equipment describes the e_uipment of each project and inicates the necessity of change in interlibrary loan procedure.

Schieber, W.D., and Shoffner, R.M. <u>Telefacsimile in Libraries -- A Report of an Experiment in Facsimile Transmission and an Analysis of Implications for Interlibrary Loan Systems</u>. Berkeley, California: University of California, 1968. <u>ED 019 106</u>

This study of a month-long experiment using telefacsimile equipment proposes a set of procedures for the use of equipment in libraries, and analyzes performance and the nature of the demand for and cost of the system.



COMMUNICATIONS (INFORMATION NETWORKS)

Clemens, Thomas. <u>Information Transfer and Research Utilization in Education</u>. Lansing, Michigan: Michigan State Department of Education, 1969. ED 039 005

Clemens' document evaluates the components of an efficient educational information system, discusses current status in such systems, and deals with system improvement for use by educational decision makers and practitioners at all levels.

<u>Pilot Project.</u> White Plains, New York: Educational Research Services, Inc., 1964. ED 037 810

This study of a pilot project directed toward planning an educational information network reports personnel data collected in higher educational institutions throughout the state of New York.

Grimes, G. H. A <u>Proposed Educational Information System for the State of Michigan</u>. Lansing, Michigan: Michigan State Department of Education, 1969. ED 039 000

Grimes investigates assumptions, rationale, structure, personnel and physical requirements for a state-wide information system, determines the existing needs and resource status of educational information in Michigan, and specifies a physical and organizational network to provide needed information services to educators.

Meeting Information Needs in Ohio: A Report on a TWX Experiment and Elements That Will Assist in Designing a Reference and Information Network. Columbus, Ohio: Ohio State Library, 1970. ED 039 909

This document which deals with Ohio libraries' committment to the development of a reference and information network, describes a TWX experiment linking two union catalogs and the State Library and suggests future steps in meeting information needs.

Seiden, H.R. <u>A Comparative Analysis of Interactive Storage and Retrieval Systems with Implications for BCN Design</u>. Santa Monica, California: System Development Corporation, 1970. ED 039 893

Seiden's report deals with one of a series of studies aimed at providing information and assistance to the National Library of Medicine in planning the Biomedical Communications Network.



COMMUNICATIONS (INFORMATION NETWORKS)

(Cont'd.)

Wakefield, R.A., and others. <u>Sources of Federal Support for Higher Education Experimental Systems for a National Information Network</u>.

Albany, New York: State University of New York Research Foundation, 1968. ED 027 840

This study reveals the growth of federal management information systems and the development of a network of computer-connected communication systems.



COMMUNICATIONS (INFORMATION THEORY)

Kriewall, T.E. Applications of Information Theory and Acceptance
Sampling Principles to the Management of Mathematics Instruction,
Part 1. Madison, Wisconsin: University of Wisconsin Research
and Development Center for Cognitive Learning, 1969. ED 038 306

The technical report is concerned with various instructional management problems encountered in situations which stress self-selection and self-pacing principles.

Kriewall, T.E. <u>Applications of Information Theory and Acceptance Sampling Principles to the Management of Mathematics Instruction, Part 2. Madison, Wisconsin: University of Wisconsin Research and Development Center for Cognitive Learning, 1969. ED 038 307</u>

Kriewall's dissertation, which treats several problems of instructional management, further discusses the efficient utilization and allocation of available human and material resources to create an operational, individualized inquiry-learning environment.

MacKay, D.M. <u>Information</u>, <u>Mechanism and Meaning</u>. Cambridge, Massachusetts: The MIT Press, 1969. ED 042 350

MacKay's volume, which includes a collection of papers and speeches on information theory over a twenty year period, discusses the premise that there is a valid analogy between Heisenberg's Principles of Uncertainty and certain aspects of information theory.

Mosberg, Ludwig, and Shima, Fred. <u>Comprehension of Connected</u>
<u>Discourse</u>. <u>Inglewood</u>, California: Southwest Regional Educational Laboratory, 1969. ED 036 398

After reviewing previous definitions of comprehension, this document develops a rationale for researching reading comprehension based upon information gain.

Perlmutter, M.S. <u>Theory and Educational Objectives in the Use of New Teaching Media</u>. Madison, Wisconsin: University of Wisconsin School of Social Work, 1968. ED 038 032

This document discusses theory and objectives in the uses of media available to social work education that have an impact on the theoretical approaches to teaching, experimentation, and research.

Roberts, Thomas L. <u>Theoretical Framework: The Bartlesville System.</u>
Stillwater, Oklahoma: Oklahoma State University Research
Foundation, 1969. ED 029 339

This document discusses the theoretical framework underlying the Total Guidance Information Support System.



COMMUNICATIONS (INFORMATION THEORY)

(Cont'd.)

Wiman, R.V., and Meierhenry, W.C. (editors). Educational Media:

Theory into Practice. Columbus, Ohio: Charles E. Merrill Co, 1969.

ED 038 010

This volume discusses the practical and theoretical aspects of communication from the standpoint of several related disciplines.

Ziller, Robert C., and others. The Neutral in a Communication Network under Conditions of Conflict, A Technical Report. Washington, D.C.: Office of Education, 1969. ED 032 607

Ziller describes two laboratory experiments that deal with the effect of the presence of a neutral party in a communication network during a difference of opinion.



COMMUNICATIONS (INPUT - OUTPUT)

Alkin, Marvin C., and others. <u>Preliminary Analysis of Data for a Secondary School Input-Output Model</u>. Los Angeles: University of California, 1969. ED 030 983

This document is a preliminary report of a project which has as its goal the construction of a mathematical model representing the interrelationships among categories of phenomena in secondary schools.

Alkin, Marvin, C. <u>Towards an Evaluation Model-~A Systems Approach</u>. Los Angeles: University of California, 1967. ED 014 150

Alkin's report develops a model for evaluating instructional programs at the school district level.

Alkin, Marvin C., and Skager, Rodney W. <u>Systems Analysis</u>
<u>Applications in Educational Research</u>. Los Angeles: University of California, 1969. ED 032 629

This study utilizes three case studies in discussing the range of educational research problems which might be beneficially examined from a systems analytic viewpoint.

Artandi, S.R. <u>Automatic Indexing of Drug Information</u>: <u>Project Medico Final Report</u>. Washington, D.C.: <u>Public Health Service</u>, 1970. <u>ED 036 310</u>

The report of this investigation deals with the nature of automatic indexing and specifically discusses the system's applicability to the indexing of drug-related information appearing in English natural language text.

Creager, J.A. <u>Empirical Taxonomies of Four Year Colleges and Universities</u>. 1967. ED 012 956

Creager applies a model of hierarchical grouping of differences among universities' characteristics to twenty four different institutions of higher education.

Jansen, J. M., Jr. Phrase Dictionary Construction Methods for the R2 Information Retrieval System. Fort Monmouth, New Jersey: Joint Services Electronics Program, 1969. ED 039 898

Jansen's paper is concerned with the construction of a phrase dictionary from a data base and with development of initial attempts for information retrieval from the data base.



COMMUNICATIONS (INPUT - OUTPUT)

(Cont'd.)

Magoon, J., and Tannian, F. <u>School System Analysis: An Interaction Process Model</u>. Minneapolis, Minnesota: Meeting of the American Education Research Association, 1970. ED 041 396

This informal paper describes a multi-stage input-output model that could aid school program decision makers.

Sotina, N.M., and Burlai, Y.P. <u>A Device with Learning Capability</u>. Springfield, Virginia: Clearinghouse for Federal Scientific and Technical Information, 1969. ED 038 846

This report describes a computer device with learning capacity that contains input, storage, arithmetic, and output units.

Stewart, A.D. <u>Measuring the Functional Structure of Complex Organizations</u>. Los Angeles: <u>Meeting of the American Educational Research Association</u>, 1969. ED 028 774

Viewing the school system as a set of subsystems with intersubsystem inputs and outputs, Stewart discusses an organizational structure assessment instrument designed to test the hypothesis that quanitification of these inputs and outputs would make possible the differences in school performance.

National Project for the Improvement of Televised Instruction.

<u>Toward a Significant Difference</u>. Washington, D.C.: National Association of Educational Broadcasters, 1969. ED 032 774

This report describes a three year National Project for the Improvement of Televised Instruction devised to develop a plan for using instructional television in education and emphasizing learning efficiency and a systems approach.

Tracz, G.S. An <u>Overview of Optimal Control Theory Applied to Educational Planning</u>. Los Angeles: Meeting of the American Educational Research Association, 1969. ED 030 189

Tracz asserts that the application of the optimal control theory to mathematical models for educational planning will aid in revealing the values of a systems approach to social and economic problems.



COMMUNICATIONS (INTERCOMMUNICATION)

Copeland, J.B. An Investigation of Four Television Teaching Feed-back Techniques via a Closed Circuit System. Ann Arbor, Michigan: University of Michigan Microfilms No. 66-13, 778, 1966. ED 027 486

This dissertation describes an investigation of four closed circuit television teaching techniques.

Jackson, B. (ed.) <u>University Intercommunication: The Nine Universities Research Project Final Report.</u> Elmsford, N.Y.: Pergaman Press Inc., 1966. ED 39 005

This report, which explores the present state of closed circuit television and video tape recording facilities at various universities in Great Britain, discusses means of development, costs, and advantages of similar systems.

Friedman, N.S. <u>Observability in School Systems</u>, <u>A Problem of Inter-System Integration</u>. New York: <u>Columbia University Bureau of Applied Social Research</u>, 1968. <u>ED 020 296</u>

Friedman's extensive study investigates specific arrangements provided by elementary and secondary schools in various New Jersey communitites to encourage parental involvement, knowledge, and support of schools.

Starlin, Glan. <u>Inter-Institutional Communications Networks</u>.
Minneapolis, Minnesota: University of Minnesota, 1966. ED 024 263

Starlin discusses various aspects of National Educational Television and asserts that a clear definition of objectives and a commitment to appropriate facilities is necessary for the introduction of an inter-institutional communication system.



COMMUNICATIONS (INTERSCHOOL COMMUNICATION)

Howard, J.M. The Relationship of Organizational and Leader
Factors to Communication Effectiveness in Illinois Public Junior
Colleges. Minneapolis, Minnesota: American Educational Research
Association, 1970. ED 038 966

Howard's study deals with the effectiveness of communication and its dependence on the factors of leadership behavior, leader background, organizational structure, and organizational age in Illinois Public Junior Colleges.



COMMUNICATIONS (MASS MEDIA)

Carrol, H. H. <u>College Reading and Television's Instant Image</u>.
Atlanta, Georgia: Nineteenth National Reading Conference Yearbook, 1969. ED 36 410

In expressing concern for college reading programs and the improvements needed to update methods to meet the effects of progress in reading habits in the field of communications, this paper emphasizes critical reading instruction as a primary concern.

Filep, R.T., and Schramm, W. A Study of the Impact of Research on Utilization of Media for Educational Purposes, Final Report:

Overview. El Segundo, California: Institute for Educational Development, 1970. ED 42 065

Filep's lengthy study of Title VII, the research and dissemination activities carried out between 1958 and 1968, investigates, researches, analyzes, and assesses educational advances and innovations, strengths and weaknesses of administrative procedures.

Gans, H.J. The Mass Media as an Educational Institution, 1967. ED 013 844

Gan interesting analysis of the role of media in schools proposes a comparative study to determine teaching effectiveness of network television and urban and suburban lower middle class schools.

Lynch, J.E., (Editor). Radio and Television in the Secondary School.

New York: Speech Communication Association, 1966. ED 42 786

The articles of more than fourty authors in this issue describe background, curriculur uses, and make recommendations for future use of radio and television in secondary schools.

Ohlinger, John. <u>Listening Groups, Mass Media in Adult Education</u>. Los Angeles: University of California, 1967. ED 014 038

This report, which examines listening group projects in over thirty countries since the 1920's, presents an historical study and review of research dealing with purposes and outcomes of projects, clientele, broadcasts and supplemental printed materials, methods of group organization, post-broadcast discussions, group leadership, and feedback.

Finnish Broadcasting Company. Report on a Round Table
"Communication 1980" on Mass Communication Research and Policy.
Hanko, Finland: 1970. ED 041 482

These papers provide outlines for critical research in mass communication, international perspectives in broadcasting, and the functions and goals of mass communications in addition to discussing the problems of democratic control over broadcasting.



COMMUNICATIONS (TELEPHONE COMMUNICATION SYSTEM)

Farquhar, J.A. <u>Alternative Technologies for Information Networks</u>. Springfield, Virginia: Clearinghouse for Federal Scientific and Technical Information, 1969. ED 038 156

This paper, which concerns economic consideration inherent in designing user services that incorporate various communication systems, describes three services considered important to the biomedical community.

Report to the Central Michigan Educational Resources Council on the Feasibility of an Interconnected Telecommunication System for the 39 County Region of Michigan. Central Michigan Educational Resources Council, 1967. ED 020 662

This report examines the feasibility of electronically connecting northern and central Michigan area schools for data processing and for instructional, administrative, informational, and audio services.



DIAL ACCESS INFORMATION SYSTEMS

Hull, R.B. <u>Dial Access Information Retrieval Systems</u>. Washington, D.C.: Academy for Educational Development, Inc., 1970. ED 039 709

Hull discusses the theory and function of DAIRS (Dial Access Information Systems), an information system that combines magnetic tape recording techniques with replay and telephone dialing switching devices.

Ingle, H.T. <u>Dial Access in Education</u>. Stanford, California: ERIC Clearinghouse on Educational Media and Technology, 1970. ED 038 875

This pamphlet, comprised of annotated references, demonstrates what is available in the ERIC system of dial access in education, a retrieval technique that permits a large variety of learning materials to be electronically delivered to varied destinations.

Mills, D.L. <u>A Random-Access Multiple-Program System for the University of Michigan Language Laboratory</u>. New York: MLA, 1969. ED 031 122

Mills discusses the operational characteristics, structural make-up, and versitility of the random-access multiple-program system and compares it to previous systems.

Naber, R.H. <u>Dial Access Information Retrieval Systems</u>, <u>Circa 1967</u>. Springfield, Illinois: Office of Public Instruction, 1968. ED 019 917

In his discussion of DAIRS, Naber posits that system innovations should focus on the availability of greater amounts of creative material and on pupil-directed rather than teacher-oriented activities to best aid the independent learner.

Offiesh, G.D. <u>Dial Acess Information Retrieval Systems</u>, <u>Circa 1967</u>: Handbook for <u>Educators</u>. Washington, D.C.: HEW, 1968. ED 025 682

This handbook establishes guiedelines for planning, purchase, and utilization of dial access information systems for educational instruction.

Ofiesh, G.D. State of the Art of Dial Access Information Retrieval:
Interim Report on Library Research. Washington, D.C.: DHEW, 1967
ED 017 307

In his progress report, Ofiesh formulates a working definition of DAIRS, covers a literature review on the subject, and discusses the necessity of further research and evaluation studies.



DIAL ACCESS INFORMATION SYSTEMS

(Cont'd.)

Sabella, A.C. <u>Procedures for Creating a Media Enviornment to Help Change Teacher Role from Disseminating Information to Guiding Independent Learners: Final Report.</u> Mt. Kisco, N.Y.: Bedford Public Schools, 1969 ED 037 818

This study, the central premises of which remain untested, attempts to demonstrate the possibility of changing the teacher's role through adoption of an audio-video dial-select information retrieval system.

Singer, I.J. At Will and At Once: The Audio-Video Dial Access Information Retrieval System. Washington, D.C.: Academy for Educational Development, Inc., 1970. ED 039 818

In his analysis of DAIRS, Singer asserts that the success and proliferation of these systems depend on the production of software based on student and curricular needs, on the development of a content-oriented approach to teacher training, and on the production of flexible, reliable hardware.



Abbott, Max G. "Hierarchical Impediments to Innovation in Educational Organizations", in Abbott, Max G. and Lowell, John T., EDS., Change Perspectives in Educational Administration, Auburn, Alabama: School of Education, Auburn University, 1965

Source not available for annotation.

Bushnell, O.D., Freeman, R.A., & Richland, M. <u>Interim Report</u>, <u>Proceedings of the Conference on the Implementation of Education Innovations</u>. Santa Monica, California: Systems Development Corporation, 1964.

Source not available for annotation.

Carlson, R.O. "Barriers to Change in Public Schools", in <u>Change Processes in the Public Schools</u>. Eugene, Oregon: Center for the Advance Study of Educational Administration, University of Oregon, 1965.

Carlson discusses the absence of a change agent, innovation that is "real knowledge" rather than research based, and the "domestication" of public schools as three barriers to change in public school systems.

Carlson, R.O. <u>Strategies for Educational Change: Some Needed Research on the Diffusion of Innovations</u>. Washington, D.C.:
Conference on Strategies for Educational Change, 1965.

This unpublished paper was not available for annotation.

Carter, Launor F. From Research to Development to Use. Santa Monica, California: System Development Corporation, 1966. ED 026 741

This paper, through the use of three studies of the impact of new knowledge" on institutions, discusses current interest in problems associated with affecting the gransition of research findings from development to utilization.

Chesler, M., and Flanders, M. "Resistance to Research and Research Utilization: The Death and Life of a Feedback Attempt", in <u>Journal of Applied Behavioral Science</u>. Vol. 3, No. 4, 1967

In exploring some of the problems scientists encounter in making their feedback of research findings relevant and useful to educational practitioners, the authors discuss scientist-practitioner collaboration, feedback processes, and feedback guidelines.



(Cont.d.)

Clinton, Alfred and House, John H. <u>Attributes of Innovations as Factors in Diffusion</u>. Minneapolis, Minnesota: Meeting of the American Educational Research Association, 1970. ED 038 347

This study explores and develops the theory that certain innovation attributes are as relevant to implementation as external factors.

Edgerton, H.A., and Sylvester, R.W. <u>The Prediction of Outcomes of MDIA Programs</u>, a <u>Pilot Study</u>. Washington, D.C.: Performance Research Inc., 1966

Source not available for annotation.

Goldhammer, K. and Elam, S. (eds.) <u>Dissemination and Implementation</u>. Bloomington, Indiana: Phi Delta Kappa, 1962

This document deals with the dissemination and adoption of innovative instructional practices.

Goodlad, J.I. <u>Innovations in Elementary and Secondary Education</u>. New Brunswick, New Jersey: Governor's Conference on Education, 1966.

Goodlad's paper deals with innovative instructional practices in public schools.

Guba, Egon G. The Impending Research Explosion and Educational Practice. Kent, Ohio: Kent State University, 1965.

Source not available for annotation.

Guba, Egon G. <u>Development</u>, <u>Diffusion</u>, <u>and Evaluation</u>, National Institute for the Study of Educational Change, 1967.

A thorough and encompassing paper, this discussion deals with implementation of research and development in terms of various kinds of evaluation.

Innovative Methods for Studying Innovation in Education and an Illustrative Analysis of Structural Effects on Innovation Diffusion Within Schools. LIN, NAN. 1968 ED 017 741

This paper examines the research methods generally utilized in diffusion research and suggests research methods to help provide a better understanding of the diffusion process.



(Cont'd.)

Kurland, Norman D., and Miller, Richard I. <u>Selected and Annotated Bibliography on the Processes of Change</u>. 1966. ED 023 025

The documents included in this bibliography, which treat such subjects as educational change, social and cultural change, diffusion and adoption, group dynamics, power structure, administration, and manpower development in emerging nations, stress the dissemination and implementation of new practices.

Lindquist, E.F., and others. <u>Educational Inofrmation Project</u>. Iowa City, Iowa: University of Iowa. 1966

Source not available for annotation.

Martin, Margaret R. <u>The Researcher's Role in the Diffusion of an Innovation: A Comparative Study.</u> Toronto: National Seminar for Adult Education, 1969. ED 025 733

This study uses a diffusion model in an attempt to understand the role of the researcher in the evaluation of an educational innovation in a school setting.

McClelland, W.A. <u>The Process of Effecting Change</u>. Alexandria, Virginia: George Washington University, 1968. ED 025 038

McClelland's paper, which includes a summary of relevant literature on the diffusion of information, describes change characteristics and inicates the importance of improved understanding of the change process.

Miles, M.B. (ed.) <u>Innovation in Education</u>. New York: Bureau of Publications, Teachers College, Columbia University, 1964.

This book, which utilizes studies of research and theory in educational innovation, emphasizes the process rather than content of change.

Miller, R.I. (ed.) <u>Perspectives on Educational Change</u>. New York: Appleton-Century-Crofts, 1966.

Miller's book is of interest to school administrators and state department officials interested in team-teaching and non-gradedness, and to those planning graduate courses in education and specialists in educational change.



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Mort, P.R. "Studies in Educational Innovation from the Institute of Administrative Research: An Overview, "in Research Bulletin. New York: Columbia University, 1941.

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Pellegrin, R.J. "Social Participation Patterns and the Communications Process," in <u>Financing the Changing School Program</u>. Washington, D.C.: National Educational Association, 1962.

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Research Implications for Educational Diffusion. Lansing, Michigan: Michigan State University, 1968. ED 026 535

These papers present a condensed systhesis of research needs in educational diffusion.

Richland, M. Final Report: <u>Traveling Seminar and Conference for the Implementation of Education Innovations</u>. Santa Monica, California: System Development Corporation, 1965

Richland's report describes an approach for reducing the time lag between the development of new classroom practices and diffusion of proven ideas throughout the nation's school districts.

Rogers, E.M., and others. <u>Diffusion of Innovations</u>: <u>Educational Change in Thai Government Secondary Schools</u>. Lansing, Michigan: Michigan State University, 1969.

This paper reviews the findings of a study conducted to determine the diffusion of educational innovations to urban and rural government secondary schools in Thailand and to teachers in these schools.

Robers, E.M. <u>Needed Research on Diffusion within Educational</u> <u>Organizations</u>. JAIN. NEMIC. ED 017 740

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Schmuck, R. <u>Social Psychological Factors in Knowledge</u>
<u>Utilization as Applied to Educational Administration</u>. Eugene,
Oregon: University of Oregon, 1967

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School District of University City. The Impact of New Ideas in Education. Vol. 2. University City, Missouri: The District, 1965.

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Strickland, R.G. "Innovations in the Language Arts," <u>The National Elementary Principal</u>. Vol. 43. 1963

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Stufflebeam, D.L. <u>Catalog of Educational Changes in Ohio Public Schools</u>. Columbus, Ohio: The Ohio State University, 1966.

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Wenrich, R.C. A State Program for the Development of Persons for Leadership Roles in the Administration of Local Programs of Vocational and Technical Education. Ann Arbor: University of Michigan, 1966.

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DIFFUSION (EDUCATIONAL INNOVATION)

Babcock, C.D. The Relationship of Elementary and Secondary
Education to a State Communications Network Serving Higher
Education. Minneapolis: Inter-Institutional Television, 1966.
ED 023 303

Babcock stresses that the training and retraining necessary to update teaching methods is best accomplished by an educational television system that not only enables teachers to learn with their pupils, but in addition provides them with inservice training.

Beggs, D.W. A Study of the Position of State Departments of Public Instruction Accrediting Agencies and Selected National Professionals, Etc. Bloomington: University of Indiana, 1967.

This study surveys and reports the policies and practices of accrediting agencies, state departments of education, and selected professional educational organizations and discusses their negative position concerning experimentation and innovation in public schools.

Breshkoff, L. <u>Television and the Continuing Education of Teachers:</u>
A Feasibility Study of the Potential of Network Television for Dissemination of Educational Research Information. New York:
Teachers College, Columbia University, 1967. ED 015 667

This three phase study seeks to bridge the gap between the producer of new educational ideas and the teacher through effective use of network television and recommends a weekly, flexible-format television series to discuss educational innovations useful to teachers in all subject matters and at all grade levels.

Distasio, Patrick J., and Greenberg, Barry. <u>Community Services</u>, <u>A Center for Community Development</u>. Washington, D.C.: American Association of Junior Colleges, 1969. ED 032 053

This brief report, the third in a series dealing with the development of community service programs, reviews and evaluates the concept of a center for community development and deals with two exsisting centers as well as exsisting programs that lend themselves to center adaptation.

Glines, D.E. <u>Implementing Different and Better Schools</u>.

Mankato, Minnesota: Mankato State College, 1969. ED 039 926

Gline's lengthy document provides guidelines for change implementation at all grade levels in public schools, describes change mechanisms, and explains the organization of new structures.



DIFFUSION (EDUCATIONAL INNOVATION)

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Gross, N., and others. <u>Complex Organizations</u>, <u>The Implementation of Major Organizational Innovations</u>. 1968. ED 025 827

In this paper based upon selected findings of a case study of an elementary school which attempted to implement a major organizational innovation (the redefinition of the teacher's role in an individualized instructional program), Gross indentifies factors that explain implementation failure.

Little, Arthur D. A Model for Innovation Adoption in Public
School Districts: Research on the Characteristics of Selected
School Systems as They Relate the Need for Appraisal, Acceptance,
and Use of Innovations. Boston: 1968. ED 022 262

This study, which seeks to acquaint personnel in local school districts and other agencies with the process of adopting educational innovation, develops the hypothesis that innovation adoption can occur only in the presence of initiating and sustaining mechanisms.

Merriman, H.O. <u>Evaluation of Planned Educational Change at the Local Education Agency Level</u>. <u>Columbus</u>, Ohio: Ohio State University Evaluation Center, 1967. ED 025 042

Based upon a systems analysis approach, this four stage evaluation model called CIPP (context, input, process, product) assesses innovative programs in education.

Mumford, K.A. <u>A Proposed Design for Olinda Elementary Demon-</u>
<u>stration School</u>. Miami, Florida: Dade County School System,
1968. ED 036 060

This plan designs a school in which adaptive, exemplary, and innovative instructional programs can be introduced an evaluated.



DIFFUSION (INNOVATION)

<u>Academic Program Statement of Sangamon State University</u>,
Springfield, Illinois: Sangamon State University, 1969. ED 036
272

This statement discusses proposed academic organization of Sangamon State University.

Allen, J.E., Jr. <u>The Community College and the Office of Education's Goals</u>. Williamsburg, Virginia: National Council of State Directors of Community Junior Colleges. 1969. ED 034 535

Allen's report asserts that full use of the junior colege can reduce the alleged artificial separation of the academic, economic, and social worlds with federal plans to let junior colleges coordinate and support diverse agencies, coordinate community action programs with remedial and work-study activities, and work with manpower programs, feeder high schools, and four year colleges.

Finney, J.C. <u>A System of Computerized Reports for Counselors</u>. Washington, D.C.: American Personnel and Guidance Association, 1970. ED 39 591

This paper describes the development of a system of computerized reports for counselors and discusses conclusions reached regarding the system.

Roberts, Thomas L. A Theoretcial Exemplar of System Design,
Implementation, and Appraisal: The Bartlesville System.
Stillwater, Oklahoma: Oklahoma State University Research
Foundation, 1969. 029 325

Roberts develops a functional model of research and systems development based upon logical sequencing and tight-line modular linkage between task assignment and implementation to avoid failure in closing modular gaps in innovation diffusion.

Rogers, E.M. <u>Supplement to Bibliography on the Diffusion of Innovations</u>, <u>Research Report 6A</u>. <u>Lansing</u>, <u>Michigan</u>: <u>Michigan</u> State University, 1968. <u>ED 030 056</u>

Supplementing an earlier work, this bibliography lists all new publications added to the Diffusion Documents Center, Michigan State University, from July, 1967 to September, 1968



Brownbridge, R., and Van Fleet, P. <u>Dissemination and Implementation Report: Investments in Prevention</u>. San Francisco: Pace I.D. Center, 1969. ED 034 223

This document discusses the dissemination process and suggests a model for implementing the concepts of the Pace I.C. Center, a Title III Elementary and Secondary Act project of the South San Francisco Unified School District, that is concerned with the effectiveness of early intervention techniques focused on the young child and his total environment.

Commission on Scientific and Technical Information. Progress in Scientific and Technical Communications. Washington, D.C.: Federal Council for Science and Technology, 1969. ED 034 691

Dumas, Neil. Research Utilization and Dissemination; Proceedings of a Regional Conference. Gainesville, Florida: University of Florida, 1968. ED 024 992

This report summarizes the activities of a conference comprised of representatives of rehabilitation agencies in the Southeast held in June, 1968, to review ways and means of disseminating, retrieving, and utilizing research and demonstration results.

Entelek, Inc. Computer Assisted Instruction Information Exchange, Final Report. Newburyport, Massachusetts: Entelek, Inc. 1970.

This final technical report deals with the establishment and operation of an "Exchange of Information" among universities, corporations, and government agencies concerned with the use of the computer as an aid to the instructional process.

Farr, R.S. Knowledge Linkers and the Flow of Educational Information

Stanford, California: Educational Resources Information

Center, 1969. ED 032 438

This document deals with the role of the "Knowledge Linker", and interpersonal network of communication within a target audience.

Green, L.A. Educational Technology Dissemination Project in Selected Methods of Disseminating Information Regarding Educational Media by the State Department of Education. Denver, Colorado: Colorado State Department of Education, 1966. ED 021 481

Green's report describes a project sponsored by the Colorado State Department of Education to inform Colorado schools of the use and scope of instruction media and to determine the best method of disseminating the information.



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Grimes, George. <u>Regional Information System for Educators, Information Resources, Installation, and Evaluation.</u> Detroit, Michigan: Michigan-Ohio Regional Educational Laboratory, 1969. ED 033 613

This document, which is primarily a series of four pamphlets that describe the Regional Information System of the Michigan-Ohio regional Educational Laboratory, a system designed to provide an effective systematic methodology for linking ushers with relevant resources, gives an overview of the history, structure, and utilization of the information system.

Guba, E.G., and others. The Role of Educational Research in Educational Change. National Institute for the Study of Educational Change, 1967. ED 012 505

This document identifies and defines five major types of organizational settings for educational research.

Havelock, Ronald. <u>Bibliography on Knowledge Utilization and Dissemination</u>. Ann Arbor, Michigan: University of Michigan Center for Educational Research, 1969. ED 029 171

Havelock, Ronald. A Comparative Study of the Literature on the Dissemination and Utilization of Scientific Knowledge. Ann Arbor, Michigan: University of Michigan Center for Educational Research, 1969. ED 020 171

Havelock's lengthy and complete report provides a framework for understanding the processes of innovation, dissemination, and knowledge utilization, and it reviews the relevant literature in education and other fields of practice within this framework.

Havre. <u>Dissemination Strategies and Devices</u>, <u>Part Four; Final Report for Phase I</u>, <u>Rural Shared Services</u>. <u>Portland</u>, <u>Oregon: Northwest Regional Educational Laboratory</u>, 1969. ED 028 882

The final part of the four part report designed to identify, synthesize, and evaluate shared services research and development throughout the nation presents a model to disseminate information concerning shared services information to rural educators.



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Hergenreter, Leonard. <u>Continuation of the Colorado Research</u>
<u>Coordinating Unit: Final Report.</u> Fort Collins, Colorado:
Colorado Research Coordinating Unit, 1969. ED 035 774

Hergenreter's study surveys the activities of Colorado University's Research Coordinating Unit, a facility responsible for coordinating state agency data collection and State Board of Education and teacher training institution research.

Intergovernment Task Force on Information Systems. The <u>Dynamics of Information Flow</u>: <u>Recommendations to Improve the Flow of Information Among Federal</u>, <u>State and Local Governments</u>. 1968 ED 019

This study reports the Task Force's findings of factors that hinder the development of efficient information flow.

Ironside, D.J. <u>Project Information Exchange</u>, <u>Phase 2 (Development Project 0379-53)</u>. Toronto: Ontario Institute for Studies in Education, Toronto, 1970. ED 035 849

This report outlines the history of project information exchange, describes the Metropolitan Toronto Continuing Education Directory and to obtain feedback on the value of the information that occurred, analyzes directory contributor and user response, and discusses the implications of the project findings.

Morchand, C.A. <u>Preliminary Study for an Improved Information Transfer System for Metro Libraries</u>. New York: Metropolitan Reference and Research Library, 1967. ED 017 301

This preliminary study of a communications system among the affiliates of the New York Metropolitan Reference and Research Library provides an outline for an initial information transfer network within a fifty mile radius of Times Square.

Nuss, E.M., and Rookey, E.J. <u>A Demonstration Model of a Means to Disseminate Advancements in Instructional Uses of Educational Media</u>. Harrisburg, Pennsylvania: Pennsylvania State Department of Public Instruction, 1966. ED 16407

Nuss's study is the first of a two phase project designed to change teacher behavior to enable improved classroom utilization of new instructional media.



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Overs, Robert and Trotter, Ann. <u>Disseminating and Using Research</u>
Reports. Stanford, California: Educational Resources Information
Center. ED 021 277

The authors offer practical guidelines in four areas of rehabilitation research information dissemination.

Sabrosky, L.K. <u>Distribution and Use of Selected Service Civil Defense Publications</u>. Washington, D.C.: Federal Extension Service, 1966.

This report describes a four-state study of public use of Civil Defense publications, of county agricultural agent's distribution practices, and the attitudes of agents toward Civil Defense publications.

Sophar, G.J. and Heilprin, L.B. <u>The Determination of Legal Facts</u> and <u>Economic Guideposts with Respect to the Dissemination of Scientific and Educational Information</u>, 1967. ED 014 621

This report deals with research in copyright practices of library administrators responsible for photoduplication services and their interpretations of the "fair use" aspect of copyright law in providing service to their clients, and studies library copying in terms of the economics of copyright.

Tiedman, D.V., and others. An Information System for Vocational Decisions. Cambridge, Massachusetts: Harvard University, 1967. ED 018 825

This study outlines problems encountered, significant findings, and future plans of the Information System for Vocational Decisions during its sixth quarter (September, 1967 through November, 1967) at Harvard University.

Tri-State Regional Leadership Planning Conference for the

Dissemination of Information About the More Effective Uses of the

New Educational Media. Washington, D.C.: National Education

Association, 1959. ED 016 388

This document reports creative uses of well known media, utilization of language labs and educational television, needs and resources for information dissemination and guidelines for improvement of educational techniques discussed at the conference.



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Walz, G.R., and Urbeck, T. The Design and Implementation of Information Systems for Pupil Personnel Services. Washington, D.C.:
American Personnel and Guidance Association, 1967. ED 022 205

This report discusses the attempts of a workshop on information systems to update and augment existing research skills, to work toward a more adequate interdisciplinary conceptual base, and to encourage the establishment of information centers in the conference participant's own locales.

