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ABSTRACT

Proposed is a regional (Northeast) model to stimulate and draw together local and state services in a Resource Linking System for special education. It is explained that the model would provide the following five functions: appraisal of teachers' training needs, management and development of materials, field-based inservice training for teachers and administrators, technical assistance, and information dissemination. Detailed are the four main objectives of the model: (1) to analyze needs assessment data of local educators gathered from regional surveys; (2) to link available national, state, and regional resource systems to local services; (3) to train "peer enablers" (master teachers) to consult with local teachers or administrators; and (4) to provide a resource and knowledge utilization system for replication in other areas. (CL)

CONCEPT PAPER

TOWARD AN IMPROVED REGIONAL DELIVERY SYSTEM FOR SPECIAL EDUCATION SUPPORT SERVICES IN MASSACHUSETTS

RESOURCE LINKING SYSTEM

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The enclosed concept paper reflects the current thinking in education on how to improve linking and networking capabilities to provide better access to resources. Any pilot effort that might be undertaken in the Northeast Region should go much further than a needs assessment or staff development program and should search out new means within a cluster of organizations for linking and resource utilization.

The immediate steps that can be implemented beginning in October are defined in the four objectives of this paper. Activities and functions related to these objectives are defined as (a) assessment of teachers' perceived needs for training; (b) training through inservice, building-based models; (c) technical assistance and in-school support; and, (d) resource exchange and information dissemination.

As we look at the needs and objectives we will tap the available agencies to see what resources they can provide and inventory available resources making them accessible to schools. The resource files will be physically located within the area where they are available to instructional personnel and will include: (a) instructional materials, (b) programmatic information, (c) management information systems, and the like. The resource center will offer programs in school buildings using conventional inservice training models and new delivery systems to include the peer enabler as part of the support mechanism for educational improvement.

Literature in the areas of teacher centers, linking and networking, and educational technology is still emerging and there is a lot to be done to integrate the teacher center concept with special education media. With the assistance of resource-providers, the new delivery systems will provide field applications. Especially important will be the results in the form of new learnings which will occur relative to what needs to be done to implement the concepts expressed in the linking/networking portion of this paper.

The enclosed concept paper reflects the current thinking in education on how to improve linking and networking capabilities to provide better access to resources. Any pilot effort that might be undertaken in the Northeast Region should go much further than a needs assessment or staff development program and should search out new means within a cluster of organizations for linking and resource utilization.

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INTRODUCTION

Complex legislation and program requirements for special education presently necessitate major school system accommodations. Meanwhile, school districts are faced with higher per pupil costs; inability to provide for equal educational opportunities; rigidity of educational planning and programming; and, lack of essential support services.[1] The school districts and State Department of Education must now find alternatives which will maximize the existing resources to meet the identified needs.

Problem Identification

The cost crunch of the 1960's and 1970's has forced planners to seek more economical ways of providing new services to meet rising standards for excellence and accountability.[2] Resources, in terms of trained personnel and of funds available to local school districts cannot at the same time both provide for the operation of the school and support efforts required to accomplish needed educational development. Availability of specific planning and management information capability to apply the new resources to school system program development is lacking in most areas.

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[1]Most school districts lack the capacity for planning, research, and evaluation to perceive potential problems and have not established or maintained enough resources to service the system for efficiency and effectiveness in either program development or operational aspects. School districts have less role differentiation, fewer problem-solving experts, and a smaller number of support services than other social organizations. (National Institute of Education, 1974; R. Lavin, 1975.)

[2]Studies of knowledge production and utilization in education have consistently pointed to the need for linking mechanisms and institutions to connect the products of educational development within the practice world. These studies assume there are useful practices and products, processes, knowledge, and expertise which could prove beneficial to the field if communicated and adapted by users. Similar proposals for linking research-based resources to local needs have been recommended by the National Institute of Education.

A needs summary for the State at this time might read as follows:

- *need to equalize and extend educational opportunities for all students in the educational system*
- *need to successfully implement new technological capabilities and new educational delivery systems*
- *need to invest substantial resources in the inservice training of educational personnel to develop competencies for mainstreaming*[3]
- *need to establish a viable interface structure as a prerequisite for the development and maintenance of a resource linking network*
- *need to reflect sound cost-benefit (cost-effectiveness) principles while improving equalization of aid to schools.*

In responding to these needs, it is essential to consider the local district perspective and[4]:

- *provision of external efforts, based on needs of local districts, should complement and support the activities of those local units*
- *provision of external efforts should be reliable and accessible and sensitive to the varying environments under which the local school districts function*
- *provision of mechanisms which make it possible for substantial involvement of the local unit in the planning and decision-making processes of the external service unit.*

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[3]Special education systems and regular education are faced currently with a strong trend to reintegrate the handicapped into the regular educational program. This reintegration must provide the most beneficial and practical program for the student.

[4]See for example: ERIC ED 086 400 (Stephens, Robert). The Governance and Organizational Affiliations of Regional Educational Service Agencies: Arms of the State; Pure Creatures of Constituent Local Districts. New Mexico State University, University Park, 1974. See also: R. Lavin, D. Meals, and J. Sanders. A Review of Educational Cooperatives and their Various Forms. Volumes I and II. Organizing for Improving Delivery of Educational Services in Massachusetts. MACE Study, 1974.

PURPOSE OF THE LINKING/NETWORKING SYSTEM

The purpose of this proposed regional model is to stimulate and draw together local and State initiative in a Resource Linking System responsive to the identified needs.[5] The proposed resource Linking model provides a system for delivery of inservice educaton and a mechanism for delivery of instructional materials and information. The process to be designed will engage local educational agencies (LEAs) in efforts to build local capacities in partnership with State and regional organizations. This will occur basically through two essential kinds of services:

- *training systems and peer consultation*
- *information service component linking resources to practitioners*

Essential elements for Networking exist in the State today as exemplified by the Northeast Region. Situated in Northeastern Massachusetts are two established centers: Northeast Regional Education Center (State Department of Education Center) and the Merrimack Education Center (a voluntary Center of collaborating school districts) which are representative of regional arrangements in other parts of the State. The Northeastern area can serve as a micro-model with implications and recommendations that can be generalized for replication throughout other regions of the State.

It is now entirely feasible for the identified organizations to cooperate with other State Department agencies and Teacher Education Institutions around a set of appropriate objectives in the area of special education.

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[5]Lance has identified a trend in development and expansion of instructional support services to the field of special education. The merger of the fields of information science and educational technology has had an impact at all levels of service. The creation of the earlier Instructional Materials Centers and the newer Regional Resource Centers, along with the technology of microfiche and the development of computer capability, smoothed the way for systems such as ERIC and the NIMIS System.

The ad hoc nature of the arrangement provides an organizational structure offering guidance for developmental planning and support for the resource linking. And, it does so without creating any new bureaucratic structures. The multiple and diverse organizations evidence complementarity while sustaining a flexible balance between State and local participation aimed at the task of mobilizing, deploying, and utilizing an all-too-limited set of available resources.

A major State goal is to overcome inequities through commitment to policies of equalization of educational resources.[6] The Network must devise better ways of allocating equalization to districts. The ability of the Network to make positive contributions to the equalization commitment of the State and offer more options for more student populations will be a crucial element of success in this model.

Through the Network, the districts are associated with and receive assistance from the major organizations such as State Department of Education and the Teacher Education Institutions, as well as other public and private agencies.[7] The Network initiates interchange between these resource providers (colleges, universities, organizations, foundations, governmental agencies, R&D labs, etc.), and local school districts. Citizens' committees and local boards of education are more willing to come together and collaborate for special education programs because this network is an organization of a variety of legitimate agencies and is being implemented in a number of school districts in the Northeast area of the State.

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[6]Within recent years, efforts have been underway to develop, refine, and improve the delivery of educational services in Massachusetts through regional approaches. Notable examples of arrangements for service delivery include Massachusetts SDE establishment of six regional centers. Additionally, the Massachusetts State legislature has enacted a bill to promote the formation of single and multi-purpose collaboratives as a means to utilize limited resources more effectively within the State. Still a third recommendation, by the Governor's Commission/MACE, is for formation of School-College Centers. The time for institutions at the State, regional, college, and local school level to begin planning together has never been more propitious.

[7]Klausmeier, H., and J. Walter. Manual for Forming Cooperative Relationships through Networks. Madison, Wisconsin: University of Wisconsin, 1974.

The Network creates the organizational structures and introduces the materials/information as means for improving practices. This dual focus of product and change support, through a rearrangement of relationships among organizations, creates the desired result where one of these approaches alone would not resolve the problems.[8] The independent school district will find that the Network has acquired the necessary resources and is prepared to make them available. The Network is then capable of moving a subset of resources from one area or Center to any participating district providing anyone, anywhere in the Northeast Region, access to resources, information, and technical assistance. The ad hoc network acts as a "switching station" or focal point for flow of information and resources from and to the elements of the network in a manner which promotes the maximum effective utilization and delivery of services to classroom teachers and students. School systems obtain necessary support services that they help to select and at a lower cost than if they were to act independently. Information communication is improved with the exchange and flow from sources in the Resource System through channels which permit it to be available in sources closer to the school buildings and teachers rather than from a centralized, remote source.

OBJECTIVES

The ad hoc network has a primary task of modeling the total innovation building and dissemination system and acting as a facilitating agent seeing to it that the system services the needs of the client districts. (See Figure 1.) This type of Resource Linking Network allows any school district to "plug into the most sophisticated sources of information in such a way that they get knowledge and materials which are relevant, timely, and truly cost-beneficial."[9]

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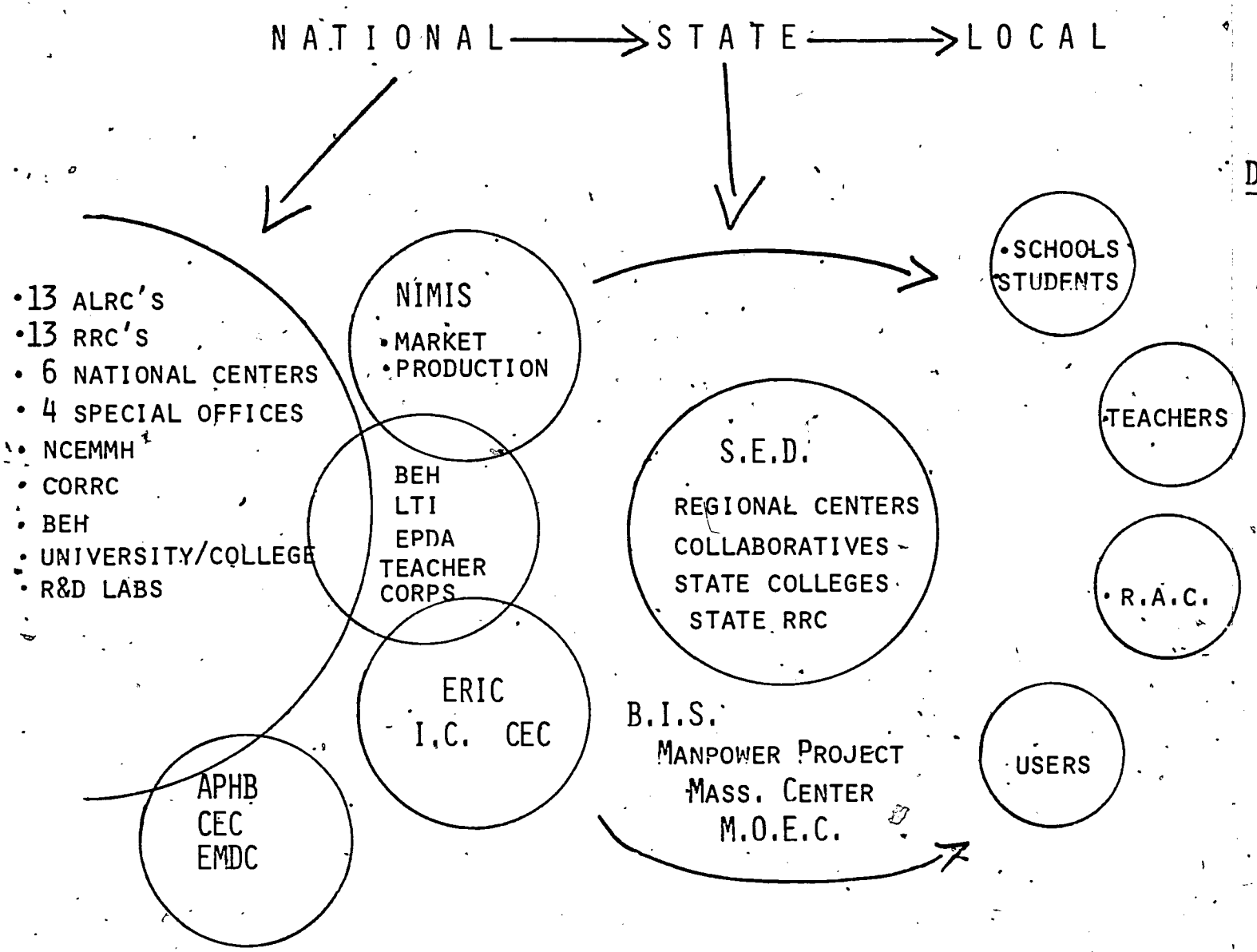
[8]Hemphill, J., and F. Rosenau, 1973. Baldridge and Deal, 1975.

[9]Havelock, R.



DISTRICTS

- SCHOOL DISTRICTS
- PRACTITIONERS
- ADMINISTRATORS
- PARENTS
- STUDENTS
- SCHOOL COMMITTEES

FIGURE 1

Utilizing existing capacities of our Massachusetts organizations, combined with successful endeavors outside the State, the Northeast model will demonstrate capabilities based upon the following objectives:

Objective 1 -- To analyze needs assessment data of local educators gathered from regional surveys of the Northeastern areas. (This assessment of teachers' perceived needs for training is expected to complement and supplement program audit procedures.)

Objective 2 -- To link available resource systems (national, State, and regional) to assist school districts in local capacity building.

Objective 3 -- To train "peer enablers" who facilitate the linking of innovative practices and provide technical assistance for improved service delivery.

Objective 4 -- To suggest a strategy for providing high quality, low-cost resource and knowledge utilization for replication via State regions.

PROCEDURES AND ACTIVITIES

Operating as the R&D arm of local schools, the resource linking network provides increased potential to cope with identified problems. Various functions are suggested to link the activities of initial needs assessment and program delivery.[10] Although services vary depending upon the needs of students and teachers being served, the design is basically comprised of the following five functions and related activities:

Appraisal -- Survey of teachers' perceived needs for training in special education.

Materials -- Selection, provision, development, and utilization for instructional and management levels

Training -- Field-based model for delivery of inservice education for teachers and administrators

Technical Assistance -- Programming information and field-based consultation

Information Dissemination -- Information utilization services and exchanges

[10] Lance, W.; op. cit.

Objective 1 -- Appraisal/Needs Assessment.

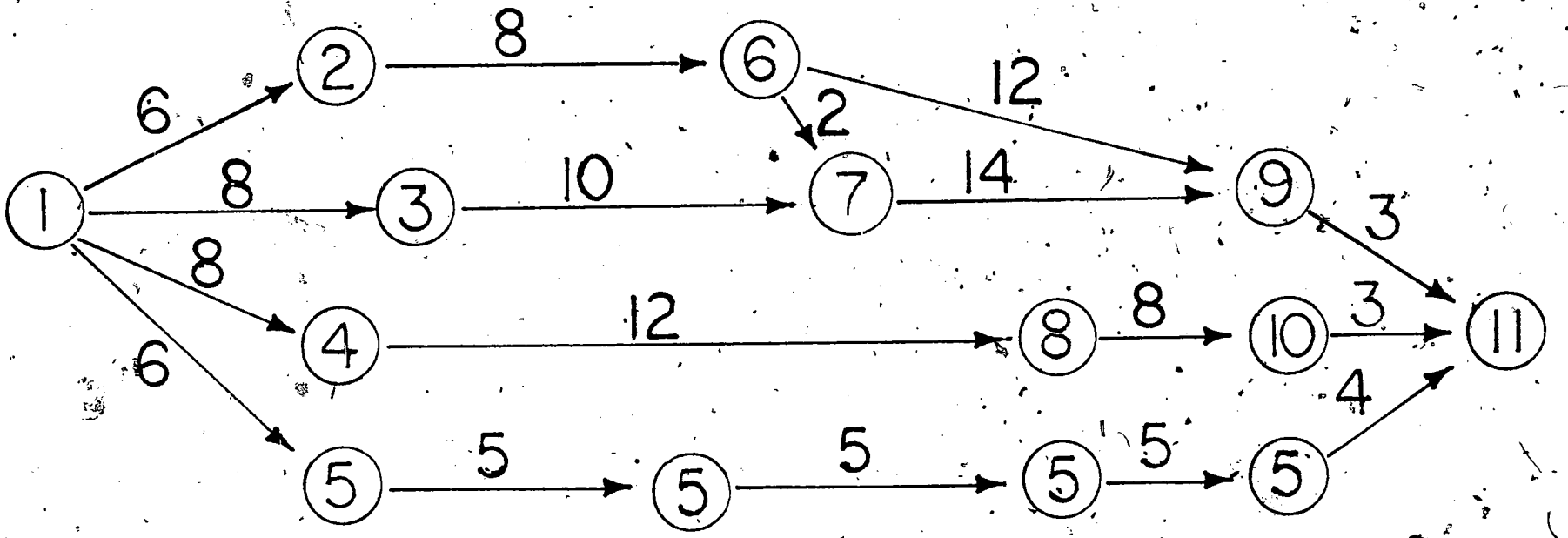
Responsibility for systematic design and conduct of the appraisal process and for resulting program development efforts for delivery of resources will rest with the Northeast Regional Center working in conjunction with the Merrimack Education Center. The ad hoc network and a planning commission of local representatives (inservice commission) act in advisory capacity. Integration of input from school system needs inventory will be coordinated through the 65-community region. Data will be collected and a summary of needs prepared enabling local personnel to select resources targeted to needs. The detailed survey will study the assessments of teachers' perceived needs for training on a short-term (school year) turn-around time for offering staff development programs. Integrated data from program audit is used to determine long-range goals and objectives for system-wide growth (three to five years).

The needs assessment process will be designed to entail the following steps.

1. Devise formats
2. Establish inservice commission of local representatives
3. Select items and categories for instrument
4. Administer instrument in 65 communities
5. Collect and analyze data through computer program
6. Prepare interpretations of data
7. Schedule response and delivery mechanisms

Figure 2 indicates an approximate time line in the form of a PERT chart for the needs assessment to occur with resulting program deliveries. The PERT time line estimates that if event one were to begin in October the project completion date would be May 1976, or a period of approximately 35 weeks.

PERT TIME LINE



1975-1976

OCT. | NOV. | DEC. | JAN. | FEB. | MAR. | APR. | MAY

1. DESIGN NEEDS ASSESSMENT
2. ADMINISTER NEEDS ASSESSMENT
3. PLAN INSERVICE DELIVERY SYSTEMS (PILOT EFFORT)
4. INVENTORY RESOURCES (MATERIAL AND HUMAN)
5. CONDUCT MEETINGS
6. COLLECT AND ANALYZE DATA
7. PLAN INSERVICE COURSES/PROGRAMS
8. SCHEDULE TECHNICAL ASSISTANCE
9. SCHEDULE INSERVICE PROGRAMS
10. COMPUTER RESOURCE BANK
11. EVALUATION COMPLETE

FIGURE 2

Objective 2 -- To link available resource systems (national, State, and regional) to assist school districts in local capacity building.

The network entails on-going, loosely structured communications among organizations with common purposes and common values thus expanding the pool of innovative ideas available to practitioners. In a consortium with Teacher Education Institutions and State and local organizations, information can be shared and resources pooled to offer improved services to schools. Programs can be successfully exchanged through the Network forming linkages between practitioners from one locale to another. Each link established adds to the growing client capacity for reaching out and pulling in relevant resources.

The linking resource network offers an opportunity for information and resource sharing in special education. It will be the responsibility of the ad hoc network to identify clearly optimal tasks for each agency geared toward this objective. Each respective organization concentrates on what it has found it can do best and makes better use of resources allocated. Figure 3 represents an organizational schema for the Network. Joint planning of SDE, Regional Education Centers, local schools, Teacher Education Institutions, Collaboratives and service organizations can include consumers in the planning process (teachers, parents, students).

The Resource Center operates as a system with the primary functions of (a) dissemination of information; (b) inservice training. The Northeast Network can supplement services of the school building level[11] through availability of services from sources outside the school building. The Network can also provide an immediate resource system, linking the classroom with intermediate and national elements.

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[11]On the aggregate, regional level, resource centers collect and circulate materials that are too limited in use for inclusion in local school building collections. The Resource Center should supplement (not duplicate) the services and materials of the buildings...so called "thin-market" materials. Performing services beyond the scope of a local district center, it may employ a mobile unit with especially designed components for effective delivery of media and materials.

Instructional Materials--A greater array of appraisal and prescriptive procedures, some unique intervention strategies, and requirements for specialized materials suited to the needs of learners with various sensory, motor, social, cognitive, or other handicaps can be made available through the Resource System. A regular class teacher with the responsibility for mainstreaming a child must be able to tap into a system of resources that will provide:

- *means to ascertain child's level of functioning in each area of the curriculum*
- *prepare programs appropriate to these levels*
- *acquire necessary materials relevant to the programs*
- *develop instructional skills necessary to teach the child utilizing the available resources*

Specialized diagnostic instruments and instructional materials are acquired to provide support services to teachers of the handicapped in a comprehensive manner. Information on selection of instructional level materials (appraisal and educational programming tools) will be made available through the Network. The national ALRC Network will be of considerable assistance here. State sources include the Massachusetts Resource Centers, Manpower Project, the Bureau of Institutional Schools, and the Massachusetts Center for Research and Training, as well as the Massachusetts Organization of Educational Collaboratives. (See Figure 1.) Other resource systems to be tapped include such examples as: (a) Los Angeles Unified School District; (b) Northwest SEIMC; (c) NIMIS (National Institute of Materials Information System).

Training Systems -- Lance[12] has indicated that the learning resource system should attend to training and consultation services with at least equal intensity as that given to the materials circulation and information acquisition/dissemination component. Lack of attention to skills and competencies of practitioners has probably been the most important reason for lack of

[12]Lance, W. Learning Resource Systems for Special Education, 1975.

TRAINING AND RESOURCE SUPPORT MODEL

(NORTHEAST REGION)

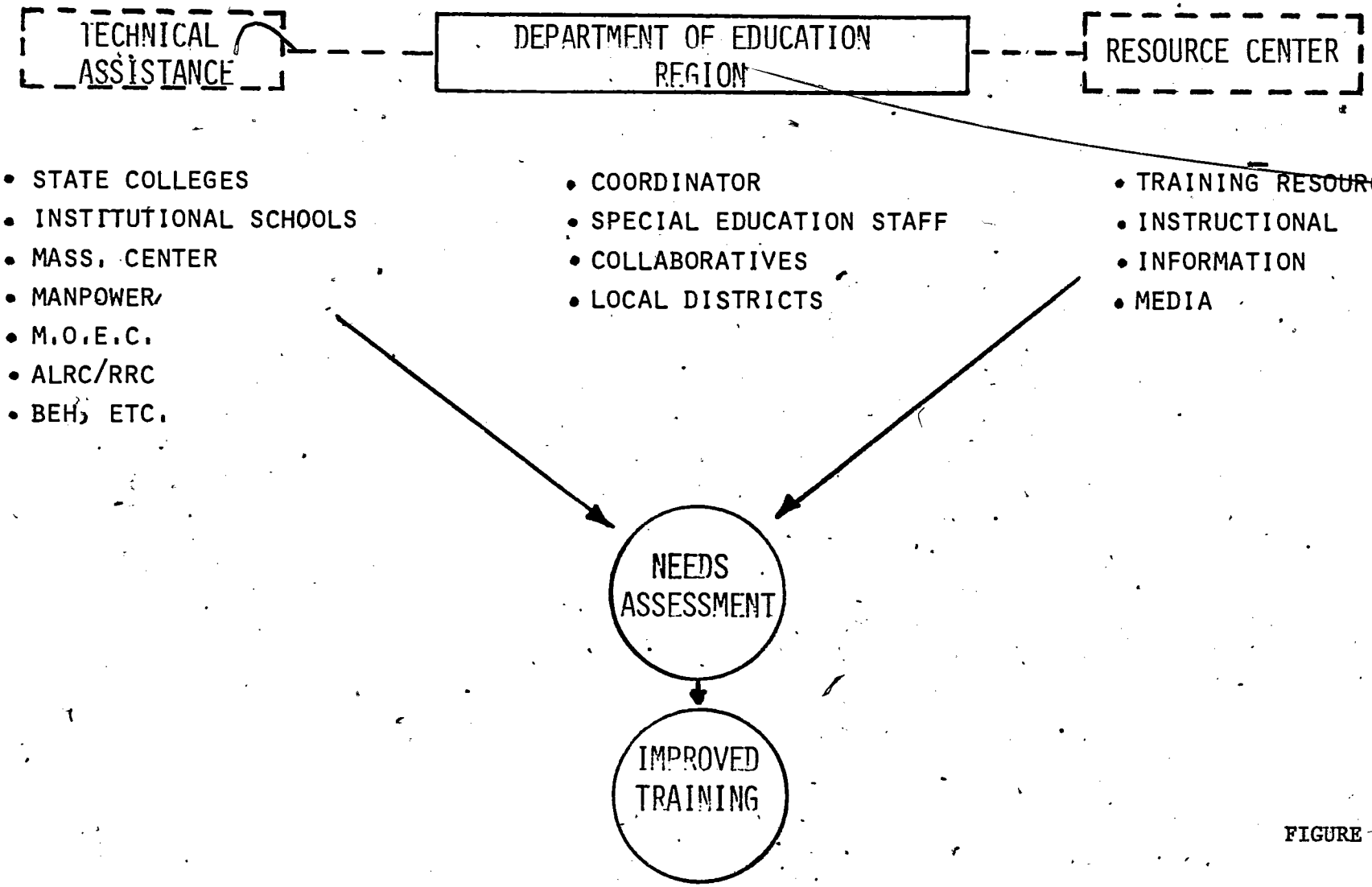

FIGURE 3

effective educational change during the most recent period of attempted innovations.[13] Reynolds[14] indicates that users are not able to work out the operational implications after the laws have been passed and the regulations written.[15] Little preservice training has been offered and virtually no time, resources, school district policies, or other supports are built into the learning of new roles through inservice in the ongoing system.

These factors are addressed through the inservice training component. The ad hoc network will have the responsibility of designing specific inservice training models within a field program component in a school-based model. With data from the assessment of teachers' perceived needs for training, the network will train local school community personnel in peer intervention strategies and provide developer-free materials for training sessions.[16]

Initial awareness of developer-free materials and the types of support and assistance available will be through overview sessions presented at the Regional Education Center (SDE). Target audience for this awareness stage is made up of local personnel (principals, teachers, special education personnel).

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[13]Fullan, M. Innovation in Learning and Processes for Educational Change, 1972.

[14]Reynolds, M. More Process Than Is Due. April 1975.

[15]Three factors seem to add to these problems: (a) teachers' lack of clarity about the change and what it means to them as teachers; change does not permeate down to the implementation levels; (b) lack of capability to perform new roles and lack of mechanisms and support structures designed to facilitate learning new roles; (c) unavailability of necessary materials; quality and quantity of instructional materials are inadequate.

[16]Cartwright, 1972; Lilly, 1971; Hofmeister, 1974; Thiagarajan, 1974; Baum, 1972; Hafner, 1972.

The Network ad hoc council reviews requests for training from the LEAs and ascertains best resources to deliver the training required, thus ensuring maximum effective utilization of resources. Joint planning through the network can also conduct special studies into new approaches to training and service programs through improved delivery systems. It is important for the resource network to provide the technical assistance to the building and classroom level practitioner and offer inservice training and resource delivery through new delivery mechanisms.

Information Sharing and Resource Exchange--Information sharing and capacity building are the tools for practitioners to obtain trusted information through the "invisible college" or network of practitioners. Activities indicated which need to be accomplished will suggest possible arrangements for participation of the various agencies complete with a responsibility matrix. These activities shall include, but are not limited to:

- *linkage of people with problems to people experienced in implementing appropriate strategies*
- *acquisition and circulation of materials, newsletters, papers, monographs, ERIC documents, and the like*
- *publication of resource directories, catalogs, newsletters, transformed materials, etc.*
- *computer-assisted retrieval of educational product, program, and practice-type documents and materials*
- *access to State and national information systems (CEC, TADS, RRC/ALRC, NIMIS, etc.)*

Objective 3 -- To train "peer enablers" to facilitate the linkage of practices and provide technical assistance to schools.

Master teachers will be selected to be trained as "peer enablers."[17] These peer-level teachers utilize intervention strategies to assist local

[17]Evelyn Deno, in the concept of enablers, launched the general resource teacher who is prepared to serve children with a variety of special needs in a team relationship with regular classroom teachers where he/she is also meeting inservice needs.

schools to develop necessary skills of implementation. The peer level enablers, from home or neighboring districts add credibility to this program as they contribute from the experiential base of actually implementing or utilizing alternatives in their respective schools.

By assisting practicing administrators and teachers to develop skills and competencies to become "peer enablers" or trainers of teachers, the pilot network increases educational alternatives. Training-based models for delivery of special education services are available and can be supplemented by the use of training packages which are proving successful in many areas of the country.[18]

In-class consultation to teachers regarding student appraisal, programming, and materials utilization as well as instructional management are made available by trained local personnel. The "peer enablers" assist in specifying objectives, activities, and methodologies to meet the needs of the learner. When materials are not available, they must be developed or those that approximate the learning requirements must be modified according to the handicap. The educator must then become competent in utilizing the materials with the handicapped pupil.

Technical assistance enables the classroom teacher to develop skills in order that programs for individual learners can proceed. This type of support service is defined within the Technical Assistance Matrix (see Figure 4) at the various levels: classroom, building level, school district, intermediate district. At the regional level, state-wide training is directed to the supportive personnel from the regions rather than attempting to directly impact upon teachers from this distance. At the building and district levels, technical assistance and support is available through the regional coordinator in a field-based inservice model.

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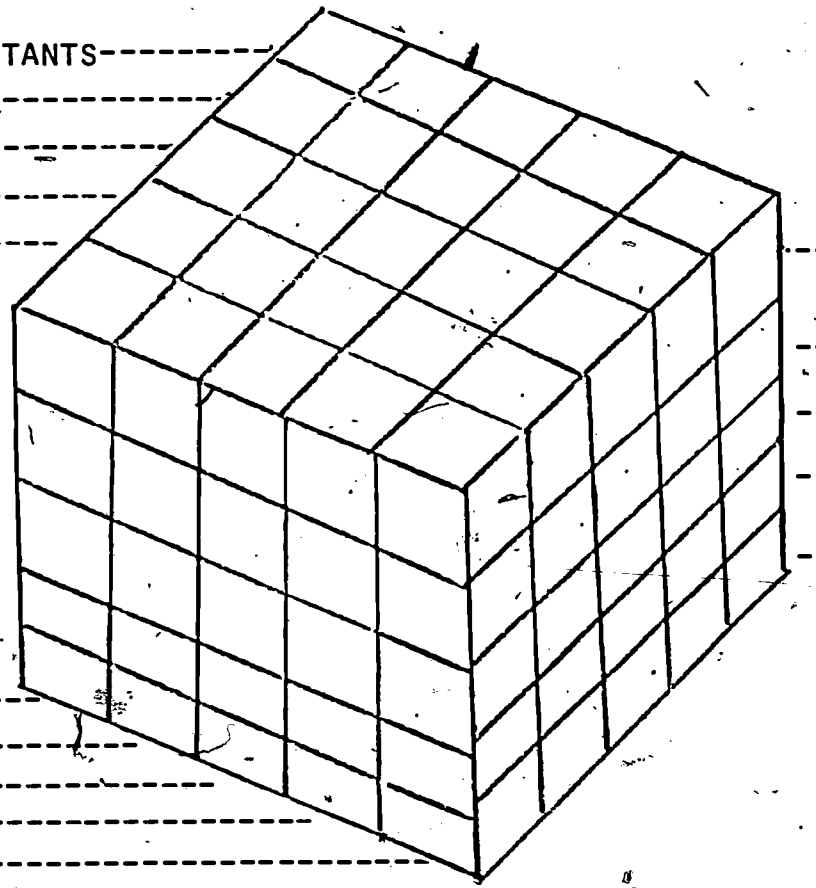
[18]The North Carolina Consortium model (D. Stedman, 1975) represents a comprehensive and apparently successful state-wide cooperative. It may be possible to begin to look further into this North Carolina model.

TECHNICAL ASSISTANCE MATRIX

20

TARGET GROUPS: LEVELS OF SERVICE

SUPERINTENDENTS, ASSISTANTS
PLANNING TEAM-REGIONAL
PRINCIPALS
SCHOOL BOARDS
SCHOOLS/CLASSROOMS



SUPPORT SERVICES

- MATERIALS CIRCULATION
- APPRAISAL
- TRAINING PEER ENABLERS
- INFORMATION ACQUISITION/ DISSEMINATION
- MANAGEMENT/MONITORING

TECHNICAL ASSISTANCE MODE

INSERVICE TRAINING
CONSULTATION
DISSEMINATION
NETWORK EXCHANGES
CONFERENCES, ETC.

FIGURE 4

Through technical assistance, products and practices developed by resource-providers are examined in reference to the local systems' capacity for utilization of these products and services. Technical assistance incorporates data from program audits that is generalizable to the consultation process. Technical assistance comprises the following supports to be offered by locally trained personnel:

a. *help practitioners assess their own needs and system-wide needs; before a practitioner can use resources, he must know specifically what the problems are.*

b. *identify resources that are readily accessible to solve the practitioner's problems. These resources may take the form of developers, practitioners, or other human resources as well as the form of successful practices, research, or training programs.*[19]

c. *have access to the resources and assist in transforming them so that they can be made available to local practitioners in a responsibe, low-cost, reliable and rapid manner.*

Objective 4 -- To suggest a strategy for providing high quality, low-cost resource and knowledge utilization for replication via State Regions.

This concept paper attempts to point out some initial steps that will lead to the design of an improved system for training and resource delivery. It specifically suggests that a demonstration be initiated in the Northeast Region of the State to develop a model for replication. The optimal arrangements of complementarity between multiple, diverse organizations in the Northeast can project what is learned from our practical experiences to a statewide regional system. Cooperation among Regional Centers, Voluntary Centers, Teacher Education Institutions, and the State Department of Education will evolve a system that is stronger than possible with agencies acting separately and will ensure that responsiveness to local needs will be preeminent. School districts, in turn, will have more channels for acquiring resources than heretofore was possible.

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[19]This process and product suport combination ensures success where one of these alone would not be as helpful. See for example: Hutchins, 1973; Baldridge, 1974; and Havelock, 1973.

The Northeast Network will provide data having practical implications that are generalizable to the State as a whole. Data gathered against a set of questions serving as a framework will (a) test the linkage model of networking; (b) offer a description for the benefit of others who wish to replicate the process; and, (c) provide feedback to the Network in formative stages of design. The resulting implications and generalizations should speak to:

- *Tested needs assessment/matching resource system that enables local school personnel to select resources targeted to needs*
- *Tested application of materials/information through dissemination strategies utilized in the region*
- *Mechanisms designed to provide linkages between resource systems and client schools*
- *Support services for training of staffs and communications of successful practices*
- *Description of functional requirements of regional networks, ways they may be met and ways complementarity among organizations can be achieved*
- *Demonstrated applicability with cost data from the pilot area*
- *Articulation of needs and specifications of educational goals and objectives in special education for a major cross-section of the population*

FACILITIES

The geographical area of Northeastern Massachusetts is the 65-community region to be serviced. The proposed resource network will assist in fulfilling educational needs of school districts comprising approximately 280,000 students. The area includes member school districts from three counties, covering 750 square miles and about one-tenth of the State's population. The proposed network will impact upon all school districts, rural, suburban, and urban, and will provide a vehicle for coordination with various types of regional and State agencies. The Northeast Regional Education Center will

provide space for meetings, conferences, and other activities and existing facilities at the Merrimack Education Center will house the Learning Resource Center. The Town of Chelmsford serves as the fiscal conduit for MEC.

FINANCIAL

In the attached budget sheets, costs are projected for the programs of needs assessment and regional resource center. Each listing portrays costs on the basis that a "center" already exists within an area and through these minimum projected funds, new center activities can be initiated without delay.

The budget sheet on the regional resource center concentrates in the first year primarily on linking to resources. Although a basic set of resources will be inventoried and maintained, a larger emphasis will be assisting schools in locating and selecting appropriate resources.

Budget information is not provided in these sheets for the peer enabler concept or the replication of the model to other regions of the State. Should other regions desire to replicate this model and train peer enablers then additional funds would be necessary for these activities.

GLOSSARY

APHB -- American Printing House for the Blind

ALRC -- Area Learning Resource Center

BEH -- Bureau of Education for the Handicapped

BIS -- Bureau of Institutional Schools

CEC -- Council for Exceptional Children

CORRC -- Coordinating Office for RRCs

EPDA -- Education Professions Development Act

EMDC -- Educational Media Distribution Center

ERIC -- Educational Resource Information Center

LTI -- Leadership Training Institute (University of Minnesota)

LLRC -- Local Learning Resource Center

MOEC -- Massachusetts Organization of Educational Collaboratives

MASS. CENTER -- Massachusetts Center for Education, Training, Research, and Development

NEIMC -- Northwest Educational Instructional Materials Center

NCEMMH -- National Center for Educational Media and Materials for the Handicapped

NIMIS -- National Instructional Materials Information System

RRC -- Regional Resource Center

RAC -- Regional Advisory Council

SDE -- State Department of Education

SLRC -- State Learning Resource Center

SOs -- Special Offices (on Visually Handicapped; Hearing Impaired; Other Handicaps; Materials Depository)

MERRIMACK EDUCATION CENTER

SAMPLE PAGE

ANNUAL ASSESSMENT OF NEEDS

Indicate the extent to which you desire to become more knowledgeable about each topic listed by marking on your answer sheet a number from 1 (low) to 6 (high). A number should be marked on your answer sheet for each question. In the event that the term is unfamiliar to you, mark the -0- for that question.

60. Organizing classrooms for instruction
61. Overview on "What is special education"
62. Providing educational assessments
63. Professional examination procedures (visual learning, etc.)
64. Determining pupil eligibility
65. Establishing grouping patterns
66. Transfer policies for children
67. Resource room model in integrating
68. Consultant model in integrating
69. Diagnostic model in integrating
70. Learning styles
71. Observation and performance testing
72. Instructional strategies
73. Behavior management
74. Using instructional systems
75. Utilization of outside resources
76. Working in cooperative units
77. Scheduling programs for integration
78. Preparing prescriptive learning programs
79. Establishing educational objectives
80. Suggested screening systems
81. Individual profile records
82. Teacher report of student progress
83. Understanding of the purposes of 766 legislation

BIBLIOGRAPHY

Baldridge, J. V. "The Impact of Educational R&D Centers and Laboratories: An Analysis of Effective Organizational Strategies." Stanford, California, 1974. ERIC ED 079 860.

Baum, D., and T. Chastain. "Training Packages: An Innovative Approach for Increasing IMC/RMC Potential for Inservice Training in Special Education." *Educational Technology*, 1972; V 12, N 9; pp. 46-49.

Cartwright, G., and C. Cartwright. "Guilding the Lilly: Comments on the Training Based Model." *Exceptional Children*, 1972. V 39; pp. 231-234.

Coffing, R., et. al. "A Hypothetical Application of a Needs Analysis Methodology for Special Education Materials." Project MORE. *Technical Report*, No. 2; August 1974. ERIC ED 097 011.

Deno, Evelyn. Presentation at the Massachusetts Leadership Training Conference; sponsored by the LTI/EPDA Project at Merrimack Education Center, Wakefield, Massachusetts. March 1975.

Evans, J., R. Lavin, and R. Peebles. "Toward An Improved Needs Assessment and Planning Process for Education: Final Report. Phase I." Prepared jointly by EDCO, MEC, and MITRE Corporation for the Massachusetts State Department of Education. March 1971.

Fredericks, H., et. al. "Needs and Concerns for Special Education in Oregon." Monmouth, Oregon: State System of Higher Education, 1971. ERIC ED 059 566

Fullan, M. "Innovation in Learning and Processes of Educational Change." *Interchange: Ontario Institute of Studies in Education*. Ontario, Canada. 1972.

Goodlad, J., et. al. "Implementing Organizational Innovations: Sociological Analysis of Planned Educational Change." New York: Basic Books. 1971.

Gross, R., et. al. "Behind the Classroom Door." Worthington, Ohio: Jones. 1970.

Hafner, D. "A Shift of Emphasis in Programming for Handicapped Children." *Exceptional Children*, September 1972. pp. 59-60.

Havelock, R. "Training for Change Agents: A Guide to the Design of Training Programs in Education and Other Fields." Center for the Research on Utilization of Scientific Knowledge: The University of Michigan at Ann Arbor. 1973.

_____. "The Utilization of Educational Research and Development." *British Journal of Educational Technology;* V 2, N 2; May 1971.

Hemphill, J., and F. Rosenau (Eds.) "Educational Development: A New Discipline for Self-Renewal." Eugene, Oregon: CASEA, 1973.

Hofmeister, A., and H. Reavis. "Learning Packages for Parent Involvement." *Educational Technology;* V 14, N 7; pp. 55-56. 1974.

Hutchins, C. [in Hemphill and Rosenau (Eds.)] "Educational Development: A New Discipline for Self-Renewal." Eugene, Oregon: CASEA, 1973.

Klausmeier, H., and J. Walter. "Models for Cooperative Relationships and Activities." Madison, Wisconsin: University of Wisconsin. 1973.

Lance, W. "Learning Resource Systems for Special Education." *Theory Into Practice: Special Education Issue;* V 14, N 2; pp. 90-98. 1975. Ohio University.

Lange, R., and C. Thomann. "Needs for Instructional Media and Materials Services for Handicapped Learners. A Summary of Extant Information." Columbus, Ohio: National Center on Educational Media and Materials for the Handicapped. Ohio State University. 1974.

Lavin, R., and J. Sanders. "Improving the Performance of Educational Managers." Washington, D.C.: Annual AERA Conference Presentation, April 1975.

Lavin, R., et. al. "Needs Assessment: The First Step." Chelmsford, Massachusetts: Merrimack Education Center. 1971 [See also: ERIC Literature Search on Needs Assessment adapted from the report of the Massachusetts Needs Assessment Task Force, 1971.] (Evans, Lavin, and Peebles.)

_____. "A Review of Educational Cooperatives and Their Various Forms." Volumes I and II. Organizing for Improving Delivery of Educational Services in Massachusetts: Boston, Massachusetts: A MACE Study, 1974.

Lavin, R., and E. Schuttenberg. "An Innovative Approach to Public School Staff Development. A Collaborative Model." Chelmsford, Massachusetts: Merrimack Education Center, 1971. ERIC ED 069 602.

Lilly, M., and J. Kelleher. "Teachers' Perceived Instructional Needs in the Northwest Region." NSEIMC: Eugene, Oregon, 1971. ERIC ED 056 426.

Lilly, M. "A Training Based Model for Special Education." *Exceptional Children,* V 37; pp. 745-749. 1971.

Los Angeles Unified School District. "System FORE: An Approach to Individualized Instruction." Los Angeles, 1972.

Marklev, O., et. al. "A Needs Assessment for Educational R&D." Menlo Park, California: Stanford Research Institute on Educational Policy and Research Center, 1972. ERIC ED 088 149.

Moore, M. "Operations of a Small Computer-Assisted Information Center: The Information Needs of the Users of a Regional Special Education Instructional Mateirals Center." East Lansing, Michigan: Michigan State University, 1972. ERIC ED 071 690.

National Institute of Education. "Building Capacity for Renewal and Reform." Department of Health, Education, and Welfare: Washington, D. C., December 1973. ERIC ED 087 095.

New Jersey State Department of Education. "Needs Assessment in Education: A Planning Handbook for Districts." Trenton, New Jersey, 1974. ERIC ED 089 405.

New Mexico State Department of Education. "An Educational Needs Study Report Related to Incidence of Exceptionality." Prelude to Planning Special Education Services in New Mexico. Santa Fe: Division of Special Education SDE, 1973. ERIC ED 087 165.

Northwest Special Education Instructional Materials Center. Total Information Package. Selected Retrieval and Information Systems. Eugene, Oregon: University of Oregon, 1973.

Reynolds, M. "More Process Than Is Due." *Theory Into Practice: Special Education Issue;* V 14, N 2; pp. 61-68. Ohio State University: College of Education, April 1975.

Rogers, E., and F. Shoemaker. "*Communication of Educational Innovation.*" 2nd Edition. New York: Free Press, 1971.

Smith, L., and R. Keith. "Anatomy of Educational Innovation: An Organizational Analysis of an Elementary School." Toronto, Canada: Wiley, 1971.

Sproull, N., and V. Wenzell. "Educational Needs Assessment of Low Incidence Handicapped Children in Eleven Illinois Counties." Macomb Office of Educational Services and Research: Western Illinois University, 1972. ERIC ED 072 597.

Stedman, D. "Education's Missing Link." *Theory Into Practice: Special Education Issue;* V 14, N 2; pp. 143-145. Ohio University, 1975.

Stephens, R. "The Governance and Organizational Affiliations of Regional Educational Service Agencies: Arms of the Stte; Pure Creatures of Constituent Local Districts." New Mexico State University, University Park, 1974. ERIC ED 086 400.

Thiagarajan, S., and D. Semmel. "Instructional Development for Training Teachers of Exceptional Children." A Sourcebook. Bloomington, Indiana: Center for Innovation in Teaching the Handicapped. Indiana University, 1974.

Tucker, Katie. "Educational Needs Assessment. A Simulation Model for Planning." April 1973. ERIC ED 087 413.

U. S. Office of Education (DHEW). "Needs Assessment Package for Right to Read School-Based Centers and Program Planning Procedures." Washington, D.C.: Right to Read Program, 1972. ERIC ED 090 492.

Watson, C. "Educational Needs Assessment." Arkansas Department of Education. Little Rock, Arkansas: SDE, 1973. ERIC ED 084 293.