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ABSTRACT

This is a systematic effort to review the knowledge and practice in management programs. In synthesizing the knowledge base, the study establishes and emphasizes the great need to link the knowledge banks of the producers' world with the users' stations. Several findings support this conclusion: (1) a wealth of knowledge exists; (2) although there is no lack of information, lack of utilization does exist; (3) gaps exist between research and practice worlds and between private and public sectors; (4) the user must be more active in the selection process; and (5) Educational Management Development Centers (EMDCs) may provide a beginning to a new institutionalized linking role. The study reviews two kinds of linkages: (1) producer/consumer linkages through EMDCs and 2) EMDC linkages (networks). The EMDCs, in linking for ERIC-like information, will build a capability for linking multiple types of resources--human and technical. Recommendations are made for building effective linkages within EMDCs. Also, the networking concept is presented to provide a mechanism for keeping centers abreast of developments from other agencies working to improve educational management. (Author/WM)

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SYNTHESIS OF KNOWLEDGE AND PRACTICE IN  
EDUCATIONAL MANAGEMENT AND LEADERSHIP

VOLUME I

U S DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
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*MANAGEMENT ... Planning that is subject  
to moment-by-moment revision by human  
intelligence.*

*Jerome S. Bruner*

EA 000 495

SYNTHESIS OF KNOWLEDGE AND PRACTICE  
in  
EDUCATIONAL MANAGEMENT AND LEADERSHIP

VOLUME I

Study Findings, Implications, and Recommendations

*Prepared for*

CHARLES F. KETTERING FOUNDATION

Program - Exploratory Studies: Educational Management and  
Leadership Project No. ED 73-241

by

Richard J. Lavin  
and  
Jean E. Sanders

August, 1973

MERRIMACK EDUCATION CENTER  
CHFLMSFORD, MASSACHUSETTS

# merrimack education center.

TO: Project Readers  
FROM: Richard J. Lavin

The Merrimack Education Center is an educational collaborative located in Massachusetts serving 21 contiguous school districts. It provides services to its member districts in the area of:

- Information Services
- Staff Development
- Individually Guided Education and
- Educational Management

In providing services to the school systems of the Merrimack Region, MEC also specializes in conducting studies for outside agencies interested in applied research.

This study on a "Synthesis of Knowledge and Practice in Educational Management and Leadership" represents one such study.

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MEC is appreciative of the continued support of its twenty-one local school boards and school superintendents and their recognition of the value of seeking out new ways to improve education through a model of collaboration.

The study reported herein was performed pursuant to a contract between the Merrimack Education Center and I/D/E/A-Kettering. Any views or opinions stated in the study are the responsibility of the writers and do not necessarily represent any other individuals or agencies.

## STUDY ABSTRACT

TI SYNTHESIS OF KNOWLEDGE AND PRACTICE IN EDUCATIONAL  
MANAGEMENT AND LEADERSHIP

AGENCY MERRIMACK EDUCATION CENTER

ABSTRACT This study is a systematic effort to review the knowledge and practice in management programs. From a literature search initiated through the ERIC data base, studies relevant to the broad spectrum of educational administration/management; leadership, management development, and management systems have been retrieved.

This study in synthesizing the knowledge base establishes and emphasizes the great need to link the knowledge banks of the producers' world with the users' stations. In support of this conclusion, several findings are apparent: (a) a wealth of knowledge exists; (b) although there is no lack of information, lack of utilization does exist; (c) gaps exist between research and practice worlds and between private and public sectors; (d) with the quality and quantity question, the user must be more active in the selection process; and, (e) EMDC's may provide a beginning to a new institutionalized linking role.

The study reviews two kinds of linkages: (1) producer/consumer linkages through EMDC's and (2) EMDC linkages (networks). The EMDC's in linking for ERIC-like information, will build a capability for linking of multiple types of resources -- human and technical. Recommendations are made for building effective linkages within EMDC's. Also, the "networking" concept is presented to provide a mechanism for keeping Centers abreast of developments from other agencies working to improve educational management.

VOLUME I

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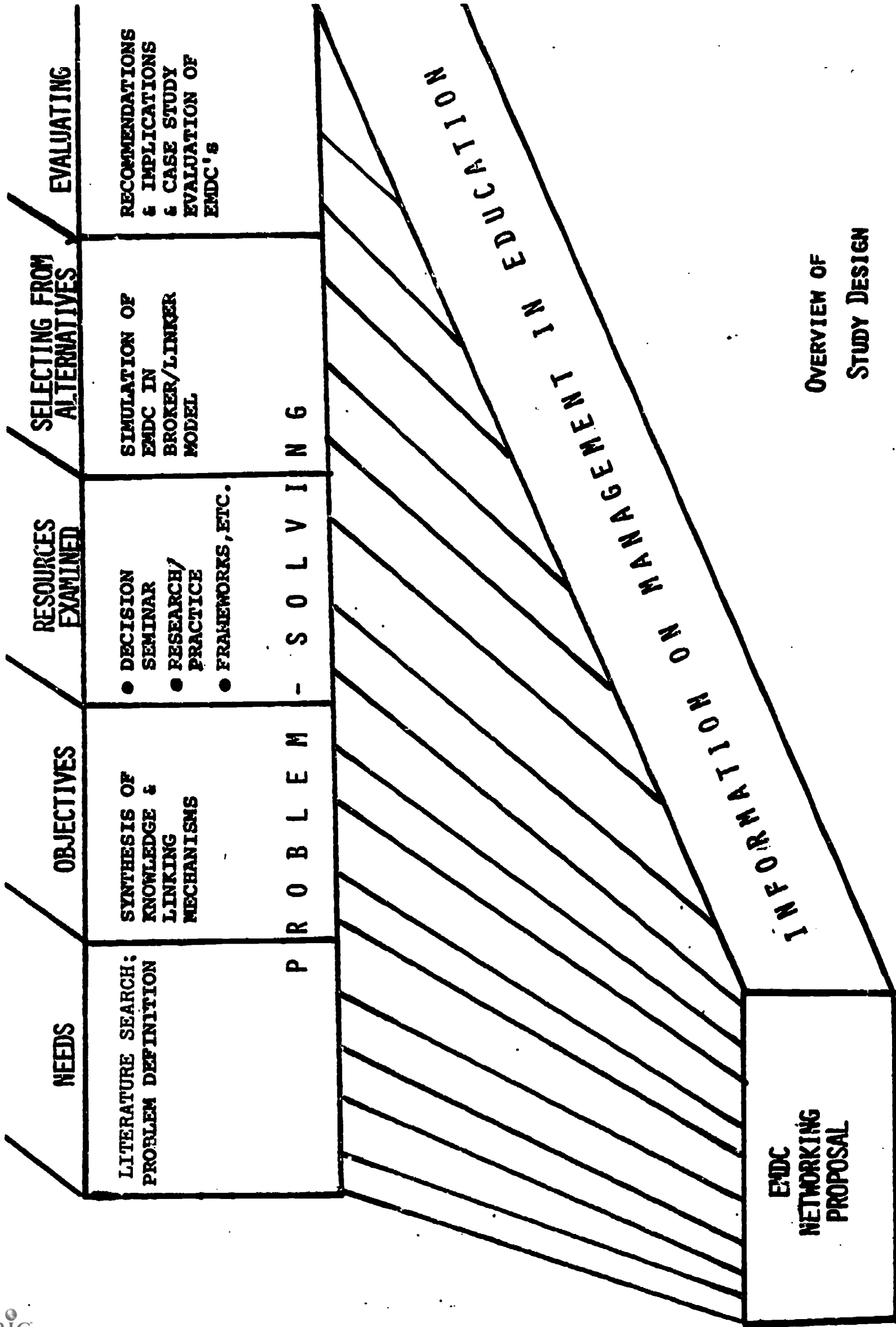
O V E R V I E W

A study entitled "Synthesis of Knowledge and Practice in Educational Management and Leadership" was performed for the Charles F. Kettering Foundation by the Merrimack Education Center. This study is reported in two volumes. Volume I describes the study, reviews the methodology, and reports general findings, implications, and recommendations. It offers a networking plan that provides a network link of EMDC's for the improved exchange of management information and services. As a supplement, Volume II contains the bibliographical sources on each of the documents identified and selected for this study.

The study was designed to address specific issues which included:

- o programs and practices useful within Educational Management Development Centers
- o mechanisms for informing EMDC's about programs and/or practices from other organizations working to improve educational management

The study focused upon EMDC's as a promising approach to improving school management structures and upon processes that would develop skills of leadership and management in school personnel.



OVERVIEW OF  
STUDY DESIGN

Figure 1

The major features of the study plan are highlighted within this Overview Section and depicted in Figure 1.

Description of Steps.

1. Step One - An exhaustive literature search was performed through the ERIC system. This task involved formally organizing a search strategy, a search process which is described in more detail in Section V entitled "Literature Search." The ERIC data base was utilized for the following reasons.

- o There is a wealth of information on recent studies/practices and products in the ERIC bank.
- o As managers and EMDC's begin to work with vast amounts of information there must be, at the same time, development of an advanced system of retrieval and selection. ERIC has that potential.
- o Local information/practices and the like will need to use the latest technologies in collecting, storing, and disseminating through exchanges.
- o In the analysis of the study information there appears to be much "reinventing of the wheel" and the need for improved dissemination networks is obvious.
- o The ERIC format provides the user a systematic process for up-dating information.

2. Step Two - The research staff attempted to synthesize directly from the large bank of literature available. This synthesizing has been picturesquely described by McCord and Smith:<sup>1</sup> "the data is amassed, someone worries very hard and long about it, and with luck discovers the regularities."

Various models and frameworks were examined in order to ascertain the "regularities" and common threads; however, each met with various types of constraints. Models and frameworks examined for utilization in this synthesis are shown in Table 1.

<sup>1</sup>Smith, J. and M. McCord. ERIC Information Analysis Products: 1967-1972. ERIC Clearinghouse on Library and Information Sciences. New York: MacMillan Information Inc., 1973.

TABLE 1

Shannon: <sup>1</sup> CHARACTERISTICS OF EFFECTIVE COMMUNICATION THEORY	KATZ <sup>2</sup> SKILLS OF AN EFFECTIVE ADMINISTRATOR	the "ABCD" <sup>3</sup> APPROACH	BLOOM <sup>4</sup> TAXONOMY OF EDUCATIONAL OBJECTIVES	HAVELOCK <sup>5</sup> DIMENSIONS OF GOALS
Technical Semantic Effective	Technical Human Conceptual	Operational environment Human resources Decision- making processes Organizational context	Cognitive Affective Psychomotor	Knowledge Skills Attitudes

<sup>1</sup>Shannon, Claude and Warren Weaver. The Mathematical Theory of Communication. Urbana, Illinois: University of Illinois Press, 1949.

<sup>2</sup>Katz, Robert L. "Skills of an Effective Administrator." Harvard Business Review, XXXIII, No. 1 (1955), 33-42.

<sup>3</sup>Evans, J., R. Lavin, and R. Peebles. (See Appendix I)

<sup>4</sup>Bloom, Benjamin S., New York: David McKay Company, Inc., 1956

<sup>5</sup>Havelock, R. and M. Havelock. Training for Change Agents. A Guide to the Design of Training Programs in Education and Other Fields. CRUSK. Institute for Social Research. Ann Arbor: University of Michigan, 1973.



The study staff was unable to develop a satisfactory matrix relationship using any of the above processes for the following reasons:

- o the semantic problem
- o indexing problems
- o retrieval problems utilizing keywords

The semantic problem. Although the information is technically sound there is a semantic problem both from the producer's side where information is created for the system as well as the indexing problems of entering the information into the system. There are also retrieval or output types of problems in terms of utilizing the computer-generated search systems.

Yet another significant problem when analyzing and synthesizing information is the consideration of the clients, the eventual recipients of the information. The researcher must have knowledge of the consumer/client and also know what will be the ultimate use of the information.

3. Step Three - To cope with the various problems and constraints identified, a Decision Seminar (see Section VI) was planned to tackle the semantic problem and also to glean new knowledge from the expertise of the participants. The Decision Seminar, with accompanying questionnaires, assisted in relating to each of the study issues and questions.

In preparing for the Decision Seminar the study staff examined the literature on educational management from a historical viewpoint. The various sources by the different authorities on management were consulted to determine what frameworks had been built over the years.<sup>5/6</sup> Table Two notes disparity of concepts and terms associated with management.

<sup>5</sup>For example, see S. Knezevich, Administration of Public Education, Washington, D.C., 1969.

<sup>6</sup>See also, Campbell, Corbellay, Ramseyer. Introduction to Educational Administration. Boston: Allyn and Bacon, Inc., 1966. (3rd edition)

TABLE 2 - Descriptors Used to Suggest Functions of Educational Managers

<p>ED 053 439</p> <p>planning organizing commanding coordinating controlling</p>	<p>HALE ED 062 505</p> <p>planning organizing stimulating directing coordinating reporting budgeting</p>	<p>Decision Seminar</p> <p>planning perceiving communicating decision-making organizing appraising programming stimulating implementing</p>	<p>ED 025 005</p> <p>sensing/perceiving planning programming evaluating communicating disseminating information</p>	<p>ED 056 000</p> <p>needs assessment program development implementation evaluating managing change</p>
<p>1961 Newman and Sumner</p> <p>planning organizing leading measuring and controlling</p>	<p>ED 032 642</p> <p>communicating decision-making negotiating evaluating</p>	<p>ED 013 947</p> <p>planning organizing directing controlling coordinating</p>	<p>Johnson (1967)</p> <p>planning organizing communicating controlling</p>	<p>ED 025 002</p> <p>decision making problem-solving long-range planning</p>

Footnotes:

1. Knezevich, Stephen J., editor. Administrative Technology & the School Executive. AASA, Washington, D.C., 1969.
2. Johnson, 1967 (Kast, and Rosenzweig) The Theory and Management of Systems, 2nd ed., New York: McGraw-Hill, 1967, pp. 121-127.
3. Newman and Sumner, The Process of Management, Englewood Cliffs, N.J.: Prentice-Hall, 1961, pp. 10-11.

. 33 33 33 33

Prior to the Decision Seminar, it was decided to ask the participants to expand the definition and terminology for the study staff by relating skills to functions. Questionnaires, (see Section VI) were prepared and mailed out to gather this type of data. The seminar participants were asked to define management functions in terms of related skills and behaviors. The Decision Seminar substantiated the complexities of the information problem, and the study staff succeeded in gaining new insight into management information and the kinds of management information that are currently needed. The Seminar also indicated approaches, practices, products and services that were presently needed. It also provided support for the local selection and decision-making process.

4. Step Four - The initial phase of the literature search and insights gleaned from the Decision Seminar indicated that selection and synthesis of information for decision-making is a local matter. It was determined that the study staff should know more about the clients of the information system in order to make appropriate selections from the available research bank.

This was accomplished by simulating the client system (the EMDC). The study staff prepared the collaborative model (see Section IV) to simulate the conditions, functions, and activities of an EMDC. The implications drawn up to this point included the following:

- o Synthesizing is a local matter and judgments as to relevance are most effective at the client/user level.
- o The original source documents don't provide all the answers but they do offer suggestions such as, (a) it is too costly to continue reinventing the wheel; (b) knowledge exists in many different places; and (c) more materials for problem-solving are needed.

These implications suggested that we make as much information as possible directly available to the user/clients. If the client is truly the central focus, then an attempt to simulate the user systems is necessary at this point before making any selections for the EMDC's.

The broker/linker model described in Section IV, implies that a central agency should not make decisions for the EMDC's. In turn, the EMDC's should be vigilant in their attempt to involve their local clients in decisions or selections. All of these implications suggested that information be made available in a different format.

In light of this, we selected two collaborative change models to be relevant: the Havelock model and the MEC broker/linker model. Section IV describes the EMDC in this context as a linking institution. Additionally, the study staff applied recommendations (Section II) that would fit this "broker/Linker" model.

5. Step Five - By examining the EMDC as a center that links both needs and resources, the EMDC would act to diffuse information locally. To assist the EMDC in this function, MEC has made a bank of information available for this purpose (see Volume II). Additionally, we have taken the concept of information exchange and suggested steps in a networking plan (see Section III).

We can thus view the EMDC's as a micro-model and add the macro- level networking for exchange. The EMDC now uses the process of brokering and linking to deliver a product and also by letting people participate in the synthesizing and decision-making. An EMDC, as a local collaborative, involves local clients/practitioners in a local synthesis of the bank of information provided.

In effect this is a micro-model which provides training for the managers of Centers in a given environment. The macro-model is evinced by enabling Centers to link with other Centers on what they identify as successful practices, products, and services. Finally, the experiences drawn from

both of these sub-systems should prove extremely valuable to I/D/E/A-Kettering in their plans for creation of new Centers, networks, and/or diffusion models on a national basis. Within this macro and micro view of the problem, the effect we would like to see evolve would mirror improved mechanisms for the delivery of educational management development programs.

SECTION II

RECOMMENDATIONS, SUGGESTED ACTION,  
AND IMPLICATIONS



STUDY RECOMMENDATIONS AND SUGGESTED ACTION

EMDC Collaborative Functions	Recommendations Based Upon Model	Suggested Action	Support Citations	ROLE RESPONSIBILITY	
				I/D/E/A	EMDC
1. Establishment of Relationships	Prior to initiating an on-going management development process, an agency should be identified that already possesses potential energy and a high degree of responsiveness.	Identify those collaborators that have proven capabilities in relating to client/practitioners.	Section II pp. II-3 Section IV-4 Section III-7 through III-22	X	
2. Needs Assessment	Needs assessment processes be investigated and appropriate mechanisms made available for co-equal presentation of needs by practitioner/clients.	Local synthesizing of information requires that clients participate in selection processes.	Section II-4 Section IV-7		X
3. Information	Identify a wide span of potential resource systems and review materials for accessibility and relevance.	(a) initial bank of management practices is located in each EMDC. (b) EMDC begins immediately to identify new listings of successful practices, i.e., consultants, services, products, etc.	Section III-4 Section II-5 Section VI-2 Section IV-8 Section V-1	X	X
4. Brokering	EMDC identifies pools of management information on successful practices from all fields of management development.	Create alternative models of EMDC's that link to remote and/or multiple and differing resources.	Section III Section II-5 Section IV	X	X

TABLE II-1 (continued)

EMDC Collaborative Functions	Recommendations Based Upon Model	Suggested Action	Support Citations	ROLE RESPONSIBILITY I/D/E/A EMDC
5. Facilitating	The implementation process is sustained through improved linking mechanisms. Among the infrastructure technologies useful to facilitate this exchange are included computer terminals, microforming capability, and hard-copy transformation capability.	Initiate the implementation of a pilot network that connects centers for improved synergies.	Section II-6 Section III-11 through III-22 Section IV-11	X
6. Evaluation <sup>1</sup>	Monitoring or evaluating the EMDC's can be in the form of a case study approach. This method examines activities of the EMDC in light of the principles and models suggested in this study.	Utilize an EMDC model (broker/linker process) in the case study design as a form of evaluation.	Section II-7 Section III-21 Section IV-13 and Figure III-1	X

**FOOTNOTES:**

<sup>1</sup> R. Lavin, "Establishing Effective Linkages at the Local Education Agency Level," Chicago, Illinois: AERA annual Meeting, 1972. All six functions listed here are described in this paper presented at the April 7, Symposium on Research Utilization Programs.

<sup>2</sup> Educational Economics and Consumer Behavior: A Concept Paper. Written for the National Institute of Education, Spring, 1973. This paper describes the use of marketing principles to evaluate activities of linking agencies. Manhattan Education Center.

## A. RECOMMENDATIONS

### 1. Building Relationships

Two principal types of linkage are involved in producer/consumer relationships: (a) The practitioner must be meaningfully related to outside resources through, (b) linkage with resource persons (both organizations and systems. The EMDC's need to coordinate helping activities with the existing problem-solving activities of the client systems.

---

*We recommend, prior to initiating an on-going management development process, that an agency be identified that already possesses potential energy and a high degree of responsiveness.*

---

Within such agency-client relationships, successful rapport is already established. To create this type of successful relationship is an intricate and complex task. Building these complex relationships takes place over time. Therefore, identifying situations and locations where these relationships already exist will save valuable time and energy and capitalize on the existing resources.

The ideal process of building this type of linkage with clients is a step-by-step awareness and early problem-solving effort. It is only after some success has been achieved in this ad hoc problem solving that an agency can enter into a serious dialogue with client systems on their

management problems. Since these activities are conceived of as representing a progression over time, valuable resource energy can be saved by identifying locations where these early and necessary relationships already exist. With initial collaborative relationships having been established, there should exist the necessary effective channels through which management development innovations can pass more efficiently and effectively.

## 2. Needs Assessment

Needs assessment is a thorough device, such as a formal instrument, that yields data related to technical and professional knowledge requirements as indicated by the educational practitioner himself. The purpose of a needs assessment is to more sharply define and relate those needs that are resolvable through management development programs. Needs assessment processes will enable EMDC's to identify such critical problems as: (a) need for management information systems; (2) need for improved planning, and the like.

-----

*We recommend that needs assessment processes be thoroughly investigated and appropriate mechanisms made available for co-equal presentation of needs by practitioner/clients.*

-----

The resulting data may be transformed into a priority listing for educational management development. In this manner, user need studies guide the provision of resources to meet expressed needs.

### 3. Information

Information in various formats includes people/consultants, practices, products, and services which must be accessible to a linking institution in order for it to offer options to client systems. As a linking organization, the EMDC is in a position to tap the necessary resource systems that lie beyond the realm of the education/university world.

---

*We recommend that EMDC's develop a wide span of awareness of potential resource systems and immediately begin to review materials for accessibility and relevance. The EMDC's will add to their initial information bank, the products developed and tested in local environments.*

---

### 4. Brokering

Since no one agency or organization has all the advantages when it comes to improving management development, alternative models should be examined for successful practices and then linked through a "brokering" of resources. Information and knowledge on management development is found in various fields and cuts across many disciplines; multiple locations involved in the practice of management development must be linked. An independent base, not identified with either the research world or the practice world, is most preferable as a linking organization.

-----  
*We recommend that the EMDC identify pools of management knowledge and successful practices from all fields of management development. These will include educational institutions and non-educational organizations.*  
-----

## 5. Facilitating

A management development program will not be fully implemented until it becomes an integral part of the user/client system. Strategies will need to be designed to ensure the continuance of the implementation.

The EMDC's incorporate a "temporary systems" approach to change by utilizing an intervention system to bring about innovative behavior in school systems. This approach can yield meaningful educational improvement without adding to the size, or complexity of the permanent client system. The internal and external support necessary to stimulate school systems to innovative management practices can best be provided by an intermediate agency without ego involvement in the permanent structure. Additionally, the intermediate agency can facilitate the peer approval and support that will encourage the risk-taking that is necessary to create meaningful change in the management system.

At the national level, the EMDC's will participate in a network exchange through a linking of activities tested in their particular environments. The major exchange benefit here is the experience that the EMDC's will derive nationally for similar implementation locally.

---

*We recommend that the implementation process be sustained through improved linking mechanisms. Among the infrastructure technologies useful to facilitate this exchange are included computer terminals, microforming capability and hardcopy transformation capability.*

---

## 6. Evaluation

The EMDC's must deliver services and resources to client/practitioners utilizing a continuous feedback mechanism solidly rooted in the exchange economy. This monitoring concept will examine how well a Center delivers services that it has proposed to deliver. It is essential to establish a formal means for receiving information (feedback) from client/practitioners.

---

*We recommend the approach of monitoring or evaluating the EMDC's be that of a case study. This case study method will examine the activities of the EMDC in light of the principles described in this present study.*

---

The evaluation of EMDC's will have as a primary objective to determine if educational management can be improved through the more effective utilization of research-based knowledge and resources from the pragmatic world of management practices. The monitoring of the EMDC's will provide the opportunity to delineate the principles modeled herein in terms of specific cases. The

model described in this study can then be tested through a comparison with actual sites and locations where the application is carefully and deliberately planned and executed.

#### B. Implications

Added implications coming forth from this study are listed in this section for the purposes of:

- \* Suggesting a possible study focus for the existing, or newly created, EMDC's.
- \* Highlighting possible future areas of investigation for I/D/E/A Kettering.

Limitations of time and resources prevent these concepts being further explored in this present study, although by exclusion we do not intend to indicate any lack of priority or importance.

Although some of these implications may be alluded to in this present study, we are herein listing them in outline form for reference purposes to provide added significance for these issues.

- \* Users must place a priority on building criteria at the local level for selection of information in light of local needs.
- \* More materials/media for the pragmatic, problem-solving focus must be developed and created.
- \* To an important degree, management development functions and concepts, developed in corporate programs, are universally applicable.



- \* It appears that there is a large and growing bank of applied knowledge in management development within corporate/business enterprises that is largely untapped.
- \* Programs in corporations tend to emphasize effective problem-solving as opposed to cognitive/theoretical development.
- \* Corporations as producers can be linked to the field of education. This would establish a relationship that is beneficial to both parties (both public and private).
- \* Corporate/school model linkages are potentially cost-effective and capable of being self-sustaining.
- \* Public Schools could collaborate to interface with outside institutions for the purpose of improving management development. Legislation to provide incentives for this principle of aggregation should be encouraged.
- \* Establishing EMDC's may provide the model for "showing the way" provided that the diffusion process gives adequate attention to the concept of 'marketing.' The concept of consumer behaviors and exchange economy are implicated here.
- \* New incentives may be necessary to foster greater commitment by institutions and managers for continuous self-improvement.

- \* Greater emphasis on training is imperative.
- \* Information is primarily of a cognitive nature rather than a problem-solving category; more problem-solving materials are needed.
- \* Training should give greater emphasis to the transfer of knowledge through improving delivery systems. Knowledge must be applied--transferred into skills and behaviors in reality environments.
- \* Resources need to be brought closer to client systems (public school systems); this will shift the locus of control away from university-based operations.

SECTION III

NETWORKING

## A. RATIONALE

The increased national investment in educational research and development over the past five years is quite evident from the vast number of studies resulting from this information search. Funding of laboratories and centers has stimulated a large number of new products and services that may offer the potential for substantial improvements in educational management. Examined closely, these programs and services can provide educators assistance in coping with current demands and challenges in education management.

Within this two volume study are listed various models of educational management development training programs, descriptions of rationale and projected needs, special programs in areas of PPBS, MIS, information directories, and the like. There are also suggested ways of helping managers improve their skills as well as proposed methods for improving organization and management.

Unfortunately, most decision-makers in schools and colleges are either unaware of methods and techniques available or they lack sufficient information to make choices about them; and, for this reason, many specific needs and products are not yet widely known. Educators are largely unaware that there are practical findings in the area of research that are applicable to school situations. Results from studies in the area of research are oftentimes not being transferred to the needs of the school system.

This section on networking suggests that information collected on educational management development act as a kind of initial source catalog for the management of EMDC's. Utilizing the ERIC-like format of microfiche will enable EMDC's to explore at the same time some of the infrastructure technologies of linking and up-dating information.

#### B. NETWORKING CONCEPT

A network is a set of elements related to one another through multiple interconnections. The metaphor of the 'net' suggests a special kind of interconnectedness, one dependent on nodes in which several connecting strands meet. There is also the suggestion of each element being connected to every other, and of elements connecting through one another, rather than to each other through a center. The EMDC concept developed by I/D/E/A Kettering offers an opportunity for a network of these Centers; thus accomplishing more through cooperative efforts than an EMDC could accomplish alone.

In developing the concept of Educational Management Development Centers (EMDC's) there are two fundamentally different strategies available. Schon<sup>1</sup> describes these as:

1. Gain control of all elements of the functional system in order to subject them to central management.
2. Knit together the still autonomous elements of the functional system in networks which permit concerted action.

It is suggested that the second alternative where linking and facilitation are prime factors be addressed by I/D/E/A-Kettering in order to maximize the benefits to each EMDC and also to examine further the synergistic value of networking.

The Merrimack Education Center has been participating in studies that examine linkages as they relate to improved knowledge utilization. Some of the major findings of these studies indicate that the complexities of collaboration be examined through a model that diffuses information as its initial service. This initial service utilizing information-like products begins to link information to the particular problem in focus as, in this case, management information.

In this feasibility study conducted by the Merrimack Education Center for I/D/E/A Kettering the information resources identified and collected become the products for initiating the process of networking between EMDC's and linking back to I/D/E/A-Kettering. Within a networking concept, the exchange of information can be implemented through a linking of activities, and information and successful practices either identified in the literature or developed and tested in a particular environment. This kind of information may be categorized under various headings or agreed upon formats and would include people/consultants, information, practices, products, services and the like. Through the accumulation of these data systems information

<sup>1</sup>Schon, Donald A., Beyond the Stable State., New York: Random House, 1971

banks can be established that are locally produced and stored for user requests on demand. Some of the infrastructure technologies necessary to introduce this exchange include computer terminals, microforming capability, and transformation capability for hard-copy mailing and follow-up.

### C. THE KNOWLEDGE UTILIZATION PROBLEM

Today the field of education is faced with the problem of harnessing the output of the knowledge explosion so that this knowledge can be utilized to solve the demands being placed upon educational systems. In 1964, Richard Carlson<sup>2</sup> cited the weak knowledge base as one of the major problems in education. Today there is not a lack of available knowledge, as exemplified by ERIC-like information systems. There is a lack of utilization of educational research and successful practices which does tend to support Carlson's concept of a weak knowledge base. Although attempts have been made to make information available to practitioners via the printed word, most have failed as noted in a study by Lazarsfield and Sieber<sup>3</sup> in which they found that only a small percentage of educators read publications which contain research results.

<sup>2</sup>Carlson, Richard, "Barriers to Change in Public Schools," Change Processes in the Public Schools, Eugene, Oregon: The Center for the Advanced Study of Educational Administration, 1965.

<sup>3</sup>Lazarsfield, Paul, and Sieber, Sam, Organizing Education Research, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1964, pp. 58-59.

This breakdown in the communication process between developers and practitioners has resulted in the lack of research utilization by school personnel as described by Carlson earlier in this paper and by Lazarsfield and Sieber<sup>4</sup> indicating that educators:

...have little or no knowledge of the research that has been done in their field and are unaware that there are practical findings that could be applied to everyday work.

This lack of utilization is compounded by the fact that even when a practitioner does know about research or has used it, the knowledge is not transferred even within the same school system as Coombs<sup>5</sup> has observed:

Even when research is undertaken in the setting of the local school, often the results are not transported even to neighboring systems.

School systems are seriously deficient in transmission processes for new and improved ways of working. Hundreds of successful innovations are born to bloom unseen.

In a recent study entitled "Educational Innovation in the United States: The Substance and the Process," the Havelocks<sup>6</sup> note that Federal information resources represented by ERIC and the Regional Laboratories are still not being utilized. ERIC was used by 9% of the 315 representative districts in their sample while the REL's were used by only 5%.

<sup>4</sup>Lazarsfield, and Sieber, op. cit., p. 51.

<sup>5</sup>Lazarsfield, and Sieber, op. cit., p. 51.

<sup>6</sup>Havelock, R. and M. Havelock, Educational Innovation in the United States, Volume I. The National Survey: The Substance and the Process. Center for Research on Utilization of Scientific Knowledge, Ann Arbor, Michigan: University of Michigan, Institute for Social Research, 1973.



This data tends to support the earlier findings of Guba and Horvat<sup>7</sup> that the ERIC information system has not been fully utilized by educators.

The problem, then, is evident: how can we increase the utilization of research based knowledge by school personnel? This does not infer a forcing of research upon the practitioners but instead provides them with research results and successful practices which will enable them to evaluate their present situation and to determine if these new findings can help them to improve educational management. The problem can be divided into subparts that are then resolvable.

1. Reduce the anonymity between developer and practitioner.
2. Target information to specific practitioner needs.
3. Increase the communication of research findings and successful practices between local practitioners.

#### D. LINKAGE PROCESS

The plan suggested in this Section is for implementation of a networking link between agencies through the utilization of low cost technology and the exchange of relevant information on educational management development. The implication here is that through the improved understanding of networks and some of the technologies utilized, the decision-making process of management will be improved by the linkage process. The roles to be examined in this process are further delineated here.

<sup>7</sup>Guba, Egon, and John Horvat, The Role of Educational Research in Educational Change, the United States, Conference on the Role of Educational Research in Educational Change, UNESCO Institute for Education, Hamburg, Germany, July, 1967, p. 93.

## 1. Linking Roles

The roles to be examined in this study and further in the process of networking are identified initially as two: (a) Broker/Linker: and (b) Network Facilitator.

### a. Broker/Linker (EMDC's)

In the literal commercial sense a brokerage house connects buyers and sellers. It helps each to identify the other, serves as a channel for information and makes "arrangements" if buyer and seller each have something the other wants. Because human resource linkages are difficult to build, there is a special need for the "linker" or "linking institution," someone who knows about resources, knows about people's needs and knows how to bring clients and resources together. The Broker/linker position maintains a personal network which cuts across critical elements of the systems to be dealt with. He makes himself the "node" connecting various strands which are otherwise disconnected. (See Figure III-1).

This diagram illustrates that linkage is not simply accomplished by a two-person process, but requires an organization such as an EMDC. In outlining the tasks of an EMDC it is important to examine its role in light of a knowledge linker. In particular, there is a need for some central agency, as shown in Figure III-1, which has a primary task of 'modelling' the total innovation building and dissemination system and which acts as a facilitator and coordinator, seeing to it that the 'system' is truly a system, serving the need of the user.<sup>8</sup>

<sup>8</sup>Richard Farr, "Knowledge Linkers and the Flow of Educational Information: in an Occasional Paper for ERIC at Stanford. (Stanford University: ERIC Clearinghouse on Educational Media and Technology, 1969), p.7.

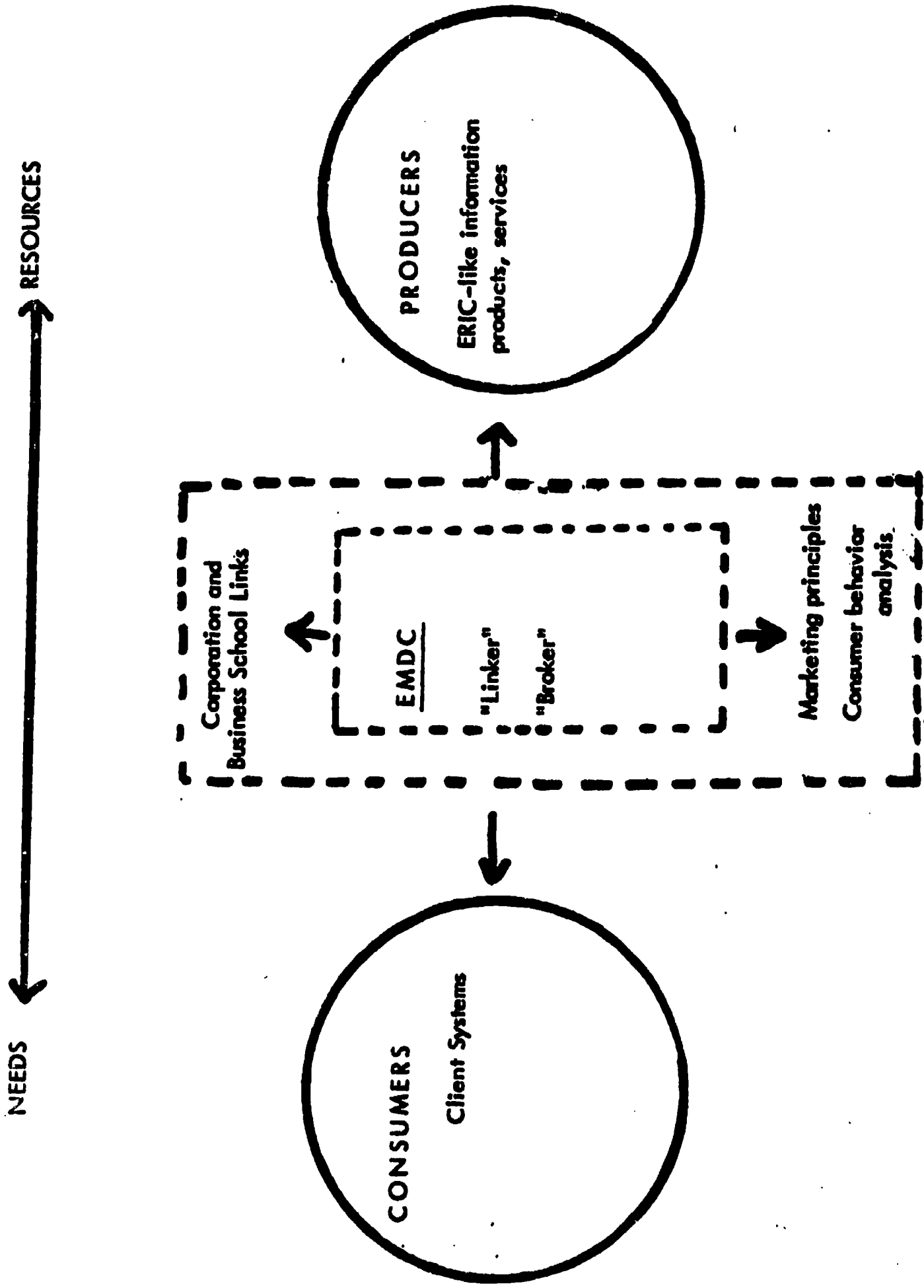


FIGURE III-1 EDUCATIONAL BROKER/LINKER MODEL

It is just such a linkage or "broker" model that is proposed in this role of the EMDC. Within this linkage model, provision is made for feedback from educational experiences and knowledge about how the network can be more productive. This consumer need orientation, inherent in a broker model, would provide educators distinct application for up-to-date management information systems. According to Havelock, we need to build this type of national system which 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 and timely and truly cost beneficial."<sup>9</sup>

The networking concept linking EMDC's provides mechanisms that would allow these things to happen. These mechanisms are further described under the role of Network Facilitator and also in the next Section of this report detailing the Network Proposal.

The "broker" must assume an active role between the developer and the practitioner. He must go to the practitioner and discover what types of information are required. Then he must turn to the resource systems, which could be developers or other practitioners, and determine what information is available to meet the needs. Many times the information is not available; then the broker can serve as an intermediary in a two-step feedback channel to provide the developer with guidance for further research work.

<sup>9</sup>R. Havelock, "The Utilisation of Educational Research and Development," British Journal of Educational Technology, No. 2, Vol. 2, May, 1971.

There are several difficulties inherent in performing the knowledge linker role. These can be classified as, (a) overload, and (b) marginality.

Overload is best described as too much information to handle, too many people to get it from, too much processing to be done before it is useful, and too many people to give it to.<sup>10</sup> Marginality refers to the intermediate position of the linker and the lack of training for new skills for this new role of "knowledge linker."

These two problems of overload and marginality require a "linking agency" or organization such as an EMDC. Farr<sup>11</sup> states the following:

What is obvious, however, is that educational linking cannot possibly be done by individuals alone but requires the resources and legitimacy of a rather comprehensive organization.

The institutionalization of the linker role is not a panacea; however, it does provide the linkers within the institution with the following:

1. economic security due to the permanence of the institution
2. identity which reduces the marginality problem and may give the individual a feeling of being worthwhile
3. coordination so that the individual can specialize on only a few tasks but yet allow the multiple functions of the linking role to be accomplished, i.e., reduces the overload problem.

<sup>11</sup>Richard Farr, op. cit., p. 5.

Farr argues for an impartial middleman since he believes the developer and practitioner are hindered in performing their roles as developers and as teachers and also decrease their effectiveness as linkers if they attempt to fill the role. The impartial no axe-to-grind middleman is able to maintain a certain trustworthiness and credibility attainable by no one else.<sup>12</sup> Havelock sums it up as follows:

This linking institution could be based in a university or a school system but neither of these alternatives is entirely satisfactory. An independent base not identified with either the research world or the practice world is probably preferable.<sup>13</sup>  
(See Figure III-2)

## 2. Network Facilitator I/D/E/A-Kettering

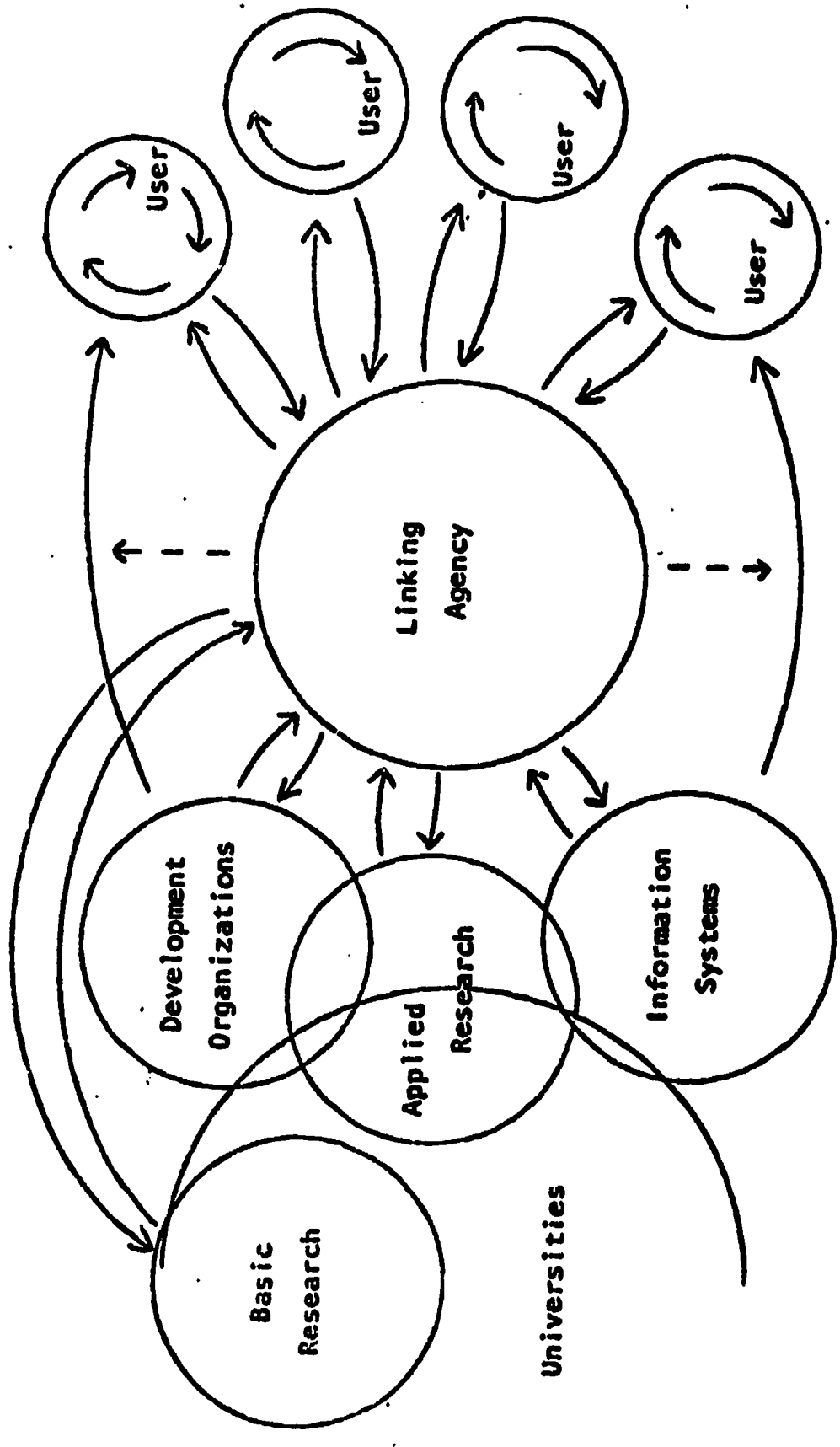
On a larger scale the network facilitator attempts to foster the development and interconnection of regional enterprises (EMDC's) each of which constitutes a variant of central themes of policy or function. The role is one of consultant, expeditor, or guide. This position by an individual or agency must provide, as well, the support functions of training and development which enable regional EMDC's to establish and maintain their own networks.

People participating in network roles frequently occupy places in several of the sub-systems among which they operate. In this interstitial position they sustain many

<sup>12</sup> Farr, Richard, *Ibid.*, p. 4.

<sup>13</sup> Havelock, op. cit., p. 7:38.

THE CENTRAL LINKING AGENCY IN THE MACROSYSTEM \*



\*R. Havelock

FIGURE III-2

organizational identities and in effect become marginal organizations (i.e., not being central or at the forefront).

In the Educational Management Development Center project there exists an unusual and unique opportunity to introduce more than the single concept of an EMDC as broker or linker.

Because there is a vast amount of network building that must occur in improving resource allocations and problem-solving it is therefore suggested that a plan be initiated to link EMDC's in a pilot network. From this network and over a period of time each link established adds to a growing client capacity for reaching out and pulling in relevant resources.

By way of summary at this point, we are suggesting there must be a special way to link the specific needs of individual educators to the vast array of knowledge available today. We can learn the specific needs of administrators through formal assessment techniques; and, the more unique the information to be transmitted as need fulfillment, the more carefully treated must be the transmission channel for such information. We are suggesting that the institutionalization of the linker/broker role as EMDC's is best accomplished through a "networking" of several individual sites. Further elaboration on the concept developed of Network Facilitator and its relationship to EMDC's is contained in EMDC Network Proposal,



AN EDUCATIONAL MANAGEMENT  
DEVELOPMENT CENTER/NETWORK PROPOSAL

Merrimack Education Center  
101 Mill Road  
Chelmsford, Massachusetts 01824

## CONCEPT

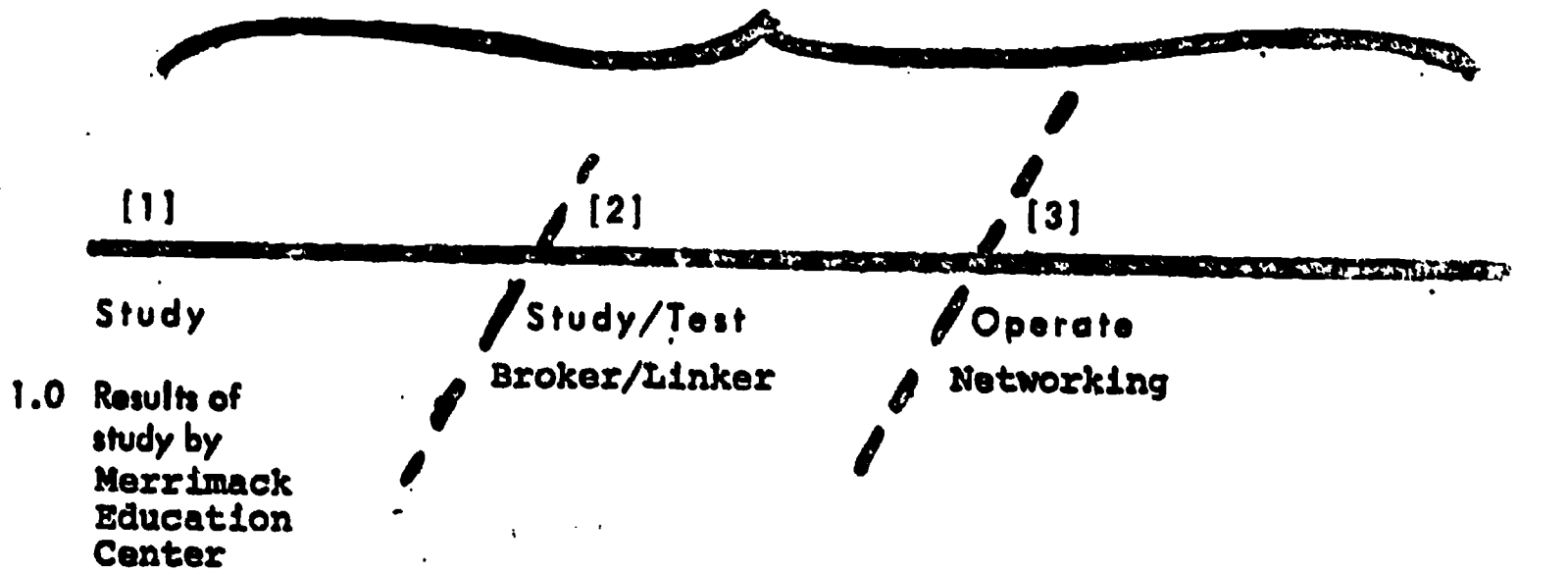
A proposal to provide a network link of EMDC's for the improved exchange of management information and services.

### A. BACKGROUND

The following plan is proposed around the concept of exchange of information on successful practices from Educational Management Development Centers. It builds off existing capabilities in EMDC's as brokers or linkers and suggests a networking role for I/D/E/A-Kettering. The mechanism suggested for initial linking is the Educational Management Development Bank of information developed for I/D/E/A-Kettering by the Merrimack Education Center. The study is seen in three stages evolving to an operational phase (Figure III-3).

The purpose of this series of planned phases is ultimately to identify within the nation educational management "products," services, or solutions to problems, or methods for filling needs--methods which have been developed, tested, and modified, and which can be replicated by other districts. Rather than

OBJECTIVE: TO STUDY EDUCATIONAL MANAGEMENT DEVELOPMENT CENTERS

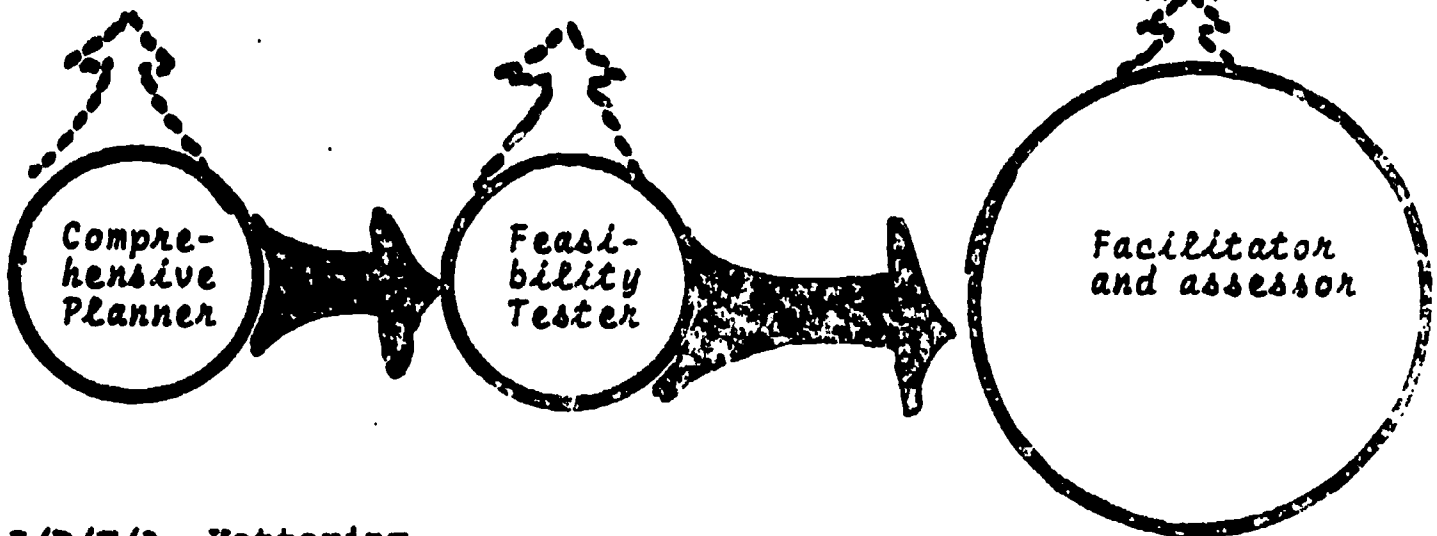


1. Apply study results to 4 discrete, existing, types of ENDC collaboratives
2. Identify and "bank" successful practices
3. Examine agencies for linking capability
4. Develop a pilot network
5. Case study evaluation
6. Recommendations

through an  
Ad Hoc  
Center to Study Educational  
Management

- 3.1 Foster successful collaboratives through new and larger networks.
- 3.2 Exchange successful practices.
- 3.3 Offer management training.
- 3.4 Generate partial financial support system (incentive/reward).
- 3.5 Identify problem areas.
- 3.6 Maintain supportive posture towards networks as appropriate.

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I/D/E/A Kettering

trying to generate new solutions, the AD HOC Center would help districts by providing a bank of such services and products which are readily available. Tangential work in continually identifying successful practices, identifying new problem areas, and helping to support these networks of exchange would also occur. But the Center would be seen as a responsive-adaptive agency, oriented to helping, not to regulating.

While there are indeed problems and needs in the educational systems of this country, there are also solutions and successful practices which have already been tested. This proposal is aimed at identifying and diffusing the many successful practices. This is action-oriented, and it is potentially cost-effective.

The Ad Hoc Center for the study of educational management, which for the purposes of this proposal could either be located at I/D/E/A-Kettering or contracted to an existing agency, would undertake certain necessary procedures. These procedures, described in the following pages, would take place during the study/test phase.

1. Apply Study Results. I/D/E/A-Kettering is presently involved in activities to identify alternative models of EMDC's selected on criteria such as: geographic locale, energy underway, potential for success, new models, and the like. Initial plans suggest that the beginning network will expand to new and larger networks.

2. Identify Successful Practices. From the sites designated by I/D/E/A-Kettering, the Ad Hoc Center would elicit those programs, products, and services, which could be described as successful. The criteria for selection would include:

- a. the degree to which the program is based upon need
- b. the degree to which the program is responsive to the need
- c. the client satisfaction
- d. the cost-effectiveness, and
- e. the replicability by others

The Ad Hoc Center would establish a bank of successful practices to which schools or EMDC's could turn for immediate response and advice regarding problems identified, program selection and modification. Banks would initially include results of Phase One Study (catalog of microfiche collection, viewers, etc.). As indicated in the study findings the eventual bank of successful practices will be based upon a local identification, selection and utilization system. It is also suggested that computer terminals be located in each of the Centers for improved access and linkages.

3. Examine Agencies for Linking Capability. Typically, the success of a program reflects the strength and practices of the agency or EMDC which offers the program. Thus, the Ad Hoc Center would study the EMDC itself, including its operational methods and relationships. The Center would thus be in a position to offer diagnostic information to the

agency regarding the appropriateness of its operational style for interface with other agencies in a network. Those factors deemed critical for members of a successful network would be included in informal input sessions conducted by the Ad Hoc Center. Such factors are derived from the literature on networking and collaboration. The concepts of brokering and linking would be examined.

4. Develop Pilot Network (See Figure III-4)

Having identified four or more discrete types of collaboratives as educational management development centers the potential for pilot networking is a reality. It is suggested that initial exchanges be accomplished at the information and successful practice level before announcing to client practitioners more complex exchange and support systems. There is much knowledge to be discovered on the emerging concept of networking and beginning at the technical level will help develop the necessary human and conceptual understandings. The Ad Hoc Center would assist EMDC's in (a) setting goals, (b) using resources, (c) improving ongoing relationships, (d) communications, and (e) conflict resolution.

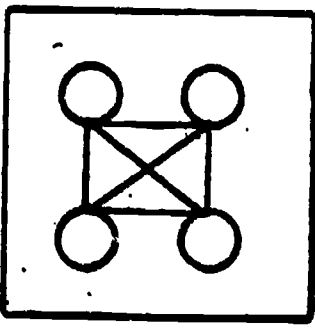
FIGURE III - 3

MAP OF PILOT NETWORK

Linking Educational Management Development Centers

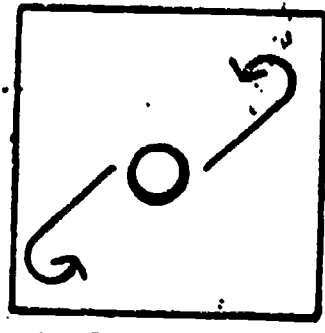
IDEA/KETERING

△ AD EOC CENTER (Networking)

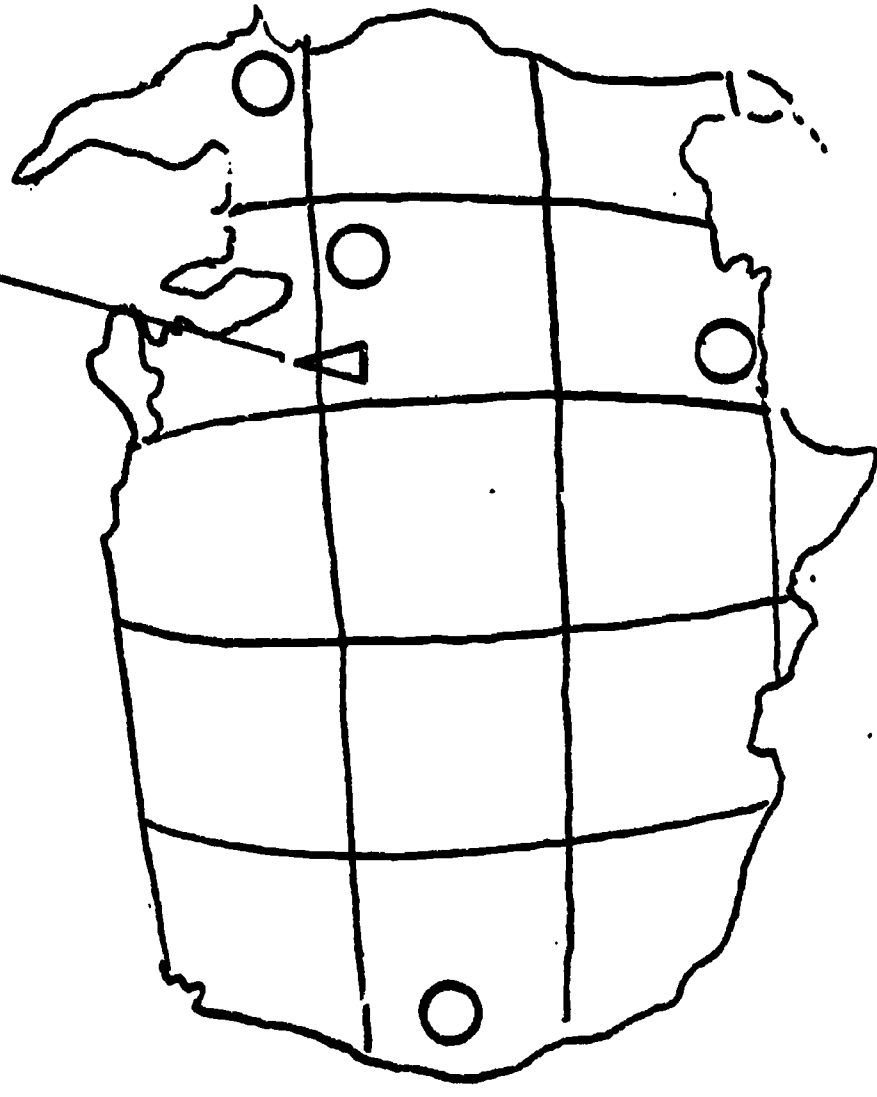


○ EDC'S (Broker-Lipker)

RESOURCES



CLIENTS



INFORMATION STEPS:

1



- Microfiche collection
- Viewers

2



- Consultants
- Products
- Services

3



- Computer-terminals
- Needs Assessment

4



- Training
- Synergy

5. Case Study Evaluation. It would seem that the formation of the pilot network is not only valuable to the clients of that network, but also to the prospective members of future networks. Thus, an evaluative study of the EMDC network would be performed using the case study method. The case studies would be developed on Havelock's steps for innovation:<sup>1</sup> (a) recognition of need, (b) problem diagnosis, (c) acquiring relevant resources, (d) selecting solutions, (e) adapting, and (f) evaluation. The result of these case studies would be a synthesis or blueprint for building successful collaboratives and linking them into a network of program exchange, leading into improved management and networking.

6. Recommendations. The work of the Ad Hoc Center will include a series of recommendations to I/D/E/A Kettering relevant to establishing new centers and networks. Main divisions of this planned series of recommendations would include:

- a. building and strengthening future collaboratives
- b. networking as a process to maximize effectiveness of collaboratives for the clients
- c. the role of the Ad Hoc Center in the future--its formalization, modification, or dissolution, and,
- d. suggested future roles for I/D/E/A Kettering.

<sup>1</sup>R. Havelock, The Change Agent's Guide to Innovation, New Jersey: Educational Technology Publications, 1973.



## B. IMPLICATIONS

This paper is designed to provide a cursory description of the study/test phase in linking EMDC's. It offers a model for transposing successful practices from developers and users to newly identified areas of need. Built upon the findings of the MEC report, a pilot collaboration network is proposed as a testing area for eventual national linkage of educational Management Development Centers.

Implications of the study for Phase III suggest:

- 3.1 Foster successful collaborative through new and larger networks
- 3.2 Exchange successful practices
- 3.3 Offer management training
- 3.4 Generate partial financial support system (incentive/reward)
- 3.5 Identify problem areas
- 3.6 Maintain supportive posture towards networks as appropriate.

It presupposes the viability of here-and-now action solutions to here-and now problems.

Finally, it sees I/D/E/A-Kettering in a leadership role for activating these solutions to problems long experienced.

SECTION IV

MAJOR FUNCTIONS OF AN EMDC

A simulation of the user system, in this case the EMDC, provides an appropriate perspective from which to select information for EMDC personnel.

Several models were examined to prepare a simulation of the EMDC model in terms of functions.

A major model investigated was that of the Educational Information Consultant program designed and produced by the Far West Laboratory for Educational Research and Development. Briefly, this well-documented<sup>1</sup> training program focuses on the following five processes:

- |                       |  |
|-----------------------|--|
| <u>Negotiation</u>    | To identify, analyze, assess, and define specifically the problem and attendant information need(s) of a client.   |
| <u>Retrieval</u>      | To develop a search strategy and locate, identify, and secure R&D information pertinent to the client's problems and request.  |
| <u>Transformation</u> | To screen, analyze and/or synthesize, and organize the results of the search in a form appropriate for delivery to the client.   |
| <u>Communication</u>  | To display and convey the results of the search to the client in a style appropriate for his use in finding a solution(s) to the problem.  |
| <u>Evaluation</u>     | To assess the performance of the major EIC process and overall role and the operational effectiveness of the setting within the linkage system; reformulate based on evaluation and follow-up evidence; and make adjustments in processes and functions. |

<sup>1</sup>Banathy, Bela, et. al., "The Educational Information Consultant: Skills in disseminating educational information. A Report on the Development and Operational Validation of Three Alternative Forms of a Transportable Instructional System. Final Report. San Francisco, Calif.: Far West Laboratory. December 1972.

Another major model investigated is that of Ronald Havelock<sup>2</sup> as proposed in his Guide to Innovation in Education. The value of this model lies in the fact that it represents the total purpose for which information is communicated and thus presents a more extensive schema.

Havelock proposes six stages:

#### Stage 1 - Relationships

The first thing the successful change agent needs to develop is a viable relationship with the client system or a solid base within it. A secure and reasonably well delineated helping role is an essential place from which to start. Some readers may be able to take this for granted because they already have a good client relationship, but others will find important points to consider..

#### Stage 2 - Diagnosis

Once established in the client system, the change agent must turn to the problem at hand. He must find out if the client is aware of his own needs and if the client has been able to articulate his needs as problem statements. The second chapter discusses this topic from several angles.

#### Stage 3 - Acquiring Relevant Resources

With a well defined problem, the client system needs to be able to identify and obtain resources relevant to solutions. The third chapter should give some good leads on how this information seeking can be carried out successfully.

<sup>2</sup> R. Havelock, The Change Agent's Guide to Innovation New Jersey: Educational Technology Publications, 1973.

#### Stage 4 - Choosing the Solution

With a defined problem and a list of relevant information, the client needs to be able to derive implications, generate a range of alternatives, and settle upon a potential solution. The fourth chapter discusses various aspects of this process.

#### Stage 5 - Gaining Acceptance

Even a good solution needs adaptation and needs to be reshaped to fit the special characteristics of the client. In the fifth chapter, he considers how initial acceptance of innovations can be generated and how the client may be able to develop attitudes and behavior supportive of the innovation.

#### Stage 6 - Stablization and Self-Renewal

Finally, the client needs to develop an internal capability to maintain the innovation and continue appropriate use without outside help. The change agent encourages members of the client system to be their own change agents and to begin to work on other problems in a similar way. As this self-renewal capacity begins to build, it allows the gradual termination of the relationship so that the change agent can move on to other projects, other problems, and other clients.

Although there is some reluctance, when taken together these two schemata represent essential qualities which an EMDC should exhibit if it is to perform linking functions. There are also six characteristic functions of an EMDC as a linking organization, that are outlined here:<sup>3</sup>

<sup>3</sup>R. Lavin, "Establishing Effective Linkages at the Local Education Agency Level."

1. Establishment of Relationships
2. Needs Assessment
3. Provision of Information
4. Brokering
5. Facilitation
6. Evaluation

The two schemata\* are represented in Table IV-1 illustrating how the essential attributes of communication theory are incorporated into the six functions for an EMDC serving as a "linking" organization.

The six functions, representing essential tasks and activities of a linking organization, are described in more detail in the following pages. The institutionalization of this "linking" role provides the necessary support mechanisms and coordination for effective innovations to take place in local educational management systems.

#### A. Establishing Relationships

Educational leaders in the client systems need to regard the EMDC as an organization containing high expertise, yet, within their control. They must view it as a supplementary and cost-effective service. Only after their initial fears are mitigated and trust is obtained will they feel psychologically free to open their educational systems and move to higher levels of management problems in collaboration with others. Therefore, the formation of relationships between user systems and resource systems is imperative. The

\*the models of Banathy, and Havelock

**FIGURE IV-1**

**S U M M A R Y M A T R I X**

CONTRIBUTIONS OF KEY CONCEPTS	F U N C T I O N S					
	RELATIONSHIP	ASSESSMENT	INFORMATION	BROKER	FACILITATION	EVALUATION
<b>ERIC (Educational Information Consultant (Banathy, et. al.)</b>		X				
<b>Negotiation</b>		X				
<b>Retrieval</b>			X			
<b>Transformation</b>				X		
<b>Communication</b>				X		
<b>Evaluation</b>						X
<b>Havelock: MODEL FOR SUCCESSFUL INNOVATION</b>						
<b>Relationship</b>	X					
<b>Diagnosis</b>		X				
<b>Acquisition</b>			X			
<b>Choosing</b>				X		
<b>Acceptance</b>					X	
<b>Self Renewal</b>						X

principal linkages are of two types: linkage to resource persons (both organizations and systems); and linkage with practitioner persons. In this way, the practitioner can be meaningfully related to outside resources.

In order to perform this type of linkage, an EMDC must coordinate its helping activities with the internal user problem-solving activities. The focus is initially on the user as a problem-solver. The outside resource person must be able to recapitulate or simulate the internal process of the client system. The resource person needs to develop a good "model" of the user system in order to "link" to him effectively. Additionally, the user must have an adequate appreciation of how the resource system operates. He must be able to understand and partially simulate such resource system activities as research, development, and evaluation.

The resource and user must provide reciprocal feedback and must provide signals to each other which are mutually reinforcing. This type of collaboration will not only make particular solutions more relevant and more effective, but will also serve to build even more meaningful relationships. Well established relationships build effective channels through which innovations can pass efficiently and effectively.

The exchanges between centers where activity is occurring will provide improved utilization of resources for individual clients. Additionally, public school systems must collaborate



to interface with outside institutions for the purpose of improving management development. (Principle of aggregation.)<sup>4</sup>

#### B. NEEDS ASSESSMENT

A Center will not be responsive (and as a result, not successful) if it fails to meet the needs of its client systems. The task here is to bring the client from his perceived need(s) to his real problem(s). Needs assessment processes, then, enable Centers to establish priorities and to build criteria for selecting appropriate and relevant resources. The needs assessment undertaken will increase the effectiveness of a Center through providing data for decision making and for carefully planned and targeted resource provision.

In-depth exploration of system problems is carried out at the management level and thus is a primary focus for an EMDC. As a part of any educational management development program, principals and superintendents become involved in methods of assessing needs and prioritizing objectives. The EMDC operates as a "temporary system" in this diagnostic process, responding to needs as they arise and changing focus as new problems emerge. The EMDC acts as a catalyst in encouraging clients to analyze their own needs. Diagnosis is followed up by responsive programs and this problem of responsiveness is discussed further in connection with the third major function, "information resources."

<sup>4</sup>According to Oettinger and Zapol (ED 064 902), the market place and learning strategies interact with respect to a set of factors grouped under the rubric "scale of aggregation." These scales of aggregation demonstrate relationships among technology, costs, and degree of aggregation.

### C. INFORMATION RESOURCES

Information systems and other printed materials comprise only a portion of the necessary sources and resources. EMDC's need to make a concerted effort to acquire all relevant resources. Research, human resources, local and national successful practices and training programs must be accessible to a linking institution in order for it to offer options to client systems. The EMDC, as a linking organization, is in a position to effectively tap the needed resources and to gain access to other resource systems that may be beyond the realm of the education/university base.

The Centers will need to examine practices already existing that would reduce the "reinventing of the wheel." The examined practices, once validated, are incorporated into information banks that allow for dissemination of knowledge on improved techniques, tools, and successful practices. Since it is costly to create totally new resources, the banks would identify what is available for modification and adaptation. The EMDC's would then provide a storehouse of fully developed and evaluated models and effective practices and techniques in educational management.

In implementing these recommendations, there are three primary tasks to be considered:

1. the EMDC develops a wide span of awareness of potential resource systems (wherever these may exist)

2. the EMDC makes contact with the most relevant and accessible outside resources and initiates an exchange
3. the EMDC targets information to practitioner/clients. The key to this selective dissemination of information (SDI) is the matching of individual practitioner needs with specific information to meet these needs.<sup>5</sup>

In this way, readily available materials are reviewed for accessibility and relevance. Virtually all information systems available nationally are tapped for relevance to educational management development. Relevance of external resources is judged primarily with two criteria in mind:

1. Does the resource answer to local needs as determined by the needs assessment surveys and prioritized objectives?
2. Is the resource capable of delivery?

Additionally, a "human resources" information exchange will be initiated. A detailed directory of people to contact, organized around questions and problem areas that the persons are competent to answer and/or are involved in operationally themselves. This type of information bank can identify a network of practitioners who are the implementation experts. Through the exchange, network members obtain descriptions of other successful programs and other professionals they can contact.

The building and maintenance of channels of communication of these available resources will be further developed under "brokering" and "facilitating", the fourth and fifth functions in this series.

<sup>5</sup>As indicated in the recommendations and implications of this study, information must be more and more locally selected and locally contributed. As EMDC's develop their goals, objectives, and desired outcomes, a valuable bank of resource data is locally produced.

#### D. BROKERING

In addition to building a permanent capacity for resource acquisition, the EMDC must foster within the client systems the capacity to select and utilize identified resources. An EMDC must respond to the needs of its client systems with products and/or processes that are highly relevant and that are applicable to the environment. Nevertheless, this must be accomplished through secondary, temporary systems which do not threaten the identity of parent organization. It is precisely in this area that the collaborative performs its linking function--linking the practitioners to appropriate information and resources.

Since information on management development is found in various fields and is considered to be "in-common" across many disciplines, multiple locations involved in management must be linked. This requires a simple mechanism for linkage utilizing various forms of technology. The need evidenced here is for mechanisms that go beyond the mere dissemination of solutions; ways must be found to assist users in selecting, evaluation, synthesizing and adapting the various offerings of products and services.

At any rate, the networking concept should attempt to maximize the "natural knowledge flow system" thereby linking pools of knowledge. Since no one model or institution has all the advantages for improving management development, alternative models should be developed and examined for successful practices, and then linked through a network. Organizations other than the EMDC's need to address the larger question

of networking.<sup>6</sup>

The role of the broker, then, is to assist in identification of alternatives from the multiple resource institutions. Current activities and programs to train educational managers emphasize methods that produce cognitive rather than behavioral changes. Therefore, an immediate focus for the broker is to determine what problem solving materials and tools can be adapted and modified to the local school system environments. Training should emphasize a new thrust on the transfer of knowledge through improved delivery systems. The broker is able to balance the inputs of cognitive/information materials with problem solving materials and tools that are developed. Both skill and cognitive development need to be related to experience and transferred to educational settings. The brokering institution would see that provision is made for management principles to be discovered, experienced and applied to appropriate situations.

#### E. FACILITATING

The art of implementation is most complex; it is this very point that is crucial to the effectiveness of the communication process. The acceptance, instruction, and motivation of the client are crucial. Equally important are the multiple dimensions and levels of the organization where the client finds himself. Unless all these facets are respected, the effectiveness of a proposed innovation diminishes.

<sup>6</sup>Control concerns must be dealt with in this proposed study. Since most of the networking links are as yet "informal and not easily planned or coordinated systematically (they) may not be amenable to direct control from a central authority."

As facilitator, the EMDC enables client systems to derive implications from research through analyzing how a given product from research would apply to a client in his own situation. The facilitator enables the client system to develop a range of possible solutions based upon the derived implications. Before a decision is made to adopt a particular solution, its feasibility is examined in light of the potential benefits, workability, and diffusability in the situation to which it will be applied. The EMDC, as facilitator, assists the client system in analyzing and adapting the chosen solutions to fit the situation.

Acting as facilitator, an organization must build delivery systems for resources that rank high on the criteria of relevance and appropriateness. Materials may need to undergo adaptation at the EMDC to meet local needs.<sup>7</sup> This is currently being carried out by the Merrimack Education Center in the design of management problem-solving techniques.<sup>8</sup>

The EMDC also initiates two-way interchanges between the Center and its resources (local colleges, universities, private organizations, governmental agencies, etc.). Joint projects are initiated since collaboration with various resource systems for specific projects is on a continuous basis. With these collaborative projects, the EMDC tests out actual resource-giving capacity of outside agencies.

<sup>7</sup>Examples would include: the Far West Laboratory training materials for management development. [ (ED 051 273)

<sup>8</sup>Management Assessment Process.

Strategies must be designed which insure the continuance and internalization of innovative programs. A system needs assistance in beginning to develop internal capacities to plan and manage change programs on a continuing basis. In the MEC management assessment program for example, peer model teams are being introduced to assess management practices and policies. It is anticipated that this model will be replicated at other levels within the school systems. Additionally, there is an increase in the amount of collaboration, the linking and sharing of information, practices and personnel among and between client systems. In this manner, an internal problem-solving capacity is facilitated and the EMDC can then withdraw to a substantial degree from overseeing established programs (i.e., continuing maintenance of an existing program.)

#### F. EVALUATION

The linking center serves as a feedback loop to various other centers (agencies, state, and federal) as well as to the world of research. (See Section III, Figure 2.) It must also assist clients in monitoring their own innovative products and processes. Finally, it must constantly monitor itself and the needs of its clients to maintain its own vitality.

Included in this system of linking, then, is a monitoring concept which examines how well an organization or EMDC delivers services that they propose to deliver. One such

approach of monitoring or evaluating utilized in the Merrimack Education Center, "LINKER" project has been the case study technique.<sup>9</sup>

A planned program must be instituted to (1) monitor practitioner needs, (2) send the appropriate information to the practitioners, and (3) receive feedback as to the usefulness of the information in meeting the needs. This feedback loop is crucial because it enables the EMDC to realize not only whether the practitioner has correctly identified his problem but also how the needs are changing.

Since marketing as a discipline is focused on building linkages between products and consumers it applies here to a concept of networking. These linkages are the essence of uniting client needs with resources. The discipline of marketing can provide valuable insights for understanding the capabilities of EMDC's and assist in developing policy guidelines for delivery of products and services.<sup>10</sup> This model has been historically absent from the educational domain and therefore, educators are not accustomed to this exchange economy model.

<sup>9</sup>Havelock case study. The EMDC is monitored through case study procedures to provide feedback for judging effectiveness. The purpose of a case study is to examine resource utilization, communication, and implementation of effective practices.

<sup>10</sup>Schalock, H. Del, Ed.; The Oregon Studies in Educational Research, Development, Diffusion, and Evaluation Volume III: Conceptual Frameworks for Viewing Educational RDD&E. Final Report. Oregon State System of Higher Education, Monmouth. Teaching Research Div. 1972.



Feedback within an exchange economy is rapid. One of the benefits of employing marketing principles and concepts is to provide the educational setting with standards for measuring the performance of activities. By stressing a consumer need orientation, the EMDC's will provide distinct applications of marketing concepts which aid in evaluation. The exchange economy model provides effective feedback on EMDC offerings; if products and services are taken advantage of and purchased, this provides evidence of relevance and effectiveness. The EMDC's are quick to respond to this type of feedback and reality testing from clients since survival is at issue.

Programs, products, and services are modified, dropped or added according to clients' feedback. Any program that becomes self-supporting can be considered to be a success in one important sense. If programs are paid for by grants or other funding sources which enable them to be offered "free" to clients, there would be no sure and immediate mechanism for ascertaining whether or not the client appreciated the programs. If a client is willing to pay, this fact may mean not only that he likes the program but also that he will become more deeply involved in it in order to gain a return on his investment.

SECTION V

EDUCATIONAL MANAGEMENT

A Review of Relevant Literature

## A. PURPOSE

This section of the report describes a systematic effort to review the literature on knowledge and practice in educational management. The immediate problem was to perform an information analysis and interpret information for application within the EMDC concept. The primary objectives of this literature review were as follows:

- o To collect educational information relevant to the concept of educational management and relevant to the participating EMDC's.
- o To organize the information collected into an integrated system which provides convenient access.
- o To provide a comprehensive bibliographical format of significant and relevant information sources.

## B. APPROACH

A detailed literature search and survey of existing programs and delivery mechanisms that might be useful within the EMDC concept was undertaken. The ERIC<sup>1</sup> system was examined for this purpose in light of two major concerns:

1. Content within the information system
2. The ERIC System as a process or vehicle for dissemination of information

<sup>1</sup>The rationale for selecting the ERIC system for the literature search is to be found in the Appendix to Volume II.

An off-line search utilizing a computer terminal to obtain print-outs of all relevant studies pertaining to management development was initiated. Since information serves as a linking mechanism, the various technologies of ERIC, utilizing computer terminals and microform systems, were deemed advantageous to this study. The search strategy, as planned by the Merrimack Education Center, tapped the ERIC bank for literature that would identify:

- o programs that could be used directly, or converted, modified, and adapted
- o models of practices in educational management development
- o methods for adapting the identified programs for dissemination and replication

### C. CONDUCTING THE SEARCH

In the initial stages of the literature search on knowledge and practices in educational management, it first was necessary to establish the "key words", or descriptors.<sup>2</sup> The concept of educational management development was defined in terms of "management education," "leadership training," "educational planning," "decision making," "systems analysis," and the like. A more complete listing of these descriptors appears in Table V-1.

<sup>2</sup>The ERIC system (Educational Resource Information Center) provides a major indexing aid: Thesaurus of ERIC Descriptors. ERIC uses a coordinate indexing and searching system. The user of the ERIC system makes his choice of descriptors and descriptor combinations and develops a search strategy for utilizing the computer tapes.

TABLE V-1

Administrator Education	Institutes (training programs)
Management Development	Educational Planning
Management Systems	Educational Administration
Management Education	School Administration
Management Information Systems	Institutional Administration
Leadership	
Leadership Training	
Decision Making	
Systems Analysis	

Upon entering these major descriptors into the on-line "ORBIT"<sup>3</sup> data base, a total of 5,583 different journal articles, texts, and microfiche documents were retrieved. A trial search of one hundred abstracts was printed out and screened to determine if the chosen descriptors would aid in selecting relevant literature for this study. A review of the trial search indicated that the descriptors appeared to describe the search question.

By selecting only one descriptor, the search system retrieves from the file all of the documents assigned that descriptor. This produces a large number of documents, of which a high percentage is likely to be only peripherally relevant. When a second descriptor is selected and used along with the first descriptor the number of documents indexed by both descriptors is much smaller. Also, fewer "irrelevant" documents are retrieved. The descriptors in Table V-1, combined with the descriptors in Table V-2 (using the "and" command) delimited further the number of documents retrieved.

<sup>3</sup>System Development Corporation (SDC) on-line bibliographic search services.

TABLE V-2

Superintendents  
School Superintendents  
Principals  
Chief Administrators  
State Boards of Education  
Boards of Education

Using the descriptors from Table V-2 linked with the descriptors in Table V-1, 308 documents were identified. This type of search strategy enabled the researcher to delimit the search into relevant documents by specific categories. For example, using the two descriptors "educational change," and "management education," a total of 706 relevant documents were identified. Utilizing the descriptors "decision making skills," and either "principals," or "superintendents," a total of 86 studies were identified. In this way the search of 5,583 documents can be narrowed utilizing specific descriptors that break the total number of studies into sub-sets that are workable. The exact listing of descriptors used and the number of postings indicated in each instance are shown in Table V-3, (at the end of this section).

**D. PROCESS OF SELECTION**

There are ever-increasing numbers of persons and organizations working to design adaptable systems and viable mechanisms by which school management personnel can more effectively

perform their roles.<sup>4</sup> However, the information crisis is due not only to the quantitative increase in the amount of the literature but also to a necessity for building suitable criteria to apply for the selection of documents. According to Mersel:<sup>5</sup>

Many reports go unread because the researcher has spent his always limited reading time in coping with the mass of literature...much of it consisting of poorly written reports of ill-conceived projects.

In view of the massive accumulation of literature on educational management, the need for a thoughtful process of selection is obvious. This process is described in the following listing of tasks.

Task 1 - Development of Criteria for Selection

In order to cope with the voluminous body of literature retrieved, it was necessary to establish criteria for sifting, selecting, and sorting. Therefore, each of the 5,583 abstracts retrieved from the computer print-out was examined in terms of its ability to meet one or more of the criteria outlined in Table V-4.

<sup>4</sup>P. Piele, and S. Smith, Directory of Organizations and Personnel in Educational Management. Third edition. University of Oregon, ERIC Clearinghouse on Educational Management, 1971-1972. ED 058 469.

<sup>5</sup>J. Mersel, C. Donohue, W. Morris, Information Transfer in Educational Research. Sherman Oaks, California; Informatics, Inc., April 8, 1966; page 94. (ED 010 128)

## CRITERIA FOR SELECTION

### Priority 1

those studies that describe actual training programs in existence or proposed; indications that the document describes training programs in progress or being proposed or designed.

### Priority 2

those studies that provide bibliographical information on sources and resources dealing with management development; indications that the document offers sources of highly relevant material or lists resources for use in educational management development programs.

those studies that describe training programs in either government or industry that could be modified for educational environments.

### Priority 3

those studies that deal with basic concepts of management science as it relates to education, business, or industry (etc.); indications that the document is incisive in its discussion of management concepts, management principles, management functions, or management needs. These studies relate to categories of skills and functions necessary for successful educational management (i.e., decision making skills, planning, budgeting, management information systems, etc.)

### Excluded

Those documents not meeting the above criteria.  
(Support programs and services such as transportation, facilities maintenance, food services, insurance/health programs, and the like.)



## Task 2 - Screening of Documents

At this point, utilizing the criteria in Table V-4, 3,083 studies were excluded and the 2,500 studies that survived the criteria were sorted according to broad and general concepts. Those documents falling into Priority One were immediately retrieved for in-depth examination. The remaining studies were organized into major areas of management concepts. (Table V-5) Additionally, a supportive library search using various indexes was initiated; texts and other non-ERIC materials not apt to be noted in the ERIC data base were identified by staff of the study.

Documents were then retrieved from Priority Two and Three if the abstract indicated that the subject clearly dealt with concepts of educational management, or management concepts from industry that could be applied to education.

## Task 3 - Review of Selected Documents

Microfiche copies of the articles retrieved were perused; each was examined in terms of the instructional approaches involved, the delivery systems, the nature of content and structure of the training program. Studies not falling into any of these categories were reviewed in terms of their usefulness in support of management functions and/or the rationale for the improvement of educational management programs. The contents of many of the studies were not pertinent to the concepts at hand while others lacked the necessary quality and were therefore excluded from this study. Figure V-1 presents a flow chart depicting

TABLE V-5

MAJOR AREAS OF MANAGEMENT CONCEPTS

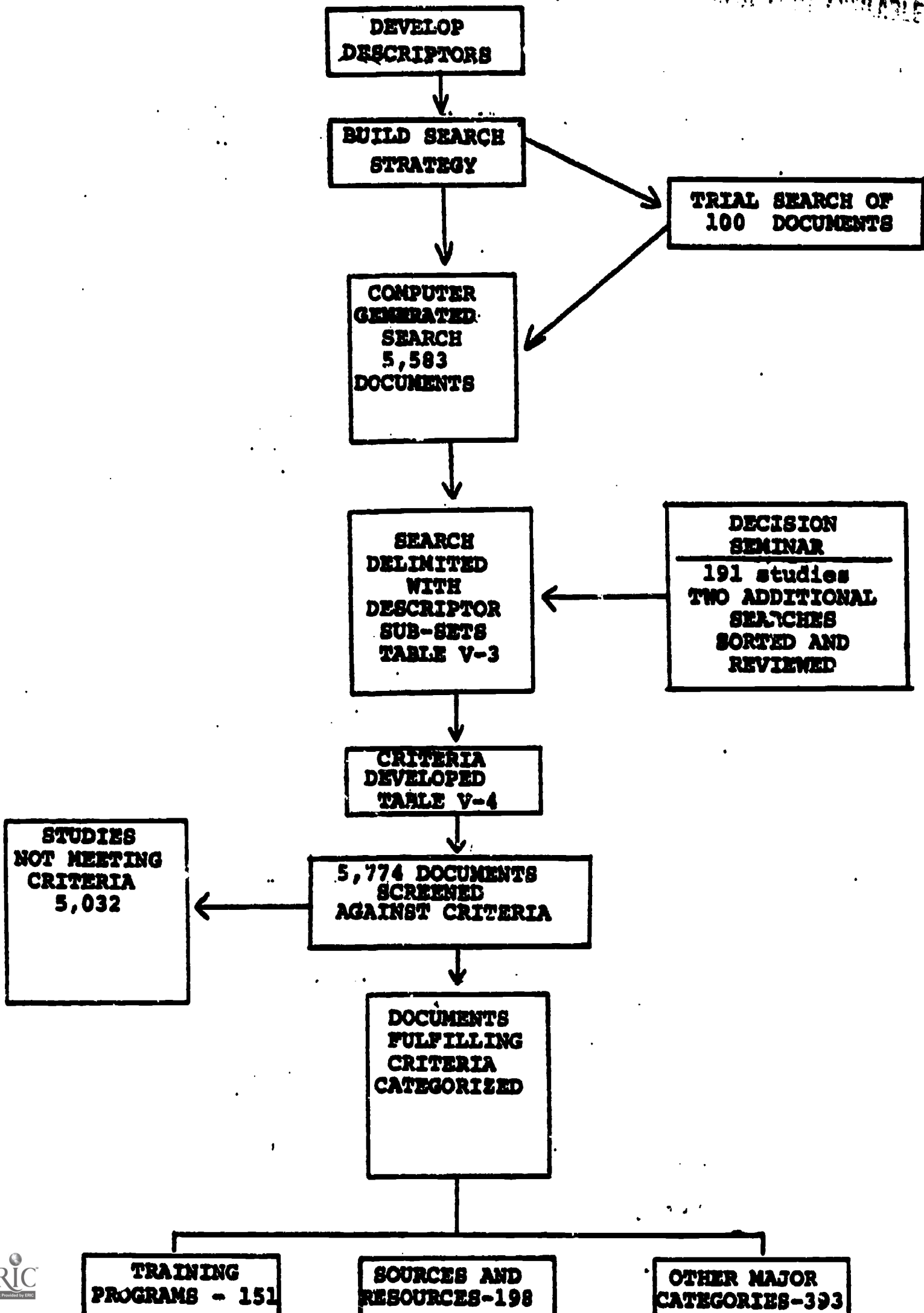
ORGANIZATION OF SELECTED STUDIES	Number of Studies	%
A. Training Programs (and evaluation of same)	151	20.5
B. Sources and Resources (includes rationale and need; other models from other fields)	198	27.0
C. Other Documents of Interest		
1. Decision Making	33	5.0
2. Educational Planning	30	4.0
3. Evaluation	45	6.0
4. MBO - Management by Objectives	27	4.0
5. MIS - Management Information Systems	37	5.0
6. PPBS - Planning Programming Budgeting Systems	74	10.0
7. Simulation	42	6.0
8. Systems Analysis	25	3.5
9. Information Networks (Vol. I)	66	9.0

742\* 100% TOTAL

\*includes studies listed in Addenda.

FIGURE V-1

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the various steps previously described and points at which decisions were made to select and screen, to defer or reject.

Table V-5, indicates the categories and the number of documents assigned to each category, from the final selection process.

Using the validated management functions, from the July 12 Decision Seminar, an additional computer generated search was conducted. The additional descriptors utilized were: communication, organizing, and planning. A search on management information systems retrieved 79 studies at this time and one on the concept of "networking" retrieved 112 studies. Relevant documents from all of these searches are found in the bibliographic section of this report (Volume II).

#### Task 4 - Analyzing the Relevant Studies

After performing intensive computer-generated searches, documents are retrieved, screened, and processed by the researchers for selection. For more effective utilization of the information, researchers must then proceed with the task of compacting, integrating and synthesizing the concepts of the study. The Overview to this Volume describes various approaches to compiling the relevant information for presentation in a format most helpful to the clients. This transformation process involved organizing the materials into a format and style best suited for the purposes of the clients requesting the study. Judgments are made as to the importance, priority,

and/or value of the retrieved information in relationship to a client's specific purposes. Insights gained from the Decision Seminar (See Section VI) assisted in this sifting and sorting process.

#### E. FINDINGS FROM THE LITERATURE SEARCH

##### 1. Training Practices Need to be Re-examined

Considering the literature, and with support from the Decision Seminar, the need is evident that the training practices and structures of educational management need extensive reexamination. It would appear, based upon the literature, that the practicing administrator is relatively ill-equipped to handle the role and functions...the responsibilities and duties. Brown<sup>6</sup> has reported that, although the university experiences of administrators are often enriching, "the time and effort expended is inadequate in helping them to cope with the realities of school administration." Indeed, superintendents often describe their training as "far from adequate for preparing them to resolve the problems which daily confront them."<sup>7</sup> Goldhammer and

<sup>6</sup>D. Brown, "The Poverty of Educational Administration." Paper presented at American Educational Research Association Annual Meeting (57th, Chicago, Illinois, 1972). ED 061 582

<sup>7</sup>Goldhammer, K. et. al. Issues and Problems in Contemporary Educational Administration. Eugene: Center for the Advanced Study of Educational Administration, University of Oregon, 1967, ED 014 787. Cited in: R. Farquhar and P. Piele, Preparing Educational Leaders: A Review of Recent Literature. ERIC CEM-UCEA. Series on Administrator Preparation., 1972. ED 069 014.

others<sup>8</sup> cite educational administrators:

...to a man, they felt that both their preparatory programs and the in-service educational opportunities which they have had since entry into administrative posts were far from adequate for preparing them to resolve the problems.

Heightened awareness of the complexities and the crises in management training also emerges from a review of the Commission Report on Public School Personnel Policies in Ohio. This report documents training of school leaders to be "one of the most pressing problems in public school education."<sup>9</sup> After a two year analysis of Public Schools in Ohio, the Commission reported that school leaders lack essential training for their present positions in educational administration.

Warnings of this pervasive weakness also are heard from other parts of the country and are documented by many different organizations and institutions. In a recent CASEA report, the preparation programs available for educational administrators were described as "relics of the past." Lutz and Ferrante<sup>10</sup> conclude that "most of these programs are at best creative rearrangements of ideas ten or more years old." They describe their efforts to identify innovative continuing education practices as essentially a failure:

<sup>8</sup> K. Goldhammer, et. al. Issues and Problems in Contemporary Educational Administration: Eugene: CASEA, 1967.

<sup>9</sup> Commission on Public School Personnel Policies in Ohio. School Leadership, Report Number 7. Stranahan, et. al. Greater Cleveland Associated Foundation, 1973.

<sup>10</sup> F. Lutz, and R. Ferrante, Emergent Practices in the Continuing Education of School Administrators. ERIC/CEM-UCEA. Eugene, Oregon, 1972. (ED 069 015)

...If one is looking for a single program to serve as a model for the creation of innovative programs for the continuing education of school administrators, little of value can be learned by reviewing present practices. It may be that reviewing present practices is even detrimental to the establishment of such a model.

In attempting to reexamine educational management development programs from a fresh perspective, this analysis and review of the existing literature has identified particular documents relevant to establishing innovative and effective training programs.

## 2. Structure and Content of Available Educational Management Programs

a. Perhaps one of the reasons that educational administrator preparation and in-service programs fall short of their goal is a lack of a comprehensive and systematic framework. Analyzing the program structure and content of various preparatory programs for educational management, Boyan noted that "curriculum development in educational administration today looks very much like the conventional local school system approach. . . . disparate, fragmented, uneven, scattered, and mainly non-cumulative."<sup>11</sup> It would appear that typical programs in educational administration have grown "like Topsy," Farquhar and Piele<sup>12</sup> speak of the "lack of a Gestalt conception of the total preparatory experience that characterizes

<sup>11</sup>N. Boyan, "Problems and Issues of Knowledge Production and Utilization." In Knowledge Production and Utilization in Educational Administration, T. Eicell and J. Kitchel (Eds.) Eugene: Center for the Advanced Study of Educational Administration, Univ. of Oregon, 1968. page 34. (ED 024 112)

<sup>12</sup>Farquhar and Piele, op. cit. page 16. (See also ED 040 941)

many programs," while Lutz and Ferrante further document this:

... the continuing education process has generally been spasmodic, separated from the school planning process, and initiated only in response to crisis situations... (There is) a dearth of continuing education programs that are continuous, based on assessed needs of the district, and accepted as an integral part of district-wide educational planning.<sup>13</sup>

A study reported by the Far West Laboratory<sup>14</sup> for Research and Development also supports this contention: "existing training efforts appear to ignore some of the most important aspects of systematic planning, needs assessment, problem formulation, and decision-making."

b. Content of Programs

In addition to lacking structure and planning, preparation programs in educational management are of dubious quality in terms of content. Hale<sup>15</sup> agrees with Brown<sup>16</sup> when he criticizes educational administration for leaning too heavily on "soft theory, soft data, verbal theory and difficult to measure concepts."

<sup>13</sup>Lutz and Ferrante, op. cit. page 32

<sup>14</sup>L. York, Coordinating Conference on Educational Planning and Management Systems. Far West Laboratory for R&D Berkeley, Calif. 1970. (ED 046 114)

<sup>15</sup>J. Hale, A Review and Synthesis of Research on Management Systems for Vocational and Technical Education, Columbus: Ohio State University Center for Vocational and Technical Education, 1971

<sup>16</sup>Brown, op. cit.



The clarification of the major concepts, however, is no minor undertaking. And yet, this clarification of management functions (in terms of skills and behaviors) is seen as a necessary step in any literature review since there appears to be much difficulty in demarking concept relationships. In the documents there is frequently noted the use of indefinite meanings for "related" terms. The problem of loose terminology is likely to remain a drawback for anyone attempting to synthesize the literature in the future.<sup>17</sup>

Brown indicates two general trends in the content of educational administration identified as a "humanistic frame of reference" and, a "scientific or rigorous method of investigation," and concludes that the humanistic orientation frequently adopted in training programs is "relatively unsuccessful at providing the solutions to problems which the practicing administrator must address."<sup>18</sup>

Baldrige<sup>19</sup> also identifies the traditional human relations approach as significantly different from a "Political" systems approach for educational management. Because of these two philosophies or approaches, training

<sup>17</sup>As noted in Section VI, the redundancies and confusions in terminology are probably the results of the functions not being discrete. The questionnaires developed for the Decision Seminar were for the purpose of identifying descriptors of skills and/or behaviors relevant to the specific functions of "educational management."

<sup>18</sup>Brown, op. cit.

<sup>19</sup>V. Baldrige, A Political Theory of Organizational Policy. Mimeographed. Stanford University (1970). See also V. Baldrige. ED 036 908. Center for Research and Development in Teaching, January, 1970.

training for educational management differs across programs. Culbertson<sup>20</sup> has indicated that approaches to training have tended to emerge over time with a "management efficiency" thrust being predominant at the turn of the century; the human relations movement taking precedence immediately following World War II; and, the scientific emphasis which presently is characteristic of administrator training programs.

With this emerging scientific emphasis, management functions are increasingly being identified and defined in terms of administrator "behaviors" focused towards the functional activities of planning; organizing; staffing; directing; communicating; reporting; budgeting, and the like.<sup>21</sup> Hale indicates that training programs should be developed with curricula that teach techniques and tools for specific tasks. However, these task-developed strategies do not as yet permeate management development programs. Eventually competencies will need to be developed into competency-based management development programs whereby they may be used as criteria for a school system manager to self-assess against the specified skills.

Baldrige<sup>22</sup> has indicated a need for management development programs that will focus on the system-level problems and goals of the organization. A problem for

<sup>20</sup> J. Culbertson (Ed.) Simulation in Administration Training, Columbus, Ohio: UCEA, 1960.

<sup>21</sup> S. Knezevich, Administration of Public Education (2nd edition). New York: Harper and Row, 1969. p. 28.

<sup>22</sup> Baldrige, V. op. cit.

persons involved in developing management programs revolve around teaching specific skills and competencies that will allow superintendents to deal with problems of effectiveness in reaching system-wide goals and in relating the school system to the socio-political environment. The techniques for training such a "policy strategist" are not yet clearly established. Baldrige does indicate that this will "probably require the restructuring of administrative programs in schools of business, schools of education and other academic departments that emphasize administration."

Still another major difficulty in dealing with content of mid-career preparation programs is that much of the content of programs for advanced training of educational managers deals with studying about education. After reviewing the literature, one primary assumption arising from the study notes a major emphasis placed upon knowledge and information rather than problem-solving skills.

There is little evidence that any real consideration has been given to the experiences that will develop in prospective elementary school principals the knowledge, skills, and critical insights needed to assess the consequences of alternative strategies.<sup>23</sup>

Hale also notes that the literature on educational management has a "propensity to remain at a non-operational, conceptual level"<sup>24</sup> and he indicates a proliferation of undefined terms which further exacerbates accommodation. In the

<sup>23</sup>Farquhar and Piele, op. cit.

Goldhammer study cited earlier,<sup>25</sup> it was reported that superintendents perceived some of the problems to stem from a poor conceptual base which is difficult if not impossible to translate to their immediate problems.

Support for this difficult problem arose from the Decision Seminar and the implication derived was that there exists a definite need to provide practical experiences, as well as knowledge, that a practitioner may then draw upon within an educational system. Many of the functions, skills, and behaviors noted as important by the participants of the Decision Seminar are still lacking since there is an "under-supply of programs offered in educational finance and long-range planning."<sup>26</sup>

In addition to the lack of provision for these major functions in management development programs, yet another significant problem emerges. Management development programs rely heavily on the acquisitional process whereby knowledge, opinions, and understandings are absorbed by reading or listening. We seem to forget that, as Dill<sup>27</sup> and Odiorne<sup>28</sup> have so aptly pointed out, managers learn by living, acting,

<sup>25</sup>Goldhammer, op. cit.

<sup>26</sup>Ferrante and Lutz, op. cit.

<sup>27</sup>W. Dill, et. al., "Strategies for Self-Education. Harvard Business Review. Nov.-Dec., 1965.

<sup>28</sup>G. Odiorne, Management by Objectives, New York: Pitman Publishing Corporation, 1965. (See also: ED 047 233)

watching, and reflecting on the relationships between what they observe happening and what they expect to happen. Experience is often the only way for a manager to master a new responsibility, or improve the complex skills he needs to be effective.

Goldhammer, in 1968,<sup>29</sup> described the need for incorporating knowledge-building, skill-building, and diagnostic experiences into training programs. Dill<sup>30</sup> indicated that the yield from experiences can be improved if it is analyzed intensively a little at a time. Havelock<sup>31</sup> also documents the need for attention to three crucial and related elements when designing training programs listing: knowledge; skills or competencies; and attitudes.

A needed emphasis is in the area of delivery mechanisms that would assist in developing the necessary skills, competencies, and attitudes. A study by the Merrimack Education Center for Educational Communication, cited an immediate need for improved dissemination and adoption practices that would include delivery systems and mechanisms for packaging and disseminating actual materials already available.<sup>32</sup> These materials to incorporate the types of

<sup>29</sup>K. Goldhammer, "Implications for Change In Training Programs," in T. Eidell op. cit. p. 182. ED 024 112.

<sup>30</sup>W. Dill, op. cit.

<sup>31</sup>R. Havelock and M. Havelock, Training for Change Agents. CRUSK. Institute for Social Research. Ann Arbor: Univ. of Michigan, 1973.

<sup>32</sup>Today there is a lack of utilization of educational research and successful practices which is described in more detail in the section on networking (Section III).

devices that would impart skills and competencies as well as knowledge and information. Ferrante and Lutz<sup>33</sup> have described the present problem when they note that more attention has been paid to implementing programs of in-service education than in developing and testing training models or preparing needed education packages<sup>34</sup> to help solve educational problems. We submit that much of this attention to in-service education has been needless reinventing of the wheel. What is needed then can be described in terms of the following:

- \* training practices and packages that produce results in the form of knowledge, skills, and attitudes
- \* training programs/models that provide useful practice and experience within the "learning" process

During the most recent decade, according to Piele,<sup>35</sup> there has been a trend towards employing case studies, simulations, and other role-playing mechanisms for training

<sup>33</sup>Ferrante and Lutz, op. cit.

<sup>34</sup>A few noteworthy exceptions to this have been recent field-testings of self-contained training packages, but these efforts remain far too few.

<sup>35</sup>Farquhar and Piele, 1971, indicate that some professors have used laboratory training exercises, programmed instruction, and other such approaches while according to Culbertson and Farquhar the use of simulation has reportedly been "introduced or expanded in almost 80 percent of the universities." (Preparing Educational Leaders. ED 069 014) page 29.

school administrators. These represent attempts to permit the student to wrestle with actual school problems in reality-testing environments. Numerous studies provide descriptions of these more recent instructional approaches, the new tools and techniques such as computer simulation applications, game theory, cases and case studies, simulated situations, and these are well represented in Volume II of this study.

A conference to establish exchange of information on major management development efforts was sponsored by the Far West Laboratory for Educational Research and Development.<sup>36</sup> Representatives of twelve agencies included personnel from a Title III project, a university graduate program, the Regional Education Laboratories, R&D Centers, and professional organizations. Exemplary programs reported at this conference included the five briefly mentioned here.

a. Title III Project - Operation PEP

Training program for educational managers that translates scientific and industrial management concepts to the context of the educational system. Instructional materials to train school administrators in the application of systems concepts and techniques developed in government and industry, are disseminated in the form of twelve booklets (i.e., Manager's Guide to Objectives, Goals for Public Education in Texas, and the like).<sup>37</sup>

<sup>36</sup>York, op. cit.

<sup>37</sup>D. Miller, ED 043 135; ED 020 584; ED 046 119.

b. Evaluation Kit. A training package with evaluation guidelines designed by the Center for the Study of Evaluation at UCLA, is used to orient elementary<sup>8</sup> administrators to evaluation procedures.

c. Research for Better Schools presented background information on its Administering for Change Program consisting of three components: Knowledge base; comprehensive planning; and, administrative management.

d. A series of self-contained training packages designed with emphasis on active training by means of programmed instruction, simulations, problem-solving, and field experiences focus on the four related processes of: problem analysis, goal-setting, deriving measurable objectives, and evaluation. Another program developed by the Far West Laboratory, entitled, EDUCATIONAL INFORMATION CONSULTANT training, is described in Section IV.<sup>9</sup>

e. CASEA's instructional materials developed in the three basic areas of (a) system technology, (b) group processes, and (c) information dissemination. CASEA has maintained programs directed to four major concepts of (1) research, (2) development, (3) training, and (4) dissemination.

<sup>8</sup>Center for the Study of Evaluation, UCLA. CSE. Elementary School Evaluation Kit: Needs Assessment. ED 058 673

<sup>9</sup>Banathy, et. al. Design, Development, and Evaluation of a Transportable. (See also: CEDaR. D&R Report. School Organization and Administration. II, #3, 1973)



### 3. Some Needed Alternatives

The Ohio Commission Report<sup>40</sup> concludes that schools can no longer wait for universities to equip themselves for the leadership training job to be done. It is often proposed that new organizations be established that would be free of outmoded approaches and vested interests.

Additionally, when examining the question of improving management practices, one immediately discovers that large pools of knowledge and extensive investments in management development exist in industrial corporations.<sup>41</sup> Although universities have in the past assumed a primary role in the preparation of educational leaders, there are other logical sources for providing the multiple resources to administrators in the public schools. One of the opportunities of which school systems could avail themselves is to examine industry for specialties in management practice. Since school administration is closely linked to public administration, it can draw upon some of the same disciplinary content for its preparation programs.<sup>42</sup>

<sup>40</sup> Ohio Commission, op. cit.

<sup>41</sup> For example, Academy for Educational Development, Inc., ED 071 609. "The Contributions of Business Management to Higher Education Management," Washington, D.C., November, 1972.

<sup>42</sup> To test this concept, a questionnaire was prepared for the Decision Seminar that asked participants to rank order the management functions across educational, industrial, and governmental applications. (See Section VI).

The American Management Association has investigated the feasibility of utilizing business management principles within educational institutions and concluded that "management problems facing educational agencies and institutions are analogous to those facing business and industrial enterprises."<sup>43</sup>

Farquhar cites recent evidence suggesting that superintendents are being exposed to content from business and public administration.<sup>44</sup> He also indicates a need for cooperation between universities and other agencies that can provide educational programs and that needs in educational management can be met by other organizations external to the university.

Erwin Miklos, writing in "Training in Common for Educational, Public, and Business Administration,"<sup>45</sup> has described several programs that provide such training. Workshops have been offered by management groups that include attorneys, industrial engineers, and business management personnel. Snyder<sup>46</sup> supports this trend since there are significant common phenomena which cut across the institutional/organizational realms...and the time is right to design integrated courses of advanced study which would serve as preparation for

<sup>43</sup> ED 072 543. Chabotar and Montgomery. Second Year Evaluation of AMA Program. (See also:ED 060 552)

R. Klawuhn and A. Basso, "Adapting and Testing Business Management Development Programs for Educational Administrators," Final Report. New York: American Management Association, 1972.

<sup>44</sup>Farquhar, op. cit.

<sup>45</sup>Miklos reviews recent developments citing networks that are being woven among educational, business and various public agencies, pointing up some of the benefits as well as the constraints to this type of inter-institutional cooperation. (ED 069 016. One of a series of booklets prepared by ERIC/CEM-UCEA in its State of the Knowledge Series. #17.)

<sup>46</sup>R. Snyder. "The Preparation of Educational Administrators: Some Problems Revisited in the Context of Establishing a New Graduate School of Administration." cited by Farquhar and Piele, op. cit. page 19.

a variety of future careers in a variety of institutional settings.

The extensive bibliographical search, presented in Volume II, reflects these processes and practices for developing new delivery systems to meet "in-common" needs.

## 1. SUMMARY

In the transformation process employed, the researchers approximated the following steps:

### 1. Selection

The researchers make choices selecting appropriate information from the search strategy to be included or excluded from the collection. The researchers screen the information making final judgments as to what to include in the package. Two primary factors are considered here:

- a. the limitations of the available information system (not a problem when 5,583 studies are retrieved); and,
- b. the level of expertise of the client's familiarity with the topic area.

### 2. Organization

The researchers decide how to arrange the selected information in order to best suit the client's purposes. Information is categorized according to systematic, orderly schemes. In Volume II, this is represented by a topical bibliography (Sections A, B, and C) with an author index and an institution index so that the EMDC personnel can examine information on specific sub-problems.

### 3. Summarization

The information in Volume I has been compacted and condensed so that the EMDC staff can gain a quick perspective on the contents of Volume II and the nature of the documents selected. The bibliographic sections A and B in Volume II present complete abstracts since these are determined to be the most helpful documents. Category C in Volume II cites document titles that are related to major concepts and functions of educational management. The search using the descriptors "educational management," and "management education," retrieved these documents and they were subsequently deemed relevant by the research staff.

### 4. Synthesis

Documents having been analyzed, reviewed, and evaluated, implications are derived from the retrieved data. This process requires organization and summarization steps as precursors. Included in the bibliographic sections also are analysis and synthesis documents prepared by other major information centers including the ERIC clearinghouses and such organizationa as CASEA.

Since the EMDC's require in-depth information from the search, the decision was made to include quantitative information. The EMDC staffs will probably prefer to examine information containing original data and descriptions of methodology, so in-depth research materials and original sources are included in the bibliographic section of this report. The amount of time the EMDC staffs have to review the materials is limited, and this was taken into consideration in preparation of this final report. However, the quantity of studies still remains quite large.

The quantity of information pertaining to educational management concepts is immediately evident upon a cursory review of Volume II. And yet, this study does not profess to contain a complete listing of all works on the topic of educational management. In addition to the number of citations in the bibliographical sections, the sheer volume of information is evidenced by the institution and author indexes with so very many organizations and individuals expressing interest in this area of management development. The depth and quantity of the information sources also places constraints upon the format of the report. Every attempt was made to include bibliographies, lists of sources of information such as texts, periodicals, journal articles, and other documents to present an extensive, comprehensive search. The information in Volume II leads, then, to other relevant materials through topical and annotated bibliographies.

The inherent assumptions of Volume I are primarily derived from the literature search and the Decision Seminar and result from the present status of the information study and the state of the art in educational management. The ultimate synthesis of this comprehensive literature and practices search, however, is left to the user. Synthesizing the literature should be localized by clients/users of the information system in accordance with their individualized purposes and goals. The purpose of this report is to organize materials and prepare them for review by the staffs of the various EMDC's. The report, then, offers alternatives and, by intent, leaves the decision-making to the client. The

rationale for this judgement is that only the client himself has the more complete knowledge of his own requirements and is thus in the best position to pass judgment to the ultimate relevance of the documents compiled.

#### 5. Some General Conclusions.

Against the background of the information explosion, some general impressions emerge as common threads:

- a. The clarification of management skills and behaviors (in terms of functions) is a necessary step since there appears to be much difficulty in demarking concept relationships and terms.
- b. The training of educational managers is lacking a focus that would examine "management functions" from a systematic, integrated, point of view.
- c. The literature ranges from the highly general, to the highly technical; there is a heavy weighting on cognitive and informational studies and very little dealing with problem-solving and other pragmatic issues.
- d. Management development programs need to be identified and/or created that would be systematically defined and competency-based in light of management functions, behaviors, and skills.

These impressions, as well as the researchers' experience and knowledge of strengths and weaknesses of management development programs, resulted in the emerging concept of the EMDC and the Network Concept presented in Section III of this study.

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**TABLE V-3**

<b>Descriptors</b>	<b>Number of Postings *</b>
<b>Management Education</b>	<b>327</b>
<b>Educational Planning</b>	<b>2,216</b>
<b>Educational Administration</b>	<b>1,269</b>
<b>Management Information Systems</b>	<b>139</b>
<b>Educational Change or Innovation and Management Education</b>	<b>721</b>
<b>Educational Change or Innovation and Superintendents</b>	<b>7</b>
<b>Superintendents or Principals</b>	<b>733</b>
<b>Superintendents or Principals and Administrator Education</b>	<b>19</b>
<b>Management Development and Superintendents or Principals</b>	<b>2</b>
<b>Management Development</b>	<b>439</b>

\* This number indicates documents entered in ERIC through Second Quarter, 1973.

TABLE V-3, cont.

Descriptors	Number of Postings
Management Education or Educational Administration and Evaluation	54
Management Education or Educational Administration and Evaluation and NCT Teacher Evaluation	53
Management Education or Educational Administration and Planning	93
Management Education or Educational Administration and Organization	50
Management Education or Educational Administration and Decision Making	130
Management Education or Educational Administration and Coordination	4
Management Education or Educational Administration and Motivation	17
Management Education or Educational Administration and Perception	5

TABLE V-3, cont.

Descriptors	Number of Postings
Leadership	535
Management Development and Leadership	14
Leadership Training	653
Superintendents	91
Superintendents and Management Development	1
Problem Solving	1,865
Problem Solving and Management Education	9
Management Education and Educational Planning	8
Management Development and Leadership Training	38
Systems Analysis and Management Education or Educational Planning	108
Systems Analysis and Management Education	3



TABLE V-3, cont.

Descriptors	Number of Postings
Management Education or Educational Administration and Program Planning	58
Management Education or Educational Administration and Resource Allocations	37
Management Education or Educational Administration and Administrator Responsibility	35
Management Education or Educational Administration and Communication (Thought Transfer)	35

SECTION VI

DECISION SEMINAR

## A. INTRODUCTION

As part of the study funded by the Institute for the Development of Educational Activities of the Charles F. Kettering Foundation, a Seminar was held at the Merrimack Education Center, Chelmsford, Mass., on July 12, 1973.

Participating in the Seminar were the following:<sup>1</sup>

Dr. Leslie Bernal, Merrimack Education Center  
Mr. Thomas Clemens, National Institute of Education  
Mr. Brian Estrada, Institute for the Development  
of Educational Activities  
Dr. Ronald Havelock, University of Michigan  
Dr. Richard Lavin, Merrimack Education Center,  
(Study Director)  
Dr. Donald Meals, Arthur D. Little, Inc.  
Dr. Treadway Parker, American Management Association  
Dr. Francis Pilecki, Merrimack Education Center  
Dr. Thomas Rivard, Chelmsford (Ma.) Public Schools  
Ms. Jean Sanders, Merrimack Education Center,  
(Study Staff)  
Dr. Kenneth Seifert, Andover (Ma.) Public Schools  
Dr. Charles Willis, Institute for the Development of  
Educational Activities

Mr. Bob LeRosa, Arthur D. Little, Inc., was present as data analyst. Two seminar informants included Mr. Edward Malott, American Management Association, and Dr. Richard Snyder, Mershon Center.

<sup>1</sup>A listing including addresses of participants is provided in Appendix D.

## B. PURPOSE

The Merrimack Education Center was funded to conduct a detailed search of both literature and successful practices in the field of educational management. In addition, the Center's responsibility in this study included the design of an interface system between the proposed Educational Management Development Centers, to be established by the Kettering Foundation, and the researchers, developers, and implementors of successful practices in the field.

The Seminar was held by the Center in order to elicit the participants' assistance toward synthesizing the results of the information search to date as these results relate especially to educational management. In addition, it was anticipated that these representatives from a wide range of service sectors would provide new insights which the staff might apply to the implementation of this study.

## C. PROCEDURES

Prior to the day of the Seminar, participants were sent a worksheet, [Table VI-1], which provided a column of the functions of educational management. This listing provided a series of terms, not necessarily discrete, which was derived from the literature search.<sup>2</sup> In Column A, participants were invited to write in up to three functions not listed which they perceived should be included. The second columnar entries (Column B) were spaces for identifying three to five descriptors of skills and/or behaviors relevant to each function. [See Table VI-1]

<sup>2</sup>See Overview

**INSTRUCTIONS FOR TABLE VI-1 - Function Skill Relationships**

In the literature on educational management various concepts, elements, and functions continually emerge. We are interested in your judgment in considering the management skills necessary to perform within the educational environment.

In this simple instrument, our attempt is to provide a listing of functions culled from the literature. You are asked to list appropriate skills with these identified areas. We would like you to consider the skills of management in relationship to the specific functions selected and listed in Column A of Table I.

**Directions;**

In Column A, seven functions are listed. Please list three to five descriptors which you perceive will add meaning to the functions.

**EXAMPLE:**

**Column A - Functions**

**Column B - Skills/  
Behaviors etc.**

Decision-making

creating alternatives

interpret data

etc.

\_\_\_\_\_

\_\_\_\_\_

We have selected for each function one example of a skill. The functions and skills we have selected may not be the most important. If you believe they are not related please cross them out.

There are additional spaces in Column A for you to record any other functions that in your judgment are of primary importance and place appropriate descriptors in Column B.

**TABLE VI-1**  
**FUNCTION - SKILL RELATIONSHIPS**

**COLUMN A - FUNCTIONS**

**COLUMN B - SKILLS/BEHAVIORS ETC.**

- |                                  |                         |
|----------------------------------|-------------------------|
| 1. decision-making               | (creating alternatives) |
| 2. programming                   | (prioritizing)          |
| 3. stimulating                   | (setting goals)         |
| 4. coordinating                  | (assigning tasks)       |
| 5. appraising                    | (evaluating)            |
| 6. perceiving                    | (interpreting)          |
| 7. implementing                  | (managing small groups) |
| 8. <i>Other (please specify)</i> |                         |
| 9.                               |                         |
| 10.                              |                         |

Using this adaptation of a Delphi method, the participants' responses were tabulated for frequencies. As a result, the three most commonly added functions were (1) communication, (2) organizing, and (3) planning. Frequencies were also noted for the skill-behavior entries in Column B. The results are shown in Table VI-2. [See Table VI-2]

While there appear to be occasional redundancies of skills/behaviors, among the functions, it is noted that these redundancies are consistent with the fact that, as noted, the functions are not discrete. However, the inherent results of this exercise were such as to provide a tendency towards a specificity of descriptors which appeared to be useful in the categorizing of studies in the literature search.

A second worksheet was used to elicit information from the participants as shown in Table VI-3. [See Table VI-3]

In this exercise participants were requested to prioritize the functions of management, first in education, and next, in both government and industry. The latter was done so as to provide comparative data with the area of educational management. As shown in Table VI-4, the ordering of the functions was performed. The parenthesized figures represent the priority range, high to low, according to the data submitted.

TABLE VI-2

## FUNCTION DESCRIPTORS

1. Decision Making
  - creating alternatives(6)
  - frame implementation plan (5)
  - gather information (4)
  - select from alternatives(3)
  - evaluate alternatives(3)
  - set policy guidelines(3)
  - consider consequences(3)
  - problem solving(2)
  - identify constraints(1)
  - evaluate data(1)
2. Programming
  - prioritizing(7)
  - allocating resources(4)
  - define/set objectives(4)
  - organizing time sequences(4)
  - evaluate personnel resources(2)
  - systematizing(1)
  - charting(1)
  - delegate responsibility(1)
  - establish interrelationships(1)
  - relate primary & secondary Obj.(1)
3. Stimulating
  - motivating(4)
  - influencing(4)
  - stimulate discussion(4)
  - set goals(3)
  - establish intermediate obj.(3)
  - develop staff capabilities(1)
  - interpret objectives(1)
  - disseminate information(1)
  - manage work groups(1)
  - encourage innovation(1)
4. Coordinating
  - assigning tasks(7)
  - integrating(6)
  - linking(4)
  - providing feedback(2)
  - synchronizing(2)
  - establish goals(2)
  - resolve conflicts(2)
  - adjusting objectives(1)
  - establish procedures(1)
  - communication(1)
5. Appraising
  - evaluating(7)
  - measuring(2)
  - determine needs(1)
  - link needs to results(1)
  - consider implications(1)
  - stimulate feedback(1)
  - interpret data(1)
  - assess feedback(1)
  - assess environment(1)
  - define & clarify issues(1)
6. Perceiving
  - interpreting(5)
  - conceptualizing(4)
  - analyzing(2)
  - clarify/focus(2)
  - morphological analysis(2)
  - understanding(1)
  - research(1)
  - identify trends(1)
  - identify expert opinion(1)
  - realizing own perceptual limits(1)
7. Implementing
  - managing small groups(3)
  - commit resources(2)
  - involve staff(2)
  - delegate responsibility(2)
  - commit resources(2)
  - test ideas(1)
  - examine results(1)
  - initiate feedback loop(1)
  - scheduling(1)
  - identify key personnel(1)
8. Communication
  - transmit data
  - collect data
  - clarify information
  - initiate feedback
  - establish lines of communication
9. Organizing
  - divide labor
  - determine goals
  - establish priorities
  - assess resources
  - develop resources
10. Planning
  - budgeting
  - develop activity matrix
  - anticipate future needs
  - establish priorities



TABLE VI - 3

PRIORITIZING THE FUNCTIONS OF MANAGEMENT

We are interested in how you perceive the importance of each of the functions listed below for effective management.

Directions: We would like you to assign a rank order of importance for the 10 functions.

1 = the most important function

10 = the least important function

For purposes of assigning ranks, assume functions are as you defined them in Table I by the skills you listed.

Cumulative Ranks - Range in Parentheses

	Education	Government	Industry
FUNCTIONS	RANK ORDER		
Decision making			
Programming			
Stimulating			
Coordinating			
Appraising			
Perceiving			
Implementing			
<u>Communication</u>			
<u>Organizing</u>			
<u>Planning</u>			

TABLE VI - 4

PRIORITIZING THE FUNCTIONS OF MANAGEMENT

We are interested in how you perceive the importance of each of the functions listed below for effective management.

Directions: We would like you to assign a rank order of importance for the 10 functions.

1 = the most important function

10 = the least important function

For purposes of assigning ranks, assume functions are as you defined them in Table I by the skills you listed.

Cumulative Ranks - Range in Parentheses

FUNCTIONS	Education		Government		Industry	
	RANK	ORDER	RANK	ORDER	RANK	ORDER
Decision making	4	(1-8)	5	(2-8)	4	(1-8)
Programming	7	(4-10)	7	(4-10)	7	(3-10)
Stimulating	8	(3-10)	9	(6-10)	10	(2-10)
Coordinating	9	(3-10)	8	(3-10)	8	(3-9)
Appraising	6	(2-10)	6	(2-9)	6	(2-9)
Perceiving	1	(1-9)	2	(1-9)	2	(1-9)
Implementing	10	(5-10)	10	(5-10)	9	(1-10)
<u>Communication</u>	3	(1-8)	1	(1-6)	3	(1-9)
<u>Organizing</u>	5	(3-10)	4	(3-7)	5	(3-10)
<u>Planning</u>	1	(1-7)	3	(1-8)	1	(1-7)

On the high to low scale, the priorities of functions as established by participants were as follows: planning and perceiving, communications, decision-making, organizing, appraising, programming, stimulating, coordinating and implementing. It is noted that there appears to be no significant difference in the priorities of functions assigned to government when compared to education management.

Finally, an exercise was presented, as seen in Table VI-5 in which participants were asked to assign percentages to the various approaches used in the educational manager's training for the functions. Thus, the question presented regarded the relative percentage of each of cognitive-related, skill related, or "other" (viz. value-rated) emphasis in the formal institutional, and in-service training. Then, participants were asked to suggest a desired balance between cognitive-, skill-, and other-related approaches to the training. It should be noted that the participants added a fourth category -- "not at all" -- under both Column A and B. Since the worksheet proved to be more appropriate as an impetus for discussion, and since participants felt that their limited perceptions of such training emphases precluded any more than uncommonly subjective ratings, no mean tabulations were performed.

The overall procedures, as noted above, dealt with the identification of functions, and skills needed in education management, ordering the relative importance of these functions and examining the emphasis used in training of administrators.

TABLE VI-5

IN THE PREPARATION OF EDUCATIONAL MANAGERS, WHAT PERCENTAGE OF THE TOTAL TRAINING EMPHASIS APPEARS TO BE COGNITIVE-RELATED, SKILL-RELATED OR OTHER?

FUNCTION	COLUMN A CURRENT APPROACHES			COLUMN B DESIRED APPROACHES		
	Cognitive	Skill Related	Other	Cognitive	Skill Related	Other
1. Decision Making						
2. Programming						
3. Stimulating						
4. Coordinating						
5. Appraising						
6. Perceiving						
7. Implementing						
8. _____						
9. _____						
10. _____						

Now that you have completed Column A, would you please go back and fill in the percentages for what you believe ought to be the case.

The worksheets were used to collect participant inputs, to summarize these inputs, and to serve as catalysts to discussion of the field. An agenda-item<sup>3</sup> on the "delivery systems" used in management training was used in a complementary manner with Table VI-5.

Minutes of the Seminar were taken, and the "round table discussion" was also tape recorded.

#### D. INFORMATION SUMMARY

Based upon the discussions and worksheets, it is possible to summarize these results.

1. Functions. Although a precise specification of managerial functions may not be possible, there was agreement that such a listing may include the functions as listed in Table VI-4.

Table VI-6 presents this listing of functions in Column A. The functions are listed in order of priority (rank order from Table VI-4) with the most important functions being listed first. Column B presents the highest ranked skill identified for each function in the parentheses. [Taken from Table VI-2]

<sup>3</sup>See Appendix E.

Table VI-6

## PRIORITIZING FUNCTIONS AND SKILLS

Column A Functions	Column B Skills
Planning	(budgeting)
Perceiving	(interpreting)
Communications	(transmitting data)
Decision-making	(creating alternatives)
Organizing	(dividing labor)
Appraising	(evaluating)
Programming	(prioritizing)
Stimulating	(motivating)
Implementing	(managing small groups)

Moreover, there was a consensus that education, industrial, and governmental environments make similar demands on managers. Each of these three environments seem to emphasize the same functions.

Current activities and programs to produce educational managers emphasize methods that produce cognitive rather than behavioral change. This appears to be consistent with the apparently heavy emphasis on cognitive (passive) learning methods as opposed to affective (behavior oriented) learning methods. Skill development and behavior change are seen to be needed emphases in training program rather than heavy emphasis on cognitive development. The members of the Seminar, agreeing upon the importance of both approaches, recommended substantially augmenting affective-behavioral training emphasis.

Finally, it was agreed that both skill and cognitive development are most effective when they can be related to actual experience and can be transferred and applied to the local situation.

2. Implications. Certain implications were derived from the discussions. They are as follows:

a. Management education is continuous. There are several reasons which strongly militate for continuous learning. There appears to be greater reference to a larger theoretical base which is increasingly multidisciplinary. There is a diverse range of quality of graduate courses. Societal and, particularly, local community changes warrant new approaches. The technological revolution has yielded new administrative and instructional methodologies.

b. Programs need a greater emphasis on practice, but require cognitive inputs as well. The lecture approach, offering cognitive emphasis, has a suitability in many learning experiences. Additionally, there should be continuous efforts to use skill-oriented, activity-based learning experiences.

c. Instruction needs to emphasize transfer. Instances were cited where materials designed for one management environment were used in training managers for another field. Assuming that there is a clear learning outcome in the materials, it may also be assumed that transfer to the educational environment may be made effectively.

d. Thus, potential sources of input methods are to be found in industrial and government programs for administrators. A literature search in educational management should not be confined to the literature of the field. Recommendations for seeking out multiple sources are offered in other sections of this paper.

3. Suggested approaches. Relevant to the study at hand, both in the literature search and the interface model, the following approaches were suggested.

a. Regional College of Managers. A peer oriented group, this group of colleagues could take an active and important role in both formal and informal delivery systems for management training.

b. Continuous education experiences. In service programs offering a series of learning modules which could be accomplished in an individualized fashion, would be valuable and should be sought out. An active and effective linkage with an information system should include diagnostic, prescriptive, and regular information service functions.

c. Emphasis on transfer to application of skills. Training should include provisions for management principles to be discovered, experienced, and applied to an appropriate situation.

d. New delivery systems. There is a need to look for multimodal, multimedia delivery systems that can be modified and adapted to meet local needs. These would then be tested in reality environments; here transfer of learning would take place.



e. Inter-systemic information linkers. Concern should be given to the development of institutional frameworks which would facilitate tapping the various capabilities in the "pools of management knowledge." In reference to the emerging Educational Management Development Centers being developed by the C.F. Kettering Foundation care should be taken to insure information exchange among and between centers.

f. Incentives for studying "energy" sources are needed. Reference here is made to the type of energy source which will sustain the linkage-networking of the E.M.D.C.'s. Energy already existing within a system can be diverted to gain a higher multiple. There is also a need to guard against provincialism. Thus, the network should link the remote and the local.

## E. EVALUATION

The primary evaluation of the Decision Seminar seems to rest in the utility of the inputs to the accomplishment of the objectives of the study. This utility can be measured in the application of the collected data to the performance of the task. Certain other data can be seen as useful in evaluating the methods used in eliciting information from participants. These latter may be summarized according to the following subtopics:

1. The Utility of the Worksheets. The exercises provided some valuable insights applicable to the study. Because it effectively involved all participants, the

performance of the exercises and the resultant discussions assured that a wide breadth of opinions would be voiced. The worksheets also permitted these opinions to be integrated and synthesized. The major utility, then, appears to be primarily in providing a common focus on the questions raised.

On the other hand, the approach taken with the worksheets has several significant limitations. One was the lack of common, standardized language, to be used by the participants. This is consonant with the findings from the literature study that there is a large number of descriptors and identifiers relevant to the concept of educational management. These terms are not easily defined, they are often redundant and are certainly not discrete. The purpose of the modified Delphi process, using Table VI-1 as a pre-conference questionnaire, was to indicate the need for clarification of terms that participants might have a common frame of reference when discussing the concepts. Indeed, the problems of terminology are apparent judging from the responses from participants reflected in Table VI-2.

(See page 6)

To the degree that the use of such worksheets was difficult, this in itself was helpful in attempting to establish future validity and reliability. Also, the tendency towards these types of phenomenological data would seem to need a more thorough preparatory rationale. For example, the very lack of prioritizing the functions of management in education, in government, and in industry is

perhaps indicative of the lack of exchange of commonalities in needs, and ultimately, in materials among these sectors.

The validity of the data is questionable because the participants did not represent a large population base, and could not be expected to accurately reflect the point of view of school superintendents as a major target population. Participants felt that their limited perceptions of such training emphases (Table VI-5) precluded any more than uncommonly subjective ratings, and no mean tabulations were performed from this Table. Regardless of the limitations of the worksheets, the exercises were valid and useful for the purpose intended. The exercises communicated to the participants the essence of the problem of dealing with the abstract vocabulary of the management literature and provided insight applicable to the development of a strategy for organizing the literature search. Many of the exercises developed and tested for use in this study can be further refined to lend themselves to application and implementation in the operational E.M.D.C. model.

2. The time allocations for the format as utilized in the Seminar were perhaps inadequate given the potential inputs from a group with such distinguished experience bases. The area of management functions was one that seemed to be hurried at the possible expense of helpful discussion.

3. The recorded discussion seemed to prove to be most valuable in terms of the next steps in this study. As had been anticipated, the participants provided an extraordinary amount of valuable input, and this included both their willingness to participate in the agenda as well as the reluctance of some to complete the worksheets.

#### F. SUMMARY

A seminar was held by the Merrimack Education Center as part of a literature study in the field of educational management. The participants included distinguished representatives from industry, education, and government. The discussion focused on the priorities of identified functions of educational management, on the identification of approaches for training managers, and on attempted categorization of the delivery systems used in training. Worksheets were used as discussion bases for the participants.

The discussion appeared to have high significance in relation to the literature search and categorization being conducted by the study staff. In order for the worksheets to be more significant, a larger population sample is necessary.

The results of the Seminar were seen as to be positively related to the study goals.

A P P E N D I C E S

## ADDENDA

### REFERENCES

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**A P P E N D I X    A**

**BACKGROUND    STATEMENT**

## **BACKGROUND STATEMENT**

The MEC/Kettering study on management development programs in education has been undertaken as a step to a better understanding of how best to improve management in education. An examination of the literature has been underway in an attempt to identify not only what is being done but also what is not being done. To provide any synthesis to this large amount of information requires the expertise and perspectives from a variety of backgrounds in management.

At this stage of the study selected individuals are being invited to assist the project by providing new insights to the problem areas. There are assumptions that are emerging from the data that now require further analysis and judgment.

The focus of the study and the one day decision seminar are aimed at future directions for educational management development. It is anticipated that some specific guidelines will emerge as next steps for the project and as next steps in the implementation stages.

In order to provide a more effective conference, we are asking you to respond at this time to a questionnaire. Directions for this questionnaire are enclosed and you are asked to bring these forms with you when you attend the Decision Seminar on July 12.

An agenda for the Decision Seminar will be forwarded to you just prior to the meeting.



A P P E N D I X    B

QUESTIONNAIRE PACKAGES

**INSTRUCTIONS FOR TABLE VI-1 - Function Skill Relationships**

In the literature on educational management various concepts, elements, and functions continually emerge. We are interested in your judgment in considering the management skills necessary to perform within the educational environment.

In this simple instrument, our attempt is to provide a listing of functions culled from the literature. You are asked to list appropriate skills with these identified areas. We would like you to consider the skills of management in relationship to the specific functions selected and listed in Column A of Table I.

**Directions:**

In Column A, seven functions are listed. Please list three to five descriptors which you perceive will add meaning to the functions.

**EXAMPLE:**

Column A - Functions

Column B - Skills/  
Behaviors etc.

Decision-making

creating alternatives

interpret data

etc.

\_\_\_\_\_

\_\_\_\_\_

We have selected for each function one example of a skill. The functions and skills we have selected may not be the most important. If you believe they are not related please cross them out.

There are additional spaces in Column A for you to record any other functions that in your judgment are of primary importance and place appropriate descriptors in Column B.

**TABLE VI-1**  
**FUNCTION - SKILL RELATIONSHIPS**

**COLUMN A - FUNCTIONS**

**COLUMN B - SKILLS/BEHAVIORS ETC.**

- |                                  |                         |
|----------------------------------|-------------------------|
| 1. decision-making               | (creating alternatives) |
| 2. programming                   | (prioritizing)          |
| 3. stimulating                   | (setting goals)         |
| 4. coordinating                  | (assigning tasks)       |
| 5. appraising                    | (evaluating)            |
| 6. perceiving                    | (interpreting)          |
| 7. implementing                  | (managing small groups) |
| 8. <i>Other (please specify)</i> |                         |
| 9.                               |                         |
| 10.                              |                         |

TABLE VI - 3

PRIORITIZING THE FUNCTIONS OF MANAGEMENT

We are interested in how you perceive the importance of each of the functions listed below for effective management.

Directions: We would like you to assign a rank order of importance for the 10 functions.

- 1 = the most important function
- 10 = the least important function

For purposes of assigning ranks, assume functions are as you defined them in Table I by the skills you listed.

Cumulative Ranks - Range in Parentheses

	Education	Government	Industry
FUNCTIONS	RANK ORDER		
Decision making			
Programming			
Stimulating			
Coordinating			
Appraising			
Perceiving			
Implementing			
<u>Communication</u>			
<u>Organizing</u>			
<u>Planning</u>			

TABLE VI-5

IN THE PREPARATION OF EDUCATIONAL MANAGERS, WHAT PERCENTAGE OF THE TOTAL TRAINING EMPHASIS APPEARS TO BE COGNITIVE-RELATED, SKILL-RELATED OR OTHER?

FUNCTION	COLUMN A CURRENT APPROACHES			COLUMN B DESIRED APPROACHES		
	Cognitive	Skill Related	Other	Cognitive	Skill Related	Other
1. Decision Making						
2. Programming						
3. Stimulating						
4. Coordinating						
5. Appraising						
6. Perceiving						
7. Implementing						
8. _____						
9. _____						
10. _____						

Now that you have completed Column A, would you please go back and fill in the percentages for what you believe ought to be the case.

A P P E N D I X      C

LETTER OF INVITATION TO PARTICIPANTS

in

DECISION SEMINAR

**June 27, 1973**

**Dear**

**Conference plans for the July 12 Decision Seminar are now fairly complete. We would request at this time your assistance in completing the enclosed Table I questionnaire and ask that you bring the completed Table I with you to the conference.**

**Other information enclosed includes a background statement and listing of participants. For our final writing we will need approximately a one page vita and request you forward this to us sometime before the conference.**

**Please do not hesitate to contact us on any questions you might have or assistance you require in making arrangements.**

**Regards,**

**Richard J. Levin  
Executive Director**

**Enclosures  
RJI/kba**

A P P E N D I X    D

PARTICIPANTS IN DECISION SEMINAR



**PARTICIPANTS**  
**DECISION SEMINAR**

**JULY 12, 1973**

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A P P E N D I X E

AGENDA FOR DECISION SEMINAR

# DECISION SEMINAR

July 12, 1973

## AGENDA

- 9:00      **Welcome**
- Background and Rationale
  - Introduction of Participants
  - Seminar Purposes
- 9:30      **Prioritizing the Functions of Educational Management  
(Table II)**
- 10:00     **Synthesis of Data Previously Submitted (Table I)**
- 10:15     **Perceptions of Emphasis in Training Approaches for  
Educational Managers (Table III)**
- Current
  - Desired
- 12:15     **Luncheon**
- 1:45      **Discussion of Delivery System**
- Formats
  - Categorization Potential
  - Organizational Implications
- 4:30      **Summary of Seminar**
- 5:00      **Adjournment**

A P P E N D I X F

CONCEPT PAPER

## **CONCEPT PAPER**

**Developed specifically for  
THE CHARLES F. KETTERING FOUNDATION**

**THE ESTABLISHMENT OF AN EDUCATIONAL MANAGEMENT  
DEVELOPMENT CENTER WITH LINKAGES TO BUSINESS AND  
INDUSTRIAL CORPORATIONS AND ASSOCIATIONS**

*July 12, 1973*

**Richard J. Lavin  
Executive Director  
Merrimack Education Center  
101 Mill Road  
Chelmsford, Massachusetts 01824**

## Concept

The establishment of an Educational Management Development Center with linkages to business and industrial corporations and associations.

## Introduction

Much has been written about management development in education. The end result is a voluminous body of literature which is currently being reviewed for the purpose of establishing a synthesis of the knowledge and practice in educational management. As this feasibility study for Educational Management Development Centers progresses, certain assumptions and insights are emerging. Although they have not been thoroughly tested it is important that these ideas be shared; we are attempting to do so by way of this concept paper.

When examining the question of improving management practices in education one first discovers that large pools of knowledge and extensive investments on management development exist in industrial corporations. Although universities have assumed the primary role in the training of educational leaders, there are other logical sources for providing the multiple resources and services to administrators in the public schools. As Merrimack Education Center pursues the question of how best to improve the training of educational managers it becomes increasingly apparent that an alternative model is possible. The feasibility study presently underway has begun to contrast both university-based and corporate-based models to determine if more investigation should occur on the concept of the corporate/school linkage. This paper suggests that this corporate/school linkage model be established as a viable option.

## Rationale

Some of the assumptions in establishing Educational Management Development Centers that would link to the corporate/business enterprises of the country are outlined as follows:

1. A major investment in management development approaching billions of dollars is presently being expended by corporations.
2. To an important degree, management development functions and concepts, developed in corporate programs, are universally applicable.
3. It appears that there is a large and growing bank of applied knowledge in management development within corporate/business enterprise that is largely untapped.
4. Programs in corporations tend to emphasize effective problem-solving as opposed to theoretical development.
5. Corporations as producers can be linked to the field of education. This would establish a relationship that is beneficial to both parties (public and private).
6. Corporate/school model linkages are potentially cost-effective and capable of being self-sustaining.
7. More effective patterns of linkage will occur when alternative models (i.e., university; corporation; government) are created and then connected through the formation of a cooperative network.

## Objectives

To establish an Educational Management Development Center with linkages to business and industrial corporations and associations would necessitate the following objectives:

1. To adapt the brokerage concept for linking the producer and the consumer.
2. To establish an EMDC that serves as a linking institution.
3. To identify pools of knowledge on management practice for possible adaptation to the field of education.
4. To establish a national network linking Management Development activities.

## Procedures

The accomplishment of the above-stated objectives would be based upon the following procedures:

1. Relationships would be established between the proposed EMDC and the corporate and industrial domain. The emphasis would be to maximize the individual benefits which can accrue from such relationships. Initially, such links would be built with such groups as the American Management Association and the American Banking Institute. The proposed EMDC, proceeding with a client focus, could broker an interface between the resource institution and the individual client or groups of clients.
2. These relationships would be built on a premise of an assessment of client needs prior to the stimulation or initiation of programs, products or services. Such a needs assessment process should be a high priority function for Educational Management Development Centers.<sup>1</sup> While needs assessments are necessary for diagnostic purposes, and since there is a frustration incurred when needs are identified but not fulfilled, the analysis of data would serve as the basis for offerings to clients. These offerings would be derived from programs selected from resource agencies and adapted by the EMDC for use by educational clients.

---

<sup>1</sup>To assess these needs in reference to available management development practices in business and industry would in any case expand the possibilities for offering available or easily adapted management education programs.



*Procedures (continued)*

3. Testing and modification of these programs would follow the initial linking of needs to resources and adaptation. Validated practices could be "packaged" and disseminated as available for use. This "package", whether print materials, people, or other products, would exist for future retrieval, transformation to client needs, and evaluation for effectiveness in problem-solving, reality-based systems.
4. The capability of delivering products and services and evaluating their use in a given client situation would be a function of the proposed EMDC. This capability would be effected on an exchange-economy model. Indeed, one evaluation of the success of this EMDC would be the tendency toward cost-effectiveness as demonstrated by utilization rates.
5. A vital linkage in this concept is not only the triad of client-broker-resource, but the very network of educational management development centers. The network would facilitate an exchange of information, needs, and resources. The potential for a true synergy in improving educational management would be enhanced by such a network. Ultimately, a common bank of data...both needs and resources... a bank built on the initial diversity of approaches to being an EMDC would result in a significant, viable, and powerful source for the amelioration of education.

### Suggested Implications.

Of the many foreseen advantages to the proposed EMDC, are the following implications:

1. A national network of Educational Management Development Centers establishes a previously unparalleled force for action.
2. These are beneficial relationships for all parties concerned. This includes the resource institutions and industries which would find viable new connections to the public sector. Spin-offs include not only enhanced public images but new markets and clues to product development. Clients from the educational sector receive the benefits of tremendous investments in techniques, and these benefits are available at relatively nominal costs.
3. The EMDC would quickly show its potential for operating in the future on a cost-effective and self-sustaining basis.
4. The educational sector would be able to identify, select, test, modify, and finally, implement new management techniques.
5. As a consequence of the management skills noted above, better services to schools and students would be possible through new avenues for innovative methods and practices.
6. Finally, organizations become more adaptive when management techniques and practices facilitate the system's testing of environmental reality and responding to newly identified environmental needs.

A P P E N D I X     G

PROJECT SUMMARY

## CFK PROJECT SUMMARY

July 12, 1973

**TITLE:** SYNTHESIS of KNOWLEDGE and PRACTICE in EDUCATIONAL MANAGEMENT and LEADERSHIP

**PURPOSE:** This project is directed towards a detailed literature search and survey of programs and practices that might be useful within Educational Management Development Centers. This study will provide a means for keeping these Centers abreast of developments from other agencies/institutions/organizations working to improve educational management.

**ABSTRACT:** A systematic effort to review the literature on competency based management programs has been initiated. The literature is reviewed for selected processes (generic skills) applicable to the role of "superintendent," or educational manager (including middle management).

From a literature search initiated through the ERIC data base, projects relevant to the broad spectrum of educational administration/management, management development, and management systems have been retrieved.

This survey and synthesis of the literature has identified programs that can be useful in meeting needs of educational managers for improving skills. Existing programs from institutions outside of education are also reviewed and examined for possible adaptation to the field of education.

**PRESENT CONCERNS:**

The project has as a major purpose the eventual goal of intervention strategies which will engage local educational agencies and administrators in a systematic search for better management structures and processes. The present project will provide current data to the existing EMDC's in their developmental efforts. Additionally, a model will be recommended for establishing a proposed linkage network for centers working towards the goal of improving management practices.

The ERIC system data base is a valuable source of information for this project. The Decision Seminar planned for July 12 will also provide valuable information obtained directly from key individuals involved in the concept of educational management development.

**IMPLICATIONS:**

From the conference, visitations, and telephone/communication interface, theories and practices identified will be analyzed and evaluated according to the criteria established as part of this study. Data provided, together with charts, matrices and the like that are developed will be synthesized into a viable reporting format.

A P P E N D I X H .

MEC - THE EDUCATIONAL MIDDLEMAN

# MEC – the educational middleman

Merrimack Education Center serves school districts as planner, researcher and catalyst

DR. RICHARD J. LAVIN  
Executive Director – MEC

The citizens of Merrimack Valley are justifiably proud of MEC . . . an educational collaborative which was singled out as a model by the Massachusetts Business Task Force for School Management.

MEC, headquartered in rolling farm country outside the town of Chelmsford, is the Merrimack Education Center, a vehicle for service, change and innovation within the educational structure.

It was established in 1968 by a Title III grant under the Elementary and Secondary Education Acts (ESEA) of 1965 and is an example of Title III's purpose to finance grass roots projects at the level of the local community. To do this, the program provides venture capital to stimulate creativity in education.

More than 150 such projects have been started in Massachusetts since the beginning of Title III in 1966 and a new group of 40 is being initiated this year. The ESEA Title III Advisory Council and Title III staff of the Massachusetts Department of Education will shortly recommend local education agencies to Commissioner of Education Neil V. Sullivan for disbursement of funds from the nearly-\$3 million program.

## Businessmen applauded

MEC provides an outstanding pattern of what the Title III program can do. The center's contributions to education were recently applauded by the Bay State Task Force, businessmen who were studying the business practices of the state's schools. They cited MEC as a "highly successful cooperative venture" of a type that should be encouraged.

These businessmen, recruited from the state's industries by the Associated Industries of Massachusetts, submitted their report to the Massachusetts Advisory Council on Education last September.

The Task Force recommended the establishment of many more centers like MEC. Such centers, said the Task



Mitre Corporation is cooperating with MEC by making its computer available for research. Standing at the computer are: (left to right) Dr. Richard J. Lavin, and Mitre executives Eugene Lundberg, Charles Curter and John Evans.

Force, should be non-profit organizations that service a number of contiguous school districts. Their purpose would be to provide educational services that are out of reach of the smaller school systems in the center's area.

Services include long-range planning assistance, cooperative endeavors between schools and information systems design. They include evaluation of the many functions that are being provided schools with contract services. They encompass supportive services to teachers, parents, and administrators. They also involve innovative programs, summer activities, advice on program budgeting, and the development of special programs to assist local districts in attracting outside funding support.

## Twenty communities

The center is a cooperative of 20 contiguous communities in the Merrimack Valley comprising approximately 100,000 students. It is one of the largest cooperative centers in Massachusetts. It encompasses the cities and towns of Andover, Bedford, Billerica, Chelmsford, Dracut, Dunstable, Grotton, Lawrence, Littleton, Methuen, North Andover, Pepperell, Tewksbury, Tyngsboro, Westford, Wilmington, Ashby, Townsend, Ayer and Carlisle.

MEC has developed a style of operation that is particularly well suited to the educational environment. The center is neither supplier nor consumer but the middleman — much as the middleman functions in business — in short, an educational broker. It offers its local boards easy access to the total educational resources of the community. These resources may be in the universities, in government or in industry. When a local board asks for help, the center assists in defining the need. Then it searches out re-

# Industry

MARCH 1971

sources from the traditional suppliers, and arranges a judicious match between the two.

Thus the community has access through the center to educational resources beyond their individual capabilities, and it gets them on a cost-effective basis. The center also provides a mechanism whereby local districts can band together to achieve economies of scale in the purchasing of services. And it provides these things without the sacrifice of local autonomy.

Organizationally, MEC is an independent operation administered by an executive board of 12 superintendents. The town of Chelmsford serves as the local educational agency for the center project. The center's professionals have had broad experience in the education field, both as school administrators and in educational consulting. The center is operated intentionally lean. This constrains it to restrict its role to that of intermediary and catalyst, and prevents it from becoming bureaucratic in nature.

## Free to be objective

MEC has proven to be an excellent organizational match to the districts it serves. Essentially a grass roots organization, it mediates change from the bottom up rather than from the top down. It is close enough to its clients to make an effective transfer of information possible with local schools. Yet, being independent of the individual districts, it is in a position to offer objective evaluations, and free enough



MEC also provides tutorial training for housewives such as Janet Givens (seated center). Mrs. Givens works with a first grade class at Westlands Elementary School, Chelmsford, under the guidance of teacher Myrtle Sykes.

to be able to create innovative solutions to local problems. And its solutions are easy for local school personnel to accept, since MEC, being outside the formal school organization, offers no threat to persons in it.

The center does not tend to induce educational homogeneity. In fact, the contrary has been the case. At a time when the tax burden has become just that, the districts are able to pilot and put into effect new programs with a limited financial investment. Each district is able to maintain its own individuality through the customized efforts of MEC.

The professional standing of the center is enhanced by its excellent relations with neighboring institutions of higher learning. Boston College and Fitchburg State College grant credit for courses taken at MEC; Boston University and Boston College participate in Administrative Intern programs; the University of Massachusetts participates in the Teacher Intern Program.

The local districts have a variety of unmet needs. These are reflected in the requests made of the center. The following center programs, developed in response to such requests, are illustrative:

- A Summer Instructional Improvement Institute for 60 elementary level teachers and principals,
- A Summer Institute for teachers of the perceptually handicapped,
- An Administrative Seminar on Planning and Programming,
- Assistance to regional subject-oriented professional groups, such as organizations of social studies or science teachers.
- A regional consulting service for development of early childhood programs.

- A regional information-subscription system.

These programs are all widely used. For example, a recent program on administration was attended by 36 principals, superintendents, and assistant superintendents. A Learning Disabilities Workshop attracted 110 teachers. The Early Childhood Workshop drew 70 participants, one-fourth of them parents, the rest teachers. Altogether in a recent six-month period, a total of 82 school committee members, 116 administrators, 324 teachers, and 3,300 students were involved in center activities. A computer guidance system also was evaluated with over 4,000 students.

#### Mothers as aides

In still another program, MEC is training 44 of the area's mothers as instructional aides in the area of handicapped education. These mothers will work in classrooms as assistants to the teachers in this critical but underdeveloped area.

MEC has also kept close ties with industry since its inception, having cooperated, for instance, with Raytheon Company and MITRE Corporation. The latter is currently making available its Model 360 IBM computer for the center's new literature search program.

The literature search capability is part of the center's microfiche program. The center has 3,000,000 pages of microfiche on what's happening in schools today. Most pertinent research is there. If a teacher sees a reference to a report in a professional journal, that report is likely to be available from the center's microfiche file.

But suppose the teacher isn't aware of what studies are available in a particular field, but needs them neverthe-

less. Three million pages is a lot to look through. In fact, it can't be done by hand. A computer is needed.

This is where MITRE's computer comes in. The computer program for performing the literature search was prepared in Washington through Dr. Lee Burchinal of the National Center for Communication — part of the United States Office of Education — and made available to MEC. Tapes list every article present in the microfiche system, by author, title, and subject matter, and they contain an abstract of the article. A literature search performed by computer can accomplish in minutes a job which, by hand, would take weeks and not be accomplished as well.

#### Stronger industry ties

MEC looks for its industry ties to broaden. The center is closer to the grass roots of education than most companies. It could therefore develop educational products for which there exists a known need — an improvement over the practice of developing a product first and looking for a market later. The center's organizational structure lends itself to such a cooperative venture, since it is not-for-profit and in the public domain, thereby offering a possible tax advantage for participating companies. It has other common interests with industry, particularly in the field of occupational education and training. Its posture as a catalyst for change, and as a planner for the future, could stand industry in good stead in times of shifting priorities, as industry undergoes rapid changes in emphasis, and as its manpower pool develops chronic obsolescence, and with it the need for continuous retraining.

By any measure, the center has discovered for itself an ecological niche in the educational biosphere and has settled comfortably into it. It is a visible, viable entity for the present. Its future is being formed. Funded under Title III for the 1970-1971 year, it will not have to assess its member districts heavily during that period. One of the more intriguing possibilities is that it will become a training center for educators intent on establishing similar centers in other parts of the country. Local communities are picking up part of the funding. Other agencies in and out of the state have added their endorsement to its many endeavors.

MEC is not an answer. It is a means to an answer. In the spirit of the Title III program, it provides options for change. Its services offer a choice. Its goal is to help school systems achieve their aspirations.



A P P E N D I X     I

SYSTEM DIMENSIONS "ABCD APPROACH"

System Dimension	Level of Complexity	Characteristics
Organizational Context	D	Organizational Development Reorganization Organizational Interface Inter-Governmental (state, federal, local) Legislative Policy ---Goals College/Community Mental Health (Education; Public Health, etc.) Corporations; Private; Public Home-School Communication
Management Decision-Making Processes	C	Assessment and Evaluation Management Development (PPBS; MBO) Research Methodology Staffing Motivating Value Clarification
Human Resources	B	Teacher Characteristics and Competencies (cognitive; affective) Teacher Education (pre-service; in-service) Paraprofessionals Differentiated Staffing (volunteers; paid aides) Parent Training Systems
Operational Environment	A	Business Practices Equipment and Materials Curriculum Learning Theory and Processes Facilities Teacher Resource Materials Educational Objectives and Outcomes Instructional Procedures Learning Programs (includes diagnosis and assessment) Facilitating Climate

A P P E N D I X J

BIBLIOGRAPHICAL FORMAT

A P P E N D I X J

BIBLIOGRAPHICAL FORMAT

Bibliographic citations in Volume II include the following information:

- TI - Title
- AU - Author
- IN/SO - Institution/Source
- AB - Abstract

The bibliographic citation includes an ERIC Document accession number (ED numbers). When ordering ERIC microfiche documents include this ED number in your request.

A P P E N D I X      K

GLOSSARY

## GLOSSARY

- Ad Hoc Center**                    The Ad Hoc Center is established as a vehicle for accomplishing the objectives specified by "networking."
- Administration**                Management and management-related processes in administering various types of school plants and educational organizations.
- Bank**                              A storage mechanism for gaining access to information resources easily.
- Broker**                            The broker extends himself into the potential user community and responds positively to inputs received from that community regarding needs by linking with resources that meet the needs.
- CFK**                                Charles F. Kettering Foundation. Dayton, Ohio. The educational affiliate of CFK is I/D/E/A.
- Collaborative**                  A collaborative of Local Education Agencies is formed in order to achieve more than any one community or school district could ever hope to achieve alone.
- Consumer**                        Schalock describes the consumer as . "more active, capable-of-demanding-accountability"; the buyers of behavioral and social technology for use in education.
- Decision Seminar**              A conference designed to elicit participants' assistance toward synthesizing the results of the information search. (July 12, 1973) See Appendix D for list of participants.
- EIC**                                Educational Information Consultant... Concept and training program developed by the Far West Laboratory for Educational Research and Development. The EIC is responsible for the flow of information on which educational renewal, innovation, and practice is based.

**EMDC** Educational Management Development Center...links the resources of university people and other experienced managers with the management improvement efforts in local school districts.

**ERIC** Educational Resources Information Center, a system for providing ready access to educational literature. ERIC is located within NIE - National Institute of Education.

**Exchange Economy** Beginning with the market, consumers, and clients, the broker must provide delivery of customer satisfactions. The product is delivered, or "bought," thus providing feedback.

**Functions** Those activities, skills, and behaviors requisite for success in school system management.

**Hard-Copy** Microfiche documents are transformed into paper reproduction which is called "hard-copy."

**I/D/E/A** Institute for Development of Educational Activities, Inc. I/D/E/A is the educational research agency of the Charles F. Kettering Foundation. Organized in 1965, I/D/E/A is now an active force for improving elementary and secondary education.

**LINKER** Local Information Network of Knowledge for Educational Renewal - a MEC program funded by NCEC.

**Management Development** Broad educational program to increase personal, interpersonal, managerial, and technical competencies of managers.

**Management Education** Educational program to increase managerial and supervisory skills of managers and management trainees.

**MIS** Management Information Systems. Information systems technology provides a broad perspective for viewing organizational and educational needs. Modern management theory demands the collection and manipulation of large amounts of information.

**Marginality** Refers to the In-Betweener position of the linking role - not having identity in an intermediate position of the linker; the role of the knowledge linker or "broker" has not been institutionalized.

**MEC** Merrimack Education Center - Serving 20 contiguous communities in Massachusetts with 100,000 students, MEC is a vehicle for educational collaboration, service, and innovation. Established by Title III funds in 1968, it continues through the support of its membership.

**Microfiche** Is a 4" x 6" acetate sheet showing up to 98 pages, each representing an 8 1/2" x 11" sheet of paper. Microfiche is read on a microfiche viewer which enlarges the pages.

**NCEC** National Center for Educational Communication. A national dissemination effort. Now included in the newly established National Institute of Education (NIE).

**Network** The physical network is a structure or combination of parts capable of establishing communication channels and patterns of information/resource exchange.

**Overload** Described as too much information to handle, too many people to get it from; the "future shock" of the information explosion...

**PPBS** Planning, Programming, Budgeting Systems. A set of interrelated organizational activities (including evaluation) that provides significant information for decision-making.

**Regional Laboratories** Regional Educational Labs are private, non-profit corporations which are designed to take the products of basic research and develop programs linking research with practice.

**RIE** Research In Education...a monthly journal of educational research document abstracts.



**Resources**

In an information network, "resources" refers to a dynamic service function that includes an almost unlimited combination of materials, services, and expertise.

**SDI**

Selective Dissemination of Information...information is targeted to the particular needs of the client/practitioner.

**Successful Practice**

...methods or "products" that have been developed, tested and can be replicated and modified for another environment.

**USER/Practitioner Client**

The client or the recipient of the information. In a Market model, this forces consideration of who the "market" really is. The market is not primarily researchers and developers operating in the field of education. The user is the ultimate consumer or purchaser.

SYNTHESIS of KNOWLEDGE and PRACTICE

in

EDUCATIONAL MANAGEMENT and LEADERSHIP

VOLUME II

Prepared for:

CHARLES F. KETTERING FOUNDATION

Principal Investigator: Richard J. Lavin, Ed.D.

MERRIMACK EDUCATION CENTER

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Chelmsford, Massachusetts 01824

August, 1973

EA 006 495

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Scope. The search for relevant information on educational management took us from professional journals, to popular business magazines and training development journals, to erudite publications from professional organizations, and various texts covering the topic from diverse vantage points. Thousands of titles were involved.

The quantity of documents, and the degree to which the documents are applicable to the study of educational management led to the format of Volume II. This Volume includes a comprehensive file of all ERIC materials relevant to educational management from the beginning of the ERIC system through July of 1973. Additionally, a supportive library search using a variety of indexes was initiated; texts and other non-ERIC materials (materials not apt to be noted in the ERIC data base) were identified by the researchers of the study staff. The scope of this Volume, then, includes all ERIC and non-ERIC documents related to educational management issues associated with school system operations and identified during the time span of this study.

Specifically excluded were documents that primarily dealt with support programs and services such as transportation, facilities maintenance, food services, insurance/health programs, and the like. A listing of descriptors and identifiers (terms and keywords) used in the study can be found in Volume I of this report.

Within this scope and purpose, the planning and implementation of the study on educational management was conducted over a six-months period from January, 1973 through July, 1973. MEC has conducted a series of searches of the files of the Educational Resource Information Center (ERIC) system. The extent of the information relevant to the area of educational management in the ERIC file in terms of (1) management training programs, (2) information sources and resources, and (3) the specific functions of educational managers led to the compilation of this phase of the study in Volume II. This volume compiles abstracts and an index of the studies selected for the various sub-topics within educational management.

Organization of Report. It has already been noted that this study consists of two major volumes. Volume I explains the rationale and philosophy guiding the literature search. It details implications and recommendations garnered from the extensive and comprehensive review of educational

management. The compilation of bibliographical data in this Volume (Volume II) includes a listing of documents which were acquired by the various ERIC Clearinghouses in the ERIC network and subsequently announced in RESEARCH in EDUCATION. Abstracts and bibliographical citations related to educational management were also obtained from CURRENT INDEX TO JOURNALS IN EDUCATION, which indexes journal articles. This material is organized into three major sections: Section A - Training Programs; Section B - Information Sources and Resources; and Section C - Categorical Information. Additional bibliographical data is presented in Volume I in the section entitled, "References" and the section on "Networking." These major bibliographical sections served as the primary reference materials for the implications, the recommendations, and the development of the networking concept, all of which appear in Volume I. Also, the literature study has provided insight into the concepts proposed in the section of Volume I entitled, "Decision Seminar."

Organization of Bibliographical Data. Section A provides the citations for TRAINING PROGRAMS. This section of the study cites documents beginning in the late 1960's and continuing through the spring quarter of 1973, covering a wide range of materials on educational management concepts. Additionally, many of these documents have extensive bibliographies which will aid in a further, exhaustive search of the literature on the concept of educational management development. For example, Philip Piele in "New Programs for Training School Administrators,"<sup>1</sup> provides a bibliography of 69 studies.

The study staff selected these documents for Section A since it was decided that they are worthy of further analysis and review by the Educational Management Development Centers. The analysis and review is limited to those studies which are potentially of immediate value to persons planning and organizing training programs in the area of educational management. In Volume I, the section on implications and recommendations, it is advised that the EMDC's make a concerted effort to seek out other resources and models which may lie outside the traditional educational/university based literature on practices and procedures.

Section B, Information Sources and Resources, also provides abstracts since these studies are deemed worthy of further analysis and review by the EMDC's. Every attempt has been made to compile in this bibliographic format relevant resources for utilization in development of training programs for educational managers. Documents that provide information pertinent to this purpose are provided in Section B. From the review of 5,583 potential sources identified by the computer-generated search, many key studies have been revealed which are integrated into this final report to the Charles F. Kettering Foundation. Section C of Volume II cites author, title, and accession number for other pertinent studies dealing with the functions of educational managers. Two additional categories, references used in writing this report and references on networking, have been placed in Volume I appendices since they deal directly with the implications and recommendations formulated during the span of this study.

Appendix A, provides information on the ERIC system. The ERIC system was selected as a prime source of information in this study for the following reasons:

1. There is already a wealth of information on recent studies/practices and products in the ERIC bank.
2. As managers and EMDC's begin to work with vast amounts of information there must be at the same time the development of an advanced system of retrieval and selection. ERIC has that potential.
3. Local information/practices and the like will require the latest technologies in collecting, storing, and disseminating through exchanges.
4. In the analysis of the study information, there appears to be much "reinventing of the wheel" and the need for improved dissemination networks is obvious.
5. The ERIC format provides the user a systematic process for up-dating information.

Additional information on the ERIC system is found in Appendix A of this Volume.

---

<sup>1</sup> ED 043 119

**S E C T I O N   A**

**Training Programs**





ED 069 016

AU Miklos, Erwin  
TI Training-In-Common for Education, Public, and Business Administrators. ERIC/CEM-UCEA Series on Administrator Preparation. ERIC/CEM State-of-the-Knowledge Series, Number Seventeen. UCEA Monograph Series, Number Four.  
IN Oregon Univ., Eugene. ERIC Clearinghouse on Educational Management.  
IN University Council for Educational Administration, Columbus, Ohio.

AB In this monograph, the author assesses the progress that has been made toward the development of in-common programs for preparing administrators to serve in a variety of institutional settings. After outlining the assumptions, rationales, and strategies behind attempts to institute interdisciplinary administrator training programs, the author describes in detail several Canadian and American programs that provide such training. Although some of the programs described consist only of shared classes and seminars, others entail a completely integrated program of experiences. The author describes several sources of resistance to the adoption of Training-In-Common and shows how these resistive forces must be overcome if the implementation of in-common training programs is to be accelerated. An extensive bibliography is included. (Author/DN)

ED 069 015

AU Lutz, Frank W.; Ferrante, Reynolds  
TI Emergent Practices in the Continuing Education of School Administrators. ERIC/CEM-UCEA Series on Administrator Preparation. ERIC/CEM State-Of-The-Knowledge Series, Number Sixteen. UCEA Monograph Series, Number Three.  
IN Oregon Univ., Eugene. ERIC Clearinghouse on Educational Management.  
IN University Council for Educational Administration, Columbus, Ohio.

AB In this monograph, the authors describe the shortcomings of traditional approaches to continuing education of administrators and examine the extent to which innovations are being attempted in present practices. The authors note that, in print and in practice, continuing education of administrators has failed to develop to the extent that it can be described as in the beginning stages of a science and that truly innovative programs are lacking in current practice. The authors then propose a comprehensive process for planning, implementing, and evaluating programs for the continuing education of administrators. They argue that a planned, systematic, and continuous administrator education program is basic to the solution of the critical problems facing education. A bibliography is included. (Author/DN)

ED 069 013

AU Wynn, Richard  
TI Unconventional Methods and Materials for Preparing Educational Administrators. ERIC/CEM-UCEA Series on Administrator Preparation, ERIC/CEM State-Of-The-Knowledge Series, Number Fifteen. UCEA Monograph Series, Number Two.  
IN Oregon Univ., Eugene. ERIC Clearinghouse on Educational Management.  
IN University Council for Educational Administration, Columbus, Ohio.

AB In this monograph, the author describes the variety of new and innovative instructional methods and materials being used to prepare educational administrators. Because the subject is new and the nomenclature surrounding it imprecise, the author defines his terms. An outline of the history of unconventional instructional methods and the rationale for their development are presented. The author focuses on those methods in current use, such as laboratory training, case methods, simulation, games, and independent study. An extensive bibliography is included. (Author/DN)

ED 068 117

AU Dougharty, Lawrence; Haggart, Sue  
TI An Information System for Educational Management, Vol. 6: An In-Service Training Program.  
IN Rand Corp., Santa Monica, Calif.

AB The information system for the Los Angeles City School District has been designed to provide relevant information in a readily available and concise manner. Equally important to the effectiveness of the information system, however, is that the decision-maker have the capability to actually use the information. This report describes an in-service training program that will help insure that the decisionmaker has the necessary tools to process the information provided by the system in a productive manner. The course content of the program covers the basic concepts and tools needed in order to use the information generated. Special emphasis is given to an orientation to the information system in terms of its inputs and outputs. A format for conducting the in-service training program is suggested. This format includes the time period of instruction, the method, the materials and the nature of the participants and the staff. (other reports in this series are: LI003908 through 003911).  
(Author)

ED 067 531

AU Osburn, Jack W., Jr.  
TI Commerce Supervisory Course: Discussion Guide. Conference Leadership.  
IN Department of Commerce, Washington, D.C.

AB This guide discusses recognition of common conference faults, their causes and how to correct them; proper planning for the conference; the use of good conference techniques; better understanding of how to handle conferees. Section Titles are: Why Have A Conference; Planning and Organizing A Conference; Conducting The Conference; Class Exercises in Conference Leadership. A selective bibliography on Conference Leadership is given. (NF)

ED 067 530

- AU McCaw, Edward A.  
TI Commerce Supervisory Course: Discussion Guide.  
Theories of Supervision.  
IN Department of Commerce, Washington, D.C.
- AB The contributions of Frederick W. Taylor, Henri Fayol and Elton Mayo to the development of current concepts of supervisory theory are outlined. Ten newer concepts of management, with graphics, provide the supervisor with an opportunity to formulate his own personal theory. Suggested bibliography for supervisors is given. (Author/NF)

ED 067 529

- AU Bella, Daniel E.  
TI Commerce Supervisory Course: Discussion Guide.  
The Leadership Role.  
IN Department of Commerce, Washington, D.C.
- AB This guide defines and shows the need for leadership; its types and qualities are discussed. Indicators of poor leadership are listed, and suggestions for improvement are given. Synopses of L6MM movie films on "The Challenge of Leadership" and "Styles of Leadership" are presented. Current data conclude that an effective manager is sensitive, flexible, tolerates uncertainty, and behaves according to his own personality and value system. (Author/NF)

ED 065 921

- AU Bergen, J. J., ED.  
TI School Program Accountability. The 1971 Leadership Course for School Principals Lecture Series.  
IN Alberta Univ., Edmonton. Dept. of Educational Administration.
- AB This collection of papers by various authors offers varied comments on (1) A Systems Approach to Accountability, (2) Accountability and PPBES, (3) Program Evaluation, (4) The

Principal's Role in Clinical Supervision, (5) Some Practical Approaches to the Evaluation of Teaching, (6) Teamwork within the School, (7) Differentiated Instruction, (8) The Community School, and (9) A "Learning" System of Education. A related document, EA 004 487, provides a history and an evaluation of the leadership course. (JF)

ED 065 920

- AU Bergen, J. J.  
TI The Alberta Leadership Course for School Principals -- A History and an Evaluation.  
IN Alberta Univ., Edmonton. Dept. of Educational Administration.
- AB This study records the historical background and investigates the value of the leadership course as perceived by former members of the course. The leadership course was initiated as an attempt to improve the quality of leadership at the school level, thereby improving educational opportunities for provincial students. The study report contents (1) examine the need for inservice leadership education; (2) provide a history and development of the leadership course; (3) discuss the value of the leadership course to participants and school systems; and (4) comment on the strengths and weaknesses of the purposes, organization, and activities of the leadership course. A related document, EA 004 488, describes the 1971 leadership course. (Photographs may reproduce poorly.) (Author/JF)

ED 065 779

- TI Management Development Study.  
IN Department of Transportation, Washington, D.C.
- AB This document reports on a management development study within the Department of Transportation (DOT). The aim of the study was to develop a systematic approach to management development for military and civilian personnel.

A variety of methods was used to gather data including having DOT staff members gather the information to be passed on to the consultants comprising the study team, field trips, formal briefings, interviews, and informal discussions. The study team's views on what steps to take to increase managerial effectiveness were gauged largely on the gravity that executives gave to various programs and the scope of activity that generally applies to sound programs. From the results, the following recommendations are made to the secretary of DOT: (1) A Comprehensive Management Development Program should be established in all elements of the department; (2) each element should design and implement a program to meet its current and future needs; (3) each element should utilize a cost-benefit analysis to determine what portions of the program should be done in-house or outside, (4) institutes a Department-wide executive development program for high level managers; (5) the office of personnel and training, OST, should provide every assistance; and (6) budgetary priority should be exercised. (JS)

ED 064 809

- AU Curtis, William H.; and Others  
TI The Further Development of the Conceptual Model and Operational Dimensions of the AASA National Academy for School Executives. Final Report.
- AB The main purpose of this project was to develop a blueprint for the future growth of the AASA-national academy for school executives. The resulting comprehensive model is displayed in outline form through the use of a conceptual framework that includes three major processes -- program planning and development, implementation, and evaluation. Each of these processes is comprised of a series of activities that may serve as guidelines for further program development, implementation, and assessment. The program planning and development process includes activities indigenous to basic planning -- i.e., needs assessment, resource identification, goal preparation, program priority determination, and the ultimate

selection of programs. The implementation process relates primarily to the management and operation of programs and services. Implied in the implementation process is the fact that facilities planning and development will also be a part of this procedure. The evaluation and revision of academy programs are the major activities of the evaluation process. (Author)

ED 064 780

- AU Knezevich, Stephen J., Ed.  
TI Preparation for the American School Superintendency.  
IN National Education Association, Washington, D.C. Commission on the Preparation of Professional School Administrators.
- AB This study of administrator preparation covering the period 1965-70 builds on previous AASA-sponsored studies (1962-63). Data were gathered from questionnaires completed and returned by 250 of the 288 institutions surveyed. The report provides information on (1) the history of administrator preparation studies, (2) institutions with graduate preparation programs for the school superintendency, (3) preservice and inservice programs, (4) graduate programs, (5) graduate enrollments, and (6) the faculty. Numerous tables illustrate the findings. (Author/JF)  
( see also ED 056 368)

ED 064 762

- AU Scott, W. Wayne; Spaulding, Lloyd F.  
TI What Do We Know About Leadership?
- AB Although many authors have spoken to the concept of leadership, basic predictive theory has eluded all who attempt to define it. This paper undertakes to conclude inductive principles suggested within published leadership literature of an



experimental design. A thorough review of this intangible, leadership, was undertaken from papers indexed in the education index (1959-1969) and in research in education (1966-1969). A spectrum of these leadership theories is discussed. (Author)

ED 064 609

AU Lovett, Tom  
TI The Role of School Managers in Educational Priority Areas.  
IN Liverpool Educational Priority Area Project (England).

AB This report is concerned primarily with impressions gained from a course on the role of school managers which was held for managers of schools in Liverpool's designated educational priority area (EPA). The Liverpool EPA project is an attempt to create support for the IDEA of the community school in socially deprived areas. The function of the school manager is to exercise a degree of local control over a school which is centrally administered by a large local authority. The manager acts as a means of communication between residents and the school, and is acquainted with the special needs and problems of his school. An account is given of the discussions during the course on the role and functions of school managers as they themselves see it, and an analysis is presented of those views in the light of the Plowden report's recommendations on managing bodies within the concept of the community school. (CL)

ED 064 599

AU Spaultz, Michael E.  
TI A Survey of the Effectiveness of Management Development Programs.  
IN Civil Service Commission, Washington, D.C. Bureau of Training.

AB This paper summarizes the results of a survey of recent unpublished research studies, conducted in private industry and business, on The effectiveness of a variety of programs designed to develop management abilities. The purpose of the survey was to obtain information about private industry training evaluation practices which might be used or adapted for use by federal agencies. Out of a total survey sample of 244, 17 studies were located that were substantial enough to be included in the report. The summaries are organized into two major categories defined in terms of the type of criteria against which the programs are evaluated: (1) External Criteria; and (2) Internal Criteria. In addition, the criteria used in a particular study are classified into four levels of sophistication: (1) participants' reactions; (2) learning; (3) behavior change; and (4) results. Some general conclusions, recommendations, and the questionnaire used in the study are also presented. (CL)

ED 064 580

TI Historical and Progress Report of the Federal Executive Institute, an Interagency Training Facility.

IN Civil Service Commission, Washington, D. C.

AB This first-year report of the federal executive institute provides an historical development record and a summarization of operational progress. The institute, located in Charlottesville, Virginia, has the following broad educational goals: To heighten career executive responsiveness to national needs and goals; to increase career executive appreciation of the totality of the governmental system; and to improve career executive knowledge of managerial processes. The "Residential Program in Executive Education" is the core educational activity of the institute; it is an eight-week program that is held five times each fiscal year for 60 people per session. Educational methods used are lecture discussions, seminars, workshops and laboratories, policy/management studies, films and tapes, and reading materials. The

institute staffing, University of Virginia collaboration, outside faculty resources, advisory board, evaluation of the institute, follow-on activities, summer and fall short seminars, special programs, formal and informal organizational relations, publicity, facility and food services, and funding are briefly discussed. Appendixes provide the following: (1) lectures, seminars, policy/management studies; (2) curriculum graphic; (3) faculty and staff; (4) outside resources; (5) original advisory board; and (6) budgets, FY 1969 and 1970. (DB).

ED 063 742

- AU Rice, Joseph A.; Elliott, F. J.  
TI Managerial Semantics: Where Again All the  
Nervous Centers are Involved.  
IN Houston Univ., Tex.
- AB The term "Managerial Semantics" brings together aspects of communication, behavior, semantics, and management. An investigation of semantic principles as they are applied in industry today shows that although Korzybski's emphasis on differences between objects and individuals may have been useful when first formulated, it is less useful today than stress on similarities. Also, problems of "future shock" seen in industry mean that generalists, who can see the whole of a problem, are vitally needed. Such a unified view is hard to achieve in an educational system which too often fragments rather than synthesizes the many aspects of an issue. For instance, some conventional and widely-accepted behaviorists fail to recognize the importance of language. But language is unique in facilitating any communal relationship, from small groups to complex industries. Therefore, managerial semantics, which brings together various disciplines that have a bearing on management, is one way to provide the synthesized training needed in industry today. (JK)

ED 063 634

AU Cummings, C. Peter  
TI Project Management In A Local School District

AB This paper embodies three presentations given at a panel discussion on organizing, planning, and managing the local school district. The first presentation on comprehensive planning for change draws a distinction between "A Prior I" and "A Posterior I" planning and relates these two types of planning in coping with school district problems. The next presentation deals with the critical factors required to implement project management capability in a school district, and examines the advantages and limitations of project management and the uses of project management in a public relations function. The final presentation emphasizes the kinds of information needed to support organizational modification in a local school district. One important consideration is the premise that major change in school districts must be supported by an organizational structure that facilitates the communication flows and the human interactions necessary to implement change. (Author)

ED 062 967

AU Bender, Louis W.; Richardson, Richard C., Jr.  
TI Management Concepts and Higher Education Administration.

IN Florida State Univ., Tallahassee. Dept. of Higher Education.

AB A summer management institute supported by the W. K. Kellogg Foundation was held for administrative teams from 20 public and independent junior colleges. The 64 participants explored theories of management relating human behavior and motivation to organizational goals. The results of the management style diagnosis test, given on the first day, showed that: (1) the test is useful for motivating self-analysis in such training programs; (2) there is little evidence of differences between public and independent school administrative attitudes; (3) educational administrators

are more likely than other occupational groups to have a high "relationships orientation" (emphasizing people); and (4) there are significant differences in role perceptions between administrators and presidents of independent colleges and also between administrators of public and independent colleges. From institute evaluations, it was concluded that administrators were interested enough to utilize some of these concepts in their own colleges, and that the summer institute was valuable. (RN)

ED 062 782

- AU Allen, Richard K.  
TI The Field Manager as Change Agent: A "New Think" Approach to an Old Training Problem.  
IN Central Michigan Univ., Mount Pleasant.
- AB The focus of this paper is methods for training middle and lower managers, especially those in the field. It is helpful to regard those managers as change agents who must implement decisions coming from the top of the organization, usually in an authoritarian way. Periods of change in an organization can be the time for most effective development of managerial talents takes place. For such development, a well-designed training program is essential. A good program has these characteristics: (1) It provides for the learner's active participation; (2) it provides the trainee with knowledge of results of his attempts to improve; (3) it allows transfer of skills from training period to job; (4) it reinforces the trainee for appropriate behavior; (5) it provides for practice and repetition when needed; (6) it motivates the trainee, and (7) it assists the trainee in his willingness to change. The best training programs are those which regard the field manager as a change agent and shows him communication strategies appropriate to change agents. Training programs for peace corps volunteers and agricultural extension agents could be modified for management training. (JK)

ED 062 701

AU Bonney, Lewis A.  
TI Accountability at the Local Level.  
IN San Bernardino City Unified School District,  
Calif.

AB This report describes the theory and 1st-year operation of the educational management system, a district-developed approach designed to identify and structure instructional program needs by emphasizing decentralized decision-making and focusing on intended program results. The report observes that educators using EMS will continually improve their ability to respond to student needs by (1) regularly identifying the most pressing student needs in the classroom, (2) establishing objectives for student learning in high priority areas, (3) allocating personnel and materials according to objectives, and (4) demonstrating measurable improvements in student performance. The report outlines the steps to be taken by each teacher and principal in preparing his EMS statement, and reproduces several sample statements.  
(Author)

ED 061 639

AU Radnor, Michael; Coughlan, Robert  
TI A Training and Development Program for Administrative Change in School Systems.

AB This speech gives a brief picture of the characteristics and components of a program to change and improve administration in educational organizations. This program affects administrative change by providing participants with specific training for their change agent roles and by concentrating on the school system from which the participants come -- to develop the support and receptivity for new perspectives that change agents bring to a system. This program differs from similar programs in its multifaceted approach. Not only does the program provide training in technologies of administration and methodologies of organizational change, but also addresses itself to the issues of the institutional environment of the change program. (RA)

ED 061 432

- AU Vivekananthan, P. S.  
TI Development of a Planning System for Educational Research and Development Centers.  
IN North Carolina State Univ., Raleigh. Center for Occupational Education.
- AB A 2-phase project has been undertaken to develop a research and development planning system which consists of (1) a systematic procedure to formulate research projects, and (2) a systematic procedure to guide the selection of a subset of projects. Phase I of the project involves the development of a meta model which is based on a modular concept and assists in building models of educational systems. Information gathering projects are needed to load the model, and a project selection model is proposed which helps select a subset of projects designed to maximize available resources. Phase 2 of the project deals with field-testing the procedures in order to determine their generalizability. The center for occupational education at the North Carolina State University will serve as the testing site, and the following activities are planned: (1) performance criteria of the center in terms of its mission, goals, and objectives will be delimited, (2) a specific approach for generating projects in accordance with the goals will be developed, and (3) the project selection procedure will be exemplified with illustrations. (SB)

ED 060 557

- AU Klawuhn, Raymond E.; Basso, Alexander J.  
TI Adapting and Testing Business Management Development Programs for Educational Administrators. Volume 6 of 6 volumes. Appendix J-Evaluation Report, Maxwell School. Appendix K - Schematic of Planning Process and Narrative Description. Appendix L - Narrative Description. Final Report.  
IN American Management Association, New York, N. Y.
- AB This report constitutes an evaluation of the first year of a 2-year training program conducted by the American Management Association. The program focuses on organizational planning in two state

educational agencies and involves the sequential implementation of three distinct, offsite, residential training efforts. The first of these, the Management Course for Presidents (MCP), was attended by the state superintendent. The second program, Top Management Briefing (TMB), was administered to the top 24 administrators from the state agency and the 24 top administrators from pilot, local education agencies. The third program, the Educational Planning Process, was administered to organizational teams primarily composed of persons who attended the TMB. Analysis of interview and questionnaire data revealed that the training program did not change attitudes toward management and planning, and that some positive training effects occurred in role relationships and group standards. In addition, the organization that showed some effects or changes attributable to training was also consistently lower on all of the measurement variables than either the other experimental state or the control. Related documents are EA 004 141-145. (Author)

ED 060 556

- AU Klawuhn, Raymond E.; Basso, Alexander J.  
TI Adapting and Testing Business Management Development Programs for Educational Administrators. Volume 5 of 5 volumes. Appendix 1-Planning Document: North Carolina LEA, Laurinburg-Scotland. Final Report.
- AB This document is comprised of an Appendix that provides a portion of the materials utilized in the project to test the feasibility of adapting business management practices to educational institutions. Included is the educational planning process document for one of the eight participating management teams. The planning process document states the mission, strengths, weaknesses, resources and objectives of each agency. Related documents are EA 004 141-144, and EA 004 146. (Pages 86-100 and 112-116 may reproduce poorly.) (RA)



ED 060 555

AU Klawuhn, Raymond E.; Basso, Alexander J.  
TI Adapting and Testing Business Management  
Development Programs for Educational Adminis-  
trators. Volume 4 of 6 volumes. Appendix G-  
Planning Document: North Carolina SEA,  
Program Services. Appendix H-Planning  
Document: North Carolina LEA, Cabarrus  
County. Final Report  
IN American Management Association, New York,  
N. Y.

AB This document is comprised of two appendixes  
that provide a portion of the materials  
utilized in the project to test the feasibility  
of adapting business management practices to  
educational institutions. Included are the  
educational planning process documents for  
two of the eight participating management  
teams. Each planning process document  
states the mission, strengths, weaknesses,  
resources, and objectives of each agency.  
Related documents are EA 004 141-143, and  
EA 004 145-146. (RA)

ED 060 554

AU Klawuhn, Raymond E.; Basso, Alexander J.  
TI Adapting and Testing Business Management Develop-  
ment Programs for Educational Administrators.  
Volume 3 of 6 volumes. Appendix E-Planning  
Document: Maryland LEA, Prince George's Co.,  
Appendix F-Planning Document: North Carolina  
SEA, Executive Staff. Final Report.  
IN American Management Association, New York, N.Y.

AB This document is comprised of two appendixes  
that provide a portion of the materials  
utilized in the project to test the feasibility  
of adapting business management practices to  
educational institutions. Included are the  
educational planning process documents for  
two of the eight participating management  
teams. Each planning process document states  
the mission, strengths, weaknesses, resources,  
and objectives of each agency. Related documents  
are EA 004 141-142, and EA 004 144-146. (RA)

ED 060 553

AU Klawuhn, Raymond E.; Basso, Alexander J.  
TI Adapting and Testing Business Management  
Development Programs for Educational Adminis-  
tration. Volume 2 of 6 volumes. Appendix A-  
Roster of Participants and Meetings. Appendixes  
B-D: Planning Documents. Maryland SEA Executive  
Staff and Program Services. LEA, Harford  
County. Final Report.  
IN American Management Association, New York, N.Y.

AB This document is comprised of four appendixes  
that provide a portion of the materials  
utilized in the project to test the feasibility  
of adapting business management practices to  
educational institutions. Included are a  
roster of the participants from and meetings  
for the eight Maryland and North Carolina educa-  
tion agencies taking part and the educational  
planning process documents for three of the  
eight groups. Each planning process document  
states the mission, strengths, weaknesses,  
resources, and objectives of each agency.  
Related documents are EA 004 141 and EA 004  
143-146. (RA)

ED 060 552

AU Klawuhn, Raymond E.; Basso, Alexander J.  
TI Adapting and Testing Business Management  
Development Programs for Educational Adminis-  
trators. Volume 1 of 6 volumes. Final Report.  
IN American Management Association, New York, N.Y.

AB The American Management Association examined the  
feasibility of improving the effectiveness of  
educational institutions through business  
management principles. Target systems were  
the state agency executive staff, the state  
agency division of program services, and  
two local districts each in Maryland and  
North Carolina. Each management team from  
the eight organizations was directed to apply  
business management principles to the manage-  
ment of their respective organizations. Some  
of the major difficulties encountered were  
the absence of a clearly defined decision-  
making process, excessive limitations on

managerial discretion, and a propensity to state objectives in terms of processes rather than results. However, in each case, a commitment was made to Longrange student-oriented objectives, the organizational structure was redesigned, the responsibilities were shifted to bring about accountability, and all participants gained new insights into their leadership responsibilities. Related documents are EA 004 142-146. (RA)

ED 059 619

- AU Blough, John A.; and Others  
TI The Simulation of an Urban School System for Use in Preparing Educational Administrators. Final Report.  
IN University Council for Educational Administration, Columbus, Ohio.
- AB The University Council for Educational Administration (UCES) conducted meetings throughout the country during the late sixties and came to the conclusion that both the experience background of professors and the limited number of conceptual and methodological tools available to them stand in the way of providing effective inservice and pre-service programs for educational administrators. The project described in this report, arising out of this general problem, was designed to simulate an urban school system and had two general objectives: to develop several sets of instructional materials for immediate use in administrator preparation, and to develop plans that would provide bases for creating additional sets of materials. Chapter One of the report provides an overview of the project and a description of its rationale. Chapters Two, Three, and Four provide a brief discussion of the content and evaluation of each of the three multimedia sets of materials already developed. The next eight chapters describe plans for future simulations and provide information on the objectives of the simulations projected, their rationales, and their various components. Two chapters describing work achieved thus far in developing support materials basic to the use of simulations conclude the report. (Author/SH)

ED 059 477

TI Marketing Research. Instructor's Manual.  
IN Small Business Administration, Washington, D.C.

AB Prepared for the Administrative Management Course program, this Instructor's Manual was developed to serve small-business management needs. The sections of the manual are as follows: (1) Lesson Plan--an outline of material covered, which may be used as a teaching guide, presented in two columns: the presentation, and a step-by-step indication of procedure; (2) The Presentation--a subject presentation; (3) The Visual Aids--Photographic copies of the set of visual aids which are available for this topic; (4) The Supply Department--materials that may be reproduced locally for distribution to course participants; (5) Cases in Point-- short actual small-business management cases that may be used to augment the presentation and to develop discussion, or as the basis for a second session; (6) The Incubator--ideas for stimulating further thought and discussion by the participants. A bibliography is provided, and field offices of the small business administration are listed. (DB)

ED 059 458

TI Guidebook for Coordinators of Management  
Training for Small Business.  
IN Small Business Administration, Washington, D.C.

AB Activities involved in planning and administering the various types of management training are described in this guidebook. The four types of management training discussed are management courses, conferences, problem clinics, and workshops for prospective small business owners. Financing the training and promotion are discussed, as are planning, presenting, evaluating, and the advisory committee. Appendixes present: statement for members of advisory committee; time table for organizing management courses; preparation and distribution of brochures; information about

class members; SBA management publications, visual aids, and motion pictures; evaluation of management training; evaluation of workshop; evaluation of subjects and speakers; and analysis of training program cosponsored with SBA. Any educational institution or organization that wishes to initiate an SBA-cosponsored training program should contact the nearest SBA field office. A list of these offices is provided. (DB)

ED 059 261

AU Randcliffe, Vickey, W.; Orligan, Francis E.  
TI Evaluation. . . Accountability - 11.  
IN Nebraska State Dept. of Education, Lincoln.  
Div. of Instructional Services.

AB The Nebraska State Department of education sought to raise the level of management skills of educational administrators through the establishment of planning and evaluation capability among personnel. Training sessions in both planning and evaluation skills were held. This publication contains the materials used in the training sessions in evaluation skills. It includes a program schedule, objectives for the sessions, an outline of the materials, an annotated bibliography of materials used, and the sample information collection instruments (See TM 001 079, 080, 081). (Author/AG)

ED 059 169

AU Brian, George B.  
TI Leadership  
IN Washington State Univ., Pullman. Coll. of Education.

AB There is a growing need for imaginative and creative thought to support leadership among local school systems, and the faculty in educational administration at Washington State University are engaged in a Leadership Development Program for AASA and the National Academy of School Executives. The ideas being developed cover the following areas: (1) the current defensive position of administrators resulting

from mere reaction to adverse events; (2) the need to seize initiative and avoid defensive positions; (3) the feasibility of public leadership by school administrators to bring about educational improvements; (4) the focus on public leadership, rooted in active concern for improvement and implying much more than management of existing services and resources; (5) the involvement of lay leaders to supplement personal charisma; (6) some seminar and report objectives to clarify the need for leadership initiative, to outline ways to encourage it, and to arouse public interest and generate public support; and (7) exploratory concepts of "Educational Needs" likely to elicit public support.  
(MBM)

ED 058 634

- AU Razik, T.A.  
TI Social and Psychological Factors in Innovation and Educational Planning. The Fundamentals of Educational Planning: Lecture-Dicussion Series No. 50.  
IN United Nations Educational, Scientific and Cultural Organization, Paris (France). International Inst. for Educational Planning.  
AB In a controlled experiment, the IIEP attempted to develop efficient teaching materials in the field of educational planning. Informal instructional materials were compiled from the tape recordings, transcriptions, and summary notes of seminars, lectures, and discussions conducted by the IIEP in its training and research programs. This instructional unit (1) examines the major learning theories and their application to innovation research; and (2) discusses some problems in innovation process management, decisionmaking, planning, and implementing change in educational innovations. Related documents are EA 003 931-938 and EA 003 942.  
(RA)

ED 058 632

- AU Razik, T. A.  
TI Systems Analysis and Educational Design. The Fundamentals of Educational Planning Lecture-Discussion Series No. 45.

IN United Nations Educational, Scientific, and Cultural Organization, Paris (France).  
International Inst. for Educational Planning.

AB In a controlled experiment, the IIEP attempted to develop efficient teaching materials in the field of educational planning. Informal instructional materials were compiled from the tape recordings, transcriptions, and summary notes of seminars, lectures, and discussions conducted by the IIEP in its training and research program. This instructional unit explains and demonstrates the use of a systems approach and provides guidelines for the development of instructional systems. Related documents are EA 003 931-936, and EA 003 938-942. (RA)

ED 058 630

AU Gass, J. R.  
TI Planning the Educational Revolution. The Fundamentals of Educational Planning: Lecture-Discussion Series No. 43.

IN United Nations Educational, Scientific, and Cultural Organization, Paris (France).  
International Inst. for Educational Planning.

AB In a controlled experiment, the IIEP attempted to develop efficient teaching materials in the field of educational planning. Informal instructional materials were compiled from the tape recordings, transcriptions, and summary notes of seminars, lectures, and discussions conducted by the IIEP in its training and research program. This instructional unit discusses the necessity of planning educational innovations and creating social conditions conducive to change instead of permitting changes to occur haphazardly. Related documents are EA 003 931-934 and EA 003 936-942. (RA)

ED 058 610

AU Cook, Desmond L.  
TI A Conceptual Framework for the Study of Project Management in Education. Final Report.

IN Ohio State Univ., Columbus. Educational Research Management Center.

AB This paper presents the results of research conducted to develop a model or a conceptual framework for the study of project management in the field of educational research and development. The basic framework incorporates two dimensions; (1) the project and (2) its environment. Four project components; task, temporary management system, project manager, and project success/criteria -- are identified. The environment component is comprised of the influences on the project originating from the parent organization, the customer and the market, and the general cultural conditions surrounding the project (economic, social, political, and technological). (Author)

ED 057 783

TI Leadership Development Training Program for Administrators of New and Developing Junior Colleges. Final Report.

IN Auburn Univ., Ala.

AB Auburn University (Alabama) sponsored a project to bring together persons from several southeastern states practicing, or aspiring to practice, a particular speciality in junior college education. An in-service and a resident group were served. Sixty persons were involved in the in-service portion that consisted largely of a 2-week conference. The 26 individuals in the resident portion also participated in the 2-week conference, but continued for a year of full-time study at the university structured like an actual or potential junior college career field. Precise objectives specified for the in-service phase were: (1) improve participant competency in his specialty, (2) increase specialist-role awareness in the junior college scheme, (3) create appreciation for the junior college's expanding role, (4) encourage people knowledgeable about junior colleges to return to them and provide leadership, and (5) prepare some to lead in the development and operation of educational programs for the



disadvantaged. The specific objectives for the resident phase included the above and the development of (1) leaders to solve southeastern junior college problems, and (2) a procedure to maximize junior college leadership. Project organization, planning, and implementation to achieve these objectives are discussed, as well as the evaluation of the outcomes. Descriptive tables and charts of participant characteristics and instruments used in the evaluation are included. (AL)

ED 057 480

AU Achilles, Charles M.; Hughes, Larry W.  
TI The Paired Administrator Team Concept: A Promising Administrator Training model

AB Describes the University of Tennessee's innovative approach to preparation of educational administrators. (JF)

ED 056 415

AU Ammentorp, William; and Others  
TI The Management System. Design Document III for the Midwest Educational Training Center.  
IN Upper Midwest Regional Educational Lab., Inc., Minneapolis, Minn.

AB This document, one part of a project to train personnel for educational development and evaluation, describes a management system for individualized student instruction. Certain objectives are set from which management activities and provisions for data storage and use are inferred. The result is a comprehensive flowchart of the instructional sequence with indications of information sources and utilization. Evaluation procedures for measuring the attainment of management objectives are also treated. Related documents are EA 003 900, EA 003 901, and EA 003 903. (Author.RA)

ED 056 414

AU Welch, Wayne; and Others

- TI Conceptual Papers Defining the Knowledge and Skills Required to Function as Educational Developers and Evaluators. Design Document II for the Midwest Educational Training Center.
- IN Upper Midwest Regional Educational Lab., Inc., Minneapolis, Minn.
- AB This document, one part of a project to train personnel for educational development and evaluation, presents the rationale underlying the training procedure. The presentation is organized around conceptualizations of the knowledge and skills required by development and evaluation personnel. Papers treat conceptually many instructional objectives and terminal behaviors as guidelines for developers and evaluators. The objectives outlined will eventually be organized into training materials for evaluation personnel and into sequences for research, development, and diffusion. Related documents are EA 003 900, EA 003 902, and EA 003 903. (RA)

ED 056 413

- AU Ammentorp, William; and Others
- TI Training for Development and Evaluation in Education. The Proposal for the Midwest Educational Training Center.
- IN Upper Midwest Regional Educational Lab., Inc., Minneapolis, Minn.
- AB This document outlines the research and development plans of a consortium of organizations whereby they might (1) collect training materials to meet identified needs for persons with development and evaluation skills in education and industry, (2) establish a system for data collection and decisionmaking to manage the individualized instruction of persons in development and evaluation training programs, (3) find trained personnel to meet the immediate needs of educational and industrial organizations, and (4) make arrangements for delivery and finance of training programs to meet long-range needs for pre- and in-service

training in development and evaluation. Each objective is documented and detailed into specific outcomes and/or tasks. Subcontracts and budgets are presented along with a time line for project completion. Related documents are EA 003 901, EA 003 902, and EA 003 903. (Author/RA)

ED 056 399

TI Management Crisis: A Solution  
IN National Association of Secondary School Principals, Washington, D.C.

AB This booklet explains the administrative team concept, argues for greater participation of the principal on this team, and provides a typical board-administrator agreement. The administrative team is described as a tool that provides not only a formal agreement for administrators, but also an internal structure that ensures participation by principals in important decisionmaking. The report concludes that an administrative team, which maintains simultaneously both formal and informal systems of participation in decisionmaking, offers a professionally satisfying approach to school district administration. (Author/JF)

ED 056 129

AU Nelson, Robert J.  
TI Human Relations Workshop Leader's Guide.

AB This summer workshop was held in 1967. This guide includes how to lead discussions, ask challenging questions, use feedback, observe behavior of members, make thought-provoking statements, and summarize points. Also included are guides to film discussion, materials on the disadvantaged child, an attitude inventory, tapes on discipline situations, role playing, isolation technique, negro history games, and other topics. (Parts of this document may not be clearly legible when reproduced, due to the print quality of the original document. Also, one page of copyrighted material has been deleted). (Author/CB)

ED 056 121

- AU Fielder, Marie; Dyckman, Louise M.  
TI Leadership Training Institute in Problems of  
School Desegregation.  
IN California Univ., Berkeley.
- AB All participants were selected on the basis of their leadership qualities, responsible and identifiable concern with the process of school desegregation, and their activities specifically concentrated in the Richmond Unified School District. Of the sixty-nine adult participants, 37 were teachers and 11 were community persons representing both black and white groups. The students, also representative of various socio-economic backgrounds, were in the ninth, tenth, and eleventh grades. Objectives centered around techniques, skills, and understandings necessary to solve problems incident to desegregation. A leadership training model to highlight common factors, was created. The institute, which afforded the participants the opportunity for interpersonal relationships across race, class, and age lines, was held from June 23 to July 14, 1967. (Authors/CB)

ED 056 000

- AU Sarthory, Joseph A.  
TI Educational Leadership as Organizational Renewal.  
IN Kansas State Dept. of Education, Topeka.
- AB A model of educational leadership is described which defines leadership as the capability to introduce and maintain a process of organizational renewal. The model is composed of six elements which are perceived as the phases or stages of planned organizational renewal: (1) assessment of educational needs, (2) assessment of the current state of the organization, (3) translation of needs into new and revised programs, (4) implementation of new and revised programs, (5) management of new and revised programs, and (6) program monitoring and evaluation. The kinds of competencies and skills required to function effectively in each phase of the model have been noted along with resultant

implications for leadership development programs. A suggested program for training educational administrators using this model would include a leadership team comprised of three to nine members in each school district and an instructional team composed of professors from an institution or consortium of institutions of higher learning. This team would "instruct" the leadership team in the skills of organizational renewal, but not in the traditional way. Rather, they would take the leadership team members through the phases of organizational renewal in the district so that team members would learn appropriate skills and competencies by using them as needed. (Author/RT)

ED 055 359

AU Wear, Maurice; Basom, Myron  
TI Accountability in Education. Educational Administration Workshop. Summer, 1970.  
IN Wyoming Univ., Laramie. Coll. of Education.

AB This publication represents the combined efforts of the participants in a workshop held at the University of Wyoming. The writings discuss accountability at the national, state, and local levels and explain the application of planning, programing, and budgeting systems to be accountability concept. The report presents methods for evaluating both schools and their staffs as means for implementing an accountability system. Appendixes include a paper explaining performance evaluation, a list of internal and external evaluation guides, and a bibliography of evaluation criteria materials. (JF)

ED 055 198

TI EPDA (Education Professions Development Act) Institute Leadership Development in Curriculum Planning. Final Report.  
IN Kentucky Univ., Lexington. Instructional Materials Lab.

AB Forty-two individuals, comprising teams of three people from 14 states, attended a conference planned to: (1) assist vocational

Leaders in developing the intent, nature, and possible structure(s) of vocational curriculums at different levels, (2) cause participants to understand implications and provisions current legislation has for professional development in the area of curriculum, and (3) help participants prepare a leadership development plan to be implemented in their state for coordinating and supervising the development of vocational education curriculums at all levels. The 11 presentations delivered during the 5-day conference included: (1) "A Planning and Managing Model" by Carl Lamar and Billy Vice, (2) "Planning Techniques and Systems" by Ray Cash, and (3) "Kentucky's Education Professions Development Act (EPDA) Plan for Leadership Development" by Mary Lois Williamson. In evaluating the institute, over 80 percent of the participants said that the objectives were clear to them and that the material presented seemed valuable. (Author/JS)

ED 053 444

- AU Kravetz, Nathan, Ed.  
TI Management and Decision-Making In Educational Planning.  
IN United Nations Educational, Scientific, and Cultural Organization, Paris (France).  
International Inst. for Educational Planning
- AB This IIEP Seminar focused on administrative, management, supervisory, and decisionmaking techniques that are useful in the educational planning process. The techniques studied included: delphi, program evaluation and review technique (PERT), and program planning and budgeting systems (PPBS). Various experts presented papers on these techniques, and seminar participants later formed into working groups to study the application of these techniques to educational planning and decision-making problems. Papers written by members of these groups are included. (Author/JF)

ED 053 440

- TI Individualized Continuing Education for School Administrators -- One Approach, An Occasional Paper.
- IN CFK, LTD., Denver, Colo.
- AB This paper shows school districts how to establish and operate an individualized continuing education program for their administrators. The focus is on ICE programs designed and operated by schoolmen throughout the nation. The report includes the rationale for the ICE program, several program descriptions, a list of characteristics that distinguish and comprise these programs, sample budgets, definitions of participant roles, a description of how to launch a program, a bibliography, and sources of assistance. (Author/MLF)

ED 052 427

- TI Self Development Aids for Supervisors and Middle Managers.
- IN Civil Service Commission, Washington, D.C.
- AB This annotated bibliography of material published through 1969 is a compilation and update of shorter reading lists prepared by the library of the U.S. Civil Service Commission during the previous five years. The publications are listed under the following categories: identification and development of managerial skills; career planning; improving leadership skills; human relations skills; managing health and tension; followership; completed staff work; developing creative ability and innovative skills; management of time; decision-making and problem solving skills; communications skills--general; delegation and order-giving; effective speaking, including telephone usage; effective listening; writing improvement; conference leadership and participation; and reading improvement. (DB)

ED 052 357

TI Project. To Plan, Develop, Present and Evaluate  
A Management Institute for Experienced Occupa-  
tional Education and Manpower Training  
Administrators. Final Report.  
IN Technology Management, Inc., Cambridge, Mass.

AB This report concludes the final phase of a  
project designed to help occupational and  
manpower training administrators apply the  
best available management concepts to the  
analysis and solution of a wide variety of  
problems. This 2-week experimental institute  
was presented to a group of Massachusetts  
Administrators from such organizations as public  
vocational-technical schools, manpower training  
programs, community colleges, and commonwealth  
agencies. Arranged in five chapters, the  
report provides: (1) an introduction to the  
organization of the report, (2) background  
information concerning the project, (3) an  
evaluation of the project which includes  
participants and staff observations, (4)  
12 recommendations in regard to improving  
the effectiveness of the institute, and  
(5) a proposed design for future institutes.  
Included in the Appendix are the project  
plan, the institute prospectus and schedule,  
and the institute bibliography. (Author/BH)

ED 051 273

AU Gall, Joyce P.; York, Linda J.  
TI Training Package Turns School People into  
Instructional Planners.

AB The communication program of the Far West  
Laboratory for Educational Research and  
Development is creating a self-contained  
training package on instructional planning  
for administrators, teachers, and others  
who plan, select, manage, and evaluate  
instructional programs. The training  
package consists of three sequential units:  
problem analysis, goal setting, and objectives  
and evaluation. The training units are being  
revised on the basis on preliminary field test  
results, which showed that the units partially



achieved their objectives of improving attitudes, knowledge, and skills relevant to instructional planning. The problem analysis unit is discussed in depth to illustrate the research and development cycle used to develop the training package. (Author/AG)

ED 050 717

- AU Malik, Joseph A., Ed.; Shay, Thomas M., Ed.  
TI A Workshop in Community College Administration: Proceedings 1970.  
IN Colorado Univ., Boulder. Higher Education Center.
- AB The purpose of this workshop, composed of 22 participants representing public and private institutions in eight states and the District of Columbia, was to provide an over-view of many important areas of concern to the community college administrator. They include the role of community colleges in higher education, trends in the community college movement, expectations of the colleges by business and industry, establishing and developing new community colleges, student personnel services, federal programs, and management information services. (CA)

ED 050 464

- AU Steinbaum, Milton  
TI Career Development for the Elementary School Principal, or the Vanishing Profession.
- AB This speech outlines a local elementary principals association's innovative program of career development for elementary school principals. This program consisted of three elements: (1) Human Relations Skills, (2) Management Training, and (3) Internships. The program's uniqueness centered around its long-range training projections for currently employed or newly appointed principals, and for future appointees on a continuing basis. (LLR)

ED 050 446

AU Deep, Samuel D.  
TI Use of Management Training Simulations in a University Educational Administration Program. The Program of Exercises for Management and Organizational Development.

AB This report describes self-administered exercises on management and organizational development that emphasize a participative approach in small groups. The program of exercises (PEX), and integrated set of exercises, incorporates case study, role playing, programmed instruction, and sensitivity training. The training provides a series of experiences relevant to personal growth, team building, and organizational development. PEX participants have possessed wide ranges of work and cultural backgrounds. (Author/JF)

ED 049 421

AU Byers, Kenneth T., Ed.  
TI Employee Training and Development in the Public Service

AB Fourth in a series on public personnel administration, this book discusses problems in personnel and organizational development (OD) and the resources potentially available to solve them, then indicates some of the ways in which employee development might be facilitated. Basic steps in the systems approach to development are outlined, followed by supervisory and other roles and functions, the nature of the OD process, and the need for written training plans and policies. Adult learning principles and specific methods and kinds of resources are considered, together with requirements for application to various situations. Such factors as sponsorship and funding, choice of courses and facilities, use of audiovisual aids, identification of potential candidates for management development and trainee evaluation, are also examined. Numerous individual and group approaches to training are described--role playing, programmed instruction, lectures, conferences, workshops, critical incidents, brainstorming, "In-Basket" exercises, and others. Finally, attention is given to special training situations, especially those connected with manpower development, and to emerging or anticipated trends. (LY)

ED 048 657

- AU Trusty, Francis M.  
TI Development and Implementation of a Pilot  
Program to Prepare Negro Administrators for  
Top Level Line Positions. Final Report.  
IN Tennessee Univ., Knoxville. Dept. of  
Educational Administration and Supervision.
- AB This report reviews and summarizes a pilot  
program in Tennessee to assist negroes in  
obtaining administrative positions in inte-  
grated school systems within the state. Five  
trainees were involved in the 1-year program.  
The review covers activities related to  
developing the proposal, the program  
purposes, the publicity and recruitment  
efforts, and the qualifications of fellows  
accepted into the program. Included are  
data concerning program dimensions of  
course work, conferences attended by  
fellows, visits to other schools, intern-  
ships in the fellows' home school districts,  
budgetary considerations, program evaluation,  
and the observable impact of the program on  
the University of Tennessee Department of  
Educational Administration and Supervision.  
(Some correspondence in Appendix A may  
reproduce poorly because of marginal  
legibility. Appendix H (newspaper clipping  
copies) has been eliminated because of  
nonreproducibility.) (Authro/MLF)

ED 047 359

- TI Policies that Support Excellence in Teaching.  
IN National School Boards Association, Waterford,  
Conn. Educational Policies Service.
- AB Recognizing that the teacher's job is to  
teach, this kit sets forth the areas in which  
school board can encourage and support good  
teaching in the classroom. School boards  
can establish policies that encourage the  
administration to recruit widely for the best  
possible teacher candidates. School boards

can establish policies that set forth high standards and performance expectations. School boards can clarify their stand on instructional philosophy and instructional goals and objectives. School Boards can make inservice education a viable part of the total school district operation. School boards can support the kind of environment that attracts and holds bright and imaginative teachers. School boards can set new demands on the administration to sharpen procedures for supervising and evaluating teacher performance. School boards can update their policies on tenure, transfer, and separation as instruments for eliminating deadwood staff. (Document previously cited in RIE as ED 044 541.) (DS)

ED 047 233

- AU Odiorne, George S.  
TI Training by Objectives: An Economic Approach to Management Training.
- AB In keeping with the current trend in business education, this book adopts a "systems" approach to training. Objectives are first defined, and then training theories and techniques are used to reach them. Economic and behavioral aspects of training are discussed and many new techniques such as sensitivity, motivational, and human relations training are critically evaluated. Part I deals with the economic approach, pointing out the fruitlessness of many past training efforts in today's environment. Part 2 presents the systems approach as a means of reorienting training to economic objectives. Part 3 outlines the various kinds of learning theories, classified with hard criteria (specific measurable stimuli and responses) and soft criteria (internalized, subjective explanations of behavior), and shows why the demands of the seventies will be for hard criteria training. There are real-life cases, questions, summaries, and bibliographies for each chapter. (Author/NL)

ED 046 111

- AU Bliss, Sam W.; and Others  
TI Proceedings of the Educational Management  
Tools Training Program 1969-1970 at Southern  
Illinois University College of Education.  
Final Report.  
IN Southern Illinois Univ., Carbondale. Coll.  
of Education.
- AB This collection of conference papers by nine  
different authors deals with the following  
topics: (1) Philosophy of Educational Manage-  
ment; (2) Systems Concepts and Development,  
and the Systems Approach; (3) Management  
Information Systems in Education; (4) Cost-  
Benefit Analysis; (5) Educational Resource  
Management; (6) Systems Approach to Project  
Management; and (7) Procedural Aspects of  
PERT Time Analysis. A list of participants'  
names and addresses is appended. A related  
document is ED 041 400. (Figure 6 on page  
138 and figure 7 on page 140 may reproduce  
poorly.) (LLR)

ED 044 826

- AU Litwak, Eugene; and Others  
TI "The Scholar Practitioner." A Collection of  
Papers  
IN Illinois Univ., Urbana.
- AB A 3-week inservice program for 19 midcareer  
school administrators was held at the  
University of Illinois during the 1969-1970  
academic year. The basic project purpose  
was to establish a linkage of mutual respect  
and common interests between practicing  
administrators and university scholars in  
related fields of study. Topics covered  
in this collection include: (1) school  
community linkages, (2) professional and  
school roles, (3) day-care centers, (4) state  
aid, (5) PPBS and organizational change,  
(6) professional negotiations, (7) staff  
involvement, (8) differentiated staffing,  
(9) pupil personnel, (10) special programs  
for students unable to adjust to regular  
programs, (11) administrator inservice programs,  
(12) long-range planning, and (13) school desegre-  
gation. A list of program participants and their  
addresses is appended. A related document is  
EA 003 179. (Map on page 268 may reproduce poorly  
because of marginal legibility.) (LLR)

ED 044 292

AU Ziener, George G.; and Others  
TI Educational Technology Project, Volume One.  
The Development of Materials for the Training  
of Science Education Personnel in Educational  
Technology. Final Report.  
IN National Science Teachers Association,  
Washington, D. C.

AB The planning, production, validation, and  
revision of learning materials designed for  
use in institutes for science supervisors is  
described in this first of five volumes. Four  
sets of packages, ("Role of the Science  
Supervisor," "Introduction to Educational  
Technology," "An Application of Educational  
Technology," and "Management Kits,") each  
using educational technology methods to  
describe educational technology were produced.  
They need not be used in a linear manner, but  
were designed for flexible programing. The  
materials can be used for inservice develop-  
ment of supervisors, or by them to meet local  
training needs. Simple media, audio-tape,  
photographic slides, and written materials  
were used. "Educational Technology" does  
not mean "use of machines for instruction"  
but is a "process approach to learning,"  
utilizing learning theory, a systematized  
approach and various instructional tools to  
produce learning in individuals. Examples  
of feedback responses to progress reports  
sent to supervisors during project develop-  
ment, copies of pre- and posttests given to  
groups and individuals used for validation,  
summarized validation results, and operations  
charts are appended. (AL)

ED 044 289

AU Ziener, George G.; and Others  
TI Educational Technology Project, Volume Five,  
Management Kit (set 6). Final Report.  
IN National Science Teachers Association,  
Washington, D. C.

AB This volume is the last of four sets of  
materials produced for training science  
supervisors in educational technology. It  
describes the contents and use of kits designed  
to help supervisors analyze their jobs in five  
basic supervisory areas: budget, equipment,  
supplies, and materials; optimum learning

systems; provision of services to science teachers; and reports. The necessity to relate these functions to improve student learning is emphasized. A bibliography is appended. Examples of management systems developed by science supervisors, samples of charts, and a copy of the criterion assessments used as follow-up activities are included as appendices to the report. (AL)

ED 043 818

AU Smith, L.L., Ed.; Reagen, Michael V., Ed.  
TI Management Development for Urban Administration.  
IN Syracuse Univ., N. Y. Continuing Education  
Center for the Public Service.

AB Readings summarize presentations made at seminars conducted by the continuing education center for the public service at Syracuse University. They cover: personal communication skills, kinds of information needed by a public official, and information retrieval system; how to persuade, sell, listen, argue in everyday public relations; organization and supervision, staffing, decision making and planning; and application of new management techniques to local government; and the future of urban areas. (PT)

ED 043 119

AU Piele, Philip K.  
TI New Programs for Training School Administrators.  
Analysis of Literature and Selected Bibliography.  
Analysis and Bibliography Series, No. 10.  
IN Oregon Univ., Eugene. ERIC Clearinghouse on  
Educational Administration.

AB This review analyzes current trends in the literature concerned with the training of school administrators. Emphasis is placed on the effectiveness of a variety of inservice training strategies, including workshops, simulations, seminars, and encounter groups. In University-based training programs, the trend is toward greater use of the humanities in preparing educational administrators. A 69-item bibliography of relevant literature is included. (RA)

ED 041 400

- AU Bliss, Sam W.  
TI A Training Program for Educational Management Tools. Final Report  
IN Southern Illinois Univ., Carbondale.
- AB Educational personnel having major responsibilities for research and development were invited to attend three one-week institutes to receive training in the use of selected management tools. Instructional topics such as Systems and Management Analysis, and Definitive Studies of Management Information Systems (MIS), Program Planning Budgetary Systems (PPBS), and Program Evaluation Review Techniques (PERT) were selected as useful to administrative personnel in planning, decision making, and evaluation. The major objective of the training program was to instill in the attendants knowledge and skills necessary for the application of these tools in the daily operation of project and school system management. Most participants rated the program as good or excellent in overall effectiveness. A followup survey of selected participants indicated that knowledge and skills acquired in the institutes were being used in the home organizations. (Author/RA)

ED 041 396

- AU Magoon, Jon: Tannian, Francis  
TI School System Analysis: An Interaction Process Model.
- AB This paper describes informally a comprehensive systems model that could aid school program decision makers. The model, a multistage input-output scheme, permits descriptions of social, political, economic, and educational interactions in an urban school system for the purpose of defining the school system performance and its amenability to change and reform. The model also makes it possible to define levels of financial support given to



different schools, and to correlate these findings with student and family characteristics. The model would permit exploration of the interrelationship between various outcomes and inputs, such as student achievement and per pupil expenditures. Description of the demands and supports deriving from a variety of community and political groups is also possible. The model is being applied in Wilmington, Delaware. (Author/DE)

ED 041 390

AU Andrews, Richard L.

TI Utilization of a Selection Criteria for Screening Applicants for Administrative Training for the Prediction of Patterns of Predecisional Behavior at the End of the Training Period.

AB This paper presents a conceptual model for determining patterns of predecisional behavior of school administrators, and a method for empirical verification of the model through content analysis of subjects' responses to complex problem-solving situations. The discussion concerns the concept of the relationship among identifiable patterns of predecisional behavior, environmental consequences of value or profit, and organismic and situational variables that possibly modify predecisional behavior. Research study findings, utilizing the model and procedures, draw some preliminary inferences with regard to the interface between strategy in the decision-making process and environmental consequences. (Author)

ED 041 388

AU Thompson, G. Baker

TI Planning and Managing Projects in School Districts.

AB This study considered the feasibility of alternative methods for managing various school district projects. Several versions of project management were identified and

studies, but only two of the more flexible systems were selected for their potential contribution to educational administration. Ten New Jersey administrators were trained by a management consultant firm to determine which problems seemed more relevant to project management techniques. During the study period of almost a year, the presentation was changed according to feedback received from the field. Another project management approach was used in a 2-day training seminar for administrators from several Pennsylvania school districts. The overall findings of this study suggest that project management techniques are applicable to special types of situations and for selected problems. The training will continue to be modified as field staff observe resulting changes in school district management techniques. A related document is EA 002 949. (Author)

ED 041 368

- AU Thomas, Terry A.  
TI Changes in Elementary School Principals as a  
Result of Laboratory Training.  
IN Oregon Univ., Eugene. Center for Advanced Study  
of Educational Administration.
- AB Response data from questionnaires administered to 204 teachers served as the basis for determining (1) changes in the interpersonal relations of elementary principals, and (2) the effect of needed changes on the social-emotional climate of their respective schools. Perceived change, organizational climate, executive leadership, tact, and collaborative decision making were measured. This report describes the resulting 5-day training laboratory attended by 28 elementary principals, and includes a list of the objectives, a list of 12 changes hypothesized as a result of the training, and a brief statistical analysis of behavior changes in a preregistered group and a nonpreregistered group. The study revealed more positive change by principals in the experimental group than by those in the control group, and showed that laboratory training in interpersonal relations affects positively the administrator's behavior with his staff and the social-emotional climate of the school. (JK)

ED 041 243

AU Sheffieck, Charles Fauriaux  
TI Management Training and Evaluation by  
Major United States Industrial Corporations.  
IN Wayne State Univ., Detroit, Mich.

AB This nation-wide questionnaire survey covered the history, present organization, top management involvement, and other features of the total system of management training and evaluation in a random sample of corporations appearing among the largest 500 listed in "Fortune" (June 15, 1968, issue) and having at least one member listed in the 1968 American Society for Training and Development (ASTD) membership directory. There were 73 usable responses. Data were obtained on corporate sales, net profit, number of employees, and individual ASTD membership by chief corporate training officers. These were among the major findings: (1) 96% of participating corporations had management training activities, 96% also conducted formal evaluations of the training function, and 86% stated that organizational development was part of their corporation strategy; (2) 82% of the chief corporation training officers stated they saw a positive change in top management attitudes toward management training; (3) 96% of these training officers were college graduates, and 52% had advanced degrees; (4) 62% of respondents reported that the amount of evaluation of their management training programs and increased in recent years. (Author/LY)

ED 040 941

AU Culbertson, Jack; and Others  
TI Preparing Educational Leaders for the Seventies.  
Final Report.  
IN University Council for Educational Administration,  
Columbus, Ohio.

AB Different program design concepts which are needed for the preparation of school superintendents in the 1970's are suggested in this study. Two approaches were used, one involving an analysis of forces judged to have an important impact on education in the 1960's, and the other based on

the perceptions of superintendents and professors about trends and needs in preparation. Six currently significant forces shaping educational organization and leadership were identified as: the federal thrust in education; the negro protest movement; the changing character of the business education interface; the increase in teacher militancy; the diffusion of special management technologies in education; and the growth of research and development in education. The literature on administration preparation was reviewed and a questionnaire administered to a sample of 180 chief school officers and personnel in 46 university council for educational administration member universities, to determine the characteristics of current preparatory programs, changes made in the past 5 years, perceived strengths and weaknesses in the programs, and desirable changes for the next decade. Data from both the force analyses and the survey were analyzed to determine the major change needed. Recommendations were developed for program content and structure, recruitment and selection, instructional approaches, field related experiences, program evaluation and development, and departmental functions and staffing. (Author/MBM)

ED 039 491

- AU West, Jude P.  
TI A Comparative Analysis of University Executive  
Development Programs conducted in 1958 and in 1968.  
IN Iowa Univ., Iowa City.
- AB Stressing changes in program status, this study examined all American universities offering executive development programs (EDP). Criteria were six program features and six institutional characteristics. Information came from conference brochures and standard statistical sources, interviews with program directors and researchers, and questionnaires sent to program directors. These were among the findings: (1) ten universities had discontinued their institutes by 1968, while two others had reduced their seminars from two to one; (2) during 1958-68, 11 universities added 13 new programs; (3) schools conducting EDP tended to have been established relatively early; (4) 81% of EDP

schools were authorized to offer graduate degrees; (5) broadening participants' vision and enhancing decision making ability were the leading EDP objectives in 1968; (6) the major changes in program content and methods have been toward more sessions on the business environment, and from case study techniques alone toward a more diversified approach; (7) most programs ran from two to seven weeks, and 55% of conferences were held in the summer. It was concluded that certain business schools lacking the institutional characteristics outlined in this study may have difficulty sustaining EDP. (Author/LY)

ED 039 477

- AU Burke, Thomas Edward  
TI A Systems Approach to the Planning and Formulation of Technology Augmented Programs for Management Education.  
IN Texas Univ., Austin.
- AB A management education planning approach called Computer-Assisted Subject Area (CASA) has been conceptualized as a framework for viewing, evaluating, and recording efforts to improve the effectiveness of a subject area to be integrated within an overall curriculum. CASA is a generalized set of models which feature a hierarchy of activities in developing a subject area; an organizational library structure, or information repository, for noting and updating findings and working criteria for use in curriculum planning; and a network of cybernetic representation to highlight dynamic interrelationships between various human and machine elements germane to a professor's subject area. Use of CASA is illustrated in planning a series of programs to give practicing managers a broad but concise introduction to computer technology. Eleven teaching/learning modules were developed, with attention to features and limitations of classroom lectures, films, computer simulations, panel discussions, and other methods and

media. Two experimental computer programs (Leisure and Architect/Client) led to the conclusion that a professor untrained in computer use could, in association with regular classroom duties, gain a basic understanding of computer augmented teaching. (Author/LY)

ED 039 414

- AU Thompson, Paul Donovan  
TI A Systems Design Management Model for the Structuring and Simulation of Selected Training Institutions.  
IN Catholic Univ. of America, Washington, D.C.
- AB The purpose of this study was to define the role and elements of a systems approach for training administrators; to develop a model to serve as a guide for educational and training planners; and to provide a set of criteria for the optimum utilization of resources. The literature was reviewed, specific graphic and mathematical analysis in education and training analyzed, and a new synthesis devised for modeling and evaluation. Among other findings, it was found that a substantial deficiency existed in the use of systems approach in training; task analysis was the method for achieving systems feedback to control and stabilize the optimum training system; and graphic analogs are valuable tools for analyzing existing institutions and for constructing new ones. The study also supported the integration of the taxonomy of educational objectives into the learning system for training. It was recommended that the systems design should become a recognized discipline in training and design development. (Author/PT)

ED 038 579

- AU Markwell, D. S.; Roberts, T. J.  
TI Organization of Management Development Programmes.
- AB The purpose of this book is to provide practical guidelines for planning and implementing management development activities. In part 1 Mar. ell

establishes the framework for designing and organizing management development programs. The section covers the following topics: Practical Starting-Point for Management Development, Establishing Management Development Needs, Management Career Planning, Learning Characteristics in Management Development, Sensitivity Training, Mathematics and Management, Technology of Management Development, and Evaluation and Training. In Part 2 Roberts analyzes management development practice in six well-known companies -- International Printers Limited, Tetley Walker Limited, Churchill Gear Machines Limited, Glaxo Laboratories Limited, Stone Platt Industries Limited, and Pilkington Brothers Limited. Illustration is provided through documents in use which include questionnaires, job descriptions, staff assessment forms, performance diary, training courses, management succession chart, manpower inventory form, and career development plan. (NL)

ED 037 621

- AU Blake, Robert R.; Mouton, Jane Srygley  
TI Building A Dynamic Corporation through Grid Organization Development
- AB These are the authors' personalized statements of how organizations function, how organizational excellence is to be judged, and how an organizational development effort can contribute to the achievement of such excellence. The book deals with the fundamentals of planned change as they apply to the corporation. It describes the principles and concepts of grid organization development and its method of planned change, and presents techniques, instruments, and phases of development essential for inducing change and achieving desired results in an orderly but vigorous and controlled way. (Authors/NL)

ED 037 599

- AU Rigg, Robinson P.  
TI Audiovisual Aids and Techniques in Managerial and Supervisory Training.

AB An attempt is made to show the importance of modern audiovisual (AV) aids and techniques to management training. The first two chapters give the background to the present situation facing the training specialist. Chapter III considers the AV aids themselves in four main groups: graphic materials, display equipment which involves projection, and student-controlled aids. For each aid a description of how it works, what advantages and disadvantages it has, and how it can be used, is included. Chapter IV describes basic principles and suggests presentation techniques using overhead projection, film, and closed-circuit television. This is followed by a Chapter on the provision of suitable conditions with reference to room layout; screens, loudspeakers, and projectors; and remote control systems. Also included are hints on the preparation and construction of display materials and equipment, and its indexing and storage. Four appendixes provide a glossary of AV terms, a film evaluation questionnaire, a suppliers' list and a session check list for training planners. There is a bibliography. (NL)

ED 035 994

- AU Monroe, Bruce  
TI Modifying Existing Management Systems for Use In Educational Agencies or How to Eat an Elephant.
- AB Five basic assumptions underlie the effective application of the systems approach to educational management: (1) the purpose of an educational system; (2) the need for improvement in the educational programs of the 50 states; (3) the complexity of local and state educational programs; (4) the present nonsystematic management of most state, regional, and local educational programs; and (5) recognition of the need to invest in educational system analysis. Following a short-term systems approach, existing educational management systems may be improved by a series of 11 specified steps. For the long-term application of the systems



approach to the management of national, state, and local educational systems, more comprehensive planning is required. Information being developed by Project Cape, an extensive national survey assessing educational progress, could serve as the background for a national educational system analysis, followed by systems applications that would be regional in scope. A seven-phase system model for program development is outlined. (JK)

ED 035 107

- AU Cook, Desmond L.  
TI Management Training Program for Educational Research Leaders. Final Report.  
IN Ohio State Univ., Columbus. Educational Program Management Center.
- AB To increase the expertise of leaders in educational research, a series of four 5-day training sessions were held between April 1968 and January 1969. Ninety-five persons from all parts of the nation attended the sessions, including directors of educational research and development programs, professors, administrators, and research associates. The training sessions sought to provide participants with a background in selected management concepts and principles. The participants are expected to implement the concepts and principles through specific programs, to instruct others in the techniques, and to disseminate information about the research management process to educational administrators. Content areas of the program included the management concepts of planning and controlling, network analysis, the systems approach, work-flow techniques, problem analysis, and decision-making procedures. The report includes participant evaluations. Bibliographic material and a list of all participants are appended. (Forms on pages A-2 and A-3 may reproduce poorly due to small print.) (JK)

ED 034 957

AU Hudson, Floyd Gene  
TI The Development of Simulation Materials:  
Media for Training Special Education  
Administrators.  
IN Kansas Univ., Lawrence.

AB This was a project to design and develop materials for training special education administrators. Simulation was used as an instructional approach allowing interaction similar to that of the "real world" administrative setting. After a literature review on roles and functions, reality-based problems were chosen for use in tasks to elicit decision making. Situations representing a city, school system, a community, a state, and a special education department within a school system, were designed for each of 50 preselected problems. Tasks involved in-basket messages, telephone calls, and conferences requiring face to face interaction. Response forms were decisions and non-decisions along with stated reasons for each action. A special trainee kit provided essential background materials and samples of the response forms. Several conclusions were reached: (1) the materials should be used with advanced special education seminars but can be used adequately in a workshop or institute; (2) they should be expanded to include more problematical situations; and (3) they should be tested for suitability. (Author/LY)

ED 034 311

AU Thomas, Terry A.  
TI The Effects of Laboratory Training on  
Elementary School Principals: An Evaluation.  
IN Oregon School Study Council, Eugene.

AB This study was designed to examine the job-related interpersonal behavior changes of elementary school principals as a result of laboratory training. A before-and-after control-group design was used to determine

if the principals who participated in the laboratory training experience changed their behavior in working with their staffs and if the socioemotional climate of their elementary schools changed subsequent to participation. The experimental group showed more change toward (1) being considerate to the individual needs of the staff, (2) use of tact, (3) a more collaborative approach to decision-making, and (4) increased leadership for improving staff performances. The staff of the experimental-group principals showed more change toward higher group morale, and their schools changed toward more open organizational climates. (DE)

ED 033 320

- AU Massey, James Orr  
TI An Approach to more Effective Training for Executive Careers.  
IN University of Southern California, Los Angeles.
- AB An assessment was made of the usefulness of more realistic simulation models in the academic study of business, and of resources needed to develop and use such models. A review of the literature showed significant differences in structure and the role of the "Player" (student) as regards game theory, which deals with analysis and selection of available strategies in competitive situations with rationality of behavior assumed; management games, with their deterministic structures in which interactions between decisions and environment are specified by referees; and true simulation, marked by indeterminacy in the relation of student to model and in input output variables. True simulation has usually proved too costly, but management games presently in use can be modified into simulations for graduate schools of business. In an experiment to test this approach, comparison of student reaction to the original and to the modification indicated improved realism and greater student appreciation of factors in decision making. (Author/LY)

ED 032 843

- TI Organizing Schools and Institutes of Administration.
- IN Pittsburgh Univ., Pa. Graduate School of Public And International Affairs.
- AB This handbook is designed as a guide for persons engaged in planning, improving or managing programs and operations of schools and institutes of administration which offer academic degree and nondegree programs, research, and advisory services. It focuses on public, development, municipal and business administration. Although the handbook is intended primarily for schools and institutes in underdeveloped countries, it contains much that is applicable to educational endeavors in industrialized nations. Specific guidance is offered for centers that: (1) serve some or all levels of government and public and private enterprise; (2) have wide substantive scope including important policy and administrative elements; (3) emphasize economic and social development; and (4) are interdisciplinary in nature. The proposed audience for this handbook prepared in collaboration with the institutional members of the International Institute of Administrative Sciences includes: staffs and governing officials of such centers, government personnel responsible for manpower and education planning, technical organizations and advisors assisting such centers, and academic administrators and instructors concerned with the role of universities in meeting public service and national development needs. (JS)

ED 032 619

- AU Barnes, Donald E.
- TI Business Methods in Reorganizing Administration of an Urban School System. Industry and Education Study No. 1, New Haven.
- IN Institute for Educational Development, New York, N. Y.

AB Problems with defining the administrative organization of the New Haven school system led a new superintendent of that system to request aid from local industrial management experts. An organization expert was "loaned" to the school system by a local industry. The end result of 6 months of interviewing and analyzing was a document, called "The Price Report," that assessed the organizational structure, pointing out serious deficiencies and proposing a detailed plan for reorganization. A local public utility then placed three men under the superintendent's direction to implement the reorganization plan. In addition to their basic assignment, they wrote an "Administrators' Manual" and produced an innovative management inservice training program. A reorganization of information channels has led to improved communication within the administrative structure, with the press, and with the public on a direct basis. Copies of questionnaires used in the study are appended with a summary of "The Price Report." (DE)

ED 032 475

- AU Ringgenberg, Clayton  
TI Local Government Training Programs, Problems,  
and Needs in Iowa.  
IN Iowa Univ., Iowa City. Inst. of Public Affairs.
- AB A report, providing guidelines for the Iowa State Advisory Council, deals with inservice training and the role of Title I in providing educational programs. Part I discusses the need for inservice training for local government officials, lists available education and training programs, points out major training gaps, and makes suggestions for strengthening such programs. Part II discusses progress and problems under the Iowa Community services program and poses policy questions for the state advisory council, the administrators of the program, higher education officials, and community officials and leaders. Part III

is a progress report on surveys and field work; it summarizes data on the personal and educational backgrounds of 1,600 persons in advisory and managerial positions and presents their views regarding their inservice training needs. The 1969 plans of the institute of public affairs are also outlined. (NL)

ED 031 684

AU Stroh, Thomas Frederick  
TI The Uses of Video Tape in Training and Development.  
IN American Management Association, New York, N.Y.

AB Video tape recording systems are used in a variety of ways in training programs for commerce and industry. A questionnaire, which drew responses from about 200 companies, identified the advantages as well as the problems of video tape usage. Many of its uses in training of industrial and sales personnel involve role playing, which in itself presents particular problems if it is not to create a threatening situation for the trainee. Most of the companies surveyed felt that their investment in video tape equipment was worthwhile. (Appendix includes a list of universities and colleges offering courses in video tape recording; equipment manufacturers; and the questionnaire sent to companies using video tape recording for training.) (MF)

ED 030 194

AU Knezevich, Stephen J.  
TI The Development and Testing of a Model for a Nationally based Vehicle dedicated to the continuing professional growth of school administrators. Final Report.  
IN American Association of School Administrators, Washington, D. C.

AB The primary objectives of the study were to develop a model for a national academy for school executives (NASE), to determine the receptivity of school administrators to such a program, and to determine the feasibility of implementing the model within the near future. Four academic task forces studied the structural elements, fiscal requirements, program characteristics, and feasibility of the model. Curriculum writing consultants specified program content, methods, and staff. An opinionnaire was circulated to test administrators' attitudes towards the model. Three pre-session programs were conducted to test the reactions of administrators to program content, staff, methods, sites and facilities, fees, and amounts of time involved, it was concluded that (1) school administrators showed considerable interest in the model; (2) NASE should offer programs at several levels, including short term clinics and seminars and longer residential sessions; (3) it is fiscally feasible to launch the short term seminars and clinics but more development is needed on the other levels; (4) the probability of attendance by administrators at short term programs is primarily related to the program content, length of the program, and the fee charged; and (5) NASE should be sponsored and implemented by the AASA.  
(Author/DE)

ED 030 081

AU Lange, Carl J.; and Others  
TI Training Leaders with Sound Films and Group Discussion Techniques.  
IN George Washington Univ., Alexandria, Va. Human Resources Research Office.

AB A leadership course for Army officers used sound films for the presentation of officer problems, based on descriptions of leadership situations collected from Army officers and NCO's in combat and noncombat areas. Each film terminated at the point where the leader

was faced with making a decision and taking action; a small group discussion followed. A manual for instructors included the purpose of the course, the technique used, the function of the instructor, and narrative descriptions of the leadership problems. The course was used for leadership training, with control groups taking conventional classes. Analyses indicated that the experimental training was superior to the conventional training.  
(Authors/LY)

ED 027 597

AU Lynch, Patrick D., Ed.; Blackstone, Peggy L., Ed.  
TI Institutional Roles for In-service Education  
of School Administrators.  
IN New Mexico Univ., Albuquerque. Dept. of  
Educational Administration and foundations.

AB This document is a compilation of papers read at a 4-day conference attended by 60 participants from throughout the United States. Chapters include (1) "In-service Education of School Administrators: Background, Present Status, and Problems," by Robert B. Howsam; (2) "Notes on Institutional Relationships in the In-service Education of the Professional Administrator," by Keith Goldhammer; (3) "Inter-institutional model for In-service Training and Changes in School Systems," by Patrick D. Lynch; (4) "Continuing Medical Education," by Reginald Fitz; (5) "The Development and Implementation of a Residence Executive Development Training Program," by Simon Herman; (6) "Models for Change in School Systems: Reinforcement," by Robert J. Berger; (7) "In-service Training of Industrial Management," by Robert Utter; and (8) "Psychological Processes in Influencing Change," by Stanley W. Caplan. (JK)

ED 027 452

AU Siegle, Peter E.  
TI New Directions in Liberal Education for  
Executives.  
IN Center for the Study of Liberal Education for  
Adults, Brookline, Mass.



AB In a discussion of several liberal education programs for executives, those run for American Telephone and Telegraph at the University of Pennsylvania, Swarthmore College, Dartmouth College, Williams College, Northwestern University, and programs at Clark University, Southwestern University, Wabash College, Pomona College, Aspen Institute, the University of Denver, the University of Akron, and the Vassar Institute are outlined and compared. All the programs stem from industry's awareness that to develop his full potential, a person needs to have a broad education rather than merely a specialty; the assumption is made that for many people, a liberal education is most profitable after years of a specialized job, rather than before, and a special, often residential, program must be devised so that one can see liberal education in the context of one's daily life. The programs are non-credit, have few participants in order to encourage discussion, emphasize humanities and values, try to provide experiences greatly different from those of daily life, and have had difficulties in attempting follow-up and evaluation. Descriptions of the curriculum, methods, and qualifications for enrollment are given for each program. (JF)

ED 025 837

AU Farquhar, Robin H.  
TI Strategies to Expand the Pool from which Talented Persons are Recruited for Preparation in Educational Administration.

AB Current recruitment efforts in educational administration are limited by the narrow target population considered (which seldom extends beyond professional educators) and the unsystematic methods utilized. In addition, five significant obstacles to effective recruitment are (1) the lack of information about educational administration among potential recruits, (2) the occupation's low perceived status as a career, (3) the restrictions to entry into the occupation, (4) the problems of graduate study for persons already established, and (5) the low general opinion of preparation

programs in educational administration. Strategies to ease the recruitment problems include: (1) communicate to high school seniors information about the career, (2) encourage talented young people to enter preparation programs from pools traditionally ignored by current recruitment efforts, (3) recruit persons from other careers in which relevant competencies are developed, and (4) recruit paraprofessionals to serve in supportive administrative roles in big-city school systems. To conduct the recruitment program, a consortium composed of the following kinds of agencies should be created: (1) nationwide group of selected universities and associated school systems (it is recommended that UCEA serve this need), (2) a firm to produce printed and audiovisual materials, (3) a public relations or advertising firm, and (4) one or more funding establishments. (HW)

ED 025 016

- AU Carson, Robert B., Ed.  
TI Seminar Series for School Administrators.  
Volume 2, Change and Innovation.  
IN Calgary Univ. (Alberta). Dept. of Educational Administration.
- AB A collection of six papers presented on separate occasions to practicing administrators deals with the general topic of the implementation and consequences of change in an organization. The authors and titles of the papers are (1) A. V. Piggott, "Educating for Tomorrow's Needs," (2) T.C. Byrne, "Research and Decision Making," (3) Keith Goldhammer, "Research Points the way," (4) R. J. Pellegrin, "Educational Organizations and problems of Innovation," (5) J.E. Cheal, "Uniting the Art and Science of Administration," and (6) R. B. Carson and F. D. Oliva, "Issue Analysis: Implications for Administration." Also included is a 19-item annotated bibliography. (HW)

ED 022 085

- TI An Approach to the Training and Development of Managers, A Report by the Management Training and Development Committee of the Central Training Council.
- IN British Ministry of Labour, London (England).
- AB This report deals with the training and development of full time managers and executives, and of persons in departmental or technical posts who have, or may be given, managerial responsibilities, either in their own specialties or in general management. The first major section presents the common features of effective management training and development schemes-- assignment of responsibility, job analysis, assessment of present and future needs, recruitment and selection, record keeping, and program appraisal--and offers guidance on the best use of individual or group projects, course work, and other means and facilities for inhouse and external training. The following section gives initial guidance to training boards on ways in which their grant schemes can contribute to management development in their industries. Finally, conclusions and recommendations on grants, reimbursements, program planning, and educational responsibility are summarized. (LY)

ED 021 330

- AU Frasure, Kenneth J.
- TI Your Leadership Development Program
- AB Inservice education of administrators had received too little attention from universities, state education departments, and the federal government. Recent developments in educational administration provide means for improving inservice education, particularly in leadership development. Various approaches to inservice education for administrators are discussed, and specific recommendations are made for improving programs of educational leadership development. (HW)

ED 020 466

AU Schwartz, Fred R.; and Others  
TI Effects of Management Development on Manager  
Behavior and Subordinate Perception.

AB As a result of cooperative planning between the University of Wisconsin management institute and a large insurance company, 57 top managers were given a two unit management development program. Group B began training five months after Group A. The workshop sessions included discussions, case studies, buzz groups, and role playing. In phase one, which measured the amount and kind of behavior change and subordinates' perception of change, subordinates of the trained supervisors completed the leadership behavior description questionnaire. In phase two, all participants were interviewed by means of the open-ended critical incident technique. Group A managers were less production centered and less oriented toward their superiors, which suggests greater concern on their part with good worker relationships or with establishing a climate conducive to better production. Group B managers were perceived as becoming more active, defining tasks more clearly, and stressing production. Group A training may have affected Group B because of daily contacts between groups. This document appeared in two parts in training and development journal, Volume 22, Numbers 4 and 5, April and May, 1968. 16 pages. (LY)

ED 019 723

AU Culbertson, Jack and Others  
TI The Design and Development of Prototype  
Instructional Materials for Preparing  
Educational Administrators. Final Report.

AB The major objective of the articulated media project (AMP) was to design prototype instructional materials for use in preparing educational administrators in such a way that concepts and reality-oriented administrative

situations were joined during the design process. The study also attempted to project potential uses and extensions of specific prototype materials created and to explore some of the implications of the AHP experience. Three different types of prototype materials were developed in the project--(1) A management bargaining game, (2) materials designed to generate and give meaning to a number of conceptual frameworks related to planned change; and (3) a set of two computerized, simulated administrative situations based upon systems concepts. Detailed information is presented on the various media and materials developed. Generalizations are made about the prototype materials, organization and processes, and implications for the future. (HM)

ED 019 625

- AU Ault, Leslie H.  
TI A Situational Test of Training Effectiveness.
- AB As part of the evaluation of a multi-media course for managerial personnel on problem-solving discussions, a special case was developed to test trainees' application of their skills in a new setting. The case placed each subject in the role of a plant manager with a problem to solve, with two subordinates available for consultation. The roles of the subordinates were carefully structured, and the people playing these roles were not informed as to the nature of the experiment. A total of 30 sales managers from two companies took part. Fourteen had been trained three months previously, and 16 were controls. Each subject was given background information and then played the case over the telephone at an appointed hour. The solutions to the problem were graded on the basis of a preestablished scale. The results showed that managers with training reached better solutions and reached them faster than managers without training. The use of the telephone, dictated by the geographical dispersion of the subjects, proved feasible, thus suggesting applications in training and research, particularly where verbal interaction is being studied. This document is available without cost from Xerox Corporation, 600 Madison Avenue, New York, N.Y. 10022. 10 pages. (Author/RT)

ED 019 068

- AU Cook, Desmond L.  
TI A New Approach to the Planning and Management  
of Educational Research.  
IN Ohio State Univ., Columbus. School of Education.
- AB The project method of funding research places importance on the management of such research in both planning and operational stages. Typical research proposals do not deal effectively with the schedule to be maintained, the complex of interrelated activities, the nature of the tasks to be performed, or the time and resources needed to do the task. A series of 11 questions can be effectively applied to management of research--(1) What is the product or major objective of the project, (2) What are the subprojects at successively lower levels which must be accomplished in order to reach the major objective, (3) What are the tasks or activities to be accomplished, (4) At what level of performance is the task to be accomplished, (5) What is the order or precedence of the tasks, (6) Who is to do the tasks, (7) Do certain restrictions or constraints affect project schedules, (8) Has adequate consideration been given to the unknown nature of many tasks, (9) Is the project plan fully understood or easily communicated outside of the project, (10) What critical points need additional resources, and (11) What alternative plans may be developed. This paper was presented at the annual college of education faculty research conference (Lake Hope, Ohio, October 1964.) (WO)

ED 018 741

- AU Catalanello, Ralph E.  
TI A Survey of the Training and Education Program  
at Motorola, Inc.  
IN Northern Illinois Univ., De Kalb.
- AB The study of industrial training and education at Motorola, Inc., compared the Motorola experience with prevalent theories and principles

of personnel development. Employee surveys and interviews, tentative and final course outlines based on specific needs of supervisory, clerical, and technical personnel, evaluation sheets for participant feedback, and additional followup courses as needed were used in the successive stages of the training cycle. In 1962, there were 128 courses being offered in evening management and technical training institutes and in largely job oriented day programs, together with special university level training programs outside the plant. Except in class scheduling and evaluation techniques, a class similarity was found between the Motorola programs, developed in large part after the 1958 reorganization of the training and education department, and the criteria, methods, and procedures suggested by authorities on training and development. (The document includes an Appendix, two tables, 21 references, a historical review, and aspects of program administration.) This M.S. thesis is available from Northern Illinois University, Dekalb. 95 pages. (LY)

ED 017 846

- AU Edwards, M. O.  
TI A Survey of Problem-Solving Courses.
- AB To determine the desirability of having its own creativity course, the Stanford Research Institute surveyed 43 organizations on their problem solving courses. Fifteen industrial corporations, four consulting firms, a government agency, a research corporation, and nine colleges and universities responded with specific information on course length (hours) and completion times, course titles, persons in charge, participants, program types and content, average cost and class size, and evaluation techniques. All the courses included lectures, demonstrations, group discussion, and exercises to get students personally involved. Almost all respondents reported an emphasis on practical work, with students actually solving problems, often of their own choice. A free and supportive

atmosphere, encouragement of new approaches and points of view, removal of obstacles to free use of the imagination, development of specialized skills and greater self-confidence in creative abilities, and intellectual and emotional involvement were among the factors considered conducive to success as measured by questionnaires, tests, and gains in productivity for the participants and their organizations. This report, which appeared in the journal of creative behavior, Volume 2, Number 1, winter 1967-68, is available from SRI Publications, 333 Ravenswood Avenue, Menlo Park, California 94025. 19 pages. (LY)

ED 017 755

- AU Andrews, Kenneth R.; and Others  
TI The Effectiveness of University Management  
Development Programs.  
IN Harvard Univ., Boston, Mass. Business School.
- AB The reactions of 6,000 business executives to formal university executive development programs were gathered by questionnaire and a few interviews. Of the total population, 80 percent reacted so favorably that differences in length, costs, and quality were almost obscured. Of seven activities, they ranked class sessions first, then study groups and informal discussions. The executives reported greater self confidence, imagination, flexibility, and tolerance, and appreciation of human problems in business as a result of the program. Rarer were responses citing greater analytical ability and changed attitudes. Program length may make the most difference in impact and may affect the vocational and informational quality of the program. Administrators should consider the region to be served, subject matter, level of participants, level of intellectual attainment to be gained, and the nature of their relationship with sponsoring companies. Companies should redefine the value of short university courses in terms of total company efforts in recruiting, developing, motivating, deploying, and evaluating its executive manpower. (Appendixes include the questionnaire, supplementary tables, and notes on methodology.) The document is available for \$6.00 from the Division of Research, Harvard Business School, Soldiers Field, Boston, Mass. 02163. 358 pages. (Author/LY)



ED 016 905

TI A Proposed Educational Program for Mid-Career Local and State Government Officials in the Metropolitan Detroit Region.  
IN Metropolitan Fund, Inc., Detroit, Mich.

AB To design an educational program to alleviate the shortage of competent personnel for top level positions in local and state government, the inter-university advisory committee (Michigan) explored (1) the feasibility of a mid-career educational program, particularly in the Detroit metropolitan area, (2) the nature of the "knowledges" required of public executives in today's complex society, (3) the means of imparting these "knowledges" (course, curriculum, and teaching method alternatives) by universities, and (4) the experiences of universities around the nation in executive development education. Data presented in this report are based on interviews with selected decision-makers in representative communities, questionnaires completed by potential program participants, followup interviews, and a limited inventory of university sponsored executive development programs conducted in 1965. Document includes recommendations of the advisory committee, characteristics of mid-career officials, opinions of decision-makers regarding type and length of program, list of reported university programs definable and not definable as mid-career education for state and local government officials, interview schedule and the questionnaire. Document is available, for \$2.50, from the metropolitan fund, Inc., One Woodward Avenue, Detroit, Mich. 33 pages. (AJ)

ED 015 385

AU Honey, John C.; Stewart, Ward  
TI University-Sponsored Executive Development Programs in the Public Service.  
IN Office of Education (DHEW), Washington, D.C.  
AB Results are reported of a 1965 survey, undertaken by the U.S. Office of Education and the National Institute of Public Affairs, of midcareer public service executive development

programs in American Colleges and universities. The following data are given for each institution--sponsor, program title, address, background information, duration and scheduling, participants, curriculum, objectives, teaching methods, distinctive features, faculty and staff, living arrangements, fees and methods of payment, awards or certificates at completion, prospects for continuation or expansion, persons to contact for further information, and further comments. Also discussed are the overall characteristics of current university-sponsored executive development programs, examples of non-university programs, issues (mainly on teaching styles and educational objectives) in executive development at universities, and the relationship of growing public service skills and manpower needs to the future contributions and approaches of universities to midcareer education. (The document includes an appendix and 259 references.) This document, FS 5.256-56023, is available for \$.45, from the U.S. Government Printing Office, Washington, D.C. 20402. (LY)

ED 014 157

- AU Alexander, Lawrence T.; and Others  
TI A Demonstration of the Use of Simulation in  
the Training of School Administrators.  
IN City Univ. of New York, N.Y. Div. of Teacher  
Education.
- AB In the spring of 1967, the New York City Board  
of Education initiated an internship training  
program for prospective principals. A team  
of consultants from the city university of  
New York developed a plan for using modern  
simulation techniques to provide practice in  
administrative decisionmaking and problem-  
solving and for incorporating these techniques  
into the program. The plan that was developed  
consisted of the following elements -- (1)  
designing a low-cost school simulation employing  
problems of school-community interaction derived  
from incidents actually occurring in New York  
City schools, (2) conducting an exercise to  
demonstrate the utility of the simulation for  
training, and (3) utilizing the experience thus  
obtained to recommend improvements in the

simulation. The demonstration exercise was conducted with the first class of trainees acting as participants. Analyses of the behavior of the participants in the exercises and of their responses to a questionnaire suggest that the simulation was an effective instrument for improving administrative decisionmaking and problem-solving skills. (HW)

ED 012 957

AU Wayson, W. W.

TI Political Concepts and the Development of Educational Administrators.

AB A conceptual framework is described for developing a university course which combines political science and educational administration. It proposes that the school system, as all social systems, has means of making authoritative decisions governing the behavior of system members. David Easton's input-output model is cited as useful in studying the political activity of various subsystems in the greater social system. Within this model, the school system can be viewed as a system located within a particular two-dimensional environment--(1) the intra-societal environment (the environment for which political decisions are made), and (2) the extrasocietal environment (the greater society). In these terms, the school system engages in a number of exchanges with its environment which include inputs from the environment and outputs from the system. Within this framework, Syracuse University developed a course which permitted focus upon behavior, processes, strategies, and interaction. This allowed investigation into three new perspectives in the school system-- (1) the systems view of policy development, (2) the nature of political behavior, and (3) the dynamics of institutional roles in the political process. Course objectives recognize that educators have a duty to engage in political activity for fulfilling educationally productive ends and to involve themselves in the determination of educational policy and the resolution

of issues related to education. This paper was delivered to a conference on designs for incorporating concepts from social sciences into preparatory programs for educational administrators, sponsored by the University Council for Educational Administration (Columbus, Ohio, March 12-14, 1967). (GB)

ED 011 370

AU Harrison, Roger; Oshry, Barry  
TI Laboratory Training in Human Relations and Organizational Behavior.

AB A series of studies were made on the effects of laboratory training in human relations on the organizational behavior of "middle" managers. Through repeated factor analysis, the organizational behavior describer survey (OBDS) was developed by which a manager and his associates could describe his behavior. The OBDS permitted ratings on rational-technical competence, verbal dominance, consideration, and emotional expressiveness. Studies of 357 managers in four populations showed no significant changes in organizational behavior following training. There were, however, positive relationships between involvement in the laboratory and increased on the consideration scale. There were small correlations between behavior in the organization and in the training laboratory. Determinants of organizational behavior seemed to be situational, and indications were that strong barriers to the transfer of attitudes from the training laboratory to the organization may exist. The findings also suggested that training may lead to multidimensional and multidirectional changes. The document included sample questions, tables of correlations, and 13 references. (AJ)

ED 010 168

AU Edmonds, Fred, and Others  
TI Developing Procedures for the Inservice Education of School Administration

AB On-the-job inservice education for school administrators was investigated in four rural, culturally deprived, and economically depressed school districts. The investigators were conducted by a team of specialists in school administration, curriculum, supervision, and inservice education working with teams of school administrators in local school districts. One objective was to determine the extent of modified performance when participating administrators were helped (1) to conceptualize their administrative jobs, (2) to clarify their administrative organizations, (3) to identify their school problems, (4) to formulate solutions for their school problems, and (5) to evaluate consequences of their administrative performance. Another objective was to experiment with field work as a part of the advanced preparation of promising young administrators by including them as members of the college interdisciplinary team. Data on the concepts, procedures, performances and instructional programs associated with sixty-four administrators were collected by questionnaires, Q-sorts, and staff observations. Results show that the administrators reformulated their job concepts, redefined their roles, and modified their concepts of their school's ultimate purposes. (JM)

EJ 064 505

AU Achilles, Charles M.; Hughes, Larry W.  
TI The Paired Administrator Team Concept: A  
Promising Administrator Training Model  
SO Planning and Changing; 3; 2; 45-50; July, 1972.  
AB Describes the University of Tennessee's  
innovative approach to preparation of educa-  
tional administrators. (JF)

EJ 063 076

AU Culbertson, Jack; Pirtle, Rod  
TI Mission: Administrator Preparation  
SO Catalyst for Change; 1; 1; 6-10; Feb., 1971.  
AB Discusses the University Council for educa-  
tional administration (UCEA) program for  
administrator education. (JF)

EJ 063 074

AU Farquhar, Robin H.; Martin, W. Michael  
TI New Developments in the Preparation of  
Educational Leaders  
SO Phi Delta Kappan; 54; 1; 26-30; Sept., 1972.

EJ 061 263

AU Minter, Robert L.  
TI Mismanagement of Training Programs  
SO Training and Development Journal; 26; 7; 2-5;  
July; 1972.

EJ 061 259

AU Crane, Donald P.  
TI Involvement Techniques for Manager Training  
SO Training and Development Journal; 26; 5; 26-9;  
May, 1972.  
AB Article describes the results of a survey on  
the use of participative learning in manage-  
ment training. (Author/MM)

EJ 060 589

AU Thompson, Noel  
TI Training Managers by the DIY Method  
SO Training Officer; 8; 7; 215-8; July, 1972.  
AB Charts illustrate - the concept of managers training their own subordinates by a do-it-yourself system" used successfully by the author. (Editor/SP)

EJ 057 710

AU Petersen, Peter B.  
TI Leadership Training  
SO Training and Development Journal; 26; 4; 38-42; April, 1972.  
AB Article describes how a group of individuals changed their behavioral style while attending U.S. Army Engineering Office Candidate School. (Author/JB)

EJ 056 943

AU Levinson, Harry  
TI Management by Objectives: A Critique  
SO Training and Development Journal; 26; 4; 3-8; April, 1972.  
AB A comparison of Odiorne's and Drucker's position is mechanistic, with heavy emphasis on measurement, while Drucker's position poses problems in long-range goal measurement and qualitative performance. The author explores the implications of these positions in practice and for the future. (Author/KB)

EJ 050 570

AU Whitley, John  
TI Establishing the Training Function  
SO Canadian Training Methods; 4; 5; 12-14; Nov.-Dec. 1971  
AB How to establish an integrated training system which balances the training requirements of the present, routine training, against those of the future, development training; and concentrates on that which is needed and that which contributes to departmental and company effectiveness. (RB)

EJ 048 988

AU Champagne, David W.  
TI A Training Design for Decision Making  
SO Social Change; 1; 3; 4-5; 1971.  
AB Describes the procedure for a laboratory training program to enhance the role perception and decision making skills of a work group. (AN)

EJ 047 443

AU Toure, Sylvia A.; and Others  
TI Examples of Over-Use of Sensitivity Training  
SO Training and Development Journal; 25; 12; 24-6, Dec., 1971.  
AB Report focuses on some over-uses of sensitivity training by showing that the technique is differentially effective for separate groups of people. (Author)

EJ 047 234

AU Byham, William C.  
TI The Assessment Center as an Aid in Management Development  
SO Training and Development Journal; 25; 12; 10-21; Dec., 1971.  
AB Reviews assessment centers, their methods, growth and validity studies. Gives an example of a typical two day assessment center and of an assessment center summary report. (RB)

EJ 047 186

AU Schein, Virginia E.  
TI An Evaluation of a Long-Term Management Training Program  
SO Training and Development Journal; 25; 12; 28-34; Dec., 1971.  
AB Describes an investigation to determine the effectiveness of an eight-month management training program for college graduates conducted by the American Management Association. Examines evaluation criteria, method, measurement instruments, data analysis and results. Charts, tables, references. (Author/RB)



EJ 047 003

- AU Wohlking, Wallace  
TI Management Training: Where has it gone wrong?  
SO Training and Development Journal; 25; 12; 2-8;  
Dec., 1971.  
AB Explores how successful training departments have been in achieving improved managerial performance; how conventional training methods compare in effectiveness with new process" techniques; how management development and training practitioners can modify existing training approaches to achieve increased managerial performance. References. (RB)

EJ 045 418

- AU Glueck, William F.  
TI Management Training Using Telelectures  
SO Training and Development Journal; 25; 11; 12-6;  
Nov., 1971.  
AB A report, on a training program for hospital administrators and managers that used the medium of the telelecture. The method is evaluated and shortcomings and possible future uses considered. (RB)

EJ 045 040

- AU Bailey, Stephen K.  
TI Preparing Administrators for Conflict  
Resolution  
SO Educational Record; 52; 3; 233-39; Summer, 1971.

EJ 043 401

- AU Yaney, Joseph P.  
TI The Analysis of Self-Selection Techniques  
within a Management Training Program  
SO Programmed Learning and Educational  
Technology; 8; 3; 196-201; July, 1971.  
AB The focus of this study is to determine how well the individual can function when he selects self-instructional courses which are job relevant, and then is told to proceed on his own, with little or no specific interest shown in his activity by the formal organization." (Author)

EJ 037 357

AU Mackenzie, R. Alec  
TI A Management Process Model for Training and  
Development Directors  
SO Training and Development Journal; 25; 5; 25-30;  
May 1971.

EJ 034 356

AU Cawelti, Gordon; Howell, Bruce  
TI Help for the Man in the Middle  
SO School Management; 15; 3; 22-23; March, 1971.

AB A program to aid building principals and to  
decentralize decisionmaking. (Author)

EJ 029 585

AU Lee, Sang M.; Dean, Charles C.  
TI University Management Training Programs: An  
Empirical Evaluation  
SO Training and Development Journal; 25; 1; 32-37;  
Jan., 1971.  
AB Perceptions by 94 Virginia Polytechnic Institute  
Program participants regarding overall content,  
effect on subsequent salary increases and pro-  
motions, principal kinds of knowledge gained,  
and overall program value. (LY)

EJ 029 525

AU Dubrin, Andrew J.  
TI Management Development: Education, Training  
or Behavioral Change  
SO Personnel Journal; 49;12;1002-5; Dec., 1970.

EJ 028 052

AU Green, Thad B.; Cotlar, Morton  
TI A New Dimension in Management Training: A  
Video-Audio-Participative (VAP) System  
SO Training and Development Journal; 24; 10; 22-27;  
Oct., 1970.

EJ 024 788

AU Woolley, T. Russell  
TI ETV for Business Training at WQEX, Pittsburg  
SO Educ. Telev.; 2; 8; 25-28; Aug., 1970.

EJ 024 561

AU Farquhar, Robin  
TI Improving the Preparation of Educational  
Leaders: The UCEA Plan  
SO Planning Changing; 1; 2; 58-70; July, 1970.

AB Discusses the organization, history, and  
purposes of the university council for  
administration; and describes the activities  
planning for 1969-74. (DE)

EJ 024 560

AU Knezevich, Stephen J.; Morrow, Richard G.  
TI Professional Development of School Adminis-  
trators: The Challenge Facing the AASA  
National Academy  
SO Planning Changing; 1; 2; 49-57; July, 1970.

AB Outlines the history and status of the National  
Academy for School Executives (NASE), A New  
Approach to Administrator Inservice Education  
Sponsored by the AASA. (DE)

EJ 024 548

AU Gannon, Martin J.  
TI The Case Observational Method: A New  
Training Technique  
SO Training Develop J; 24; 9; 39-41; Sept., 1970.

EJ 024 122

AU James, Leslie  
TI The Training Page  
SO Educ. Training; 12; 7; 269-270; July, 1970.

AB Distinguishes between executives, administrators,  
and managers, and their differing training needs.  
(BH)

EJ 024 111

AU Suessmuth, Patrick; Stengels, Marit  
TI Training Ideas Found Useful  
SO Can Training Method; 3; 3; 28-30; Jul.-Aug., 1970.

AB Group decision on the moving of chess pawns is a useful way to demonstrate to students in a management development situation how ineffectively they use the resources available in a work situation. (MF)

EJ 024 103

AU Desatnick, Robert L.  
TI Developing Managers - An Integral Part of the Management Process  
SO Training Develop J; 24; 8; 2-6; Aug., 1970.

EJ 022 829

AU Hughes, Larry W.; Tanner, C. Kenneth  
TI An Evaluation Procedure for a New Program to Prepare Administrator Change Agents  
SO Educ. Admin. Quart; 6; 2; 46-55; Aug., 1970.

AB This article describes a new program directed toward preparing principals to function as change agents in elementary and secondary schools in Appalachia. Program evaluation procedures that include cost effectiveness analysis based on Bayesian statistics are described in detail. (JH)

EJ 021 395

AU Papaloizos, A.; Hicholls, J. R.  
TI An Approach to Measuring the Effectiveness of Participative Methods in Teaching Managerial Skills  
SO Training Develop J; 24; 6; 10-14; June, 1970.

AB Ford Foundation sponsored research at the Swiss International Management Development Institute focused on thought processes, kinds of content, and types of intellectual output or outcomes. Article includes a diagram of relative effectiveness of participative methods in developing specific skills, and Guilford's structure of the intellect" model. (LY)

EJ 019 410

AU Enni., Gerard J.  
TI Using Public Seminars and Institutes  
SO Training Develop J; 24; 4; 20-25 ; April, 1970.

AB Guidelines on incorporating outside training into a management training program. Two references and a checklist are included.  
(LY)

EJ 015 776

AU Young, Donald A.  
TI The Trouble With Training Today  
SO Training Technol; 2; 1; 51-54; Jan., 1970.

AB Discusses shortcomings in measuring results, training methods, and management interest in management and supervisory training and suggests how to make training more effective. Training technology is a quarterly supplement to educational technology magazine. (GR)

EJ 015 689

AU Joyce, Robert D.  
TI In-Basket Training for Engineering Managers  
SO Training Technol; 2; 1; S20-S26; Jan., 1970.

AB Describes incorporating the use of memorandums as a technique of training engineering managers. Training technology is a quarterly supplement to educational technology magazine. (GR)

EJ 015 551

AU Bellon, J. J.; Jones, R. V.  
TI Renewal for School Administrators--A Systematic Approach  
SO J Secondary Educ; 45; 1; 3-8; Jan., 1970.

AB In order for school administrators to be able to provide vigorous leadership in our rapidly changing educational system, they must be given the opportunity to undergo personal and professional renewal. Programs for this purpose must be designed and made available.  
(CK)

EJ 015 261

AU Dejnozka, Edward L.  
TI Training School Administrators: Some  
Suggestions for Improvement  
SO Peabody J.Educ; 47; 4; 243-5; Jan., 1970.

EJ 015 083

AU Hall, Clifford G.  
TI Tooling Up for Auto-Motivated Management  
Training  
SO Sch. Shop; 29; 6; 49-51; Feb., 1970.

EJ 014 349

AU Brynildsen, R. D.; Wickes, T. A.  
TI An Integrated Approach to Maximize Laboratory  
Methods in Training  
SO Training Develop J; 24; 2; 4-8; Feb., 1970.

AB An antiobsolescence management education  
program by TRW, Incorporated, includes  
preliminary discussion, reading, and con-  
sultation; offsite laboratory training; work  
unit application; a management skills work-  
shop; and individual developmental followup.  
Program flow chart. (LY)

EJ 007 783

AU Williams, Roger  
TI Can We Evaluate Management Training?  
SO Ind Training Int; 4; 3; 120-122 ; March, 1969.

EJ 007 188

AU Burke, Ronald J.  
TI A Plea for a Systematic Evaluation of Training  
SO Training Develop J; 23; 8; 24-29 ; Aug., 1969.

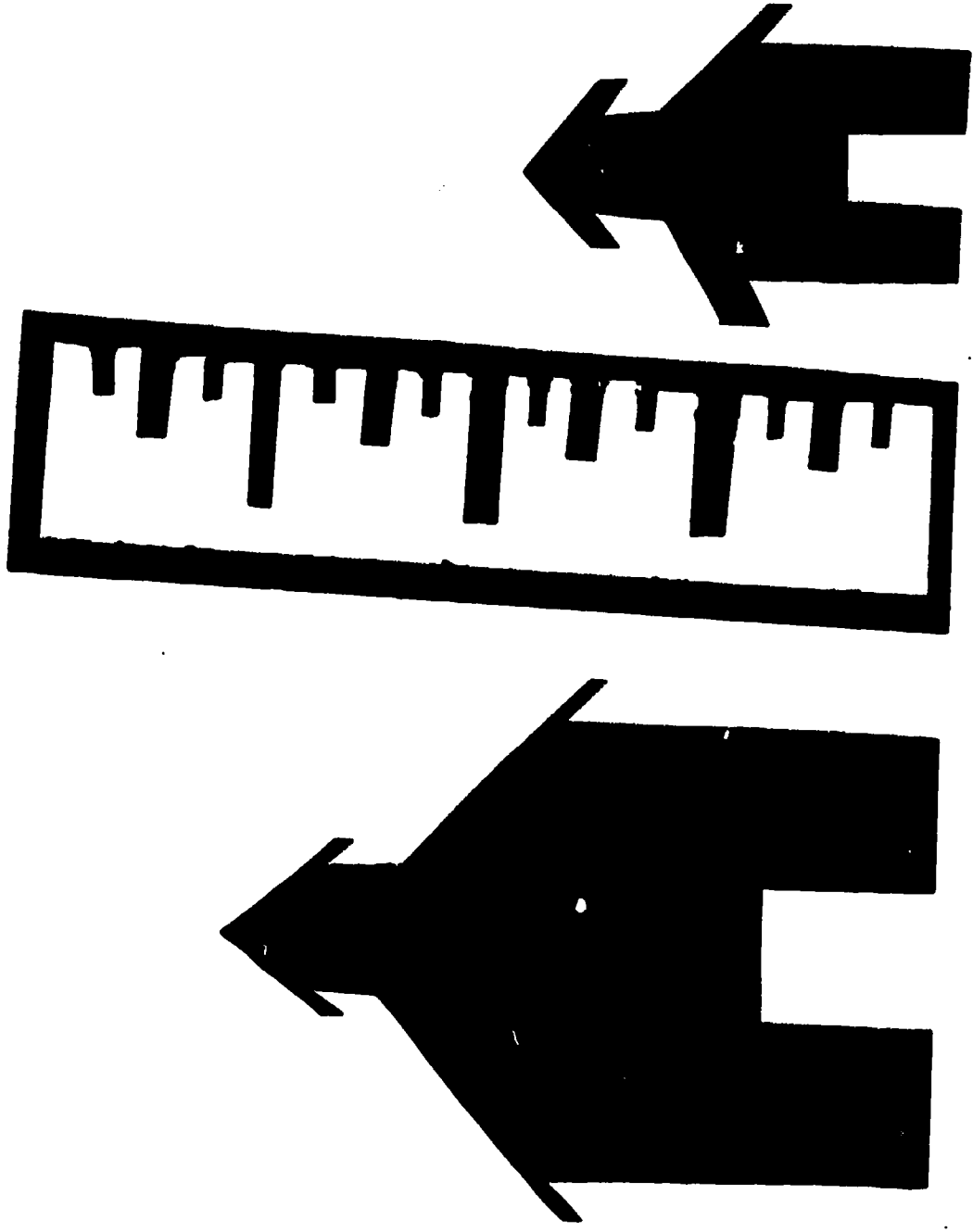
EJ 001 273

AU Knezevich, Stepehn J.  
TI AASA Academy for School Executives  
SO Amer Educ; 5; 2; 25-26; Feb , 1969.

**S E C T I O N     B**

**Sources and Resources**

# COMPARE RESEARCH FINDINGS



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ED 069 015

AU Lutz, Frank W.; Ferrante, Reynolds  
TI Emergent Practices in the Continuing Education of School  
Administrators. ERIC/CEM-UCEA Series on Administrator  
Preparation. ERIC/CEM State-of-the-Knowledge Series,  
IN Number Sixteen. UCEA Monograph Series, Number Three.  
Oregon Univ., Eugene. ERIC Clearinghouse on Educational  
Management.  
IN University Council for Educational Research and Development  
(DHEW/OE), Washington, D. C.

AB In this monograph, the authors describe the shortcomings of  
traditional approaches to continuing education of administrators  
and examine the extent to which innovations are being attempted  
in present practices. The authors note that, in print and in  
practice, continuing education of administrators has failed to  
develop to the extent that it can be described as in the beginning  
stages of a science and that truly innovative programs are lacking  
in current practice. The authors then propose a comprehensive  
process for planning, implementing, and evaluating program for  
the continuing education of administration. They argue that a  
planned, systematic, and continuous administration education  
program is basic to the solution of the central problem facing  
education. A bibliography is included. (Author/DN)

ED 069 014

AU Farquhar, Robin H.; Piele, Philip K.  
TI Preparing Educational Leaders: A Review of Recent Literature.  
ERIC/CEM-UCEA Series on Administrator Preparation. ERIC/  
CEM/ State-of-the-Knowledge Series, Number Fourteen. UCEA  
IN Monograph Series, Number One.  
Oregon Univ., Eugene. ERIC Clearinghouse on Educational  
Management.  
IN University Council for Educational Administration, Columbus,  
Ohio.

AB In this monograph, the authors provide a general overview of  
recent literature on administrator preparation programs. Ten  
chapters parallel the major interrelated components of an  
administrator preparation program: program content, program  
structure, recruitment and selection, instructional approaches,  
field-related experiences, student research, graduation

requirements, program evaluation and development, departmental functions and staffing, and in-service programs. The survey is limited largely to recently published books and journals that treat as their prime topic the preparation of administrators in education. An extensive bibliography is included. (Author/DN)

ED 068 821

- AU Crotty, Philip T., Jr.  
TI Professional Education for Experienced Managers: A Comparison of the MBA and Executive Development Programs.  
IN Northeastern Univ., Boston, Mass. Bureau of Business and Economic Research.
- AB An analytical and comparative study of Northeastern University's MBA and management development (MDP) programs, as representative of university MBA and MDP programs generally, is given. Perceived effects on participants of their attendance and completion of either MBA or MDP in terms of their needs and objectives are measured. Results of two programs in relation to teaching effectiveness and teaching methodology are analyzed. Strengths and weaknesses of Northeastern University's MBA and MDP as seen by participants are assessed. Implications for both industry and universities postulate that Northeastern's experience has wider application to other university programs. (Author/NF)

ED 067 991

- TI Pert and CPM: Workshop Material  
IN Burroughs Corp., Detroit, Mich.
- AB This is a workbook containing problems in PERT (Program Evaluation Review Technique). It is intended to be used in a workshop or classroom to train management personnel in the basic methodology and capability of PERT. This material is not adequate in depth to create an expert in these techniques, but it is felt that the material is adequate to provide a working understanding of the methodology as a management tool. It is assumed that this workbook is used under the guidance of an experienced instructor.

ED 067 538

TI General Management Training Center.  
IN Civil Service Commission, Washington, D. C. Bureau of  
Training.

AB A description of the courses and seminars given by the General  
Management Training Center of the U.S. Civil Service Commission  
to provide training opportunity for managers working in Washington  
Metropolitan Area at all levels of government is given. Categories  
of courses are: entry level training; supervisory training;  
management training; executive training; legal, legislative and  
civil rights training; and science and engineering training. Its  
administration is described and names of its professional staff  
are listed. (NF)

ED 067 528

AU Pinkham, Richard C.  
TI Commerce Supervisory Course: Discussion Guide. Duties  
and Responsibilities of a Supervisor.  
IN Department of Commerce, Washington, D. C.

AB Attempts to develop an appreciation of the first-line super-  
visor's job and his responsibilities to management, to his  
worker-subordinates, to his peers, and to himself are pre-  
sented. In particular this document studies the making of  
decisions, and discusses do's and don't's of face-to-face  
problem-solving with a subordinate. A movie film brings  
out typical decision-making defects of supervisors and shows  
these defects can hinder their job performance and jeopardize  
chances for promotion. (Author/NF)

ED 067 054

TI External Degree Project. Summaries of Areas of Competency  
in Business Administration.  
IN Syracuse Univ., N. Y. School of Management.

AB The school of management at Syracuse University recently  
undertook the task of classifying the kinds of competency one  
should demonstrate in order to function effectively in positions

within the field of business administration. The study is aimed at identifying the mix of technical skills, general ability, and background knowledge that fits recognized career patterns in modern business, and listing them in organized fashion. In addition, techniques, technology, and teaching approach are cited that are felt to be effective in communicating the appropriate core knowledge for individual areas of competency. Each of the 10 areas of competency is discussed individually. They are: financial information systems; environmental studies; logistics; quantitative analysis; accounting; finance; marketing; operations management; personnel and industrial relations; and advanced quantitative analysis. (HS)

ED 066 828

AU Scott, J. Glenn, Ed.; Ducharme, David J., Ed.  
TI The Planning Process: A Systems Perspective for School Boards.  
IN Ontario Inst. for Studies in Education, Toronto.  
IN Ontario Inst. for Studies in Education, Toronto. Dept. of Educational Administration.

AB The six papers in this publication discuss how reasonable planning processes can be established and how budgeting procedures can be related to the wider planning process. In the first selection, K. George Pedersen establishes the current context of educational planning and decision making with emphasis on economic implications, and he outlines several formalized approaches to the planning function. In his first paper, Donald M. Levine describes systems analysis procedure and establishes its relationship to program budgeting. In a second paper, he identifies objections to the application of a planning programming budgeting system to education and responds to these objections by outlining a plan for balanced implementation. T. Barr Greenfield provides a specific example of how a system analytical approach can be applied to educational planning and policy analysis. Jack R. McCarthy points out that, in a quest for accountability in education, those concerned should not overlook some limitations that planning techniques borrowed from industry may have when applied to educational operations. In the closing paper, John C. Croft focuses on the human problems that arise in using complex planning systems. (Editors)

ED 065 781

- TI Management & Supervision Personnel Administration Training;  
General Reference.
- IN United States Government Printing Office, Washington, D. C.  
Training and Career Development Div.
- AB This report lists 329 books in the Library of the Training and  
Career Development Division of the personnel service. The  
books are listed under six categories. They are: personnel  
administration (46), management and supervision (60),  
general reference (57), training (20), American Management  
Association (AMA) publications (118), and United States  
Civil Service Commission Publication (28). The AMA category  
is broken down into the following classifications: administrative  
services, finance, international management, manufacturing,  
general management, insurance, marketing, packaging,  
personnel, purchasing, and research and development. It is  
also noted that the library has small pamphlets and flyers in  
12 categories and back issues of 10 magazines. (JS)

ED 064 809

- AU Curtis, William H. ; and others.
- TI The Further Development of the Conceptual Model and Operational  
Dimensions of the AASA National Academy for School Executives.  
Final Report.
- IN American Association of School Administrators, Washington,  
D. C. National Academy for School Executives.
- AB The main purpose of this project was to develop a blueprint  
for the future growth of the AASA-National Academy for School  
Executives. The resulting comprehensive model is displayed  
in outline form through the use of a conceptual framework that  
includes three major processes -- program planning and develop-  
ment, implementation, and evaluation. Each of these processes  
is comprised of a series of activities that may serve as guide-  
lines for further program development, implementation, and  
assessment. The program planning and development process  
includes activities indigenous to basic planning -- i. e. , needs  
assessment, resource identification, goal preparation, program  
priority determination, and the ultimate selection of programs.

The implementation process related primarily to the management and operation of programs and services. Implied in the implementation process is the fact that facilities planning and development will also be a part of this procedure. The evaluation and revision of academy programs are the major activities of the evaluation process. (Author)

ED 064 780

- AU Knezevich, Stephen J., Ed.  
TI Preparation for the American School Superintendency.  
IN National Education Association, Washington, D. C. Commission on the Preparation of Professional School Administrators.
- AB This study of administrator preparation covering the period 1969-70 builds on previous AASA-sponsored studies (1962-63). Data were gathered from questionnaires completed and returned by 250 of the 288 institutions surveyed. The report provides information on (1) the history of administrator preparation studies, (2) institutions with graduate preparation programs for the school superintendency, (3) pre-service and in-service programs, (4) graduate programs, (5) graduate enrollments, and (6) the faculty. Numerous tables illustrate the findings. (Author/JF)

ED 064 613

- TI Management Education.  
IN Organization for Economic Cooperation and Development, Paris (France).
- AB The papers in this report were presented at a 1971 symposium on management education held under the auspices of the industry committee of the Organization for Economic Cooperation and Development (OECD). Under the major topic of "The Present State of Management Education in OECD Countries" are the following papers: "Gardens and Graveyards in Management Education"; "The Situation of Management Education in Japan"; and "In-Career Training in Management Education." Four papers dealing with the situation of management education in OECD European member countries, Scandinavian countries, North American countries, and Japan are included under the

topic "Industry's Needs for Qualified Management." The following papers deal with the major topic "Possibilities for Action by OECD and by Member Governments": "Contacts Between Management Education Centers and Between These Centers and Industry"; "Coordination at National and International Level of Existing Management Education Programs"; "Quality of Management Education Imparted by Management Training Centers"; and "Improvement of Management by Firms Individually and Between Firms." (CL)

ED 064 600

- TI Directory of Instructional Programs in Supervision and Management Training.
- IN Civil Service Commission, Washington, D. C. Training Assistance Div.
- AB This directory, which is designed for the use of training officers in the Washington, D. C. area in prescribing learning programs to meet employee training needs, describes available group and self instructional programs used for the training of supervisors and managers. Each of the 21 courses listed contains the pertinent information necessary to make the determination of its appropriateness to meet the training needs of an agency. Such information includes subject matter, purpose, entry level, format, type of instruction, supervision requirements, time to complete, cost, and related materials. The course titles range from "Introduction to Supervision" to "The Effective Executive." (CL)

ED 063 676

- AU Forsythe, Ralph A.; Keegan, John J., Jr.
- TI The Development of Exemplary Performance Objectives and Their Attendant Evaluation Criteria for the Administrative Service Area of a School District. Final Report.
- IN Denver Univ., Colo.
- AB The procedures used in this study were designed to (1) identify the role of performance objectives in industry, (2) determine the importance of performance objectives at all levels of a school system, (3) identify the functions of the administrative service area of a school district, (4) construct the identified

functions in terms of performance objectives and evaluation criteria, and (5) validate the constructed performance objectives and evaluation criteria. One hundred and nine tentative performance objectives and evaluation criteria were developed of which 97 objectives were validated. Twelve criteria, because they were attendant to the non-validated objectives, were not validated. Study findings resulted in two major recommendations: (1) school districts instituting a system of management by objectives or PPBS should examine the exemplary performance objectives and evaluation criteria found in this study and adapt them to fit their particular situation, and (2) the technique utilized to develop the exemplary objectives and criteria should be employed by those school districts seeking to develop performance objectives and evaluation criteria for those functions described as administrative service functions. (Author/RA)

ED 063 495

- TI A Directory of Public Management Organizations. A Guide to National Organizations of State and Local Governments and Associations of Public Officials with an Interest in Public Employee-Management Relations.
- IN Labor-Management Services Administration (DOL), Washington, D. C.
- AB This directory lists 16 national public management organizations having a substantial and continuing interest in public employee-management relations. Arranged in a standard format, the directory lists: (1) the address and phone number of the headquarters and branch offices, (2) type of individuals or agencies eligible for membership and membership requirement, (3) a brief description of the organization and its purpose, (4) the organization structure, offices, titles and names of incumbents, (5) programs and services of the organization, (6) publications issued, (7) information on annual conferences, and (8) place and date of origin of the organization. Among the organizations listed are the American Association of School Administrators, The National Governor's Conference, and U. S. Conference of Mayors. Related directories are available at VT 015 586 and VT 015 590 in this issue. (Author/JS)



ED 062 603

AU Debin, Samuel S.  
TI New Developments in Continuing Education for the Professions.

AB The need of the professions to update is studied. It is pointed out that the half-life in a professional's competence is the point in time after the completion of training when he had become roughly half as competent as he was upon graduation. Obsolescence is defined as a reduction of efficiencies of performance over time. It has been found to exist when there is a discrepancy between job needs and managerial or professional capabilities as a result of innovation. It is stated that the motivational process at the adult and professional level is a major undeveloped area and one which continuing education should explore. Various methods of assessing competence include: testing, questionnaires, interviews. Research in continuing education has been found to be light in both quantity and quality. Continuing education approaches are studied in the following fields: medicine, natural resources, education, psychology, law, biological science, dentistry, management, engineering. (Author/CK)

ED 061 582

AU Brown, Daniel J.  
TI The Poverty of Educational Administration

AB This speech argues that educational administrators are ill-equipped to meet contemporary challenges because of their lack of present-day administrative knowledge. Two general modes of generating such knowledge are outlined and contrasted -- the humanist (involving verbal theory and "soft" data). A categorization of articles in educational administration quarterly and administrator's notebook reveals an imbalance in favor of the humanist tradition. The implications of this imbalance for the advancement of knowledge and for the resultant service of university departments to the field are discussed. (Author)

ED 060 525

AU Bockman, Valerie M.  
TI The Principal as Manager of Change.

AB Social and technological changes have brought about the need for educational changes. One of the more pressing changes needed directs that principals focus on management -- the process of active and creative leadership -- rather than on administration -- the application of predetermined policies and procedures. The role of manager implies a human relations philosophy and the establishment of an open organizational climate. The manager-principal should treat teachers and staff as competent, intelligent persons and should nurture open participation in decision making and educational processes by all persons and groups who are directly concerned. (RA)

ED 059 491

TI Sources of Assistance and Information.  
IN Small Business Administration, Washington, D. C.

AB The 15th publication in a series of subject presentations in the field of administrative management for use by educators and businessmen who teach management courses is presented. These presentations are intended to be particularly useful to distributive education in the smaller community where library research facilities are limited and equipment for the production of visual aids is not readily available. The lecture is designed to be presented to the businessman in non-technical language. The lesson plan is an outline of the material covered which may be used as a teaching guide. The presentation may be used as written or modified to meet local needs and conditions. The visual aids are photographic copies of the set of visual aids which are available for this topic. These visuals are 8- by 10-inch colored transparencies prepared for use on overhead projectors. The supply department contains materials which may be reproduced locally for distribution to course participants. Cases in point are short actual small-business management cases which may be used to augment the presentation and to develop discussion. The incubator contains ideas for stimulating

further thought and discussion by the participants. A bibliography and list of small business administration field offices are included. (CK)

ED 059 452

TI The Industrial Training Yearbook: 1972. A Comprehensive Guide for Training Officers and their Managements.

AB A vehicle for providing training managers and officers with the necessary advice and information is presented. This completely revised fifth edition contains new sections on metrication training and industrial relations. A 36-page glossary of training terms and the views of the training boards on future developments are included. Content of the yearbook also includes courses, colleges, consultants, training aids, and sources of information. (Editor/CK)

ED C58 610

AU Cook, Desmond L.

TI A Conceptual Framework for the Study of Project Management in Education. Final Report.

IN Ohio State Univ., Columbus. Educational Research Management Center.

AB This paper presents the results of research conducted to develop a model or a conceptual framework for the study of project management in the field of educational research and development. The basic framework incorporates two dimensions: (1) the project and (2) its environment. Four project components: task, temporary management system, project manager, and project success/criteria -- are identified. The environment component is comprised of the influences on the project originating from the parent organization, the customer and the market, and the general cultural conditions surrounding the project (economic, social, political, and technological). (Author)

ED 058 595

AU Fiedler, Fred E.  
TI On the Death and Transfiguration of Leadership Training.  
IN Washington Univ., Seattle.

AB Empirical research shows that neither leadership training nor experience increases organizational performance. These disappointing results can be explained by the contingency model. This theory postulates that task motivated low esteem for the least preferred co-worker (LPC) leaders perform best in very favorable and unfavorable situations while relationship -- motivated (high LPC) leaders perform best in situations of intermediate favorableness. It has been assumed that training in the job's technical aspects and in handling interpersonal relations will make a leader more effective. In contrast, the contingency model holds that we must see training as improving the favorableness of the leadership situation. Therefore, in very favorable and unfavorable situations, training and experience will improve the performance of low LPC leaders but decrease performance of high LPC leaders. In intermediate situations training should increase the performance of high LPC leaders but decrease that of low LPC leaders. This hypothesis is supported by data from previous studies as well as 2 recent studies which specifically tested this hypothesis. (Author)

ED 058 469

AU Piele, Philip K., Ed. ; Smith, Stuart C., Ed.  
TI Directory of Organization and Personnel in Educational  
IN Management. Third Edition: 1971-1972.  
Oregon Univ., Eugene. ERIC Clearinghouse on Educational  
Management.

AB Compiled as a tool for locating information about research in educational management, this new edition has been expanded both in the scope of its subject areas and in the number of organizations and researchers listed. The directory, with increased coverage of research on educational facilities, lists 154 organizations and 416 individuals. Cited for each organization is its name and address, purpose, policy for supplying information to users, geographic service areas,

and topics of available publications. The personnel section cites each researcher's name, title, address, subject areas, research affiliation, and available publications. Extensive subject indexes are provided for both organizational and personnel sections. (Author)

ED 058 157

TI Viewpoints on Accountability.  
IN Educational Innovators Press, Tucson, Ariz.

AB This booklet contains five papers which examine the activities, successes, and pitfalls encountered by educators who are introducing accountability techniques into instructional programs where they did not exist in the past. The papers are based on actual programs and offer possible solutions in the areas considered, which are 1) performance contracting, 2) individualized performance-based teacher education programs, and 3) educational management systems. The papers are 1) "The Educational Management System," by Dr. George L. Caldwell, superintendent of the San Bernardino City Unified School District; 2) "The Texarkana Dropout Prevention Program," by the director, Martin Filogamo; 3) "The Grand Rapids Performance Contracting Program," by the director, Joan Webster; 4) "Elementary Level Individualized Performance-Based Program," by Douglas H. Stellner and John Carter of the Vallejo City Unified School District; and 5) "The College Level Wilkit Program at Weber State College," by the director, Dr. Blaine P. Parkinson. (MBM)

ED 058 107

AU North, Robert C.  
TI Alternative Futures for Society: Certain Variables and Parameters.  
IN Diablo Valley Education Project, Berkeley, Calif.  
IN New York Friends Group, Inc., New York. Center for War/Peace Studies.

AB This paper begins by establishing the need for new world views and social invention. Its thesis is that: 1) reform must begin at both the individual and system levels; 2) we must clearly see how we are caught in systems within systems; and 3) by responding somewhat acquiescently to these systems, we help keep them

stabilized. The author first provides a model to account for human behavior, and discusses the way perceptions, values, expectations, and loyalties lead to foundations for social organization, custom, law, and institutions. Many of these widely shared values are associated with preservation of a society from inner and outer threats, and pursuit of national interests. The behavior of nations and empires is then characterized, mainly in terms of the dynamics of leadership, how it interacts with the shared values, and the process of decision making by national leaders. The author discussed the importance of population and technology as parameters affecting the decisions of its leaders and attempts to account for the importance of these variables through a series of propositions. Machine (or man-machine) simulations of all levels of decision and control with real world data would allow is to determine scientifically not only how basic area, resource, population, production and other variables have combined and are combining, but also what trends are likely to continue, with what consequences. (Author/JLB)

ED 057 453

- AU Morse, Gerry E.  
TI Focus on the Individual: The Mandate for Effective Education and Training.
- AB Government, business, and the public are demanding better education and training programs. The shortcomings of education and training lie not in financial lack but in the absence of relevance, good timing, and efficient objectives. By emphasizing the development of the individual, education and training can become relevant in a world of increasing complexity and rapid change. In-service education and retraining programs should be developed to combat occupational obsolescence, and the objectives should be reordered to prepare the individual to know "how" to live rather than simply to know "about" life. (RA)

ED 057 420

- AU Guruge, Anada W. P.  
TI A Functional Analysis of Educational Administration in  
Relation to Educational Planning.  
IN United Nations Educational, Scientific, and Cultural  
Organization, Paris (France). International Inst. for  
Educational Planning.
- AB This study begins with a look at current systems and practices  
in educational administration in an effort to identify the  
influence of certain interpersonal relationships on educational  
planning. Different types of planning organizations are then  
surveyed to illustrate that methods in and approaches to  
administration and planning are numerous. A subsequent  
chapter analyzes the extent to which existing systems and  
practices interfere with the effective formulation and execution  
of educational plans. The concluding chapter makes a number  
of recommendations for professionalizing and reforming  
educational administration. (Author/RA)

ED 057 350

- AU Margulies, Newton; Raia, Anthony P.  
TI Organizational Development: Values, Process, and Technology.
- AB The current state-of-the-art of organizational development is  
the focus of this book. The five parts into which the book is  
divided are as follows: part one -- introduction (organizational  
development in perspective -- the nature, values, process, and  
technology of organizational development); part two -- the com-  
ponents of organizational developments (key elements in organi-  
zational development -- planned change, organizational learning,  
consultation, and selected readings); part three -- the process  
and technology of organizational development (the collection of  
data-data gathering, nature of the data, techniques, choosing a  
method, selected readings; the diagnostic phase -- diagnosis,  
selected readings; intervening the system -- planned inter-  
ventions, conflict and conflict resolution, and selected readings;  
laboratory method and selected readings, team development and  
selected readings, intergroup building and selected readings,  
and other interventions and selected readings); part four --  
emerging issues in organizational development (problems and  
challenges in organizational development -- the need for

professionalism, the use of sensitivity training, the use of external and internal consultants, overemphasis on personal-cultural change, limitations to hierarchical systems, and selected readings); and part five -- case studies in organizational development (the practice of organizational development -- some conditions for success and failure). (DB)

ED 057 283

- AU Bowers, Raymond V. .  
TI Impact of Technological Change on Executive and Professional Careers.  
IN Arizona University, Tuscon. Dept. of Sociology.
- AB The purpose was to continue the analysis of data obtained by mailed questionnaires from 3970 middle management executives and professionals in 12 military, industrial and governmental organizations. These represented a 66% return. Results support the thesis that the unusually rapid and diverse changes in middle management work since World War II (in material technology, ways of dealing with people, and organizational growth) have had an important effect on middle management careers (80% say "most," "very," or "of some" importance). Moreover, contrary to some opinion, this effect is looked on as a boon to career advancement rather than as a source of career retardation (73% to 9%). Furthermore, consistent with this attitude are several other results: respondents wished that they had had more rather than less change in their work during the previous decade (67% to 33%), thought that they had kept up with change satisfactorily so far (96%) and would be able to continue keeping up with it in the future (97%). Perhaps related to this confidence is their belief that they have coped successfully with the change by facing up to it rather than by trying to oppose or avoid it, and by depending primarily on their own resources rather than trying to cope through others or by organizational means. (Author/DB)

ED 056 511

- TI Olympic Training Film Profiles. Volume III.
- AB Approximately 250 instructional films are described in Volume III (1970-1971) of this review. After an introduction which



considers film discussions from the instructor's point of view and offers some ideas for conducting a film showing and ordering the films, profiles of the films are presented grouped under such areas as management development, human relations, communication skills, salesmanship, training the disadvantaged, and guidance. Each profile consists of a full-page fact sheet that gives the name of the film, the primary audience, the running time, the year the film was made, the specific content, a detailed synopsis, titles of related materials such as guides and workbooks, and the source of the film. Discussion questions and an evaluation of each film are also provided. (Author/SH)

ED 056 367

- AU Johnson, Dale A.; Weiss, Donald J.  
TI Middle Management Decision Making and Job Satisfaction.  
The Relationship Between Participation in Decision Making,  
Personality Characteristics, and Job Satisfaction of Building  
Principals.  
IN Educational Research and Development Council of the Twin  
Cities Metropolitan Area, Inc., Minneapolis, Minn.
- AB This booklet reports the results of two studies of building  
principals that attempted to determine the extent to which  
the relationship between participation in decision making and  
satisfaction would be affected by the personality of the  
principal participants. One study revealed that a significant  
relationship existed between psychological participation and  
job satisfaction for elementary school principals. Although  
the results from the second study were below the level of  
statistical significance, they also revealed that a positive  
association between psychological participation in decision  
making and general job satisfaction existed for secondary  
school principals. (Author/JF)

ED 056 287

- AU Steele, Sara M.  
TI Cost-Benefit Analysis and the Adult Educator: A Literature Review.  
IN Adult Education Association of U. S. A., Washington, D. C.  
IN Syracuse Univ., N. Y. ERIC Clearinghouse on Adult Education.

**AB** In order to determine the value of cost-benefit analysis to adult educators, this paper discusses the concepts involved and how they are being operationalized in adult education. The specific technique is discussed within the general framework of systems approach. A survey of current usage reveals that it has thus far been limited primarily to programs which lend themselves to achieving economic outputs and programs which are closely associated with industry. The final section of the paper concludes that while cost-benefit analysis can be of usefulness in adult education, a more general input-output analysis would be more useful because of its flexibility in dealing with human variables within an educational system. A 68-item bibliography is included. (Author)

**ED 056 285**

**AU** Hiemstra, Roger P.  
**TI** Program Planning and Evaluation: A Bibliography.  
**IN** Nebraska Univ., Lincoln. Dept. of Adult and Continuing Education.

**AB** Meant to serve as a guide to literature concerning program planning and evaluation, the format of this bibliography is a simple planning and evaluation model. The bibliography material cited is related to one of the four model components, as follows: 1. clientele analysis and need; 2. establishing objectives; 3. program planning (models, principles and procedures; tools; general and miscellaneous planning information; and decision-making/problem solving); and 4. evaluation. The 229 items cited are either books or journal articles.

**ED 056 265**

**AU** Passett, Barry A.  
**TI** Leadership Development for Public Service

**AB** The third in a series of books on human potential, the focus of this book is the leadership and management capability of people in public service. The chapters of the book are: 1. the leadership gap; 2. the leader: definitions; 3. the issue develops; 4. creative pressures for the '70s; 5. the private-public dialogue; 6. response: the universities;

7. response: training outside the universities; 8. response: government training initiatives; 9. empty credentials and new careers; 10. the training argument; and 11. leadership development in the '70s. Aspects of the debate in the U. S. Senate on S. 11, the intergovernmental personnel act, on October 27, 1969, are presented in the book's appendix. A nine and one-half page annotated bibliography presents lists of books, articles and books. An index is provided. (DB)

ED 055 757

AU Saretsky, Gary; and others.  
TI Accountability, A Bibliography.  
IN Indiana Univ., Bloomington. ERIC Clearinghouse on Reading.

AB Approximately 225 citations of books, journal articles, and conference proceedings dealing with accountability are listed. The bibliography is subdivided into two categories -- general, technical assistance, needs assessment, management systems, change strategies, performance objectives, performance budgeting, staff development, comprehensive evaluation, program auditing, community involvement, and cost effectiveness. A general bibliography follows with articles discussing measures of accountability, general statements on accountability, and cost-benefit analysis of education and instructional technology. Most of the titles listed were published since 1965. (AL)

ED 055 359

AU Wear, Maurice; Bason, Myron.  
TI Accountability in Education. Educational Administration  
Workshop. Summer, 1970.  
IN Wyoming Univ., Laramie. Coll. of Education.

AB This publication represents the combined efforts of the participants in a workshop held at the University of Wyoming. The writings discuss accountability at the National, State, and Local levels and explain the application of planning, programing, and budgeting systems to be accountability concept. The report presents methods for evaluating both schools and their staffs as means for implementing an accountability system. Appendixes include a paper explaining performance evaluation, a list of internal and external evaluation guides, and a bibliography of evaluation criteria materials. (JF)

ED 055 336

AU Forsberg, James R.  
TI Accountability and Performance Contracting. Analysis and  
Bibliography Series, No. 13.  
IN Oregon Univ., Eugene. ERIC Clearinghouse on Educational  
Administration.

AB Intended for both researchers and practitioners, this review  
analyzes literature on educational accountability and performance  
contracting. It defines the concepts, describes certain individual  
contracts completed or in progress, discusses the use of  
management systems and safeguards, identifies some testing  
and measurement problems, and probes some legal aspects of  
performance contracting. A 44-item bibliography of relevant  
literature is included. (Author)

ED 055 259

AU Stroh, Thomas F.  
TI Managing the New Generation in Business.

AB This book was written primarily for men in management  
positions in American organizations. It is also intended to  
serve as a guide to all instructors and students of management  
institutions from two-year community colleges through graduate  
schools. It is divided into nine chapters. Chapter 1 includes  
a study of the personal characteristics of young people (19 to 24  
years of age) as well as of their knowledge level and educational  
background from the point of view of their usefulness to business.  
Chapter 2 studies the attitudes of college seniors toward a  
business career, noting that the typical one is not motivated  
primarily by money. In chapter 3, it is observed that the burden  
of interesting young college people in becoming productive  
members of private industry falls on business itself, i. e.,  
traditional management methods must change. Chapter 4 cites  
examples of how the manager, by acting like a friendly authority  
figure, may boost the firm's business in coordination with his  
young subordinates. Chapters 5 and 6 illustrate how to identify  
and develop leadership potential within a company. Chapter 7  
discusses the psychology of communication and persuasion,  
based primarily on the principle that all behavior is goal-  
directed. Chapter 8 includes a discussion of the four functions

of management -- planning, organizing, leadership and control. Finally, chapter 9 discusses ways of handling and building positive relationships between young and old managers. (CK)

ED 054 524

AU Kademani, G. B.  
TI Educational Planning Programming Budgeting Systems. Annotated  
IN Bibliography. Technical Information Program Series.  
Georgia Univ., Athens. Center for Management Systems.

AB This bibliography presents a collection of 87 references identified by the center for management studies at the University of Georgia during research studies on planning, programming, and budgeting systems (PPBS). The study evolved from a local need for a unified bibliography with a focus on PPBS applications in education, and this document represents an initial effort to provide all researchers in the area of PPBS with a guide to the literature currently available in this field. (RA)

ED 054 413

AU Argyris, Chris  
TI Intervention Theory & Method: A Behavioral Science View.

AB The primary tasks of intervention activity are introduced in chapter 1. In chapter 2, the conditions necessary to develop the competence of any social system are explored. In chapter 3 the probabilities that client systems will tend to manifest these conditions are examined, and in chapter 4 it is shown that the research methods used by an interventionist may also inhibit his effectiveness. Chapter 5 represents an attempt to give some suggestions for the development of more organic research and diagnostic activities that may increase the interventionists' probabilities for effectiveness. In chapter 6, the conditions under which interventionists will work are examined, and a primary intervention cycle is developed in chapter 7. In chapter 8 the conditions that lead to ineffective intervention activity are examined, and chapter 9 contains an analysis of three cases where interventionists behaved ineffectively. Chapter 10 focus on the problems of locating a client system; chapter 11 follows with a detailed discussion of two introductory meetings with client systems. Chapter 12

discusses how to systematically select a potential client system, and in chapter 13 some basic requirements for diagnostic methods are presented. The method used by the writer to diagnose systems is outlined in chapter 14. Chapter 15 discusses the feedback process, and chapter 16 deals with the problem of terminating ineffective relationships with client systems. (Author/CK)

ED 053 439

AU Saxe, Richard W., Ed.  
TI Source Materials for Educational Administration: Critiques.  
IN Toledo Univ., Ohio. Coll. of Education.

AB This document consists of 17 graduate student critiques of sources that contribute to an historical perspective and a knowledge of educational administration. Each article consists of a brief synopsis of the selected source, followed by two types of evaluation in terms of (1) the student's experience, and (2) a comparative analysis with other sources familiar to the student. (Author)

ED 052 534

AU McIntyre, Kenneth E., Ed.  
TI The Principalship in the 1970's. Bureau of Laboratory Schools  
IN Monograph No. 23.  
Texas Univ., Austin.

AB This document contains a collection of papers presented at the University Council for Educational Administration Career Development Seminar. The papers included are: L. D. Haskew, "The Individual School in the 1975 Educational System"; Edwin M. Bridges, "Personal Success As A Determinant of Principals' Managerial Style"; Conrad Briner, "Viewing the School Principalship"; Luvern L. Cunningham, "Educational Reform and the Principal" and "Alternatives to the Principalship"; Michael P. Thomas, Jr., "Students and the Shaping of The Principalship"; Cecil Mansfield, "A Report on A Principal's Experience in Project Plan"; and Kenneth E. McIntyre, "What Kind of Person (If Any) Is Needed?" (JF)

ED 054 404

TI Basic Case Studies.  
IN British Association for Commercial and Industrial Education,  
London (England).

AB The terms "case study" and "case" are used in this study to indicate the description of a situation which is used as a basis for study and discussion. "Case Leader" is used to indicate the person responsible for the learning situation; "students" are those who are there to learn, including senior managers of mature years. Case studies are used specifically for management training. The study of cases gives useful practice in: analysis and critical thinking, problem solving, decision making, judging between courses of action, handling assumptions and inferences, presenting a point of view, listening to and understanding others, and relating theories and policies to practice. Well-designed questions from the case leader and challenge from his peers stimulate the student's thinking and help him to gain insight into business operations. (CK)

ED 052 357

TI Project to Plan, Develop, Present, and Evaluate a Management Institute for Experienced Occupational Education and Manpower Training Administrators. Final Report.  
IN Technology Management, Inc., Cambridge, Mass.

AB This report concludes the final phase of a project designed to help occupational and manpower training administrators apply the best available management concepts to the analysis and solution of a wide variety of problems. This 2-week experimental institute was presented to a group of Massachusetts administrators from such organizations as public vocational-technical schools, manpower training programs, community colleges, and commonwealth agencies. Arranged in five chapters, the report provides: (1) an introduction to the organization of the report, (2) background information concerning the project, (3) an evaluation of the project which includes participants and staff observations, (4) 12 recommendations in regard to improving the effectiveness of the institute, and (5) a proposed design for future institutes. Included in

the appendix are the project plan, the institute prospectus and schedule, and the institute bibliography. (Author/BH)

ED 052 355

- TI Studies and Reports Related to Training and Education.  
Fiscal Year 1970.
- IN Civil Service Commission, Washington, D. C. Bureau of  
Training.
- AB The information in this directory is compiled from material  
submitted by agencies which are included in the annual report  
of training activities. The purpose of the directory is to  
promote and coordinate an exchange of the training related  
information that agencies obtain as they conduct studies of  
their training needs, problems, and courses. The information  
can be useful to trainers and managers in planning, conducting,  
or evaluating their own programs or courses. The studies and  
reports are related to: (1) career development, (2) determining  
training needs, (3) evaluation of training, (4) executive depart-  
ment, (5) management training, (6) program development, (7)  
summer employment programs, (8) supervisory training,  
(9) technical training, (10) training administration, (11) training  
methods, and (12) upward mobility programs. Entries under  
each category include the title of the information, a brief  
abstract, the performing author and organization, and an  
address for additional information. (GEB)

ED 051 852

- AU Farmer, Richard N.
- TI New Directions in Management Information Transfer.
- IN Gottlieb Duttweiler Inst. for Economic and Social Studies,  
Zurich (Switzerland).
- AB The entire question of how management skills and techniques are  
transferred is extremely complex. Even to identify relevant  
environmental, organizational, and personal variables takes many  
pages, and detailed explorations of even a few key interrelation-  
ships in any country takes much time and money to explore  
properly. A second general conclusion is that there are no  
easy inexpensive ways to transfer any kind of knowledge, let  
alone knowledge as complicated as management skills. A third



general conclusion is that much of the problem is closely related to the educational and behavioral constraints in the society. While legal-political and economic constraints are also important, the key variables appear to be the former two. This also presents problems since it is typically easier to change an economic or legal variable than to change an educational or behavioral constraint. Any practical programs for accelerating knowledge transfers should take this problem into account. (Author/MM)

ED 051 760

- AU Retzlaff, Bernice R.  
TI Higher Education Administration. An Annotated Bibliography of Research Reports Funded by the Cooperative Research Act, 1956-1970.  
IN National Center for Educational Research and Development (DHEW/CE), Washington, D. C.
- AB This annotated bibliography lists federally-funded research reports on the organization and administration of institutions of higher education. The items were selected from announcements in research in education, and are divided into 6 subject categories: communication, faculties, financing, institutional management, instructional programs, and students. Author and institutional indexes are included. (JS)

ED 051 571

- AU Marien, Michael D.  
TI Alternative Futures for Learning: An Annotated Bibliography of Trends, Forecasts, and Proposals.  
IN Syracuse Univ. Research Corp., N. Y. Educational Policy Research Center, Syracuse, N. Y.
- AB This bibliography of materials relevant to educational policy-making is confined to trends, forecasts, and proposals i. e., documents on changes that are taking place, on future states of affairs, and on recommended changes. The material is organized into seven sections: (1) general, (2) elementary and secondary, (3) higher education, (4) other educating institutions, (5) planning and plans, (6) miscellaneous, and

(7) addenda. More than 80 per cent of the 936 items cited are books or book-length documents. Four indexes are supplied: major author, organization, selected subject, and bibliographic. A related document is ED 047 406. (Author/MLF)

ED 051 568

TI The Governor's Commission on Education. Preliminary Report.  
IN Governor's Commission on Education, Madison, Wis.

AB This document reports the commission's indepth study of the state's financial and administrative relationships with education at all levels. The report consolidates the viewpoints and recommendations of 600 Wisconsin citizens. Their perspectives and proposals recommend an educational system to provide necessary educational opportunities and programs from early childhood through adult life, and to assure Wisconsin citizens the highest possible value from their investment in education. The commission made a comprehensive evaluation of the state educational system and recommended appropriate actions to promote utilization of technology, improve educational results, and increase efficiency. The report is organized into five major sections: (1) underlying assumptions, (2) designing the educational system, (3) financing education, (4) special education, and (5) education management. A related document is EA 003 571. (Author: MLF)

ED 051 560

TI Goals for Public Education in Texas. A Report by the Sub-  
committee on Goals to the Governor's Committee on Public  
School Education.  
IN Operation PEP, Burlingame, Calif.  
IN San Mateo County Superintendent of Schools, Redwood City,  
California.

AB This report identifies the universal and continuing purposes that have been generally accepted as the goals of public education in the nation. The document contains reviews of historical educational developments, landmark studies, and recent reports on the educational goals of other states, in

an effort to develop long range objectives for Texas public education. Funds for this research were provided by an ESEA Title III Grant. (Author/RA)

ED 051 447

- AU Rose, Harold B. ; and others.  
TI Management Education in the 1970's: Growth and Issues.  
IN National Economic Development Office, London (England).
- AB The probable demand for and supply of management education in the United Kingdom over the next six or seven years is investigated. The project was intended partly to provide a preliminary study for the national economic development office management education, training, and development committee and partly to meet the special request of the council of industry for management education for information to serve as a background for future policy. Management education in the United Kingdom is in a state of rapid transition. According to the 1966 sample census of population, there were almost 1/2 million "managers" in Great Britain, representing 6% of the population. There are approximately 12,000 places available for post-graduate and post-experience day-study in educational institutions and the permanent centers of companies and industrial organizations. The demand for courses has been growing most rapidly on the part of private industry. The 118 industrial companies replying to the survey reported an increase of 125% in the number of managers sent on internal courses between 1966 and 1968. The most serious direct obstacle to the expansion of capacity is the shortage of suitable staff. There is a widespread need to be strengthened in certain directions. More attention also needs to be given to the effectiveness of different types of post-experience education in subsequent managerial performance. Four appendices are attached. (CK)

ED 050 445

- AU Bowen, C. R.  
TI What Is The Future Role of the School Administrator ?
- AB Because technically oriented nations are spending billions of dollars on research and development, by 1980 school administrators will be operating in a society saturated with new

information and devices to handle it (i. e., computer-based terminals in homes, offices, and schools hooked up to telephones, videos, and radios). However, the pressing need for professional and technical talent to man the information devices will remain to be satisfied. Through professional management training, educational leadership must master the new management techniques and apply them to education. (Author)

**ED 049 983**

- AU** Ling, Cyril C., Ed.  
**TI** The Business Schools in the 70's - Preparing the Leaders of the 80's and 90's.  
**IN** American Association of Collegiate Schools of Business, St. Louis, Mo.
- AB** These proceedings present a collection of addresses and panel discussions. The titles of the panels were: (1) "New Schools of Business and Administration -- Their Opportunities and Challenges," (2) "Student Participation in Schools of Business Administration," (3) "Partners in Revolution -- A Case Study of a Minority Experience," (4) "Business School Research in the 70's," and (5) "Undergraduate Business Schools in the 70's." In his speech "Preparation for What?" Leonard Marks, Jr. discussed the purposes of the need for management education programs. John V. Foster discussed: "The Management of Technology," and the title of Benjamin H. Swig's talk was: "A Challenge for Business Deans in the 1970's." (AF)

**ED 048 528**

- AU** McClellan, William A. ; and others.  
**TI** Humrro Research on Officer Training.  
**IN** Human Resources Research Organization, Alexandria, Va.
- AB** This document records the four presentations on officer training and education research programs made by members of the human resources research organization (Humrro) staff at a briefing sponsored by the office of the deputy chief of staff for individual training at headquarters, U.S. Continental Army Command in July 1970. The presentations provide information about selected Humrro research projects, summarizing the

work, describing progress to date and giving a forecast of future demands to be placed on military leaders and advisors. Some of the components of the training were: leadership, manager and technical specialist training; work units concerned with systems engineering at the battalion level -- developing methods for increasing the effectiveness of the battalion command group through analysis of the interactions commander and staff; work unit skyguard to develop an improved defense officer advanced course; and the development of a technique for creating cultural self awareness. The briefing was the fourth in a series on Humrro training research and development programs. (PT)

ED 048 332

- AU Temkin, Sanford  
TI An Evaluation of Comprehensive Planning Literature with an Annotated Bibliography.  
IN Research for Better Schools, Inc., Philadelphia, Pa.
- AB Every administrator bears primary responsibility for planning the accomplishment of those objectives and activities that fall in his area. When responsibility is relatively restricted, the informal and intuitive methods that constitute "sound judgment" suffice. However, as his area of responsibility widens to include increasingly complex tasks more formal methods of planning and control may be needed. As, for example, when planning for or controlling whole systems of activities (such as a school district), when the activities are new or experimental, or when large sums of money are to be expended. A vast literature exists on methods of planning for systems, for "comprehensive planning." Many of the ideas and methods found in the contemporary literature are discussed and evaluated in the first part of this report. An extensive annotated bibliography follows, with five main sections covering planning process information; system-wide planning methods; system characteristics and qualities; politics, community, implementation and communications; and, finally, other relevant bibliographies. The report concludes with author and subject indexes. (Author/GS)

**ED 047 755**

**AU** Ross, Joel E. ; Murdick, Robert G.  
**TI** An Annotated Bibliography of Management Information Systems.  
**IN** Association for Systems Management, Cleveland, Ohio.

**AB** This bibliography on management information systems contains: (1) an annotated bibliography of text books, (2) an annotated bibliography of publication articles, (3) an index of textbooks by title and (4) an index of publication articles by title. Approximately 59 textbooks and 309 publication articles are cited. (NH)

**ED 047 272**

**AU** Patchen, Martin; and others.  
**TI** Case Studies of Decision-Making in Organizations: Purchase Decisions in Business Firms.  
**IN** Michigan Univ., Ann Arbor. Survey Research Center.

**AB** Conducted during 1966-67, these 33 case studies were expected to provide insights into various aspects of organizational decision making (especially the ways in which influence is exerted and perceived in specific decisions). Eleven firms, all having headquarters and at least one plant or division in the Chicago area, were chosen from a directory of the 1,000 largest United States industrial corporations. These 11 firms ranged in type from heavy industrial equipment to publishing and musical instruments. Accounts of non-repetitive (infrequent or first time) purchasing included 11 cases involving decisions to purchase and use new materials, eight on purchasing or leasing business machines, six on buying machinery and tools, five to purchase trucks, two to conduct plant expansion and maintenance, and a decision to obtain furniture for an individual office. In an effort to trace the chain of communication, 180 people were interviewed as to the product and its use, how the need arose, internal and external information sources, the choice of a particular type of product, and factors (including the supplier's role) in the choice of the successful supplier. (LY)

ED 047 247

AU Fordyce, Jack K.; Weil, Raymond  
TI Managing with People; A Manager's Handbook of Organization  
Development Methods.

AB Addressed to managers, students of management, and organizational development (OD) practitioners, this handbook concentrates on the joint management of change, and presents particular methods that have proved useful in realizing change within business, government, universities, and many other institutional settings. Beginning with factors that challenge organizations to change, part 1 outlines symptoms of organizational health and illness, then offers a definition of OD followed by steps for launching it. Functions and qualifications of a skilled OD arbiter or "third party" are also indicated. Part 2 presents four case studies which trace day to day change processes accomplished by intergroup team building and various other means. Part 3 describes about 20 basic approaches or tools (plus variations) commonly employed in OD to bring about change, collect information, produce better meetings, and improve the quality of relationships. An index and 19 references are included. (LY)

ED 047 224

AU Sulkin, Howard A.  
TI Relationship Between Participant Personality and Teaching  
Methods in Management Training.  
IN Chicago Univ., Ill.

AB Focusing on the impact of participant characteristics on learning, this study investigated whether certain teaching methods are more effective than others in changing the knowledge and attitudes of adults with specific personality profiles. A total of 117 persons from each of five sections of a course ("Coaching and Developing Individuals") developed by the industrial relations center, University of Chicago, were classified into four personality types: high extraverted, highly neurotic (HE/HN); highly extraverted, less neurotic (HE/LN); less extraverted, highly neurotic (LE/HN); less extraverted, less neurotic (LE/LN). Members of these categories were randomly divided between lecture and case discussion groups. Pre-tests and post-tests

of proficiency were given. It has been hypothesized that discussion would work better than lectures with relatively extraverted and stable people (including HE/LN types), while lectures would supposedly work best with introverts and more neurotic (including LE/HN) types. Findings failed to prove or disprove the hypotheses. The Eysenck theory (highest participation by HE/HN types, lowest participation by LE/HN persons) was not supported either. Implications for further research were also noted. (LY)

ED 046 339

- AU Fougères, Viviane, Comp.  
TI Programme on Institutional Management in Higher Education.  
List of Documents.  
IN Organization for Economic Cooperation and Development,  
Paris (France).
- AB The documents on university management listed in this report were collected by the centre for educational research and innovation. The documents are divided into 3 sections: (1) higher education planning, management and organization; (2) institutional management techniques applied to specific institutions; and (3) reference documents. Within these sections the documents are listed according to country and institution or organization of origin. (AF)

ED 046 096

- AU Cook, Desmond L.  
TI An Investigation of the Responsibilities and Duties of Educational Project Managers.  
IN Ohio State Univ., Columbus. Educational Program Management Center.
- AB This document reports the results of a checklist questionnaire administered to two different groups of educational project managers. Study results are reported in both tabular and descriptive forms. Copies of the initial and revised checklists are appended. (LLR)



ED 045 892

- AU Berniklau, Vladimir V.  
TI Management Development of Scientists and Engineers in the  
Federal Government; An Analysis of Basic Behavioral and  
Systems Considerations.  
IN New Mexico Univ. , Albuquerque.
- AB Focusing on management development of scientists and engineers within the federal government, this study was done to form a framework of factors ( attitudes, motives or needs, and leadership styles) to be evaluated before choosing suitable techniques and alternatives. Such variables as differing program objectives, characteristics of professionals, means of program and performance evaluation, determination of the proper clientele, and responsibility for program planning and decision making, were discussed in a background review. Management development was shown to be a mechanism for achieving mutual organizational and individual need satisfaction when an organization is psychologically healthy and its top managers operate on theory Y assumptions (satisfaction of the higher needs for love or acceptance, esteem, and self-actualization). Thus, management development can help change both attitudes and behavior in accordance with these assumptions while strengthening the theory Y spirit throughout the organization. Moreover, it was concluded that, when adapted to different managerial levels and treated as part of a system of alternatives, management development programs can smooth the transition to managerial competence. (LY)

ED 045 816

- AU Moullette, John B.  
TI Selected Leadership Dimensions of Management Personnel in Vocational Education, General Education, Industry, and the Military.
- AB As the roles and responsibilities of vocational education have increased and expanded it has become necessary to identify, select, educate and train leaders. Recognizing this need for leadership development this study assessed the behavior and the leadership dimensions of management in four occupational settings as reported by inservice management personnel in an

opinion survey. Data were collected by using a revised leader behavior description questionnaire which consisted of 45 communications, human relations, and style and technique items whose tetrachoric correlation coefficients were relatively high between each item and the total dimension score. On the basis of 120 responses the hypothesis that there is no significant difference in total scores among leaders in the four occupations was accepted while the hypothesis that there is no significant difference in total scores among the three levels of leaders was rejected. As a conclusion it was stated that the four occupations are in agreement in their perceptions regarding the dimensions of communications, human relations, and style and technique. The Ed. D. dissertation was submitted to Rutgers University. (Author/JS)

ED 045 008

- AU Koenig, Adolph J.  
TI Educational Research and Development: Implications for  
Research Management from a National Perspective.  
IN American Educational Research Association, Washington, D. C.
- AB This paper explores some of the conditions currently affecting research and development in education and examines their implication for management. These conditions are: (1) the public expectation of quick and sure responses from the R and D effort, and (2) the genuine wish for increased democratization in society and increased responsiveness on the part of its institutions. For management this will mean: (1) the need to increase the scope of involvement and the human sensitivity of the planning and decision-making processes in the R and D policy and priority setting sector; (2) new mechanisms for evoking responsive corporate behavior to achieve desirable collegial and group productivity; and (3) increased clarity in communications and differentiated products if better practices based on research knowledge are to find their way into the schools and improve learning environments. The paper also reviews federal involvement in educational research, comparative expenditures in different areas for research, the need for more research, development, and training in administration and management, the proposal for the creation of a national institute of education, the kind of climate that must be created to encourage potentially effective R and D, and the skills a manager of R and D will need. (AF)

ED 044 789

- AU Knezevich, Stephen J., Ed.; Eye, Glen G., Ed.  
TI Instructional Technology and the School Administrator. Final  
Report.  
IN American Association of School Administrators, Washington,  
D. C.
- AB A special committee on technology and instruction, appointed  
by the AASA in 1967, reviewed the literature on instructional  
technology and visited the experimental and developmental  
work being done in the area. This document presents the  
committee's report to the profession on the promises and  
immediate possibilities of the new technology. The contents  
focus on technology as a systematic approach to practical  
problems. Seven chapters incorporate a review of interesting  
and meaningful issues in instructional technology, provide a  
description of its current status, identify recent and significant  
innovations in the teaching or learning process, examine the  
existing evidence based on research or experience that supports  
newly developed techniques and approaches to instruction, and  
appraise the validity of claims for instructional innovation.  
(Author/MLF)

ED 044 636

- AU Bricker, George W.  
TI Bricker's Directory of University-Sponsored Executive  
Development Programs. 1971 Supplement.
- AB This 1971 supplement updates the 1970 edition of Bricker's  
Directory (see ED 034 945); used with the 1970 edition, it pro-  
vides pertinent information about the programs and an objective  
description of their content and conduct. During the last year,  
three programs have been discontinued and one new one will  
begin in 1971. The pages of the supplement (numbered to  
correspond with those of the 1970 edition) provide basic informa-  
tion on location, duration, dates, tuition, living quarters,  
participants, and faculty. Subsequent pages of the 1970  
directory provide descriptions of subject matter, methods of  
instruction, facilities, and special features. Where significant  
changes have been made in a program within the year, such  
changes are described on the appropriate pages of this 1971

supplement. Unless otherwise stated, tuition charges include the cost of books and materials. In an introductory section, there is information on variations in programs and on selection of programs. (EB)

ED 044 565

TI     ASTD Consultant Directory  
IN     American Society for Training and Development, Madison, Wis.

AB     The second edition of the American Society for Training and Development Consultant Directory lists members who have indicated their availability to serve clients in consulting capacities. The names are accompanied by statements, largely prepared by the consultants themselves, describing their services. Addresses are also included. (NL)

ED 043 837

AU     McNulty, Nancy G.  
TI     Training Managers: The International Guide.

AB     This international reference guide to management education and executive development programs identifies and describes all major training programs, admission requirements, participant and program descriptions, teaching methods, curricula, faculty, costs, dates, and so on. It provides information for analysis and study of the international trends in management education; and contains activities of universities, institutes, associations, intergovernmental and governmental bodies, and other groups whose training programs include participants beyond their own employees. (NL)

ED 043 824

AU     Finnigan, J.  
TI     Industrial Training Management

AB     This book's objective is to stimulate the type of thinking and develop the attitudes destined to raise the tone of industrial training management. All twelve chapters are devoted to training needs, training management problems, and the means to solutions. Topics include growth of and demand for

industrial training; the training manager's role in the organization, the strategy of industrial training; assessing training needs and defining training objectives; identifying the individual's training needs and designing his training program; internal and external courses; examination and assessment of training effectiveness; external training influences; organization of the training manager's relationship with it; training manager's contribution to manpower utilization and his role as a trend setter; training for social and political change; and the future of training and trainers. (PT)

ED 043 119

- AU Piele, Philip K.  
TI New Programs for Training School Administrators. Analysis of Literature and Selected Bibliography. Analysis and Bibliography Series, No. 10.  
IN Oregon Univ., Eugene. ERIC Clearinghouse on Educational Administration.
- AB This review analyzes current trends in the literature concerned with the training of school administrators. Emphasis is placed on the effectiveness of a variety of in-service training strategies, including workshops, simulations, seminars, and encounter groups. In university-based training programs, the trend is toward greater use of the humanities in preparing educational administrators. A 69-item bibliography of relevant literature is included. (RA)

ED 043 116

- TI Procedures for Managing Innovations. Analysis of Literature and Selected Bibliography. Analysis and Bibliography Series, No. 7.  
IN Oregon Univ., Eugene. ERIC Clearinghouse on Educational Administration.
- AB This review focuses on the innovation process in local schools. Emphasis is placed on (1) how local schools implement innovations, (2) facilitators and inhibitors of innovation, and (3) unmet needs in assisting schools to adopt innovations. A 78-item bibliography of related literature is included. (RA)

ED 043 115

- AU Hall, John S.  
TI Models for Rational Decision Making. Analysis of Literature and Selected Bibliography. Analysis and Bibliography Series, No. 6.  
IN Oregon Univ., Eugene. ERIC Clearinghouse on Educational Administration.
- AB This review analyzes the trend in educational decision making to replace hierarchical authority structures with more rational models for decision making drawn from management science. Emphasis is also placed on alternatives to a hierarchical decision-making model, including governing models, union models, and influence models. A 54-item bibliography of related literature is included. (RA)

ED 043 113

- TI Management Information Systems. Analysis of Literature and Selected Bibliography. Analysis and Bibliography Series, No. 4.  
IN Oregon Univ., Eugene. ERIC Clearinghouse on Educational Administration.
- AB This review analyzes literature dealing with applications of management information system (MIS) tools to educational management. Of the three levels of management -- operational control, management control, and strategic planning -- the literature suggests that most activity is taking place at the operational control level. Fewest applications have been attempted in strategic planning. A 47-item bibliography of related literature is included. (RA)

ED 042 965

- AU Mant, Alistair  
TI The Experienced Manager, A Major Resource.  
IN British Inst. of Management, London (England).
- AB Results are presented of a survey of British top executives (largely from smaller companies) as to general difficulties

and specific educational or developmental needs facing experienced business managers. First, a definition of an experienced manager is elaborated, followed by familiar managerial types, conditions conducive to learning, the internal dynamics of company manpower systems, and typical forms of management development. Next comes a brief review of educational sources, including relevant government departments. Two findings are stressed: (1) most company heads who feel they have successfully dealt with motivation, mid career job improvement, obsolescence, and other management development problems had done so through organizational improvements and more appropriate management styles rather than by training; (2) most successful programs were closely job oriented and involved problem oriented project work, preferably in collaboration with outside schools and consultants. Further questions as to clientele, educational wants or needs, suitable methods and settings, and likely sources of experimentation and change are raised in the conclusion. Appendixes give additional data on managers' attitudes, perceptions, and expectations. (LY)

ED 042 959

AU Adair, John  
TI Training for Leadership.

AB An in-depth study of how to select and train for effective leadership is based on the belief that though innate character traits play a role of leadership, leadership potential can be developed. The author's theory known as "functional leadership," stresses that leadership is an interaction among leader, group members, and situations. The good leader is the one who, by virtue of his personality, knowledge and training, is able to provide the functions necessary to enable the group to achieve its task and to hold it together as a working team. The book also discusses the functional approach to leadership, field leadership training, developing leadership in industry, and leadership training for junior managers. The author draws on numerous examples -- soldiers, explorers, politicians, businessmen -- to illustrate the good leader. (PT)

ED 042 954

AU Graham, Robert . Gray, Clifford F.  
TI Business Games Handbook.

AB The aim of this handbook is to provide training directors and all others interested in business games with an organized listing and description of business games and their sources; and to provide a source of sufficient data to help them select games for a particular purpose. The games are categorized as general purpose games, used in management and decision making; and particular purpose games, developed for use in decision making in particular occupational areas. The book is divided into three parts. The first part includes introductory readings aimed at introducing the concept of the game, use of general and special purpose games; and industry use of games for training. The second presents abstracts of more than 200 games currently being used -- description, purpose, and administration of the game, sources of information, and decisions made by the participant. Occupational areas covered by industrial games include: advertising, aerospace, agribusiness, banking, forest products, insurance, petroleum, transportation, and retailing and wholesaling. The third part contains a bibliography of articles and books. (PT)

ED 042 249

AU Maguire, Louis M.  
TI Change Literature and the Practicing School Administrator.

AB Based on a review of 500 sources dealing with change, this presentation sets forth the practical applications of change literature for school administrators. The report concludes that change is a term neither commonly used nor commonly understood, and that there exist few scientifically developed (i. e., theoretically based and empirically tested and revised) tools to operationalize change. The presentation provides a realistic focus on various suggestions, prescriptions, and models for bringing about change in local school districts. (Related documents are EA 002 947 and EA 002 949). (Author)



ED 042 236

- TI Structuring the Administrative Organization of Local School Systems. Educational Research Service Circular No. 2.
- IN American Association of School Administrators, Washington, D. C. ; National Education Association, Washington, D. C.
- AB This paper is intended to assist school administrators in improving existing school organizations. It discusses the nature of organizations, provides indicators of reorganization timing, and discusses the task of reorganization. A matrix chart, used to analyze and compare different organizational structures, is provided with explanations. Flowcharts for 15 different types of school administrative structures are provided and explained. A 25-entry bibliography is included. (DE)

ED 042 199

- AU Dumas, Neil S.
- TI The Decision Maker's Guide to Applied Planning, Organization, Administration, Research, Evaluation, Information Processing and Analysis Techniques.
- IN Florida Univ., Gainesville. Regional Rehabilitation Research Inst.
- AB This guide is an attempt to eliminate the need for decision makers to suffer from many of their future errors. It is an attempt to insure that the "right" decision is made the first time. Briefly, the theory is that one can learn from other peoples' experience and thus avoid making future mistakes. This volume is a guide to other peoples' "experience." Used properly, it can and will result in: better planning, rigorous research and development, and improved projects. The guide is composed of three parts: (1) a subject index; (2) an author index; and (3) an abstract section. All entries in the abstract section are arranged by guide numbers. Having selected some of the entries from the subject and author indexes, the reader merely locates the appropriate guide numbers to find the complete reference and a descriptive abstract. The abstracts provide an entry into the world of organization, administration, planning, decision making, management and computer science. (Author/KJ)

ED 041 207

- AU Haas, John Arthur  
TI Middle Managers' Expectations of the Future World of Work:  
Implications for Management Development.  
IN Pittsburgh Univ., Pa.
- AB The middle manager of today needs to acquire new skills and knowledge to enable him effectively to manage tomorrow's corporation. The purposes of this study were: to provide a means by which managers may assess the future world of work and to describe it by means of these assessments; and to compare present with past predictions of the same future point in time, in order to identify continuing and changing trends; and to examine the effects an assessment of the future has on managers' subsequent plans for their training and development. Two instruments were developed, a world of work questionnaire and a personal development plan. The former is divided into two parts -- one containing items considered rational in context, the other behavioral items. The latter instrument listed various skills ability, areas of knowledge and training methods. Managers were asked to indicate for each the value to them of receiving further training. A total of 139 managers responded. Present predictions were found to agree with past ones. The study also demonstrated that opportunity to attend to particular aspects of the future can lead managers to broaden the scope of what they considered relevant training for them. (Author/PT)

ED 041 108

- AU Skelton, Gail J.; Hensel, J. W.  
TI The Change Process in Education: A Selected and Annotated Bibliography. Final Report.  
IN Ohio State Univ., Columbus. Center for Vocational and Technical Education.
- AB This document was developed as a working paper by a research staff concerned with the change process in vocational and technical education. Works selected for inclusion treat: (1) the change process in education rather than in other fields, (2) the relationship between various types of communication processes, patterns, structures and high or low change orientation and/or adoption behavior in an educational organization, (3) decision-making process in an educational

organization, and (4) communication behavior patterns of opinion leaders and isolates. Abstracts are arranged under the following headings: (1) empirical works on the change process, (2) theoretical or non-empirical works on the change process, (3) collections of readings on the change process, (4) bibliographies on the change process, and (5) works from dissertation abstracts. Titles which are available through the educational resources information center (ERIC) list an ERIC document number, the issue of research in education (RIE) containing the ERIC resume, the microfiche and hard copy prices following the bibliographic citation. The 135 cited documents are arranged alphabetically in a bibliographic index. (DM)

ED 040 334

- AU McKibbin, Lawrence Edwin  
TI A Comparison of the Effects of an Executive Development  
IN Program on Owner-Managers and Employee-Managers.  
Stanford Univ., California.
- AB Fifty employee managers and 50 owner managers were interviewed to determine differences in their behavior after a university level executive development program (EDP) conducted for businessmen in Lima, Peru. Findings indicated that: (1) owner managers had received a greater overall impact from an EDP than employee managers; (2) the perceived value of tool (strictly utilitarian) sources was higher for owner managers than for employee managers; (3) the perceived value from general, non-tool courses was higher for owner managers; (4) owner managers had experienced a greater change in their activities than employee managers (mainly attributed to owner managers' relatively high decision making and policy setting positions); (5) owner managers, all but one of whom came from Peruvian firms and had had relatively little previous exposure to North American management practices, showed relatively more attitude change as well. It was concluded that the EDP did cause an impact on behavior on the job sufficient to suggest that such programs should be offered in other developing areas. (LY)

ED 039 429

- TI Studies and Reports Relating to Training and Education,  
Fiscal Year 1969.
- IN Civil Service Commission, Washington, D. C. Bureau of  
Training.
- AB This directory of federal educational and training activities  
contains 25 completed reports and studies, followed by 48  
others on programs still in progress. The Civil Service  
Commission, post office, National Aeronautics and Space  
Administration, and the Departments of Commerce,  
Defense, and Health, Education and Welfare report  
activities of both types. The Department of Housing and  
Urban Development notes one completed project; the  
Veterans Administration, and the Departments of the  
Treasury, the Interior, and Transportation, are presented  
by seven still in progress. Each entry gives an abstract  
(usually evaluative), the performing organization and/or  
author, and information on document availability. Subject  
and title indexes are included, along with addresses of  
regional Civil Service Commission Training Centers.  
(LY)

ED 038 581

- AU Skertchly, Allan R. B.  
TI Tomorrow's Managers.
- AB This book undertakes to define management education and  
training requirements in relation to the needs of Great  
Britain and other advanced technological societies. It  
considers the present and predicted structure and functions  
of industry and business, as well as desired qualities  
(intellectual and communication skills, organizational  
understanding, motivation) of future managers. Moreover,  
it offers a pattern of growth and development that envisions  
progress from junior through middle to senior management  
in evolving terms of interest in oneself, the company, and  
the community. Managerial problems are elucidated through  
such disciplines as psychology, sociology, applied mathe-  
matics, and engineering. Britain's need for managerial

talent and executive development is also assessed, and approaches to continuing education are ventured. Also considered are company environmental effects on managers, followed by several case studies in management appraisal and development. An index, 38 tables and diagrams, and a bibliography are included. (LY)

ED 038 571

- AU Camealy, John Bremer  
TI Management Development Training; Multiple Measurement of its Effect when used to Increase the Impact of a Long Term Motivational Program.  
IN Washington Univ. , Seattle.
- AB This field investigation applied multiple measures to determine effects of management development training when used to increase the benefits from a long term motivational program. Two experimental groups and a control group were used. Instruments applied included the miner sentence completion scale, the leadership opinion questionnaire (LOQ), and a special pride in performance (PIP) questionnaire. Pretest and posttest measures were obtained of the tendency of managers to behave in ways relevant to the managerial role, how they feel they should supervise, and attitudes toward the PIP concept. Effects of development training in causing change were statistically analyzed. Data from the LOQ were expanded in an overlay exhibit to elucidate the direction and magnitude of change. The study found that development training produced changes opposite to those desired by top management; top managers need to state and define clearly the organizational goals to be furthered by development courses; early coordination of evaluation strategy, selection of measurements, goals, and program design is needed for effective evaluations; and the measurement instruments did not measure the same thing. (LY)

ED 037 817

- AU Corrigan, Robert E.  
TI Methods-Means Selection: An Inquiry/Decision-Making Process Approach.

AB Educational management programs have planned outcomes that can be achieved through alternative routes. Methods-means selection is a systematic approach to choosing the most favorable route. "Methods" refer to the specific strategies and "means" refer to the actual resources and personnel used to carry out the chosen method. This systems analysis strives for efficiency and effectiveness within the limits of feasible solutions. In this document, the dimensions of methods-means selection are defined, the steps in the approach are outlined, and the expected outcomes are summarized. A 33-item bibliography concludes the report. (LN)

ED 037 636

AU Drucker, Peter F.  
TI The Age of Discontinuity: Guidelines to our Changing Society.

AB Concentrating on the social dimension of human experience and existence, this book probes certain profound changes occurring in contemporary technology, economy, society, politics, and education. The author discusses four major discontinuities: (1) the impact of the new technology on the industrial structure; (2) the shift from an "international economy," to a "world economy" which as yet lacks policy, theory, or institutions; (3) a new sociopolitical reality, embracing business, government, and other pluralistic institutions, which poses drastic political, philosophical, and spiritual challenges; (4) the rising importance of knowledge and of formal education, with resulting implications for work, life, leisure, and leadership. Numerous changes are urged, among them the de-emphasis of academic and federal governmental dominance, and more attention to continuing education and other approaches to making education more flexible and relevant. A subject index is also included. (LY)

ED 037 629

TI Glossary of Organization Development Terminology.  
IN Kepner-Tregoe and Associates, Inc., Princeton, N. J.

AB Ranging from action sequence to zero defects, this Kepner-Tregoe glossary defines 194 terms (including some specifically Kepner-Tregoe) relevant to the fields of management development, organization development, and industrial training. (LY)

ED 036 908

AU Baldrige, J. Victor  
TI Organizational Change Processes: A Bibliography with  
Commentary.  
IN Stanford Univ., Calif. Stanford Center for Research and  
Development in Teaching.

AB This bibliography deals with a wide variety of organizational dynamics and is related to the definition of organizational change developed by the Stanford Center's organizational change project. This definition, discussed in detail, focuses on deliberate change instituted to reformulate official policy. A topical outline of the bibliography is provided. Included under the heading "General Problems of Analyzing Organizational Change" are discussions of: (1) reasons why organizational theorists have generally neglected the problem of organizational paradigms, (2) deliberate action by authorities and partisans, (3) organizational conflict as a promoter of change, and (4) the interrelation of organizational subsystems. Included under the heading "Changes in Various Subsystems" are discussions of: (1) changing organizations by changing individuals, (2) partisan groups of agents of organizational change, (3) system changes planned by authorities (long-range planning and decision-making), (4) technology as a source of organizational change, and (5) the organization and its environment. (DE)

ED 036 762

AU Gorn, Gerald; Dubin, Samuel S.  
TI Measuring Attitudes Toward Management Development.

AB The attitudes of managers toward continuing education management development programs were analyzed, using the Fisbein technique; by this approach, the beliefs people have and their evaluation of these beliefs are measured separately. The evaluation of a belief is multiplied by its

strength to get the direction of the attitude. A questionnaire, consisting of 20 attitude statements, was administered to 170 middle managers who rated each statement on an agree-disagree scale and then on a good-bad scale; they also provided information on age, level of education, and length of time as a manager. Results showed that managers who were older, less educated, and in a managerial position for a number of years tended to have more favorable attitudes and generally tended to have more positive beliefs and evaluations. For diagnostic purposes, information was obtained on the individual and the group as a whole; this approach provides a basis for understanding and changing specific attitudes in order to produce maximal attitude change. (Author/EB)

ED 035 807

- AU Toothaker, Robert C.  
TI Management's Attitudes and Evaluations of Government Training Programs and Government Subsidization for Industrial Training.  
IN Maine Univ., Orono.
- AB This research project examined management's attitudes toward government training programs and the subsidization of industrial training. Questionnaires were addressed to general managers but many responses were from personnel directors, presidents, vice presidents, and others. The basic research tool contained checklists, ranking, and open-ended questions. The sample included 476 of Maine's manufacturing firms that employ 25 or more persons. Of the 159 (33.4%) questionnaires returned, all but two were usable. Questionnaires came from employers with about 50% of the employees in the sample. The approximately 60% of the respondents who know about government training programs and who were more familiar with federal than with state and local ones, obtained their information through the mass media. Government subsidy to employers to encourage on-the-job training was preferred to institutional training by 65% of the employers. About 49% of the managers were willing to hire "disadvantaged" workers when their on-the-job training could be supported by federal funds, but only 42% were interested in hiring those who were institutionally



trained. Thirty of the 157 responding firms reported applications for work from government trained workers, and of the 579 applicants 477 were hired. (NL)

ED 035 789

- TI Programmed Instruction in Business and Industry, Current Information Sources, No. 28.
- IN Syracuse Univ., N. Y. ERIC Clearinghouse on Adult Education.
- AB Covering the period since 1960, this annotated bibliography contains 97 items (most with abstracts) relevant to programmed instruction in business and industry. The following appear: (1) 12 bibliographies, directories, and information sources, both foreign and domestic; (2) general considerations of programmed instruction as a training technique (26 entries); (3) 30 descriptions of programs in office occupations education, anesthesiology, military electronics training, vocational re-training, manpower development, and other areas; (4) 22 research and evaluation studies, largely in various phases of military training; (5) program outlines and other instructional materials. Also included are notes on document availability, a list of ERIC Clearinghouse on adult education publications, and an order blank. (LY)

ED 035 267

- TI Systematic Methods in School Planning, Programming, and Design. A Selected Bibliography.
- IN Wisconsin Univ., Madison. ERIC Clearinghouse on Educational Facilities.
- AB A selected reference list is presented of 94 source publications of interest to architects contemplating employing systematic methods in the execution of professional services involving planning, programming, and design. The publication is divided into four major topical areas -- (1) architectural design, (2) design (general), (3) decision making, and (4) planning. Each citation is followed by a listing of descriptors which are selected to describe the subject elements of each document. (TC)

ED 035 086

- AU Blackmon, C. Robert, Ed.  
TI Changing Behaviors and Values: The Educational Administrator  
in American Society.  
IN National Conference of Professors of Educational Administration,  
Lincoln, Nebr.
- AB The introductory chapter of this document describes the Anderson Center for Personal Development of Bowling Green (Ohio) University, as a vehicle for the study of morals, standards, and ethics. Sponsored by the Center, this publication contains 12 papers by 13 authors that focus on the educational administrator and values. Special emphasis is placed on the changing role of the administrator; the humanities in educational administrator education; human values and educational leadership; values and value relationships of elementary school principals; educational and administrative values, goals, priorities, and their implementation; values, behaviors, and decision making; and attitudes of prospective principals. An outline of the group discussions on values at the 1968 national conference of professors of educational administration is included. A two-part comparison of public school administrators with professors of educational administration ends the report. The section includes a substantive analysis of score comparisons on a leadership attitude scale and a brief report of a second study that compares members of the two groups by their responses to a survey instrument on their values orientations. (JK)

ED 034 956

- AU Galbraith, Oliver, III  
TI An Analysis of Small Business Administration Management  
Training Program.  
IN California Univ., Los Angeles.
- AB This study examined the impact of the small business administration (SBA) management training program at San Diego State College on its participants, and investigated certain characteristics of small businessmen that might relate to acceptance or rejection of concepts presented in the program. The sample consisted of 57 past participants (38 owner managers

and 19 nonowners), 65 nonparticipants (60 owner managers and five nonowners), and 30 senior business students. Training consisted of eight, two-hour sessions given by college faculty. Behavior change was measured using 55 managerial actions recommended in the SBA training program. Attitudes were measured on ten dimensions. Findings included the following: (1) as compared to participants, nonparticipant small businessmen were more authoritarian, showed stronger convictions, and viewed the role of religion in a way more closely akin to the classic business ideology; (2) program participants showed no significant attitude or behavior changes; (3) business students were less authoritarian, showed less strength of convictions, expressed a greater need for independence, and were less bound to the classic business ideology, than the businessmen. It was concluded that the SBA program was not achieving its goals, but that changes in structure and presentation could help it succeed. (Author/LY)

ED 034 947

- AU Kohn, Vera, Comp.  
TI A Selected Bibliography on Evaluation of Management Training and Development Programs.  
IN American Foundation for Management Research, Inc.,  
Hamilton, N. Y.
- AB Prepared for those interested in program evaluation, this bibliography (largely annotated) on management development and training contains 61 items published between 1959 and early 1969. Citations have been grouped into five categories: descriptions of research studies; literature reviews; discussion of evaluation techniques; surveys of corporate practices; and books (eight references). Such aspects as participant satisfaction, interpersonal competence, sensitivity and human relations training, program planning, behavior and attitude change, reinforcement, and the management grid approach are represented. Topics not covered include evaluation of undergraduate management courses or manager training programs conducted under university auspices; assessments of programmed instruction as a management development technique; and military research. An author index and a list of periodicals are included. (LY)

ED 034 945

- AU Bricker, George W., Comp.  
TI Bricker's Directory of University-Sponsored Executive Development Programs, 1970 Edition.
- AB Fifty-five university sponsored executive development programs in the United States and Canada are covered in this directory. Each item gives concise basic information on location, duration, dates, tuition, participants, faculty, and official program contacts, followed by descriptions of subject matter and curriculum materials, methods of instruction, special features (if any) and general recommendations regarding suitability for certain types or levels of executives. Salary ranges (when available) are quoted as some indication of the organizational level of participants. Unless otherwise stated, tuition charges include the cost of books and materials. All programs supply a substantial number of pertinent books, reproduced material, and reprints for use by participants and for eventual addition to their personal libraries. General guidelines as to program variations and selection criteria appear in an introductory section. Programs are indexed by starting dates, duration, and size of classes. (Author/LY)

ED 034 924

- TI Selected Papers, ASTD 25th Anniversary National Conference.  
IN American Society for Training and Development, Madison, Wis.
- AB Taken from the annual conference (May 12-16, 1969) of the American Society for Training and Development, these papers concentrate on sociological and related trends affecting manpower development and utilization. Such topics as new training and educational resources for industrial trainers, current social changes and upheaval on and off college campuses, and the impact of social, technological, and organizational change on professional and technical education, are treated in the first papers. Others describe and discuss new technology in military training, IBM field engineering training, current federal legislation, employment opportunities for women, the systems approach to training and development, the need to improve communication and cooperation between the

universities and business, and applications of behavioral science knowledge and methods in human relations training by the national training laboratories. The last paper compares management development and organizational development as strategies for change. (LY)

ED 034 922

TI The Industrial Training Yearbook, 1970: A Comprehensive  
Guide for Training Officers and Their Managements.  
IN Kogan Page, Ltd., London (England).

AB This yearbook is designed as a comprehensive guide to British industrial training. Section 1 describes existing resources, information, and obligations in the light of the industrial training act of 1964. Sections 2-6 deal with the scope of training; the department of education and productivity and the central training council; the 27 regional industrial training boards; training in Northern Ireland; and the further education role of the department of education and science and the Scottish department of education. Other sections cover nonuniversity further and higher education examining bodies and courses; course offerings by local education authorities, technical and central institutions, and central colleges; university first degree sandwich courses (alternate work and study); management courses at colleges, universities, business schools, and independent training centers; professional and qualifying bodies; information and consulting services; sources of books, journals, films, and correspondence courses; and suppliers of furniture, teaching machines, television equipment, visual aids, and other training equipment and resources. Two indexes are included. (LY)

ED 034 921

AU Warren, Malcolm W.  
TI Training for Results: A Systems Approach to the Development of Human Resources in Industry.

AB Using the systems approach, this book explores training in industry as an organizational tool for developing human resources, and stresses training results and return on

investment rather than training programs as such. It is intended as a guide for general managers, personnel and industrial relations directors, and training directors on how training functions, how and when it is cost effective, how to evaluate it, and how it should be structured within the mass production, sales, supervisory, administrative, and technical training fields. Included are sections on cost estimating and evaluating training in terms of objectives and results. Training systems elements (research, analysis, development, operations, evaluation) are also explained, together with such other aspects as instructional design, feedback, financial support for employee self-improvement, and the organization and staffing of the training function. An index, bibliography, and 19 tables and figures are also included. (LY)

ED 034 435

- AU Taylor, William  
TI Heading for Change: A Background Work-Book for the Harlech Television and University of Bristol Institute of Education Series. Supplement, Heading for Change: A Report.  
IN Bristol Univ. (England). Inst. of Education.
- AB A series of eight television programs was prepared by Harlech Television and the University of Bristol Institute of Education. Its purpose was to stimulate discussion of the human relations and management issues that arise in connection with innovation and change in the secondary school. The programs dealt with problems of size and change; tracking and grouping; team teaching and multi-media approaches; curriculum development; home/school relationships; counselling and guidance; school dropouts; and the roles of the headmaster and staff in planning and evaluation. Viewing groups were set up to encourage discussion. A workbook was provided which presented a group of letters and memos from the files of a hypothetical secondary school, background notes on the content of the programs, extracts from books and articles, and some suggestions for further reading. The multi-media package was designed to allow staff members to become acquainted with some of the changes in educational thinking and to discuss ways in which they might be useful at their particular school. The result of a survey of the viewers is tabulated. (JY)

ED 033 251

- TI Management Development and Supervisory Training. Current  
IN Information Sources, No. 26.  
Syracuse Univ., N. Y. ERIC Clearinghouse on Adult Education.
- AB Management development and supervisory training are covered  
in this 210-item annotated bibliography. Bibliographies and  
other information sources are listed, followed by studies on  
such background considerations as training needs and interests,  
career patterns, learning behavior and achievement, and pro-  
gram planning. Works on human relations training, group  
training, simulation, and other methods and techniques appear  
next. Program descriptions and evaluations, evaluation  
procedures, academic programs, surveys of training in the  
United States and abroad, and American and British course  
directories are also treated. The document includes a list  
of publications of the ERIC Clearinghouse on adult education,  
notes on availability, and the ERIC document reproduction  
service order form. (LY)

ED 032 843

- TI Organizing Schools and Institutes of Administration.  
IN Pittsburgh Univ., Pa. Graduate School of Public and  
International Affairs.
- AB This handbook is designed as a guide for persons engaged  
in planning, improving or managing programs and operations  
of schools and institutes of administration which offer  
academic degree and non-degree programs, research, and  
advisory services. It focuses on public, development,  
municipal and business administration. Although the hand-  
book is intended primarily for schools and institutes in  
underdeveloped countries, it contains much that is appli-  
cable to educational endeavors in industrialized nations.  
Specific guidance is offered for centers that: (1) serve  
some or all levels of government and public and private  
enterprise; (2) have wide substantive scope including  
important policy and administrative elements; (3) emphasize  
economic and social development; and (4) are interdisciplinary

in nature. The proposed audience for this handbook prepared in collaboration with the institutional members of the international institute of administrative sciences includes: staffs and governing officials of such centers, government personnel responsible for manpower and education planning, technical organizations and advisors assisting such centers, and academic administrators and instructors concerned with the role of universities in meeting public service and national development needs. (JS)

ED 032 652

AU Lansky, Leonard; and others.  
TI The Effects of Human Relation Training on Diagnosing Skills  
and Planning for Change. A Technical Report.  
IN Oregon Univ., Eugene. Center for Advanced Study of  
Educational Administration.

AB During the summer of 1965, an experimental group of 12 school administrators participated in sensitivity training sessions to measure the influence of the sessions on situations involving administrative change. The study tested: (1) behavior of administrators in meetings in their school system; (2) behavior toward subordinates; (3) skill in diagnosing problems; (4) ability to see alternative strategies in diagnosing problems; and (5) influence on nonparticipants in their school systems. Measurement instruments compared this experimental group with a control group in discussion of issues in school, sensitivity to problems in staff and administrative meetings, interaction with subordinates, and organizing of subordinates. The study concluded that a one-shot laboratory training experience, conducted outside the context of the participants' organizational system, is not a very effective tool for initiating and maintaining significant behavior change in the back-home situation. (LN)

ED 032 642

TI Increasing the Effectiveness of Education Management. A  
Research Proposal.  
IN Battelle Memorial Inst., Columbus, Ohio. Columbus Labs.;  
Ohio School Boards Association, Columbus.; School Management  
Inst., Inc., Columbus, Ohio.



AB A 3-year research program is proposed to develop improved methods for increasing the effectiveness of education management, including those functions of the board of education and the superintendent that deal with planning, organizing, communicating, and evaluating. The proposal lists 30 major problems confronting school boards and superintendents and outlines a series of eight projects: (1) surveying the public's educational preferences, (2) describing the educational program, (3) personnel negotiations, (4) evaluating teacher performance, (5) evaluating performance of administrative personnel, (6) stating and measuring the accomplishment of instructional objectives, (7) follow-up evaluation of graduates, and (8) administration. (JK)

ED 032 619

AU Barnes, Donald E.  
TI Business Methods in Reorganizing Administration of an Urban  
IN School System. Industry and Education Study No. 1, New Haven.  
INstitute for Educational Development, New York, N. Y.

AB Problems with defining the administrative organization of the New Haven school system led a new superintendent of that system to request aid from local industrial management experts. An organization expert was "loaned" to the school system by a local industry. The end result of 6 months of interviewing and analyzing was a document, called "The Price Report," that assessed the organizational structure, pointing out serious deficiencies and proposing a detailed plan for reorganization. A local public utility then placed three men under the superintendent's direction to implement the organization plan. In addition to their basic assignment, they wrote an "administrators' manual" and produced an innovative management in-service training program. A reorganization of information channels has led to improved communication within the administrative structure, with the press, and with the public on a direct basis. Copies of questionnaires used in the study are appended with a summary of "The Price Report." (DE)

ED 032 292

AU Bish, John, Ed. ; and others  
TI Information Requirements for Planning Instructional Strategies:  
IN An Anthology for Teachers and Principals.  
Central Atlantic Regional Educational Lab., Inc., Alexandria,  
Va.

AB The introduction to this anthology reports a study designed to develop a systematic procedure for gathering information from actual school settings about the impact of school organization, staffing, and administration on students -- information to provide baseline data for decision makers. Included are description of methods and procedures, data analysis techniques, and specific objectives which included (1) selection, modification, and design of instruments for gathering data regarding students, teachers, parents, principals, and teacher aides, percepts of selected issues in the elementary school and instruments for making objective observations of classroom environment, and (2) gathering baseline information on one public and one non-public (one centralized and one decentralized) elementary school in urban, deprived environments. The eight chapters, each written by a specialist in the area of concern, present different aspects of the study: the place of objective information in total school planning; critical information requirements in the management of the elementary school; analysis and implications of student, teacher, and parent percepts of student performance; professional staff encounters; classroom ecology; general atmosphere for administrative autonomy: the atmosphere for decision making; three views of the teacher aide; and community interest in local school management. (JS)

ED 031 787

AU Novotney, Jerrold M., Ed.  
TI The Principal and the Challenge of Change. An /I/D/E/A/  
IN Monograph.  
Institute for Development of Educational Activities, Dayton,  
Ohio.

**AB** The papers in this monograph review the literature and summarize recent research findings on factors affecting educational change in the public schools. The authors also report the reactions of several principals who have attempted to implement significant educational innovation in their schools. In the opening chapter, Kenneth A. Tye uses a systems model to discuss equilibrium, resistance, and strategies that facilitate change. Next, Mary M. Bentzen discusses the demands that accompany the principal's role, the conflicts he faces, and how these demands and conflicts might be channeled and resolved. Robert L. Sinclair examines the expression, requirements, and determinants of leadership behavior. Jerrold M. Novotney's chapter describes methods for achieving optimum staff involvement and cooperation in change efforts. In the final chapter, Donald A. Myers discusses the roles of the principal and of his teachers in the decision-making process. Lillian K. Spitzer prepared the annotated bibliography on change which contains 65 recent citations. (Author and JH)

**ED 031 652**

**TI** Baci. Register of Programmed Instruction in the Field of Education and Training in Commerce and Industry. Volume 2, 1968.

**IN** British Association for Commercial and Industrial Education, London (England).

**AB** The British Association for Commercial and Industrial Education has included in its register of annotated programmed instructional materials: programs available in the United Kingdom; programs dealing with industrial and commercial training and related further education; and information as supplied by the authors or producers of programs. The areas covered are: chemistry; commercial subjects (12 subheads); computers; electricity; electronics; engineering (13 subheads); industrial processes and techniques (6 subheads); management subjects (5 subheads); mathematics (11 subheads); physics; police procedures; sales (4 subheads); training (2 subheads). Also included area subject index and a list of producers -- publishers, consultants, firms, government departments, and educational establishments. (NL)

ED 030 976

AU Lucio, William H., Ed.  
TI The Supervisor: New Demands, New Dimensions.  
IN Association for Supervision and Curriculum Development,  
Washington, D. C.

AB This document contains seven papers which examine the functional and organizational roles of the school supervisor in the context of new social, organizational, and professional demands on the school. The papers were presented at a 3-day symposium which focused on three related themes. The first theme, "The Supervisor: New Demands, New Dimensions," is treated by C. Taylor Whittier in his paper "The Setting and New Challenges." Papers concerned with the second theme, "Coping with Role Realities," are "Helping Adults Change," by Gordon J. Klopff; "Influencing Professional Negotiation," by William F. Young; "Assessment of Learning Outcomes," by J. Thomas Hastings; and "Coordinating the Team," by George W. Denmark. The third theme, "Career Development," provides the subject for "Implications for Career Development," by William H. Lucio, and "The Supervisor and His Professional Identity," by Jack R. Frymier. (JH)

ED 030 969

AU Greenfield, T. B. ; and others.  
TI Developing School Systems: Planning, Organization, and  
Personnel. A Manual for Trustees, Administrators, and  
Teachers.  
IN Ontario Inst. for Studies in Education, Toronto. Dept. of  
Educational Administration.

AB This manual is designed to assist school board members, administrators, and teachers in the tasks of assessing present educational organizations and developing new ones. Each chapter in the manual has two major sections, the first containing a general discussion of the chapter topic and the second containing detailed guidelines which suggest specific courses of action for those who accept the principles of the chapter and wish to put them into practice in a school system. A model for effective planning and decision making is developed in the first chapter and is demonstrated in chapters 3 and 4, which deal with school system organization and personnel

administration. The second chapter focuses on the roles of the school board and school administrators in the decision-making process. Chapters 5 through 10 are concerned with management and development, pupil transportation, purchasing, and data processing. The final chapter illustrates principles for effectively linking the school system with its social environment. (JH)

ED 030 222

- TI When Management Negotiates. A Guidebook for Sound Collective Bargaining.
- IN National Association of Manufacturers, New York, N. Y. Industrial Relations Committee.
- AB This guide provides management with specific procedure and tactical advice to be used while negotiating a labor union contract. The first 10 chapters suggest management techniques for collection and evaluation of pertinent information, evaluation of past negotiation experiences, formulation of company proposals, selection of the company negotiating team, use of visual aids, final preparation for negotiation, and conduct of the negotiating team. Chapter 11 offers a list of questions related to 24 typical negotiation issues which are likely to arise during negotiations. Impasse procedures and general "do's and don'ts" of bargaining are suggested in the final two chapters. The appendices include: (1) a checklist on cost of fringes, (2) definitions of union security terms, (3) 13 selected references dealing with collective bargaining, and (4) related name publications. (JH)

ED 030 185

- AU Tompkins, Ellsworth; Trump, J. Lloyd
- TI The Secondary School Principals and the Challenge of Change.
- AB In his role as the manager of educational change, the secondary school principal is responsible for determining programs and procedures, enlisting teacher aid in those determinations, resolving staff resistance to change, identifying staff members as effective change agents, and working with them to implement change. To produce significant gains in pupil learning,

four basic changes in school operating procedures are essential: (1) the principal should give about three-fourths of his working time to instructional improvement, (2) teachers should have more free time to improve their teaching skills, (3) principals should have more time for independent study, and (4) there must be better utilization of educational funds, facilities, supplies, and equipment. Suggestions to help the principal discharge his primary responsibility to improve instruction include freeing him from other responsibilities by enlarging his administrative staff, increasing staff productivity through a horizontal and relatively informal type of organization, delegating decision-making and administrative responsibilities as much as possible, improving his own communication skills, and maintaining a clear understanding of roles and relationships among school system administrators.

ED 029 181

- TI      Studies and Reports Relating to Training and Education, FY 1967.  
IN      Civil Service Commission, Washington, D. C. Bureau of  
         Training.
- AB      The 44 entries in this Civil Service Commission Directory deal with the development and evaluation of training programs in federal agencies (in progress, and completed) and with training methodology. Agencies include the Department of Agriculture; the Air Force; Army, and Navy; the District of Columbia Department of Public Welfare; the general accounting office; the Department of Health, Education and Welfare; the Department of Interior; the National Aeronautics and Space Administration; the Post Office Department; the Department of Justice; the Coast Guard, the Department of Treasury; and the Veterans Administration. Training needs, career development, placement, manpower utilization, programmed instruction, video tape recordings, closed circuit television, guidance, testing, correspondence study, and organizational development are among the topics of these studies. Authors, performing organizations, and publication information are indicated. (LY)

ED 029 159

- AU Decrow, Roger  
TI Cross Cultural Interaction Skills: A Digest of Recent Training Literature.  
IN Syracuse Univ., N. Y. ERIC Clearinghouse on Adult Education.
- AB Innovative programs and new methods of training for cross cultural skills in interpersonal interaction are the focus of this review which provides a bibliography with 48 abstracts of documents, largely from the years 1966 to 1968; a topical digest of the main points made in these documents, elaborated by quotations from the texts; and an index to documents, or to sections of documents, which relate to each section of the review. The review of the literature is contained under the following headings: the cross cultural training problem; the need for more effective methods of cross cultural training; conditions affecting the design of cross cultural training programs; conceptualizing the training task; and cross cultural interaction training methods. The document also lists other publications of the ERIC Clearinghouse on Adult Education, and gives instructions for ordering documents in microfiche and hard copy from the ERIC document reproduction service and from the clearinghouse for federal scientific and technical information. (Author/LY)

ED 028 399

- AU Trickett, Wilson L.  
TI An Empirical Investigation of the Effectiveness of Executive Development Programs as Perceived by Participating Marketing and Sales Executives.  
IN Michigan State Univ., East Lansing.
- AB A study of the effectiveness of executive development programs for marketing and sales executives tested three hypotheses: (1) participation in such programs results in identifiable benefits as perceived by the participants; (2) academically oriented executive development programs have significant advantages over company oriented programs as perceived by participants; and (3) program benefits as seen by participants are enduring. Phases of the study were an evaluation of a 2-1/2 week graduate school of sales management and marketing (1962), a questionnaire survey of 84 management and marketing executives (1964),

and a followup evaluation in 1965 of the effectiveness of the programs. The hypotheses were basically substantiated. However, there was relatively little enthusiasm for company programs as compared to academically oriented programs. Three major features of the more successful programs were: (1) participants had both the desire and the capacity to develop; (2) the best qualified instructors were university faculty with a business or business consulting background; (3) the curriculum fitted executives' daily employment needs, used the best learning techniques, and involved discussion among participants and with faculty. (Author/LY)

ED 028 352

- AU Rindt, Kenneth E.  
TI Handbook for Coordinators of Management and Other Adult  
Education Programs.  
IN Wisconsin Univ., Madison. University Extension.
- AB This handbook is planned for both new and experienced coordinators of management and other adult education programs, for school or adult education administrators, training directors, instructors, or speakers. Part one covers philosophy and perspective -- objectives of adult education and the responsibilities and duties of the coordinator and the administrator. Part two, covering planning and organization, discusses finding the needs to set program goals; developing curriculum and methods; staffing; facilities, equipment, and materials; and promotion. Part three covers the coordinator's duties in conducting the program, and evaluation and feedback. Appendixes include a management institute survey, program questionnaire, hints about hotel reservations and visual aids, facilities, equipment, and materials plans, facilities inventory, available locations, room setups, and a promotional letter. (NL)

ED 028 341

- TI Studies and Reports Relating to Training and Education,  
FY 1968.  
IN Civil Service Commission, Washington, D. C.



**AE** The 1968 Directory of Federal Training and Education Programs has been compiled to encourage wider use of findings by other agencies, to avoid duplication of research efforts, and to stimulate experimentation needed to keep pace with technological progress. Federal agencies report both completed and in-progress studies and include such agencies as Agriculture, Civil Service Commission, Defense, District of Columbia, Health, Education and Welfare, Interior, Justice, Post Office, Transportation, Treasury, and Veterans Administration. Agencies have used their own resources and personnel to perform these studies. The studies were designed to determine needs for training; develop training programs for effective manpower utilization; and to evaluate specific training programs and particular training methods. Each of the 95 studies reported includes a brief description of the study, performing organization and author, contact for further information, or availability of publication information. Studies are indexed alphabetically. (PT)

**ED 028 325**

**AU** Pabcock, Elaine P.  
**TI** Training and Development Announcement: A Comprehensive Review of the Department of the Army Management Intern Program, August 1968.

**AB** A comprehensive review of the Department of the Army Management Intern Program, August, 1968, presents details about the aims of the program, the recruitment procedure, the characteristics (including qualification) of the participants, and the achievement and rate of promotion of these individuals who are being trained for civilian careers in the Army. A comparison is made between the achievement of participants who have had graduate training and those who have not and the facts are supported by statistics. Also statistically presented is the ability of the program to retain those who are trained and the degree to which women are included among those trained. Appendix one lists the college majors of Army management interns and appendix two the universities issuing degrees to them. (For information about the program in 1962-66 see AC 003 409.) (NL)

ED 028 322

TI A Conspectus of Management Courses.  
IN British Inst. of Management, London (England).

AB This catalog of management courses lists only diploma in management studies available in the British Isles at business schools, universities, colleges of technology, commerce, and further education, and selected independent colleges, management consultants centers, adult education colleges, professional institutions, and private organizations. The information is presented in three sections: (1) reference grid pages, (2) institution pages, and (3) course descriptions, under the type of institution which gives them (universities, colleges, or independent centers), and includes titles, names and addresses of centers, duration, management level, qualification required, costs, and frequency. No undergraduate courses and only those of five days or longer are listed under the five categories of general management, functional management (finances, production, marketing, personnel, training), management techniques (automation, computers, management services), management skills (communications, decision making, human relations), and background courses (mathematics, economics, sociology, psychology). (PT)

ED 027 645

AU Culbertson, Jack  
TI "The Way It Could Be. "

AB Underlying projections for the development of preparatory programs for educational administrators is the assumption that differences between education and business will be eroded by growing interaction between the two sectors. Leaders in both sectors are thinking increasingly in common terms of "investment," "input-output," "social responsibility," and "social benefit." Flow of management talent between the two sectors represents another key point on the education-business interface. In both sectors, goal setting, based upon research, will be increasingly influenced by interaction between education and business. In accord with these important trends, those responsible for planning programs for the training of educational administrators must (1) set new

objectives for leadership development; (2) adopt a perspective which is both national and future oriented; and (3) incorporate activities adapted from the private sector, including identification of manpower needs, a national computer based inventory of available administrative leadership and support personnel, improved allocation of training resources, program design incorporating systematic evaluation, and training objectives more clearly oriented to specific administrative responsibilities and qualifications. (JK)

ED 027 642

- AU Whigham, Edward L.  
TI The AASA Commission on Preparation of Professional School Administrators. A Report.
- AB To assess current problems and achievements in education and to project directions for school administration beyond 1970, the AASA appointed a commission to study the preparation of professional school administrators. This report is designed to provide background for the work of this commission. The 1960's have seen teacher walkouts, use of armed forces to maintain public order in cities, unrest over the war in Viet Nam, and student unrest. On the other hand, notable achievements were made in educational quality, quantity, and innovations. Also, advances in pre-service and, to a lesser extent, inservice preparation for school administrators were made, but more advances are needed. The active practice of school administration changes, especially in areas of employee organizations, minority group unrest, demands for economy, social conflict in cities, and school control. Such developments raise questions as to the focus of the commission's study. The most likely areas for the concern of the commission are, therefore, strategies for managing change, theories of system organization and structure, information systems, master plans for program evaluation, new technologies for managing school operations, and comprehensive planning as a basis for resource allocations. (HW)

ED 027 619

AU Eidell, Terry L. ; and others  
TI Innovativeness and the Organizational Attributes of Schools.  
IN Oregon Univ. , Eugene. Center for Advanced Study of  
Educational Administration.

AB Five papers focus on the interrelated themes of school organization and innovation. They report on some preliminary analyses of field studies conducted during 1968 on such structural, sociocultural, and sociopsychological variables as division of labor, performance of organizational functions, decision making studies and processes, hierarchies of authority and esteem, rule observation, value systems, reward systems, and leadership. The authors and their studies are: (1) Max G. Abbott, "Programmatic Research and Development of Innovativeness and the Organizational Attributes of Schools"; (2) Terry L. Eidell, Ronald Little, and Jon Thorlacius, "Uniformity and Variability in the Organizational Characteristics of Elementary Schools"; (3) Nico Stehr, George Lewis, and Roland J. Pellegrin, "Task Differentiation in Elementary Schools: An Exploratory Analysis"; (4) Charles J. Dudley, Keith F. Smith, and Roland J. Pellegrin, "The Decision-Making Structure of Schools"; and (5) Max G. Abbott and C. Michael Stuart, "The School Over Time: Our Findings Compared with those of Waller." (HW)

ED 027 603

AU Mahoney, Leo G.  
TI Position Analysis for Administrative Personnel in Public  
School Systems.

AB An attempt is made to determine ways of organizing and treating individuals at work so that each may gain the greatest possible realization of his intrinsic abilities. To accomplish this, techniques of position analysis are adapted and developed for administrative personnel in public school systems. Position analysis techniques include position classification, evaluation, description, and specification. Previously, position analysis in schools has been limited to the non-instructional range of jobs. To develop the position analyses, a selective survey was conducted on literature and research materials from business, industry, government, and education. Selected

sample, model, and illustrative documents are reproduced and commented upon in analytical detail. These data are then adapted to position analysis for administrative personnel in public school systems. The resulting position evaluation plan describes various personnel levels for each of the following factors -- responsibility for planning, knowledge, judgment, managerial responsibility, scope of supervision, cost responsibility, interpersonal relationships, and responsibility for creative work. A 123-item bibliography is included. (HW)

ED 027 473

AU Lauwerys, Joseph A., Ed.; Scanlon, David G., Ed.  
TI Education Within Industry. The World Year Book of Education, 1968.

AB Essays in this international yearbook examine the past and present interests of governments, industry, and the economy in the education of workers, managers, engineers, and citizens. Economic, industrial, sociological, and other theoretical aspects of education within industry are discussed. Next come national and historical studies of the role of industry in vocational education and training in France, West and East Germany, the Netherlands, the United Kingdom, the Soviet Union, Nigeria, Zambia, India, Japan, Mainland China, Brazil, Venezuela, and the United States. Case studies of programs arranged by companies, work organizations, and local and regional training centers are presented from most of the above named countries and from Congo (Kinshasa), Guyana, Jamaica, and Mexico. A need is seen for a coordinated system of national policies on vocational guidance, recruitment, preoccupational training, inservice training, and examinations for selection and qualification. (LY)

ED 026 747

AU Chorness, M. H.; and others.  
TI Use of Resource Material and Decision Processes Associated with Educational Innovation: A Literature Survey. Part I of a Study.  
IN Far West Lab. for Educational Research and Development, Berkeley, Calif.; Stanford Research Inst., Menlo Park, Calif.

**AB** This annotated bibliography and literature review covers educational literature concerned with the decision making process, innovation, organization for change, sources of information regarding educational change and innovation, and the role which various agents in the field of education play in the decision making process. A special emphasis has been placed on studies concerned with the decision making process preceding educational change, especially those studies which have yielded empirical findings. A related study in the form of a field survey on the same topic area is presented in a separate volume, EA 002 091. (HW)

**ED 026 744**

**TI** An Annotated Bibliography of Benefits and Costs in the Public Sector.  
**IN** Research for Better Schools, Inc., Philadelphia, Pa.

**AB** Approximately 2,700 books, pamphlets, and articles from all over the world published before October, 1967, are listed in this annotated bibliography on public expenditure decision making. Emphasis is on the economic criteria of decision making derived through use of systematic and analytical methods. Entries are organized into 33 general categories, including education, government, military, foreign aid, national education plans, resources, welfare, industry, systems analysis, planning, health, urban renewal, and transportation. Among the analytical techniques covered are cost-benefit analysis, cost-effectiveness, planning-programming-budgeting systems (PPBS), and operations research. An author index in one alphabetic listing follows the bibliography. (TT)

**ED 026 723**

**AU** Hickcox, Edward S. ; and others.  
**TI** A Model for School Board Operation.

**AB** A school board must operate in such a way that it can cope with the increasingly larger size, complex organization, and sophisticated programs of schools. The relationships among the community, board, and school can be viewed as component

parts of a system. Formal and informal lines of communication exist among these parts -- between the community and the board in the form of elections, reports, tax levies, and the like; between the community and the school through the board; and between the board and the school through the administrative staff. Each part has its function in the organization. The board sets objectives for the system. The board and administrative staff sets budgets, formulate policies, and make rules. All levels are involved in the evaluation of the school programs. The board must develop two kinds of objectives for the school system -- general (a philosophy of education) and operational (specification of the general objectives). The board has the responsibility for decisions to meet these objectives. In this area the board's role includes policy making, rules, budgets, maintaining consistency with administrative decisions, and evaluation of programs on the basis of administrative reports. (HW)

ED 026 715

- AU Frasure, Kenneth  
TI Perspectives Concerning In-Service Education for Educational Administrators.  
IN New York State Teachers Association, Albany. Council for Administrative Leadership.
- AB The usefulness of inservice opportunities for school administrators have sometimes been perceived differently by professors and superintendents. To explore whether these differences might be related to such things as years of service, metropolitan or non-metropolitan location, and professional participation in a superintendency preparation program, a list of 20 ways for universities to serve participating school superintendents was mailed to 140 professors of administration and 140 superintendents in New York State. The order of their preferences for the 20 items was recorded along with differences in perception that resulted from the above items, while there was general agreement among professors and administrators on the rank order of the items, results tend to confirm the idea that perception differs between individuals and groups as they view a process from different environmental positions. More experienced professors and superintendents tend to agree

more fully than less experienced members of these groups. Younger professors, those from schools offering a superintendency program, and those from urban areas were found to place relatively more emphasis on administrative theory. Further study is needed to determine reasons for the discrepancies in points of view. (TT)

ED 026 553

AU Jerkedal, Ake  
TI Top Management Education, An Evaluation Study.  
IN Swedish Council for Personnel Administration, Stockholm.

AB A study of top management education was carried out in a practical training situation to determine attitude change and relationships between training objectives and training evaluation, initial standing and change, and initial standing and background factors. Subjects were 140 people completing one of five management courses. A questionnaire and semantic differential scales measured initial attitudes and change. Questionnaires also determined background information, reasons for taking the course, policy of organizations and relation to the participants, interests, and knowledge and job experience. Raven's progressive matrices measured intellectual ability, and Rubenowitz's flexibility-rigidity scale measured resistance to change. Results showed some meaningful relationships between initial attitudes and background variables, a negative correlation between initial scores and change, and some change and background covariance requiring more verification. Change showed a tendency to relate to reasons for course attendance, suggesting that participants should be motivated before beginning the course and that study should be made of the motivation necessary to compel participants to take courses. (Extensive references and tables are included). (JF)

ED 025 855

AU Piele, Philip  
TI Planning Systems In Education.  
IN Oregon Univ., Eugene. Center for Advanced Study of Educational Administration.



**IN** Oregon Univ., Eugene. ERIC Clearinghouse on Educational Administration.

**AB** This literature review examines 16 selected documents processed by the ERIC Clearinghouse on educational administration that deal with the application of several kinds of planning systems to educational programs. Particular attention is given to planning-programming-budgeting systems (PPBS), program evaluation review techniques (PERT), and various types of planning models. (HW)

**ED 025 854**

**AU** Davis, Donald E.

**TI** Managing Public Education in a Metropolitan Area.

**IN** Metropolitan Detroit Bureau of School Studies, Inc., Mich.

**AB** Metropolitanism is a phenomenon of development in our society which has completely circumvented the basis institutions upon which we have relied, making the management of all public services more complex. The major problems of metropolitanism as it affects public education are those associated with the ability of society to utilize not only its economic resources but also its social and cultural resources, which are even more significant in the education of children. Three areas of concern are the proper relations between educational government and other governmental units, the internal sharing of decision making, and the process of educational management. Exclusive exercise of local action with only local resources cannot deal successfully with the emerging problems which are not local in nature. Potential solutions to the problems require that school districts cooperate and coordinate activities. An example of what has been done in this respect is an educational research and development council, a private non-profit corporation consisting of 22 school systems established in the twin cities metropolitan area, Minnesota. (HW)

ED 025 851

AU Case, C. Marston; Clark, Stephen C.  
TI A Bibliographic Guide to Operations Analysis of Education.  
IN National Center for Educational Statistics (DHEW), Washington,  
D. C. Div. of Data Analysis and Dissemination.

AB This bibliography lists 155 books, articles, monographs, and other studies on operations analysis in education. The criteria for inclusion are that the study be quantitative and analytical and use techniques of operations research, systems analysis, management science, program planning and budgeting, benefit analysis, cost analysis, benefit-cost analysis, cost effectiveness analysis, multivariate statistical methods, economics, or computer science. A list of six bibliographies which include most of the studies cited and a list of 38 technical notes of the division of operations analysis that are available through ERIC are appended. This document replaces ED 014 129. (HW)

ED 025 837

AU Farquhar, Robin H.  
TI Strategies to Expand the Pool from which Talented Persons  
are Recruited for Preparation in Educational Administration.

AB Current recruitment efforts in educational administration are limited by the narrow target population considered (which seldom extends beyond professional educators) and the unsystematic methods utilized. In addition, five significant obstacles to effective recruitment are: (1) the lack of information about educational administration among potential recruits, (2) the occupation's low perceived status as a career, (3) the restrictions to entry into the occupation, (4) the problems of graduate study for persons already established, and (5) the low general opinion of preparation programs in educational administration. Strategies to ease the recruitment problems include: (1) communicate to high school seniors information about the career, (2) encourage talented young people to enter preparation programs from pools traditionally ignored by current recruitment efforts, (3) recruit persons from other careers in which relevant competencies are developed, and (4) recruit paraprofessionals

to serve in supportive administrative roles in big-city school systems. To conduct the recruitment program, a consortium composed of the following kinds of agencies should be created: (1) a nationwide group of selected universities and associated school systems (it is recommended that UCEA serve this need), (2) a firm to produce printed and audiovisual materials, (3) a public relations or advertising firm, and (4) one or more funding establishments. (HW)

ED 025 828

- AU Morphet, Edgar L. ; and others.  
TI Basic Principles, Concepts, and Issues. Part One, Educational Organization and Administration: Concepts, Practices, and Issues. Second Edition. Prentice-Hall Education Series.
- AB The behavioral sciences and findings from important research studies are used as the theoretical basis for describing many of the concepts, practices, and issues in educational administration. Seven chapters cover the following topics: (1) the system of education, (2) the legal basis for education, (3) the use of theory and research in educational administration, (4) concepts and principles of organization and administration, (5) concepts and studies of educational leadership, (6) types and trends of cooperative procedures in educational administration, and (7) external environment and the schools. A list of selected references completes each chapter. (TT)

ED 025 647

- AU Moss, Jerome Jr., Ed. ; and others.  
TI The Report of a Developmental Project Guidelines Conference (Minneapolis, June 13-15, 1968).  
IN Minnesota Research Coordinating Unit in Occupational Education, Minneapolis.
- AB Major purposes of the conference were to help educators develop a concept of the developmental process and to provide mutual learning among the 10 participants. Answers to two questions were sought: "what is an educational development project?" and "how should one go about planning or conducting educational development projects?" These papers were presented. "The Economic Evaluation

of Development Projects in Education" by Ernest W. Stromsdorfer discusses basic principles of design which allow economic evaluation of development projects. "Some Decision Points and Alternatives in Developmental Curricula" by Hulda Grobman suggests 18 considerations on this topic. "A Perspective of Developmental Projects" by John D. McNeil reviews guidelines for the organization and operation of developmental projects. "The Relationship of R&D to Educational Improvement: An Output-Oriented Model" by Hendrik D. Gideonse contrasts research and development projects to educational development projects and presents a graphic model of the differences. A model of the developmental project process is included. (EM)

ED 025 155

- AU Zinn, Karl L.  
TI A Basic Reference Shelf on Interactive Use of Computers for  
IN Instruction. A Series One Paper from ERIC at Stanford.  
Stanford Univ., Calif. ERIC Clearinghouse on Educational  
Media and Technology.
- AB The field of computer applications in education, characterized  
by continuous change in technology and nomenclature, is  
documented by diverse information sources. This paper  
names methods of organizing information on computer-based  
instructional systems and lists sources under literature  
surveys and reviews, conferences and symposia (1965-68,  
U. S. A.), publishers, and professional organizations.  
Interactive uses of computers for instruction include drill  
strategy, author-controlled tutorial, and "dialogue"  
tutorial; simulation and gaming; information handling,  
computation and display (scholarly aids); computer aids  
for instructional management; and computer-based tools  
for the author and researcher. The variety of lessons,  
systems, and languages for computer-based instruction  
depends on instructional objectives and on records of  
student performance. (TI)

ED 025 015

- AU Johnson, Robert B., Ed.  
TI Seminar Series for School Administrators. Volume 1,  
Leadership.

IN Calgary Univ. (Alberta). Dept. of Educational Administration.

AB A collection of six papers presented on separate occasions to practicing administrators deals with the need for better leadership in administration. The authors and titles of the papers are (1) R. B. Howsam, "Administering Tomorrow's Schools," (2) H. W. Kitchen, "Recent Studies Relating to Leadership," (3) Alan F. Brown, "Reactions to Leadership," (4) J. E. Cheal, "Leading the Administrative Team," (5) E. L. Koch, "Supervision: Recent Research and Trends," and (6) R. A. Schmuck, "Using Knowledge of Group Processes to Improve Administrative Performance." An 18-item annotated bibliography is also included. (HW)

ED 025 010

AU Pons, Alain  
TI Research Management.  
IN Organization for Economic Cooperation and Development,  
Paris (France). Directorate for Scientific Affairs.

AB Thirty-four key ideas on research and research management summarize the views of scientists in charge of research institutes who attended three regional seminars held in 1960 and 1961 in France, Austria, and Denmark. Meaningful research, whether pure, directed, or applied, requires professional management by directors who are technically skilled in their respective scientific disciplines and who are capable administrators of programs that require longrange planning, fiscal expertise, flexibility, and special ability in human relations. Research programs should be flexibly organized to allow free circulation of ideas and the most efficient use of research staff. A bibliography of 26 books, reports, and monographs published between 1955 and 1964 is appended. (JK)

ED 025 002

AU Cook, Desmond  
TI An Overview of Management Science in Educational Research.  
IN Ohio State Univ., Columbus. Educational Research Management Center.

AB Management science is defined as the basic process or function of rational decision making. The concept of educational research is expanded to include use of new management techniques developed by the private sector which are adaptable to decision making in the total educational context. Four trends in the field of educational research are briefly reviewed: (1) increasing use of scientific problem-solving methods, (2) increasing use of management information systems, (3) increasing emphasis on long range planning to correlate the educational system with political, economic, and social subsystems for more effective human resource development, and (4) increasing use of systems concepts. (JK)

ED 024 145

AU Cook, Desmond L.  
TI The Impact of Systems Analysis on Education.  
IN Ohio State Univ., Columbus. Educational Research Management Center.

AB The nature and extent of systems analysis in education is discussed in terms of the following specific applications: (1) instructional systems where the concern is with the components of the system (e. g., teachers, students, material to be taught, or audiovisual systems) and their interaction in the learning process, (2) project management systems for the planning and controlling of a wide variety of educational projects, (3) management information systems for better decision making by chief school officials, (4) planning-programming-budgeting systems for selecting among alternatives to reach program goals, and (5) operations research which attempts to identify the relevant variables making up the total system and subsystems and to secure quantitative data for each variable. Two problems involved in discussing systems analysis in education -- terminology and the difficulty of securing evidence about its impact and application -- are outlined. Warnings and recommendations regarding the role of systems analysis in education are presented. (HW)

ED 024 144

AU Terrey, John N.  
TI Program Budgeting and Other Newer Management Tools in Higher Education: A Description and Annotated Bibliography.

IN Washington Univ., Seattle. Center for Development of  
Community Coll. Education.

AB The first part of this document describes the following four  
new managerial tools available to the educational admini-  
strator: planning-programming-budgeting, systems analysis,  
PERT or the critical path method, and the DELPHI technique  
which employs the systematic solicitation and collation of  
expert opinion to achieve consensus in the formulation of  
goals. The second part is an annotated bibliography which  
lists 73 books, reports, journal articles, bibliographies,  
and government publications related to the decision making  
process, published between 1963 and 1968. (JK)

ED 023 198

AU Piele, Philip  
TI Annotated Bibliography on Educational Administrator Pre-  
paration Programs.

IN University of Oregon, Eugene. ERIC Clearinghouse on  
Educational Administration.

AB This annotated bibliography is a collection of the more  
significant, recent (since 1962) literature describing or  
proposing programs for the inservice or preservice  
preparation of educational administrators for public and  
private educational organizations at the elementary, second-  
ary, and higher education levels. The thirty-six documents  
included deal with such topics as the influence of the social  
sciences and the humanities on the preparation of educational  
administrators, the writing of case study materials, and  
the use of simulation.

ED 023 186

AU Frasure, Kenneth  
TI In-Service Role of Professors of Administration, A National  
View. 1966.

AB This study examines working relationships between school  
administrators and professors of educational administration.  
The purpose of the investigation was to determine the order  
of preference for twenty suggested ways in which professors  
of administration may best serve practicing administrators,

as viewed by members of each group. The views of the participating professors and superintendents were each classified by geographical area and by years of service. The population of the study was obtained from a list of professors attending the 1963, 1964, and 1965 National Conferences of Professors of Educational Administration and from the 1964 Directory of the American Association of School Administrators. The results indicate that, while the total group of respondents seems to agree with current practices in providing service to administrators, there appear to be considerable differences of opinion on specific items.

ED 023 178

AU Markus, Frank W.  
TI Negotiations Bibliography.  
IN Metropolitan School Study Group, Kansas, Mo.  
IN Missouri Univ., Kansas City. School of Education.

▲B Over 500 items published between 1964 and 1967 are listed without annotation in seven categories as follows: journal articles, 344; pamphlets, 64; special articles and monographs, 41; papers, addresses, and memoranda, 27; theses and dissertations, 16; audiovisual material, 12; and books, 30. (JK)

ED 023 113

AU Gibb, Jack R.  
TI Dynamics of Leadership.  
IN United Ministries in Higher Education, St. Louis, Mo.

AB Examined are two types of leadership. The first type is authoritarian or paternalistic and seems appropriate to a world of machines. This is a defensive leadership built on fear and little trust between people. Techniques for control are developed which often produce undesired results such as apathy or resistance. The alternative is emergent leadership, built on trust and confidence in others. Goals and controls come from the group process, rather than the leader. The author suggests these concepts of leadership as particularly challenging to the university. Current



student-administration conflicts emphasize the need for participatory or emergent leadership by administrators. (NS)

ED 023 053

TI Interagency Training Programs Bulletin, 1968-1969.  
IN Civil Service Commission, Washinton, D. C.

AB A bulletin listing training available for interagency use is published annually by the Civil Service Commission. Information includes names of agencies offering interagency programs, general course descriptions, enrollment requirements, enrollment fees, addresses of office offering course and training site, dates and length of courses, and a place to call or write for more information. A wide variety of courses is offered, covering executive management, supervision, financial management, management analysis, personnel management, communications, office skills and practices, office skills and administration, supply management, specialized agency programs, and health and safety services. A calendar of interagency training programs and an index of courses by agency are included. (JF)

ED 023 049

AU Blake, Robert R; Mouton, Jame S.  
TI The Managerial Grid; Key Orientations for Achieving Production Through People.

AB The managerial grid arranges a concern for production on the horizontal axis and a concern for people on the vertical axis of a coordinate system: 1,1 shows minimum concern for production and people; 9,1 shows major production emphasis; 5,5 shows adequate production and satisfactory morale; and 9,9 shows major concern for people and production. Most American managers are 5,5, but the ideal, the 9,9 management, encourages teamwork and mutual respect, learns from mistakes, has a sense of directed commitment, and does not use facades. A study of 716 members of one organization showed that career accomplishment is consistently related to managerial style; the greater a career accomplishment, the more likely that the approach

is 9, 9 and 9, 1. To approach a 9, 9 goal, a long term effort should be made with managerial grid laboratory-seminar training, team development, horizontal and vertical organizational relationships, organizational improvement goals, goal attainment, and stabilization. An experiment now in its fifth year in an industrial plant of 2, 400 implemented these suggestions and made considerable tangible and intangible gains. (Extensive references are included.) (JF)

ED 023 025

AU Kurland, Norman D., Comp.; Miller, Richard I., Comp.  
TI Selected and Annotated Bibliography on the Processes of Change.

AB Over 170 books, booklets, articles, bibliographies, periodicals, and unpublished items on anthropology, sociology, education, industry, and technology, medicine, political science, and psychology are listed in this annotated bibliography on the processes of change. These documents, which treat such subjects and educational change, social and cultural change, diffusion and adoption, group dynamics, power structure, administration, and manpower development in developing nations, stress the dissemination and implementation of new practices rather than the practices themselves. (LY)

ED 022 125

AU Vetter, Eric W.  
TI Manpower Planning for High Talent Personnel.

AB Written primarily for organizations beginning their manpower management effort, this book focuses on analytical approaches to studying the managerial manpower situation in a specific organization. Chapters 1 and 2 develop the nature, need, and process of manpower planning and include a schematic overview of the entire process. Chapter 3 describes programs which help the organization meet difficult situations, based on interviews with manpower managers. Chapter 4 involves an analysis of inventory and forecast data to identify potential manpower problems. In chapters 5 and 6, how to measure labor productivity and to use the information in manpower forecasting are discussed. Chapter 7 relates

the manpower forecast to other economic forecasts of business organizations. In chapter 8 fundamental ideas of control and evaluation and indications of the role of control in manpower planning are presented. Chapter 9 examines the role of the manpower planner. There are case studies and a bibliography. (AJ)

ED 021 339

AU Griffiths, Daniel E., Ed.  
TI Developing Taxonomies of Organizational Behavior in Education.  
Final Report.  
IN New York Univ., N. Y. School of Education.

AB This series of six related studies reports the work of a multi-university team in developing and evaluating extensive taxonomies of organizational behavior in education. The report is divided into seven chapters, four of which describe the development of classification schemata, utilizing the concepts of four theories of organization and administration -- decision-making theory, bureaucratic theory, compliance theory, and general systems theory. Chapters on taxonomic inquiry and on field procedures used in the development of the taxonomies are followed by an explanation of attempts to systematize the taxonomies into a single classification. (Authors/JK)

ED 020 740

AU Pearce, Frank C.  
TI A Study of the Business and Industrial Management Programs  
at College of San Mateo.  
IN San Mateo Coll., Calif.

AB This survey correlates goals, certain characteristics, and job status of students in the college's business management and industrial management programs in an effort to learn from the students if the curriculums meet their needs. The questionnaire was completed by 746 (67 per cent) of the students in the two management programs. The principal conclusions were (1) more than half the students were seeking a certificate of completion, (2) the probability of working toward a certificate increased, (3) the programs

were most attractive to employees of large firms, (4) most students were in nonsupervisory positions and had held their jobs for about four years, (5) although most students felt the programs were of at least some help, there was no general agreement on how to improve them, (6) greater scope and depth in the courses and improved instruction appeared to be needed, (7) the unemployed and younger students held the programs in lower regard than did those working for advancement, (8) the most popular teaching methods were lecture, class discussion, guest speakers, case studies, and small-group discussions, and (9) those who regarded the program most highly preferred teaching methods with a maximum of student involvement. (HH)

ED 020 580

- AU Cook, Desmond L.  
TI References on Network Planning in Education, Research Management, Project Selection, and Program Management. (Title Supplied.)  
IN Ohio State Univ., Columbus. Educational Research Management Center.
- AB. This bibliographic listing of 109 related addresses, articles, books, microfilms, monographs, reports, and other items, published between 1959 and 1968, includes 39 items on network planning, 48 items on research management, 13 items on project selection, and nine items on program management. (JK)

ED 020 302

- TI Research Visibility, 1967-68, Reports on Selected Research Studies in Vocational, Technical, and Practical Arts Education.  
IN American Vocational Association, Washington, D. C.
- AB The complete texts of "Research Visibility" sections published in the nine issues of "American Vocational Journal," September, 1967 through May, 1968 are presented. The initial source of direction in determining appropriate themes and subtopics for each issue was the panel of consultants' report, "Vocational Education for a Changing World of Work." The reviews include research in the

areas (1) high school age youth, September 1967, (2) people with educational needs beyond high school, October, 1967, (3) youth with special needs, November 1967, (4) youth and adults unemployed or at work, December 1967, (5) toward teaching excellence, January 1968, (6) curriculum development and instructional materials, February 1968, (7) vocational guidance, March 1968, (8) leadership and administration, April 1968, and (9) research and evaluation, May 1968. Each section contains general discussion of the month's theme, the synthesis of research, the column "plain talk" and a bibliography of research, demonstrations, and institutes in process. This document is available for \$1.25 from American Vocational Association, 1510 H Street, N. W., Washington, D. C. 20005. (MM)

ED 019 755

AU Twelker, Paul A. ; Wallen, Carl J.  
TI Instructional Uses of Simulation -- A Selected Bibliography.  
IN Northwest Regional Educational Lab., Portland, Oreg.

AB This annotated bibliography on the instructional uses of simulation is indexed for the convenience of the user. Only limited aspects of man-machine instructional systems are considered. Although most of the items are related to the instructional uses of simulation, some items are related to the design of instructional systems. The bibliography lists the very latest references available and purposely omits many of the older articles. (HW)

ED 019 738

AU Foster, Charles W.  
TI Annual Volume of Proceedings, Addresses, and Research Papers of the Annual Meeting and Educational Exhibit of the Association of School Business Officials of the United States and Canada (53d, Miami Beach, Florida, October 14-19, 1967).  
IN Association of School Business Officials, Chicago, Ill.

AB A verbatim reporting of presentations made at the 53d Annual Meeting of the Association of School Business Officials of the United States and Canada, held in Miami Beach, Florida, October 14-19, 1967, includes the keynote

address by the Honorable Barry G. Lowes, Chairman of the Metropolitan Toronto Board of Education, on purposes, problems, and proposals for effective education. Other meeting addresses are also included, as are reports of forums and panel discussions dealing with difficulties faced by school business officials. Nineteen section meetings were addressed by leaders representing business and education. Papers read are reported under section headings as follows -- general obligation school bonds, personnel management, professionalization, program budgeting, schoolhouse planning and construction, private school management, accounting and finance, junior college business management, building maintenance and operations, management techniques and development, office management, purchasing and supply management, university training of school business officials, data processing, insurance management, legal basis for a pre-service training program, product information, school foods service management, and transportation. Articles and by-laws of the association and its research corporation are appended. This document is available from the office of the executive secretary, Association of School Business Officials of the United States and Canada, 2424 West Lawrence Avenue, Chicago, Illinois 60625, 440 pages, \$5.00. (JK)

ED 019 531

- AU Merrell, V. Dallas  
TI An Analysis of University Sponsored Executive Development Programs.  
IN University of Southern California, Los Angeles. School of Public Administration.
- AB As part of a three-part project to include (1) a review of bibliography available at the University of Southern California and nearby libraries, (2) a sample survey of executive development programs organized and operated by industry, and (3) a review of executive development programs organized and operated by universities for marketing to industrial and commonwealth organizations, this paper deals with the third phase. It includes information on 27 programs at 25 universities, from 14 states and every geographic region of the United States except the Southwest -- information about title of course, sponsor, dates and length of

programs, year founded, location, enrollment, prerequisites for participants, program content, training techniques, faculty, fees, geographic region, other programs available, and comments. The report concludes with comments on characteristics of the programs and suggestions for possible improvement and strengthening of them. (PG)

ED 018 742

- AU Bell, Gordon  
TI The Adoption of Business Practices by Participants in the  
IN Small Business Management Training Program.  
British Columbia Univ., Vancouver.
- AB This study was an evaluation of the effectiveness of three courses in the small business management training program conducted in British Columbia -- personnel, management accounting, and marketing for manufacturers. The concept of adoption was used to determine the degree to which respondents made use of skills and techniques. Data were collected by interviewing a random sample of participants in each course. Gains in the degree of adoption among respondents in all courses were significant at the 1 per cent level. An analysis of variance among means of adoption scores in relation to several characteristics of respondents indicated that three -- education, the relationship of the respondent to the business, and the number of employees in the business -- had a significant relationship to the degree of adoption. Scores on the three scales used to measure reactions to course, instructor, and course content respectively indicate a favorable reaction in each case and for each course. This masters thesis is available from the University of British Columbia, Vancouver. 91 pages. (Author/PT)

ED 018 703

- AU Brech, E. F. L.  
TI Management Development.
- AB Among the essential personal qualities required of successful managers or potential managers, a balanced temperament and the capacity to see the other person's point of view should be stressed. Fuller and broader knowledge, greater

skill in judgment and decision, and greater maturity in exercising responsibility and interpreting experience must be achieved in the trainees. Therefore, competent managers must not only provide for their continuing self improvement and increase overall managerial effectiveness, but must also ensure that their successors become even more competent than they themselves. Program evaluations, appraisals of individual development, and plans for further action require strict objectivity. The services of a management development advisor may also prove valuable. (This document includes a review of the recent background of management development in Britain.) (LY)

ED 018 690

AU Rindt, Kenneth E., Ed.  
TI Handbook for Instructors in Management Programs.  
IN Wisconsin Univ., Madison. University Extension.

AB Planned for instructors, both lay and professional, in university extension management development programs, this handbook presents a brief summary of basic principles, tools, and techniques of adult instruction. After a discussion of the student and his needs, there are suggestions for the preparation of the presentation (lesson plan and working outline), methods of presentation, both passive (such as lecture, panel discussion, or movies) and participating (simulation and discussion) and the use of such training aids as exhibits, charts, blackboards, projectors, tape recorders, films, and demonstrations. There is an instructor's self-rating scale and a bibliography. This document is available from the University of Wisconsin Extension Division, Department of Commerce, Madison. 55 pages. (EB)

ED 018 674

AU Law, Gordon F.  
TI Research Visibility. Vocational Education is Service --  
Leadership and Administration.  
IN American Vocational Association, Washington, D. C.



**AB** Nineteen reviews in this issue pertain to leadership and administration, one of the major areas of concern identified by the panel of consultants on vocational education. They are organized by topics -- (1) "Leadership Training, Workshops, and Institutes" treats an interdisciplinary forum on occupational education, a home economics workshop, a doctoral program symposium, and six leadership development meetings, (2) "Costs and Benefits of Vocational Education" discusses wage differences, cost-benefits analysis, and costs and returns of technical education, (3) "State Administration" describes Michigan's leadership program, instruments used in studying state agencies, and criteria for self-analysis for vocational education, and (4) "Studies of General Interest to Administrators" includes a post-war examination of vocational education and intergovernmental fiscal relations, social factors in slums, and implications of vocational education for company plant site selection. "Plain Talk," a continuing column, discusses leadership development efforts in vocational education and two of the reviewed studies. The bibliography lists eight related studies which are in process. This article is published in the "American Vocational Journal," Volume 43, Number 4, April 1968. (EM)

**ED 018 568**

- TI** Leadership for Vocational Education in California -- Theory and Practice of Program Development, Summary Report of the Coastal, Northern, and Southern Regional Conferences (November, 1965).
- IN** California State Dept. of Education, Sacramento, Vocational Education Services.
- IN** California Univ., Los Angeles. Div. of Vocational Education.
- AB** Approximately 105 supervisors and coordinators of public school vocational education programs in California participated in conferences to study current leadership practices and vocational education programs as related to national, state, and local requirements. Presentations were -- (1) "A Theoretical Model for Vocational Education in a History of Change" by Melvin L. Barlow, and (2) "The Impact on My Administration of Recent Trends in Vocational Education"

by John W. Dunn, Charles W. Patrick, and Harry D. Wiser. Presentations on regional business were -- (1) "Recent Developments in Business Education" by Robert M. Boldt, (2) "Homemaking Education and Occupational Training Related to Home Economics" by Mary F. Inman, and (3) "Functions of Vocational Education" by Lee W. Ralston. Brainstorming sessions identified some sources, patterns, and consequences of change in vocational education. Using a junior college case study, presented by Peter Vaill, as a basis, discussion groups developed suggestions to help vocational administrators understand the climate of a college and to match the program with social situations. Other discussion group sessions were devoted to the images of vocational education and the sources and implications of these images. Reports of the brainstorming and group discussion sessions are included. (PS)

ED 018 379

- AU Perlman, Jacob  
TI Current Projects on Economic and Social Implications of Science and Technology 1964.  
IN National Science Foundation, Washington, D. C.
- AB This publication is the sixth annual inventory of research projects which are currently in progress at colleges and universities and which deal with the social and economic impacts of science and technology. The information involved in this document was compiled by the National Science Foundation for the use of scholars, administrators, and others concerned with this growing field of inquiry. Each entry includes (1) the name of the project director, (2) project title, (3) project address, and (4) a brief description of the project. The 14 category areas are (1) agriculture and rural sociology, (2) general economic analysis, (3) history and philosophy of science and technology, (4) international and foreign studies, (5) administration, organization, and management, (6) public policy, government and national defense, (7) impacts of selected industries, (8) scientific and engineering manpower - performance, education, and creativity, (9) sociology and psychology, (10) economic development, (11) patents and trademarks, (12) automation and impacts

on labor, (13) innovation, including impacts on specific inventions and new processes, and (14) decision making. Appended are (1) cross-references to projects which also pertain to science information, space, and state and regional studies, (2) related compilations of research projects, (3) reports of the status of projects that were listed in the 1963 inventory, (4) author and institution indexes, and (5) the forms used in obtaining information. This document is also available for \$0.

ED 017 881

- AU Coghill, Mary Ann  
TI Sensitivity Training, A Review of the Controversy -- Key  
Issues Series, Number 1.  
IN State Univ. of New York, Ithaca. School of Industrial and  
Labor Relations at Cornell Univ.
- AB Distinctions between laboratory training, T-group training,  
and sensitivity training are made, followed by a diary of a  
T-group in session. The background and development of  
the laboratory approach is presented, highlighting those  
aspects, problems, and results which are of greatest  
interest to industrial and labor relations. A discussion  
of the controversy over the technique includes the argu-  
ments in the areas of ethical questions for managers and  
trainers, of the relationship of T-groups and psychotherapy,  
and of research on the effectiveness of the training. A list  
of annotated references, covering the areas discussed and  
dated from 1949 through 1967, are included. The paper  
is available for \$2.00, from Public Information Center,  
Industrial and Labor Relations Library, Cornell University,  
Ithaca, New York, 14850. 30 pages. (Author/PT)

ED 016 927

- TI Management Development. Current Information Sources,  
No. 17.  
IN Syracuse Univ., N. Y. ERIC Clearinghouse on Adult  
Education.

- AB This annotated bibliography on management development contains 33 indexed items with abstracts, in such areas as leadership training, program planning and evaluation, human relations and laboratory training. With one exception, all the documents are from 1966 and 1967. (SG)

ED 016 902

- TI The Industrial Training Yearbook 1967-68, A Comprehensive Guide for Training Officers and Their Managements.

- AB Contents of the British Industrial Yearbook for 1967-68 appear in 12 sections. Section 1 reviews the present industrial training situation, including the aims of the industrial training act of 1964. Section 2 covers the training of operatives, craftsmen, technicians, technologists, commercial and clerical workers, supervisors and managers, and trainers. Section 3 and 4 indicate the components and activities of the Ministry of Labour, the Central Training Council, and the Industrial Training Boards. Provisions for further education under the Department of Education and Science and the Scottish Education Department are outlined in Section 5. The following two sections deal with nonuniversity further and higher education examining bodies and their courses, and with college and university courses related to industrial training. Sections 8 through 11 list professional and qualifying bodies, information and consulting services, educational resources and media, and sources of training aids. The last section contains a diary of events of general industrial training interest during 1967 and 1968. Also included are two indexes. This document is available from Kogan Page, Ltd., 22 Gray's Inn Road, London W. C. 2, England, 500 pages. (LY)

ED 016 412

- AU Fall, Charles R.  
TI Individualizing University Instruction, Exploring Computer Potential to Aid College Teachers by Directing the Learning Process.  
IN State Univ. of New York, Buffalo. Coll. at Buffalo. School of Education.

**AB** This document concludes that instruction by computer-based resource units can facilitate learning and provide the instructor with valuable assistance. By pre-planning the teacher-learning situation, resource units can free the instructor for decision-making tasks. Resource units can also provide appropriate learning goals and study guides to each student. Single copies of this document are available from the State University of New York at Buffalo, School of Education, 220A Foster Hall, 3435 Main Street, Buffalo, New York 14214. (MS)

**ED 016 176**

**AU** Dubin, Samuel S. ; and others.  
**TI** Educational Needs of Managers and Supervisors in Cities, Boroughs, and Townships in Pennsylvania.  
**IN** Pennsylvania State Univ. , University Park.

**AB** This study was undertaken by the Department of Planning Studies, Continuing Education, the Pennsylvania State University, (A) to determine the professional education needs of managers in municipalities and supervisors in cities in Pennsylvania, (B) to suggest methods of meeting these needs, and (C) to indicate the role of colleges and universities in helping to meet these needs. Data were collected through two questionnaires, one for managers in cities, boroughs, and townships, and one for supervisors in cities. Returns were received from 138 managers in 28 cities, 48 boroughs, and 20 townships, and from 186 supervisors in 28 cities. Managers and supervisors provided information on their background, methods of updating, and the attitude of local government toward education. Managers indicated their own educational needs and also those of the men they supervise on 68 courses. Supervisors rated their educational needs on 16 courses. Recommendations are made for educational institutions, for cities, boroughs, and townships, for individual managers and supervisors, and for professional associations. The document is available, for \$2.00, from Continuing Education Business Office, J. Orvis Keller Building, the Pennsylvania State University, University Park, 16802. 111 pages. (Author /AJ)

ED 016 159

- TI Human Relations -- Training and Research, Number 1.  
Current Information Sources, Number 10.
- IN Syracuse Univ., N. Y. ERIC Clearinghouse on Adult  
Education.
- AB This annotated bibliography presents 36 citations of the  
more current literature on human relations training and  
research, most of them with abstracts. The abstracts  
have been grouped as research and research reviews,  
monographs and reports, and journal articles. The docu-  
ments are mostly dated 1966 and 1967. (PT)

ED 016 153

- AU Craig, Robert L., Ed.; Bittel, Lester R., Ed.  
TI Training and Development Handbook.
- AB To provide a broad reference source, from the viewpoint  
of the employer organization, for those responsible for  
developing human resources in any organization, this  
handbook includes materials for the sophisticated manager  
of a large training staff as well as the fundamentals of  
training for the beginning or part-time trainer. The levels  
of training covered range from apprentices to top executives.  
Chapters are -- the evolution of training, determining  
training needs, the learning process, testing for training  
and development, evaluation of training, job instruction,  
coaching, the lecture, conference methods, case method,  
role playing, programmed instruction, human relations  
laboratory training, management games, related reading,  
correspondence study, training aids, supervisor develop-  
ment, management development, vocational and technical  
education, training facilities, use of consultants, univer-  
sities and their extensions, special programs, scientific  
and technical personnel development, organization of  
training, selecting and organizing the training staff, trainer  
education and training, planning and scheduling, budgeting  
and controlling training costs, training records and infor-  
mation systems, and legal aspects of training. This  
document is available from McGraw-Hill Book Company,  
New York. (AJ)

ED 015 538

- AU Goldhammer, Keith; and others.  
TI Issues and Problems in Contemporary Educational Administration, A Review of Related Literature. Supplementary Report.  
IN Oregon Univ., Eugene. Center for Advanced Study of Educational Administration.
- AB Some 138 articles, research reports, and unpublished items, dating from 1953 to 1966, contributed to the development of a rationale for a major study of problems facing public school superintendents. Brief reviews coordinate the material under six main headings -- (1) educational change, (2) negotiations and teacher militancy, (3) aspects of instruction, (4) administrative leadership, (5) critical social issues, and (6) educational finance. (JK)

ED 015 415

- AU Moan, Charles E., Jr.  
TI Public Employee Training on the State Level in the United States. Research Series, Number 8.  
IN Rhode Island Univ., Kingston. Bureau of Government Research.
- AB To survey inservice training for public employees within state governments, questionnaires were sent to all 50 states, Puerto Rico, and the Virgin Islands. Of the 37 states and possessions responding, two reported no training activities, 16 had a central training office to direct and coordinate training programs, and 19 indicated that inservice training was conducted entirely by individual departments. The number of full-time professional training personnel in central training agencies ranged from zero to ten. Salaries for trainers on all levels ranged from \$3600 to \$15,432 annually. Many states depended heavily on training facilities and staff of outside agencies. Few states had written statements of training policy or standards for establishing or evaluating training programs. Top and middle managers were most often trained, followed by supervisors and clerical staff. Training for unskilled and semi-skilled employees ranked near the bottom in most agencies. Training functions did not have the stature of

other state government posts such as salary administration or examination preparation. (Appendixes are the questionnaire and training officer job descriptions from several states.) This document is also available, for \$0.50, from the Bureau of Government Research, University of Rhode Island, Kingston, R.I. (AJ)

ED 014 787

- AU Goldammer, Keith; and others.  
TI Issues and Problems in Contemporary Educational Administration. Final Report.  
IN Oregon Univ., Eugene. Center for Advanced Study of Educational Administration.
- AB Major issues and problems facing public school superintendents were defined through an analysis of conferences and personal interviews with 47 administrators of various-sized districts in 22 states. Assisting the research team were personnel from 11 state departments of education, six regional educational laboratories, 36 colleges and universities, and the USOE. Findings of the study indicate that public school superintendents are apprehensive and concerned. Many feel their training was inadequate for the conditions under which they now work and question the value of the few in-service training programs available to them. They find it difficult to define proper actions for themselves and their school districts, especially with regard to educational change, teacher militancy, aspects of instruction, administrative leadership, critical social issues, and educational finance. Recommendations are made relative to the services which should be provided to superintendents by colleges and universities, state departments of education, regional educational laboratories, administrators associations, the university council for educational administration, and the USOE. (JK) [See also : ED 015 538, Issues and Problems in Contemporary Educational Administrations, 1967. ]



ED 014 646

AU Morgan, John S.  
TI Practical Guide to Conference Leadership.

AB This guide to conference leadership begins with a chapter on leadership psychology and goes on to present outlines for running conferences. The leader prepares for the meeting by collecting facts on the subject, preparing an outline, knowing the participants, making physical arrangements, and writing the tentative summary. In the conference he uses such discussion tools as the question and visual aids and helps the group summarize. Instructions for making a record of the conference are given. Dealing with problem people (including the poor talkers, the dissenters, and the undisciplined) involves spotting them in advance, managing the meeting to avoid developing them, and knowing techniques for coping with them. Directions for leading the four types of conferences -- planning, informative, problem solving, and training conferences -- are given. In a chapter on teaching by the conference method, training sessions on work, supervisory, and management techniques, and evaluation are outlined, including use of the case study method, role playing, and refresher and sensitivity training. (This document is available from McGraw-Hill Book Company, New York. (AJ)

ED 014 031

TI Higher Adult Education, Number 1. Current Information Sources.  
IN Syracuse Univ., N. Y. ERIC Clearinghouse on Adult Education.

AB The forty-one items indexed and abstracted in this bibliography deal largely with fine arts education, urban extension, community development, leadership training (including civil rights), managerial and professional education, vocational training, public television, and participant characteristics, together with such concerns as educational needs and attitudes, testing, program development, and the use of evening classes, correspondence study, and the residential method. Also noted are historical reviews of extension

work at Rutgers, the University of Texas, and the University of Chicago, and a Peace Corps program of field training. (LY)

**ED 014 026**

- TI** Continuing Education in the Professions, Number 1. Current Information Sources.
- IN** Syracuse Univ., N. Y. ERIC Clearinghouse on Adult Education.
- AB** An annotated bibliography contains 21 indexed entries, mostly with abstracts, on such aspects of professional continuing education as medicine, law, management development, theological education and pastoral counseling, vocational counseling, social work, and extension work, together with participation, motivation, educational needs, educational methods and media, and career opportunities for college trained women. (LY)

**ED 013 430**

- TI** Management Development, Number 1. Current Information Sources.
- IN** Syracuse Univ., N. Y. ERIC Clearinghouse on Adult Education.
- AB** This annotated bibliography on management development contains 28 indexed items, many with abstracts, in such areas as human relations and leadership training, program planning and evaluation, business games, discussion group behavior, and company and university sponsored programs. Also included are comparative studies of programs and methods in several countries. (LY)

**ED 013 398**

- AU** Bennis, Warren G.
- TI** Principles and Strategies of Directing Organizational Change via Laboratory Training.
- AB** This chapter of a larger work on the sociology of organizational change suggests guidelines for using laboratory

training within organizational social systems. The ultimate aim of such training is not only to impart human relations skills to the participants, but also to change organizational values so that human feelings are regarded as legitimate. The effective change agent needs professional and human relations skills, nonauthoritarian style, and the assurance of acceptance within the target organization. Moreover, training goals must be appropriate and feasible, the target system and its high officers must be prepared for, and oriented to, laboratory training, and participation should be strictly voluntary. (The document includes 17 references, three case histories illustrating causes of laboratory training failures, and a five-step model for diagnosing the state of the target system.) This document is chapter 8 in *changing organizations*, by Warren G. Bennis, which is available from McGraw-Hill, New York. (LY)

ED 012 884

- AU Moore, Larry F.  
TI Business Games vs. Cases as Tools of Learning, Results of Research at University of Colorado.
- AB As a teaching device, the management game possesses unique features -- direct feedback of decision results and sequential decision making. The business game and case method are closely related. Both define a collection of data, afford practice in the use of analytical tools, expose trainees to decision making under conditions of uncertainty, and illustrate the actions of competitors. Attempts to compare the teaching effectiveness of games and cases carried out at Harvard and Northwestern Universities showed no significant differences between the two methods. In another attempt at evaluation, two groups of business students at the University of Colorado used five games and five corresponding cases and were tested at the end of their course. Test results did not support the proposition that games are more effective from the standpoint of learning, in fact, they showed some aspects of learning to be better achieved through the case method. While these studies were not meant to measure motivation, the results suggest that game players are not strongly motivated to learn the basic concepts underlying the game but rather become preoccupied

with "beating the system" or with competing against each other. The case method, on the other hand, may provide an atmosphere more suitable to the examination of key issues. This document appeared in Training and Development Journal 21 (10)/ 13-23, October 1967. (AJ)

ED 012 848

AU Bass, Bernard M. ; Vaughan, James A.  
TI Training in Industry -- The Management of Learning.

AB The principles of learning behavior derived through laboratory study can be extended to explain much of the complex learning required in industrial training programs. A review of the basic principles of human learning introduces four basic concepts -- drive, stimulus, response, and reinforcer -- and discusses classical and instrumental conditioning and higher forms of learning. The strategy of training involves three steps -- (1) statements of the content of the training program, characteristics of the learner and his environment, the overall organizational climate, and the relation of training to company goals, (2) decisions about how and by whom the content will be taught, including discussion of both current industrial training techniques and promising innovations and the extent to which they conform to the principles of learning, and (3) administration and evaluation of the training program. Training needs and the effectiveness of training programs must be assessed continuously in a carefully designed and executed research program. This document is available from Wadsworth Publishing Company, Inc., Belmont, California. (AJ)

ED 012 428

AU Olean, Sally J.  
TI Changing Patterns in Continuing Education for Business.  
IN Center for the Study of Liberal Education for Adults, Brookline, Mass.

AB After World War II, business and industry moved into the adult education field, and are now spending a reported \$20 billion annually in higher education for their scientific personnel and management. Large industries, like IBM,

have complete educational programs and facilities for their personnel. Ford and General Motors use outside educational groups for executive development programs. Such companies as Continental Can, have a small headquarters educational staff administering decentralized programs, either using their own programs or participating in programs available locally at colleges or universities. The American Bankers Association and the American College of Life Underwriters have their own programs. Some companies use such unaffiliated educational organizations as the American Management Association or the National Industrial Conference Board. With better communication between universities and business, the universities could (1) set the conceptual framework for long-duration education, (2) provide short-range, immediate pay-off education, (3) evaluate company-sponsored programs, and (4) investigate new technology and methods for teaching adults. This document is available from the Center for the Study of Liberal Education for Adults at Boston University, 138 Mountfort Street, Brookline, Massachusetts 02146, for \$2.00. (EB)

ED 012 407

- AU Foreman, Wayne J.  
TI Management Training in Large Corporations, A Survey of Methods, Programs and Recruiting.
- AB A survey was made of management and development programs, using data obtained from 49 corporations with the highest sales volume in 1964. It was found that the training techniques most effectively used included on-the-job training, conference and discussion groups, and job rotation, and that university courses, management seminars, and American Management Association courses were generally used. Three basic types of programs were used -- formal, informal, or a combination of both. Eighty-nine per cent of respondents had found college placement bureaus to be the most productive source for recruiting management trainees. All of them ranked intelligence as one of the five most important personal characteristics desired. Of trainees selected, 48.2 per cent had backgrounds in a scientific field as compared to 35.5 per cent with backgrounds in general business. This article

was published in "Training and Development Journal," May 1967, a monthly journal of the American Society for Training and Development, 313 Price Place, P.O. Box 5307, Madison, Wisconsin 53705. (SM)

EJ 061 017

- TI Management Development Program. Joint Effort by Government and Business.
- SO Canadian Vocational Journal; 8; 1; 29-30; Sept., 1972.
- AB Describes a program designed to upgrade the skills of business owner/managers and supervisory personnel. (SB)

EJ 043 519

- AU Life, Andrew
- TI The Thinking Manager.
- SO Journal of Management Studies; 8; 2; 242-245; May, 1971.
- AB A review of four books on manager thinking processes and creativity. (RA)

EJ 043 517

- AU Evans-Vaughan, G. F.
- TI Management.
- SO Journal of Management Studies; 8; 2; 228-232; May, 1971.
- AB A review of eight books on the topics of business administration and management. (RA)

**EJ 041 885**

**AU** Gold, Leon S.  
**TI** Using Film in Management Development.  
**SO** Training in Business and Industry; 8; 8; 19-20, 25; Aug., 1971.

**AB** Film is a very effective medium in management training because it comes closest to actual experience, has actual experience, has reasonable cost, and is entirely predictable. (AN)

**EJ 039 084**

**AU** Martin, Alec.  
**TI** Educational Technology and Management Education.  
**SO** Times (London) Educational Supplement; 2921; 62; May 14, 1971.

**EJ 039 053**

**AU** Kastens, Merritt L.  
**TI** A Management Coach Concept for Management Development.  
**SO** Training and Development Journal; 25; 8; 8-11; Aug., 1971.

**AB** The author believes that a highly qualified and mature executive serving as a management coach may be a valuable method to overcome communication gaps existing between different divisions of an industry. (EK)

**EJ 030 644**

**AU** Grundstein, Nathan D.  
**TI** The Public Schools: System Change and Management Science.  
**SO** Education and Urban Society; 3; 1; 99-122; Nov., 1970.

**EJ 030 037**

**AU** Misshauk, Michael J.; Carlson, John.  
**TI** A Guide to Game Design and Model Building.  
**SO** Training and Development Journal; 24; 12; 10-12; Dec., 1970.

EJ 029 525

- AU Dubrin, Andrew J.  
TI Management Development: Education, Training or Behavioral Change.  
SO Personnel Journal; 49; 12; 1002-1005; Dec., 1970.
- AB A brief classification scheme groups management development resources, experiences, and techniques by major purposes. A table. Five references. (LY)

EJ 027 980

- AU Cone, William F.  
TI Management Development: The Need for an Eclectic Approach.  
SO Training and Development Journal; 24; 10; 14-19; Oct., 1970.
- AB Learning systems for management development consist of classroom-based systems and job-based systems. Management development as viewed from the eclectic approach is a highly individual matter. Higher priority will be placed on training the individual rather than training the group; and the needs of the individual will have relevance to the needs of the organization. (PT)

EJ 027 427

- AU Debenham, A. I. S.  
TI An Introduction to the Use of Case Studies.  
SO Bacie J; 24; 4; 89-98; Sept., 1970.

EJ 024 109

- AU Cone, William F.  
TI Management Development: The Need for an Eclectic Approach. Part 1. Classroom-Based Systems.  
SO Training Develop J; 24; 9; 26-30; Sept., 1970.
- AB We need an eclectic management development approach combining the best features of both classroom-based systems (T groups, sensitivity training, games, university programs) and of such job based systems as coaching, counseling, and planned rotation. (LY)



**EJ 022 854**

**AU** Habib, Waqar  
**TI** Problems in Determining Training Needs in an Organization.  
**SO** Training Develop J; 24; 7; 44-48; July, 1970.

**AB** Guidelines on a basic diagnostic approach (training and development needs survey) include ways of coping with problems of methodology or technique. (LY)

**EJ 019 475**

**AU** Wheatley, Edward  
**TI** Putting Management Techniques to Work for Education.  
**SO** Coll. Univ. Bus.; 48; 4; 55-59; April, 1970.

**AB** Analysis of recently developed concepts in business and governmental administration suggests techniques applicable to management of higher education resources. (Editor)

**EJ 005 077**

**AU** Carter, Clyde  
**TI** What Management Techniques can the School Learn from Industry?  
**SO** N Cent Assn Quart.; 43; 4; 353-360; Sept., 1969.

**AB** Paper presented at the North Central Association Annual Meeting, March 26, 1969.

**EJ 004 388**

**AU** Diller, N. Richard  
**TI** The Management of Professional Educators; Management Development Needs in the Education Field.  
**SO** Training Develop J; 23; 5; 48-9; May, 1969.

S E C T I O N   C

Categorical Information

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## DECISION MAKING

ED 066 820

TI Project Admire: Assistance for Decision  
Making through Information Retrieval in  
Education. End of Budget Period Report.  
IN Lincoln Public Schools, Nebr.

ED 066 814

AU Stubbs, D. K.  
TI Forstran: A Case in Force Structure  
Analysis.  
IN Air Force Inst. of Tech., Wright-Patterson  
AFB, Ohio.

ED 065 586

AU Fletcher, Jerry L.  
TI A Model for Data Based School Improvement.

ED 065 456

AU Mager, Robert F.  
TI Goal Analysis.

ED 062 713

AU Klawuhn, Raymond E.  
TI A Model for "Comprehensive, Strategic,  
Organizational Planning as a means of  
Increasing Organizational Effectiveness."

ED 062 691

AU Peterfreund, Stanley; and Others  
TI Innovation and Change in Public School  
Systems.  
IN Peterfreund (Stanley) Associates, Inc.,  
Englewood Cliffs, N. J.

ED 060 524

AU Carpenter, Polly  
TI Cost-Effectiveness as an Aid to Making  
Decisions in Education.  
IN Rand Corp., Santa Monica, Calif.

ED 056 687

AU Kintzer, Frederick C.  
TI Decision Making in the Multi-Unit College.  
IN American Association of Junior Colleges,  
Washington, D.C.  
IN California Univ., Los Angeles, ERIC Clear-  
inghouse for Junior Coll. Information.

ED 055 328

AU Van Dusseldorp, Ralph A.; and Others  
TI Educational Decision-Making Through  
Operations Research.

ED 053 444

AU Kravetz, Nathan Ed.  
TI Management and Decision-Making in Educational  
Planning.  
IN United Nations Educational, Scientific, and  
Cultural Organization, Paris (France).  
International Inst. for Educational Planning.

ED 051 572

AU Larkin, Ralph W.  
TI Decision Making in the Schools.  
IN California Univ., Los Angeles. Center for  
the Study of Evaluation.

ED 049 554

AU Langmeyer, Daniel; and Others  
TI Theory to Guide Organizational Training  
in Schools.  
IN Oregon Univ., Eugene. Center for Advanced  
Study of Educational Administration.

ED 049 518

AU Walker, Jerry P.  
TI Decision-Making Under Conditions of Informa-  
tion Overload: Alternative Response Modes  
and their Consequences.

ED 048 629

AU Sardy, Susan; Sardy, Hyman  
TI Administrative Decision Making and Resource  
Allocation.

ED 044 797

AU Persell, Caroline H.  
TI An Evaluation of a Strategy for Bringing Social  
Science to Bear on Organizational Decision-  
Making.  
IN American Educational Research Association,  
Washington, D. C.

ED 043 970

AU Montemuro, Michael  
TI An Assessment of the Decision Making Process  
related to Curriculum Innovations with Public  
School Systems in Southeastern Pennsylvania.  
Final Report.  
IN West Chester State Coll., Pa.

ED 043 945

AU Armstrong, Charles M.  
TI Decision Making In the Public Schools. Need  
Assessment  
IN Operation PEP, Burlingame, Calif.

ED 042 732

AU Pharis, William L.; and Others  
TI Decision Making and Schools for the 70's.  
IN National Education Association, Washington, D.C.  
Center for the Study of Instruction.

**ED 041 366**

**AU** Lundin, Edward; Welty, Gordon  
**TI** Program Monitoring: Problems and Cases.  
**IN** Research for Better Schools, Inc.,  
Philadelphia, Pa.

**ED 041 357**

**AU** Rittenhouse, Carl H.; Chorness, Maury H.  
**TI** A Survey of the Decision Processes and  
Related Informational Requirements for  
Educational Planning and Innovation.

**ED 041 356**

**AU** Lundin, Edward; Welty, Gordon  
**TI** Relevance of a Managerial Decision-Model  
to Educational Administration.

**ED 040 491**

**AU** Harman, W.G.  
**TI** Three Approaches to Educational Resource  
Allocation.  
**IN** Toronto Univ., (Ontario). Inst. for the  
Quantitative Analysis of Social and Economic  
Policy.

**ED 037 817**

**AU** Corrigan, Robert E.  
**TI** Methods-Means Selection: An Inquiry/Decision-  
Making Process Approach.

**ED 037 680**

**AU** Belasco, James A.; Trice, Harrison M.  
**TI** The Assessment of Change in Training and  
Therapy.

ED 035 101

AU Reynoldson, Roger L.  
TI The Interrelationships Between the Decision-  
Making Process and the Innovativeness of  
Public Schools. Final Report.  
IN Utah State Univ., Logan. Dept. of Educa-  
tional Administration.

ED 028 507

AU Monahan, William G.  
TI Some Limitations and Cautions in the Use of  
Quantitative Techniques in Decision-Making.  
IN Iowa Univ., Iowa City. Iowa Center for  
Research in School Administration.

ED 023 052

AU Willings, David R.  
TI How to Use the Case Study in Training for  
Decision Making.

ED 014 299

AU Weber, John  
TI Administration and Innovation, Papers from  
the Community College Presidents' Institute  
(6th, 1966).  
IN Midwest Community Coll. Leadership Program,  
Ann Arbor, Mich.



EJ 056 937

AU Hamilton, Norman K.  
TI The Decision-Making Structure of a School  
System  
SO Educational Leadership; 29; 8; 668-71; May 1972.

EJ 055 205

AU Yonemura, Margaret  
TI Research on Aspects of Leadership Roles in  
Early and Elementary Education  
SO Childhood Education; 48; 3; 163-6; Dec. 1971.

EJ 048 153

AU Judd, Robert C.  
TI Delphi Applications for Decision Making.  
Planning & Changing--Higher Education.  
SO Planning and Changing; 2; 3; 151-156; Oct. 1971.

EJ 021 443

AU Garbutt, Douglas  
TI Decision Making in Training  
SO Ind Training Int; 5; 5; 213-214; May 1970.

EJ 008 571

AU Pharis, William L., Jr.; and Others  
TI Educational Decision Making  
SO Todays Educ; 58; 7; 52-54; Oct. 1969.

## EDUCATIONAL PLANNING

ED 071 142

AU Weischadle, David E.  
TI An Educational Planning System: System  
IN for Trenton's Educational Planning (STEP)  
Trenton Public Schools, N. J..

ED 067 992

AU Morris, Edward P., Jr.  
TI Do-It-Yourself Critical Path Method.  
IN Georgia Univ., Athens. Center for Manage-  
ment Systems.

ED 062 711

AU Temkin, Sanford  
TI Planning for Change: Comprehensive  
IN Planning.

ED 061 644

AU Chuang, Ying C.  
TI An Educational Planning System: Cost-  
IN Effectiveness Approach.

ED 060 573

AU Greenfield, T. Barr  
TI Developing and Assessing Objectives for  
IN School System Planning. A Report.  
Ontario Inst. for Studies in Education,  
Toronto. Dept. of Educational Administration.

ED 059 548

AU Schutz, Richard E.  
TI Educational R & D Program Management  
IN Considerations.  
Southwest Regional Educational Lab.,  
Inglewood, Calif.

ED 059 528

AU Nutt, Andy  
TI Planning for the Business of Education.

ED 059 524

AU Tracz, G.S.; Burtnyk, W.  
TI New Dimensions for Educational Planning  
in the Seventies: With Specific Applications  
to Teacher Manpower.  
IN Ontario Inst. for Studies in Education,  
Toronto. Dept. of Educational Planning.

ED 058 631

AU Hallak, Jacques  
TI The Role of Budgets in Educational Planning.  
The Fundamentals of Educational Planning:  
Lecture-Discussion Series No. 44.  
IN United Nations Educational, Scientific, and  
Cultural Organization, Paris (France).  
International Inst. for Educational Planning.

ED 058 608

AU Croft, John C.  
TI Organization Development and the Planning  
Interface.

ED 057 420

AU Guruge, Ananda W. P.  
TI A Functional Analysis of Educational Administration  
in Relation to Educational Planning.  
IN United Nations Educational, Scientific, and  
Cultural Organization, Paris (France)  
International Inst. for Educational Planning.

ED 056 670

TI Planning for the 1970's: Higher Education  
in Colorado.  
IN Colorado Commission on Higher Education,  
Denver.

ED 056 371

AU Weiss, Edmond H.; Ackerman, Jerry  
TI System for Trenton's Educational Planning  
(Step) Year 1, Final Report. Volume I:  
General Design Report.  
IN Government Studies & Systems, Philadelphia,  
Pa.; Trenton Board of Education, N.J.

ED 053 444

AU Kravetz, Nathan, Ed.  
TI Management and Decision-Making in Educational  
Planning.  
IN United Nations Educational, Scientific, and  
Cultural Organization, Paris (France).  
International Inst. for Educational  
Planning.

ED 053 442

AU Lyons, Raymond, Comp.  
TI Administrative Aspects of Educational Planning.  
IN United Nations Educational, Scientific, and  
Cultural Organization, Paris (France).  
International Inst. for Educational Planning.

ED 053 196

AU Hartwig, Keith E.  
TI A Basic Model for Planning, Monitoring, and  
Evaluating Educational Programs.

ED 052 510

AU Coombs, Philip H.  
TI What is Educational Planning? Fundamentals of  
Educational Planning-1.  
IN United Nations Educational, Scientific, and  
Cultural Organization, Paris (France).  
International Inst. for Educational Planning.

ED 046 115

AU Derr, C. Brocklyn  
TI The Utility of Organization Development  
Methods for Educational Planning.

ED 043 933

AU Neal, W. D., Ed.  
TI Educational Planning in Local School Systems.  
The Lecture Series of the Banff Regional  
Conference of School Administrators (1967).  
IN Alberta Univ., Edmonton. Dept. of Educational  
Administration.

ED 037 817

AU Corrigan, Robert E.  
TI Methods-Means Selection: An Inquiry/Decision-  
Making Process Approach.

ED 033 590

AU Pfeiffer, John  
TI New Look at Education Systems Analysis in  
our Schools and Colleges.

ED 019 751

AU Cook, Desmond L.  
TI Pert Applications in Educational Planning.  
IN Ohio State Univ., Columbus. School of  
Education.

ED 019 736

AU Drewry, Galen N.  
TI The Administrative Team and Long-Range  
Planning.  
IN Georgia Univ., Athens. Inst. of Higher  
Education.

ED 016 303

AU Watson, Cicely, Ed.  
TI Educational Planning. Papers of the  
Invitational Conference (Toronto,  
Canada, March 20-22, 1967).  
IN Ontario Dept. of Education, Toronto.  
IN Ontario Inst. for Studies in Education,  
Toronto.

ED 014 807

AU Adams, Don  
TI Educational Planning.  
IN Syracuse Univ., N.Y. School of Education.

EJ 059 162

AU Armstrong, R.H.R.; Hobson, Margaret  
TI The Use of Games in Planning  
SO Long Range Planning; 5; 1; 62-66; March 1972.

EJ 055 426

AU Tracz, George; Burtnyk, Wayne  
TI Educational Administration, Planning and  
Management  
SO Education Canada; 12; 1; 44-7; March 1972.

EJ 053 961

AU Richards, Robert W.  
TI A Management Compendium  
SO Consulting Engineer; 37; 4; 104-106; Oct. 1971.

EJ 026 393

AU Ziegler, Warren L.  
TI Some Notes on How Educational Planning in  
The United States Looks at the Future.  
Part III.  
SO Notes Future Educ; 1; 3; 14-19; Summer 1970.

EJ 001 868

AU Koenig, Herman E.  
TI A Systems Model for Management, Planning,  
and Resource Allocation in Institutions of  
Higher Education  
SO J Eng Educ; 59; 8; 963-966; April 1969.

## EVALUATION

ED 067 760

AU Alkin, Marvin C.  
TI A Classification Scheme for Objectives-  
Based Evaluation Systems.  
IN California Univ., Los Angeles. Center for  
the Study of Evaluation.

ED 067 514

AU Krystal, Sheila; Henrie, Samuel  
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Colorado University, Higher Education Center	ED 050 717
Computer and Information Science Research Center, Ohio State University	ED 054 782
Conference Board, Inc.	ED 060 907
Consumer's Association of Canada	EL 054 834
Cooperative Educational Lab, Inc.	ED 035 975
Council of the Great City Schools	ED 063 647
Council of Planning Librarians	ED 049 778
"	ED 049 779
Denver University	ED 063 676
Department of Army, Staff Civilian Personnel Division	ED 028 325
Department of Commerce	ED 067 531
"	ED 057 530
"	ED 067 529
"	ED 067 528
Department of Education and Science (London, England)/ Trenton Board of Education (N.J.)	ED 057 425
Department of Transportation	ED 065 779
Designing Education for the Future	ED 013 481

<u>INSTITUTION</u>	<u>NUMBER</u>
Diablo Valley Education Project/ New York Friends Group, Inc., Center for War/Peace Studies	ED 058 107
Eastern Regional Institute for Education	ED 058 292
Education Turnkey Systems, Inc.	ED 057 462
Educational Innovators Press	ED 058 157
Educational Management, ERIC Clearinghouse on	ED 043 119
"	ED 023 198
"	ED 049 564
"	ED 058 469
"	ED 058 622
"	ED 043 115
"	ED 043 116
"	ED 043 113
"	ED 035 065
"	ED 055 336
Educational Management, ERIC Clearinghouse on/ University Council for Educational Administration	ED 069 013
"	ED 069 015
"	ED 069 014
"	ED 069 016
Educational Management, ERIC Clearinghouse on/ Center for Advanced Study of Educational Administration	ED 049 563
	ED 049 562
Educational Media and Technology, ERIC Clearinghouse on	ED 025 155
Educational Program Management Center, Ohio	ED 035 107
State University	ED 029 373
"	ED 046 096
"	ED 020 580
"	ED 024 145
"	ED 058 610
"	ED 025 002
Educational Research and Development Council of the Twin Cities Metropolitan Area, Inc.	ED 056 367
Educational Service Bureau, Inc.	ED 055 341
"	ED 055 338
Educational Technology Publications	ED 069 110
Educational Testing Service	ED 059 275
Environmetrics, Inc.	ED 048 775
Erie County Board of Cooperative Educational Services/ Harless Educational Technologists, Inc./ Western New York School Development Council	ED 066 832
Evaluation Center, Ohio State University	ED 025 043
"	ED 025 042
Far West Laboratory for Educational Research and Development	ED 026 748
	ED 026 747
Florida State University, Department of Education/ Washington County Board of Public Instruction	ED 054 525

<u>INSTITUTION</u>	<u>NUMBER</u>
Florida State University, Department of Higher Education	ED 062 967
Florida University, Regional Rehabilitation Research Institute	ED 042 199
General Technical Services, Inc.	ED 014 996
Georgia Institute of Technology	ED 062 215
Georgia State University	ED 060 823
Georgia University, Center for Management System	ED 067 992
Gottlieb Duttweiler Institute for Economic and Social Studies	ED 051 852
Government Studies Center, Pennsylvania University	ED 037 812
Government Studies and Systems/ Trenton Board of Education	ED 056 371
Governor's Commission on Education (Madison, Wisconsin)	ED 051 568
Harvard University Business School	ED 017 816
Houston University	ED 063 742
Human Resources Research Office, George Washington University	ED 030 081
Human Resources Research Organization	ED 016 172
	ED 048 528
Illinois University	ED 044 826
Improving State Leadership in Education	ED 057 450
Improving State Leadership in Education/Virginia State Department of Education	ED 058 618
Indiana University, Measurement and Evaluation Center in Reading Education	ED 055 733
Insgroup, Inc.	ED 028 131
Institute for Community Development, Michigan State University	ED 066 885
Institute for Development of Educational Activities (I/D/E/A)	ED 031 787
Institute for Educational Development	ED 032 619
Institute for Social Research	ED 056 258
Institute of Public Affairs, Iowa University	ED 032 475
Iowa University	ED 039 491
Junior Colleges, ERIC Clearinghouse on	ED 056 687
Kansas State Department of Education	ED 056 000
Kansas University	ED 034 957
Kent State University	ED 049 807
Kentucky University, Instructional Materials Lab	ED 055 198
Kogan Page, Ltd. (London, England)	ED 034 922
Krepner-Tregoe and Associates, Inc.	ED 037 629

INSTITUTION	NUMBER
Labor-Management Services Administration (DOL)	ED 063 495
Lincoln Public Schools	ED 066 820
Liverpool Educational Priority Area Project (England)	ED 064 609
Lockheed Missiles and Space Co.	ED 048 873
Maine University	ED 035 807
Metropolitan Detroit Bureau of School Studies, Inc.	ED 031 788
	ED 058 607
	ED 025 854
Metropolitan Fund, Inc.	ED 016 905
Metropolitan School Study Group, Kansas, Mo.	ED 023 178
Michigan State University	ED 028 399
Michigan University, School of Education	ED 013 883
Michigan University, Survey Research Center	ED 047 272
Mid-Continent Regional Educational Lab, Inc.	ED 052 798
Midwest Community College, Leadership Program	ED 014 299
Minnesota Research Coordinating Unit in Occupational Education	ED 025 647
Minnesota State Department of Education	ED 047 423
Minnesota University, Inter-Institutional Television	ED 023 303
Mitre Corporation	ED 050 751
	ED 047 730
	ED 047 429
	ED 046 435
Montgomery County School Board/ Pennsylvania State Department of Public Instruction	ED 055 372
	ED 055 367
National Archives and Records Service	ED 067 104
National Association of Manufacturers, N.Y. Industrial Relations Committee	ED 030 222
National Association of Secondary School Principals	ED 056 399
	ED 064 772
National Center for Educational Communication	ED 048 871
	ED 067 514
National Center for Educational Research and Development (DHEW)	ED 051 760
National Center for Educational Statistics (DHEW), Division of Data Analysis and Dissemination	ED 025 851
National Conference of Professors of Educational Administration	ED 035 086
National Economic Development Office (London, England)	ED 051 447
National Education Association	ED 024 154
National Education Association, Center for the Study of Instruction	ED 042 732
National Education Association, Commission on the Preparation of Professional School Administrators	ED 064 780

<u>INSTITUTION</u>	<u>NUMBER</u>
National Foundation for the Improvement of Education	ED 057 627
National Institute for the Study of Educational Change	ED 027 601
National School Boards Association	ED 047 359
National School Public Relations Association	ED 060 574
National Science Foundation	ED 027 923
"	ED 018 379
National Science Teachers Association	ED 044 289
"	ED 044 292
Nebraska State Department of Education, Division of Instructional Services	ED 059 261
Nebraska University, Department of Adult and Continuing Education	ED 056 285
Nevada Western States Small Schools Project	ED 025 359
New Hampshire University	ED 043 952
New Jersey Urban Schools Development Council	ED 045 728
New Mexico University	ED 045 892
New Mexico University, Department of Educational Administration and Foundations	ED 027 597
New York State Teachers Association, Council for Administrative Leadership	ED 026 715
New York State University (Buffalo), School of Education	ED 016 412
New York State University (Ithaca), School of Industrial and Labor Relations at Cornell Univ.	ED 017 881
New York University (New York), N.Y. Division of Teacher Education	ED 014 157
New York University (New York), School of Education	ED 021 339
North Carolina State Department of Public Instruction, Division of Research	ED 061 653
Northeastern University, Bureau of Business and Economic Research	ED 068 821
Northwest Regional Educational Lab	ED 031 814
"	ED 019 755
Office of Education, Washington, D.C.	ED 015 385
"	ED 020 450
"	ED 020 449
"	
Office of Institutional Planning, Santa Clara University	ED 044 780
	ED 062 815
Ohio Board of Regents	ED 043 284
Ohio State Department of Education	ED 064 802
Ohio State University, School of Education	ED 019 068
"	ED 019 736

INSTITUTION	NUMBER
Oklahoma University, Norman College of Education	ED 044 784
Ontario Institute for Studies in Education, Department of Educational Administration	ED 060 573
"	ED 059 524
"	ED 016 303
"	ED 030 969
Operation PEP	ED 066 828
"	ED 046 120
"	ED 020 585
"	ED 043 945
"	ED 023 181
"	ED 043 135
"	ED 046 119
"	ED 020 584
Operation PEP/ San Mateo County Superintendent of Schools	ED 050 481
Oregon School Study Council	ED 051 560
Oregon State Board of Control	ED 034 311
Organization for Economic Cooperation and Development (Paris, France)	ED 059 411
"	ED 057 469
"	ED 064 613
Organization for Economic Cooperation and Development, Directorate for Scientific Affairs	ED 046 339
"	ED 025 010
Pennsylvania State University	ED 016 176
Peterfreund(Stanley) Associates, Inc.	ED 062 691
Phi Delta Kappa Educational Foundation	ED 063 641
Pittsburgh University	ED 041 207
Pittsburgh University, Graduate School of Public and International Affairs	ED 032 843
Portland Public Schools	ED 044 815
Princeton University	ED 016 898
Rand Corporation	ED 068 117
"	ED 068 116
"	ED 068 115
"	ED 067 730
"	ED 038 156
"	ED 050 498
"	ED 045 096
"	ED 044 795
"	ED 068 114
"	ED 068 113
"	ED 049 368
"	ED 060 524
"	ED 061 654
"	ED 060 534
Reading, ERIC Clearinghouse on	ED 055 757



<u>INSTITUTION</u>	<u>NUMBER</u>
Research for Better Schools, Inc.	ED 041 366
"	ED 041 380
"	ED 026 744
"	ED 041 366
"	ED 043 966
Research Council of the Great Schools	ED 040 509
Research Triangle Institute	ED 046 081
Rhode Island University, Bureau of Government Research	ED 015 415
Richfield Independent School District # 280	ED 043 094
San Bernardino City Unified School District	ED 062 701
San Jose State College	ED 057 625
San Mateo College	ED 020 740
San Mateo County Superintendent of Schools	ED 051 552
"	ED 051 551
"	ED 050 482
Simulmatics Corporation	ED 023 009
Small Business Administration	ED 059 477
"	ED 059 491
"	ED 059 458
Southern Illinois University, College of Education	ED 046 111
"	ED 041 400
Southwest Regional Educational Lab	ED 044 387
"	ED 059 548
Stanford Center for Research and Development in Teaching	ED 036 908
Stanford University	ED 066 622
"	ED 040 334
"	ED 062 720
Swedish Council for Personnel Administration	ED 026 553
Synetics Corporation	ED 069 288
"	ED 069 287
Syracuse University	ED 024 166
Syracuse University, Continuing Education Center for the Public Service	ED 043 818
Syracuse University, School of Education	ED 014 807
Syracuse University, School of Management	ED 067 054
Syracuse University Research Corp., N.Y. Educational Policy Research Center	ED 051 571
System Development Corporation	ED 041 599
Systems Research Group (Toronto, Ontario)	ED 047 646

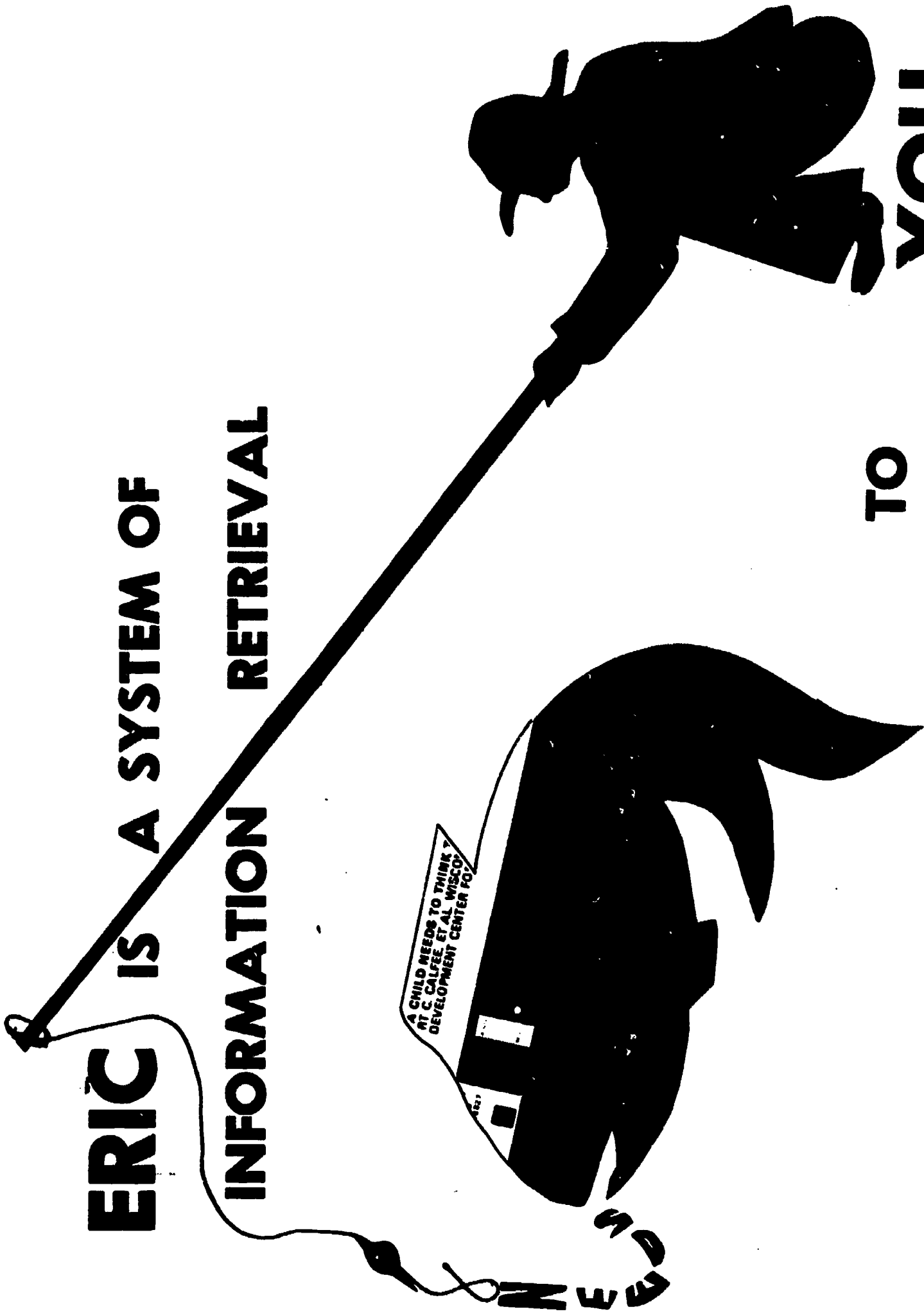
<u>INSTITUTION</u>	<u>NUMBER</u>
Teacher Education, ERIC Clearinghouse on	ED 036 465
"	ED 059 150
"	ED 036 470
Technology Management, Inc.	ED 052 357
Tennessee State Board for Vocational Education	ED 064 484
Tennessee University, Department of Educational Administration & Supervision	ED 048 657
Tests, Measurement and Evaluation, ERIC Clearinghouse on	ED 060 043
Texas University	ED 039 477
"	ED 052 534
Toledo University, College of Education	ED 053 439
Toronto University, Institute for the Quantitative Analysis of Social and Economic Policy	ED 040 491
Trenton Public Schools	ED 057 457
"	ED 071 142
United Ministried in Higher Education	ED 023 113
United Nations Educational, Scientific and Cultural Organization/ International Institute for Educational Planning	ED 058 634
"	ED 058 632
"	ED 058 630
"	ED 053 444
"	ED 057 420
"	ED 053 442
"	ED 058 631
"	ED 052 510
United States Government Printing Office, Training and Career Development Division	ED 065 781
University Council for Educational Administration (UCEA)	ED 059 619
"	ED 040 941
"	ED 024 126
"	ED 018 012
University of Southern California	ED 033 320
University of Southern California, School of Public Instruction	ED 019 531
Upper Midwest Regional Educational Lab, Inc.	ED 056 415
"	ED 056 414
"	ED 056 413
Utah State University, Department of Educational Administration	ED 035 101
Viabile Systems Planning Institute	ED 057 458
Vocational and Technical Education, ERIC Clearinghouse on	ED 038 512
	ED 041 108

<u>INSTITUTION</u>	<u>NUMBER</u>
Washington State University, Pullman College of Education	ED 059 169
Washington University (Seattle)	ED 038 571
"	ED 058 595
Washington University (ST. Louis, Mo.)	ED 055 419
Wayne State University	ED 041 243
Wayne State University, Department of Library Science	ED 045 113
	ED 045 117
West Chester State College	ED 043 970
Western Interstate Commission for Higher Education	ED 063 860
"	ED 052 751
Western New York School Development Council	ED 038 742
Western New York School Study Council/ State University of New York (Buffalo)	ED 028 540
Whittenburg, Vaughan Associates, Inc.	ED 027 918
William Rainey Harper Junior College	ED 050 721
Wisconsin University	ED 047 303
Wisconsin University (ERIC Clearinghouse on Educational Facilities)	ED 035 267
Wisconsin University, Madison Department of Education	ED 039 779
Wisconsin University, University Extension	ED 018 690
"	ED 028 352
Wyoming University, College of Education	ED 055 359
Yale University, Linguistic Automation Project	ED 031 694
York Borough Board of Education (Toronto, Ontario)	ED 066 794

**A P P E N D I X   A**

**Information  
on the  
ERIC System**

**ERIC IS A SYSTEM OF  
INFORMATION RETRIEVAL**



**TO HELP YOU...**



## **EDUCATIONAL RESOURCES INFORMATION CENTER\***

ERIC stands for Educational Resources Information Center. ERIC was originally conceived in the U. S. Office of Education in the mid-1960's as a system for providing ready access to educational literature. At the time ERIC was first discussed, the literature of education was uncontrolled. Research reports, submitted to OE by their contractors and grantees, received an initial scattered distribution and then disappeared. Reports from other sources generally remained equally inaccessible. ERIC was intended to correct this chaotic situation and to provide a foundation for subsequent information analysis activities and attempts to spread the use of current developments.

Because of the decentralized nature of American education, education's many specializations, and the existence of numerous professional organizations, ERIC's designers opted for a network of organizations rather than a single monolithic information center located in Washington. ERIC was conceived, therefore, as a network of "clearinghouses," located across the country in "host" organizations that were already naturally strong in the field of education in which they would operate.

Contracts with clearinghouses originally gave them responsibility for acquiring and selecting all documents in their area and for "processing" these documents. "Processing" includes the familiar surrogation activities of cataloging, indexing, and abstracting. This scheme has worked out very well. Virtually all observers of ERIC have concluded over time that the network of clearinghouses does a better job of ferreting out the current literature of education than one single information center in Washington could ever do. With their specialized subject expertise, clearinghouse staff are well qualified to manage ERIC document selection functions. Decentralization has paid off as well for information analysis and user service activities. However, decentralization was not the complete answer. In order to generate products that included the output of all network components, information gathered by the clearinghouses had to be assembled at one central place. ERIC's final design, therefore, included decentralized clearinghouse operations integrated around a central computerized facility which serves as a switching center for the network. The data recorded by each of the clearinghouses is sent to the facility to form a central data base from which publications and indexes are produced.

Similar arrangements are used to supply the public with copies of reports added to the system. A basic decision for ERIC was to make documents available from a central source instead of just informing users that a given document existed. It was, therefore, necessary to provide a document reproduction service where any non-copyrighted document announced could be obtained. (When permission is obtained, copyrighted materials are also reproduced.) In other words, ERIC was developed as a complete document announcement and retrieval service.

Both of these centralized services had entrepreneurial aspects. The Government obviously could not afford to subsidize every user's document needs. The document reproduction effort had to become self-supporting or it would become too expensive within Federal budgets. Therefore, users had to pay for reports they wanted. In the same way, dissemination of the data base is not subsidized by the taxpayer; persons wanting ERIC magnetic tapes are required to meet order processing, tape, and duplication costs. The Federal Government limits its investment in both areas by generating a fundamental data base and then permitting the private sector to market it at prices as advantageous to the public as possible.

In support of this strategy, and also because central facility operations depended on use of advanced technologies (computerized photocomposition and microreprographic technology), these functions were located in the commercial sector. (This material reproduced from "ERIC- A PROFILE")

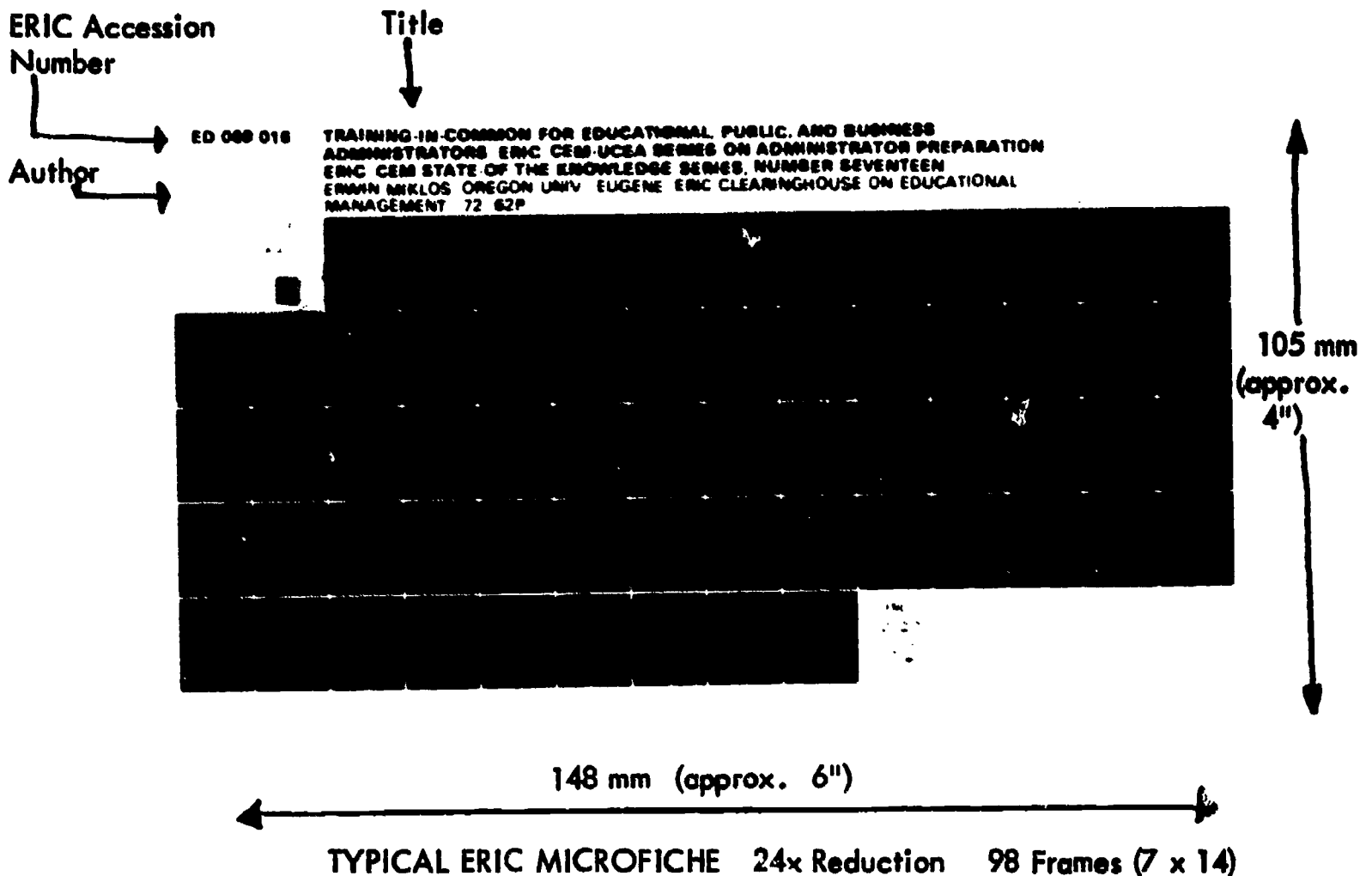
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## MERRIMACK EDUCATION CENTER

### LINKER PROJECT RESUME

- Title** Local Information Network of Knowledge for Educational Renewal (LINKER)
- Descriptors** LINKER, Resource Information, ERIC (Educational Resource Information Center), Knowledge Utilization, Information Retrieval, subscriptions to ERIC
- Abstract** Information needs of clients/practitioners in the educational field are identified through needs assessment procedures. Using its information resource banks, MEC responds to information requests by targeting specific documents in MF (microfiche) and/or hard copy (HC.) School system utilization of knowledge and theory into practice documents is augmented by MEC staff, field agents, and locally identified gatekeepers and educational information consultants.
- Linkages and Sponsoring Activities** The initial phases of LINKER have been, in part, supported by funds from NCEC. The NCEC (now located within National Institute of Education) is a national dissemination program under the direction of Dr. Lee Burchinal.
- MEC also cooperates in a network with the Massachusetts Department of Education R & D Center in the State Educational Information Center (SEIC) Network and participates in cooperative studies in needs assessment with the State Department and other local collaboratives.
- Still another linkage brings computer-generated search services to MEC's client/practitioners. This computer retrieval program, using System Development Corporation's "ORBIT", searches the ERIC data base for Research in Education and Current Index to Journals in Education. Computer print-outs of the full citation of the relevant reports or studies, and the abstracts of the studies are made available to the educator on the subject of his choice.