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ABSTRACT

This guide, focusing on participative management and the requirements of public decision-making in education, is designed as a management referent for the development and use of verifiable performance objectives. In addition to an indexed main section, the volume contains an analysis matrix for educational objectives; formats for and examples of verifiable policy, program, curricular, and instructional objectives; and embryonic statements of verifiable instructional objectives for childcare and nursery schools, kindergartens, primary and intermediate schools, and junior and senior high schools. The work reported in this volume was performed under an ESEA Title III grant. (LLB)

**A Manager's
Guide
to
OBJECTIVES**

OPERATION PEP

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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TITLE III

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A MANAGER'S GUIDE TO OBJECTIVES

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October 1969

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PREFACE

This document had its origin in an earlier edition prepared for OPERATION PEP by Larry Harty and Bruce Monroe. The current edition is a completely revised version using feedback from OPERATION PEP participants. This edition focuses upon participative management and the requirements of public policy decision making in education. It is designed as a management referent for the development and use of verifiable performance objectives in education.

The primary mission in development was to prepare a basic management referent detailing selected considerations and procedures that can be used by practicing educational leaders in the development, appraisal and use of verifiable performance objectives.

A series of secondary missions were used in development. They include:

- To establish a basic philosophical position for the use of verifiable performance objectives in the management of education
- To present a series of internally consistent definitions for key concepts related to verifiable performance objectives
- To present guidelines for managing objective-setting processes in educational organizations
- To present guidelines for deriving and specifying verifiable performance objectives for education
- To suggest possible uses for verifiable performance objectives in managing educational performance
- To present supplementary materials that have been designed for use in setting educational objectives

The Guide has been indexed using tables of contents. The primary table of contents indexes the sections of this document and their principal sub-sections. Each section has a table of contents that presents a more detailed index of the sub-sections presented. Where it was deemed necessary, cross reference notations were used to direct user attention to other areas of content presented in the Guide.

The Guide was developed under the leadership of Donald R. Miller who was primarily responsible for writing the materials presented in the Introduction, Section 1.0, Section 3.0 and APPENDIX A. Virginia Carroll and Lynne Svenning were primarily responsible for development of Section 2.0. Section 4.0 was developed primarily by Richard Wehe. Sheldon Varney and Allen Buckner developed Section 5.0. Ted Rogers and Donald Kase were responsible primarily for the development of APPENDIX B. Drafts produced in all stages of development were critiqued by all members of the staff.

Donald R. Miller

Burlingame, California
October 1969

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INTRODUCTION

Human societies are purposive in nature. Individuals organize and direct their collective efforts toward the achievement of societal purposes. One of the most basic and common societal purposes is the establishment and maintenance of an educational system; societies are maintained and/or renewed through the growth and development of their individual members.

Underlying the educational processes in democratic societies are the following assumptions:

1. The individual is important: An individual human being is the basic unit of structure and function in society. The unique capabilities of a society's membership constitute its survival potential at any given point in time. Thus, the survival of any society through time depends upon the capabilities of its individual members.
2. Participation is necessary: A democratic society requires active and effective participation by each of its individual members. All participation is sanctioned by the characteristic set of values (pluralistic in nature) dominant in the society at a specific point in time.
3. Education helps develop individual potential: A democratic society depends upon formal and informal educational processes to renew continuously its human resource potential and to maintain an enlightened public.

Educational organizations must define purposes that represent a satisfactory integration of the needs and desires of the varied societal aggregates that comprise the societal whole. The assessment of societal and organizational needs and the continuous renewal of delineated purposes in light of these needs are vital management functions in healthy

organizations. Likert states:

Neither the needs and desires of individuals nor the objectives of organizations are stable and unchanging. The desires of individuals grow and change as people interact with other people. Similarly, the objectives of organizations must change continuously to meet the requirements of changed technologies, changed conditions, and the changes in needs and desires of those involved in the organization or served by it. The interaction process of the organization must be capable of dealing effectively with these requirements for continuous change.

In every healthy organization there is, consequently, an unending process of examining and modifying individual goals and organizational objectives as well as consideration of the methods for achieving them. The newer theory specifies that:

- (1) The objectives of the entire organization and of its component parts must be in satisfactory harmony with the relevant needs and desires of the great majority, if not all, of the members of the organization and of the persons served by it.
- (2) The goals and assignments of each member of the organization must be established in such a way that he is highly motivated to achieve them.
- (3) The methods and procedures used by the organization and its subunits to achieve the agreed-upon objectives must be developed and adopted in such a way that the members are highly motivated to use these methods to their maximum potentiality.
- (4) The members of the organization and the persons related to it must feel that the reward system of the organization--salaries, wages, bonuses, dividends, interest payments--yields them equitable compensation for their efforts and contributions.¹

The actions of organizations should be objective-oriented and managed toward the achievement of preferred consequences. Educational managers must integrate statements of purpose that are responsive to the needs and desires of people located both within and outside the organization. The integrative, objective-setting process is complicated by differing individual perceptions of fundamental societal values and issues relevant to

¹Rensis Likert. New Patterns of Management (New York: McGraw-Hill Book Company, 1961), p. 116.

education. The following questions raise some of the currently relevant issues:

1. In what kind of world and social environment will the current and future learners live?
2. What capabilities and competencies will be needed for success and effective participation in that world?
3. Which of these capabilities and competencies should be made the responsibilities of public education?
4. What instructional programs and learning environments are required to develop desired societal capabilities and competencies?
5. What present organizational factors must be changed to develop, install and operate necessary instructional programs and learning environments?

Individual differences with respect to educational values, beliefs, goals and expectations bring to the fore another set of issues:

1. What benefits does society and/or should society reasonably expect to receive as outputs from educational organizations?
2. Why does society and/or should society expect to receive such outputs and/or valued benefits?
3. What societal factors should be considered and what procedures should be followed in the derivation of educational purposes?
4. Who is responsible and/or who should be made responsible for setting educational goals and objectives?
5. What pattern of human involvement is required to set responsive and responsible educational objectives in a particular society?
6. What criteria can be used to determine the validity, relevancy, feasibility and acceptability of educational purposes?
7. What trade-offs should society be willing to make relative to valued societal benefits, alternative choice-consequence relations and organizational capabilities to produce the benefits?

Conflicts are bound to arise when such questions are considered because different individuals, groups and organizations use different sets of criteria to determine purposes and preferred courses of action.

Conflict and differences of opinion always exist in a healthy, virile organization, for it is usually from such differences that new and better objectives and methods emerge. Differences are essential to progress, but bitter, unresolved differences can immobilize an organization. The central problem, consequently, becomes not how to reduce or eliminate conflict, but how to deal constructively with it. Effective organizations have extraordinary capacity to handle conflict. Their success is due to three very important characteristics:

1. They possess the machinery to deal constructively with conflict. They have an organizational structure which facilitates constructive interaction between individuals and between work groups.
2. The personnel of the organization is skilled in the processes of effective interaction and mutual influence. . . .
3. There is high confidence and trust among the members of the organization in each other, high loyalty to the work group and to the organization and high motivation to achieve the organization's objectives.²

Conflict, and the resolution thereof, can stimulate growth. The nature and quality of available information, communication and management action determines whether conflict facilitates or impedes progress. Statements of goals and objectives must be constantly constructed, negotiated and revised by concerned members of both educational organizations and society. When participation from divergent populations is encouraged, conflict becomes inherent. The management of this conflict toward mutually acceptable statements of goals and objectives determines the responsiveness of the educational system to the many and various publics it serves.

Participation must be encouraged in all types and at all levels of operation. For example, at national, state and local levels of political organization, many policy decisions are made which affect education. Executive, legislative and judicial powers of government influence educational activities. Education in its totality has become so involved,

²Ibid., p. 117.

complex and encompassing that no single group, institution, organization nor division of government can provide sufficient inputs to cope with all of the major problems.

Major problems extend across established boundaries for jurisdiction, authority and responsibility. New patterns of planned interdependency, involvement and new methods-means for achieving maximum productivity must be developed to achieve valued benefits and desired levels of performance effectiveness. The derivation of educational purposes and the management of educational organizations and processes cannot be isolated from related activities taking place in other sectors of American life.

Before educational organizations can function effectively in the context of American society, they must engage in strategic planning. This process requires the careful deliberation and consideration of societally-relevant philosophies, purposes, priorities and policies and results in explicit statements of educational philosophies, purposes, priorities and policies. These planning statements are especially important when viewed from an evolving management perspective (including Planning-Programming-Budgeting and Executive Information Systems) that is oriented to pre-specified purposes and improved levels of effectiveness.

Strategic planning focuses upon the development of verifiable statements of goals and objectives. These planning products enable the organization to:

1. Make the most progress in the shortest possible time.
2. Assess and evaluate its capacities, capabilities, opportunities, requirements and risks.
3. Maintain an effective balance between performance and societal values, expectations, purposes and changing requirements.

4. Improve policy, managerial and operational decision-making judgements by comparing performance to plans and expectancies.
5. Encourage members to think and act toward common purposes and to understand and appreciate efforts and progress being made elsewhere.
6. Provide an output rationale for policy decision making and, thereby, stimulate determination of priorities in terms of product, service and/or benefit requirements.
7. Develop critical insights to and a basis for communication both within the organization and with its environment.
8. Produce alternative responses which may be used to alleviate internal and external stresses, conflicts and crises.
9. Initiate pressures for growth, development and renewal.
10. Provide bases for management actions which are consistent with societal philosophies, purposes, priorities and policies.

Educational managers must learn to: (1) manage objective-setting processes; (2) derive relevant information and construct verifiable statements of objectives; (3) appraise performance objectives; and (4) use objectives as communication referents and as guides for action. It is toward the achievement of these ends that A Manager's Guide to Objectives is designed.

Contents of Section 1.0

DEFINITIONS RELATED TO VERIFIABLE PERFORMANCE
OBJECTIVES IN EDUCATION

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 - 1.1.2 Definition of PURPOSES
 - 1.1.3 Definition of PRIORITY
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 - 1.6.4 Definitions of INSTRUCTIONAL OBJECTIVE

The definitions presented in this section have been arranged in an ordered sequence beginning with statements of general definitions and ending with specific definitions of verifiable performance objectives. In most of the sub-sections, alternative statements of definition are presented. Each statement is intended to convey basic conceptual information regarding the concept being defined. Users of this Guide should appraise the ideas presented and formulate their own definitions.

1.0 DEFINITIONS RELATED TO VERIFIABLE PERFORMANCE OBJECTIVES IN EDUCATION

The significance of verifiable performance objectives in educational management may not be readily apparent to most observers. When viewed from the perspectives of strategic planning and accountability, the importance of such objectives becomes more obvious. Strategic planning is the conscious determination of alternative courses and/or methods of action that afford maximum support for policy decisions. Generally in educational organizations, these decisions are made relative to the attainment of valued societal goals or targets in light of relevant conditions, future probabilities and perceived consequences. The products of strategic planning are clearly and cogently stated philosophies, purposes, priorities and policies.

Accountability is a reciprocal feedback-control relationship that is established between levels of authority in organizations for the effective, efficient and responsible management of performance. It is based as much on democratic ideals, faith in one's fellowmen and trust as it is on surveillance and managerial control. The key level of authority in an accountability framework is the operational level of performance where task-level achievements result in incremental

progress toward desired goals.

1.1 Definitions of STRATEGIC PLANS

Strategic plans are developed to assure that significant organization-society relations will be maintained. These plans include: philosophies, purposes, priorities and policies.

1.1.1 Definition of PHILOSOPHY

A philosophy is a system of beliefs, concepts and attitudes that serve to guide the actions of individuals, groups, organizations and/or societal systems. Generally, a philosophy is specific to a particular area of human endeavor (for example, education, psychology, religion, anthropology, etc.) where it serves as a framework for the specification of purposes. Explicit statements of philosophy are necessary prerequisites for the management of actions or change. In any complex societal system, a hierarchy of philosophical statements usually exists for each organized area of human endeavor. Reciprocal interaction-influence relations exist between philosophies of related areas of human endeavor. In organizations, the philosophical positions of higher levels of authority influence the philosophical positions of lower levels. The same type of influence exists between the philosophical positions of informal leaders in the school-community and their respective followers.

1.1.2 Definitions of PURPOSES

A purpose is an intended end and/or end state of action or change. Alternative definitions of purpose include:

- a statement characterizing a valued and/or desired outcome for an individual, a group, an organization and/or a societal system
- a statement of intent to achieve a specified result, product and/or benefit
- a statement delineating an intended service to be performed or an intended change in behavior to be effected

Statements of purpose can be classified as goals or objectives.

1.1.2.1 Definition of GOAL

A goal is a universal, continuing purpose that provides a sense of broad direction through time. It is general to a wide area of human endeavor and the range of individuals, groups and organizations operating within that area. Generally, the uncertainties, risks and difficulties associated with its attainment cannot be defined beyond the issue or problem level. A goal is suggestive of a range or set of corresponding alternative objectives.

1.1.2.2 Definition of OBJECTIVE

An objective is a target for action or change having temporal limitations and definable parameters.

It may be general or specific but in either instance the input and performance requirements for its achievement can be specified with some degree of certainty. Its achievement advances the individual, group and/or organization toward a corresponding goal.

An integrated, time-phased hierarchy of goals and objectives that reflects the multi-level setting of an organization constitutes its master plan for action or change.

1.1.3 Definition of PRIORITY

A priority is any individual, group, organizational and/or societal system consideration that has been defined to have precedence in time, position or value. It is a subjective judgement which establishes the significance of action or change alternatives. Priorities are usually determined by the application of political, social, economic, legal and/or technical rationality to a range of choice-consequence alternatives. Priority setting requires the definition of criteria and methods-means for determining precedence. It requires a strategic (master plan) or analytical framework for establishing priority ranks and weights that can be used by selected judges to assign priority ratings.

1.1.4 Definition of POLICY

A policy is a preferred course and/or method of

action or change that has been selected and defined from a range of alternatives. It is selected in light of relevant philosophies, purposes, priorities and conditions to guide behavior and determine present and future decisions. Policy statements tend to constrain actions or change toward the achievement of preferred consequences.

1.2 Definition of PERFORMANCE

Performance is the behavioral actions of individuals, groups and/or organizations. It can be demonstrated, observed and/or measured. In organizations, performance is defined usually as the planned, controlled and evaluated execution of assigned duties or responsibilities and authority. It involves managed expenditures of effort toward pr specified purposes that can be appraised using criteria of relevance.

1.3 Definition of VERIFIABLE PERFORMANCE TERMS

Verifiable performance terms are concepts that can be used to detail the qualitative and quantitative aspects of performance. They are semantic constructs that can be used to characterize actions, objects and their cause-effect relations. These constructs include:

- Verbs which denote the actions to be taken. They define what actions are to be demonstrated, observed and/or measured.
- Nouns which define the object of the action to be taken. They specify the object toward which change effort is to be managed.

--Modifiers (words and/or phrases) which clarify and refine actions, objects and/or their relations. They serve to assure reliable interpretation of intent by elaborating the characteristics of relevant performance factors.

1.4 Definition of VERIFIABLE PERFORMANCE OBJECTIVE

A verifiable performance objective is a target action for change that has been specified using terms which enable change efforts and achievement to be demonstrated, observed and/or measured. Its temporal limitations and performance parameters are defined to an extent sufficient for its replication.

Verifiable performance objectives consist generally of operationally-stated components that define the purposes, relations and actions relevant to future performance. Separate verifiable statements are used to characterize the performance (1) outcome, (2) rationale, (3) requirements, and (4) criteria. Additional phrases may be necessary to achieve clarity. These statements constitute the narrative of the verifiable performance objective.

1.5 Definitions of VERIFIABLE PERFORMANCE OBJECTIVE COMPONENTS*

The individual components of a verifiable performance objective must be specified using terms which enable them to be verified and/or replicated. Once specified in isolation the components and narrative are integrated as a verifiable performance objective.

*Formats which can be used in learning to specify the components of verifiable performance objectives are presented in APPENDIX A.

1.5.1 OUTCOME COMPONENT

- a statement defining the expected or desired outcome, end, end state, result, product and/or benefit to be achieved
- the operational target, goal or purpose toward which change efforts will be managed

1.5.2 RATIONALE COMPONENT

- a statement that justifies and/or validates the expected or desired outcome, communicates the intent of organized effort, provides an incentive for involvement and/or motivates people to participate in the achievement of an objective
- a statement that defines the relevance of present purposes, relations, actions and events in terms of probable future states and requirements. It must be tailored in terms of the operational requirements and experiences of individual performers who are to participate

1.5.3 REQUIREMENTS COMPONENT

- a statement defining the requisite conditions that must be managed, met and/or maintained in performance
- a statement detailing requisite conditions predicated by the nature of things, circumstances or defined purposes
- a statement delineating (a) the limits that are operative, (b) the constraining forces (constraints) which must be managed and (c) the specifications that define the planned entry, enroute and evaluative state or end conditions of performance
 - LIMITS are boundaries and/or boundary conditions that act in terminating, circumscribing or confining performance capabilities and the operational context
 - CONSTRAINTS are forces operating within and/or across the boundaries of the operational context affecting, directly and/or indirectly, purposive efforts toward achievement
 - SPECIFICATIONS are precise, verifiable statements defining the nature and qualities of operational conditions, available inputs, performance contexts, operational activities and expected outputs

1.5.4 CRITERION COMPONENT

--a statement defining the standards to be used in measuring achievement, degree of change, rate of change, type of change, direction of change, commitment to change and other factors in performance

--a statement defining the standards by which incremental achievements toward prespecified purposes will be measured

1.5.5 NARRATIVE

--words, phrases or statements that elaborate significant aspects of the course and/or method of planned change not defined in the outcome, rationale, requirements and/or criterion components

--words, phrases or statements included to assure reliable interpretation of intentions in replication experiences

1.6 Definitions of CATEGORIES OF VERIFIABLE PERFORMANCE OBJECTIVES IN EDUCATION*

The most prominent categories of verifiable performance objectives in education are: (1) policy objectives, (2) program objectives, (3) curricular objectives and (4) instructional objectives. The significance of these categories can be established by explaining the roles and relations of each type of objective in the accountability framework of an educational system.

An accountability framework features a closed-loop pattern of reciprocal performance relations that extends from policy decision makers to individuals who receive the benefits of performance. In essence it is a political framework encompassing the multi-level aspects of the educational system. Defined nationally, an

*See APPENDIX A for specific examples of each type of verifiable performance objective defined in this sub-section.

educational system encompasses federal, state, county and local levels of jurisdiction. Defined organizationally, it encompasses policy making or strategic planning, managerial and operational levels of performance.

Realizing that an educational system includes an integrated hierarchy of political jurisdictions and organizations, the accountability framework becomes somewhat complex. Within the framework, hierarchies of relations among educational purposes, priorities, policies and programs can be investigated in terms of specific philosophical positions. Since educational systems are responsible for managing desired behavioral transformations in individuals, categories of objectives should be designed to fulfill this requirement.

i.6.1 Definitions of POLICY OBJECTIVE

A policy is a preferred course and/or method of action or change that has been selected and defined from a range of alternatives. It is selected in light of relevant philosophies, purposes, priorities and conditions to guide behavior and determine present and future decisions.

Policy objectives define the performance commitments of an organization. They are derived from the objectives of higher levels of organization and/or political jurisdiction. They define significant ends and/or end states that must be achieved to fulfill both external (societal) and internal (organizational) requirements. They include such alternatives as:

--a statement defining a preferred choice and/or a proposed plan of action for an organization. The choice and/or plan is selected from among available alternatives, in light of given conditions and probable consequences, to guide and determine present and future organizational decisions

--a statement defining expected benefits, useful products and/or services which promote the well-being of society. The definitions are derived from societal goals for education, social change requirements, policy decisions made at higher levels of organization, demands for educational services, educational needs of specific human target populations and ultimately the values of society

1.6.2 Definitions of PROGRAM OBJECTIVE

A program is a group of closely related and interdependent inputs, activities and events that are managed according to plan and which contribute collectively to the achievement of prespecified societal and/or organizational purposes. It is a major, mission-oriented endeavor that is developed, installed and operated to achieve, or support the achievement of, societally-valued benefits, products, services and/or other performance outcomes.

Program objectives can be defined as:

--statements, derived from policy objectives and/or higher level purposes, defining valued societal targets toward which a group of related and interdependent organizational inputs, activities and events are to be managed

--statements, derived from policy objectives and/or higher level purposes, defining valued societal targets that are to be achieved, directly and/or indirectly, as a result of organizational accomplishments in a major, mission-oriented endeavor

1.6.3 Definitions of CURRICULAR OBJECTIVES

A curriculum is a systematic group of planned learning experiences featuring alternative learning pathways and environments which are made available to individuals under the guidance of an educational organization or cluster of organizations. Curricula are developed to fulfill specific educational program requirements and achieve related societal benefits. They constitute methods-means for effecting planned behavioral change in individuals.

Curricular objectives are derived from program and policy objectives set at higher levels of organization and/or political jurisdiction. They define societally-relevant ends toward which a systematic group of planned learning experiences will be managed. Curricular objectives may be defined as:

- statements defining societally-valued capabilities and competencies, personal qualities, states and conditions of being and/or levels of proficiency to be achieved by individuals through education for successful participation in some future society and/or world
- statements defining societally-valued benefits, services, products and/or other performance outcomes that are required to fulfill specific educational program requirements

1.6.4 Definitions of INSTRUCTIONAL OBJECTIVES

Instruction is a planned sequence of teaching-learning processes that are designed to effect specific behavioral changes in individuals. Instruction can be appraised in terms of relevant: (1) learning environments, (2) intellectual and sociological processes of

learners, (3) qualitative and quantitative aspects of learning, and (4) significant relations among components (1), (2) and (3). Instruction and instructional objectives relate to a planned continuum of entry, enroute and evaluative states and performance conditions that contribute collectively to the achievement of curricular and program objectives. Alternative definitions of instructional objectives include:

- statements that define what the individual is to know, be able to do and/or will be able to demonstrate as a consequence of his learning experiences during a course and period of planned change which was designed to effect specific behavioral transformations
- statements that define what members of the instructional staff are to know, be able to do and/or will be able to demonstrate in fulfillment of professional requirements associated with their assigned roles and responsibilities of guiding processes of planned change for individuals
- statements that define prespecified performance products, outputs, services, ends, end states and/or societally-valued benefits to be achieved by individuals as a result of their experiences in managed instructional sequences

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 - 2.5.2 The Influence of Objectives on Organization Members

2.0 MANAGING OBJECTIVE-SETTING PROCESSES IN ORGANIZATIONS

The following assumptions are made regarding organizations and the management of objective-setting processes in organizations:

- organizations have particular qualities as formal segments of society
- these qualities are functions of organization-society-environment relations and changes in these relations
- changes in these relations are especially relevant for educational organizations in that they produce new requirements for success
- objectives are necessary prerequisites to the management of planned change in organizations because they specify desired outcomes, rationales, requirements and criteria
- objective-setting processes can be managed
- a participative style of management offers promise of effectiveness in objective setting and objective achievement

2.1 Developing a Management Perspective for Objective-Setting Processes in Organizations*

A management perspective for objective-setting processes in organizations requires a view that encompasses:

- the past, present and future states of the organization
- the self-renewal qualities of organizations
- internal relations (actions, patterns and structures)
- participative management
- external relations (organizational, societal and environmental)

Without an eye toward all of these factors, the objective-setting process will become just another procedure to bog down the intricate

*Based on Warren G. Bennis, Changing Organizations (New York: McGraw-Hill Book Company, 1966).

functionings of the organization. From a perspective which includes all of the aforementioned factors, specified organizational objectives will reflect (1) a realistic assessment of the organization's role in the larger society, (2) a realistic assessment of organizational and member needs and (3) organizational growth and change activities that are responsive to the needs of the organization, its members and its environment.

2.1.1 Trends and Qualities of Present Organizations Can Be Appraised and the Nature of Future Organizations Can Be Projected

Organizations are formal segments of society that are created to achieve desired benefits. Present societal and organizational trends can be appraised to determine their implications for organizational renewal. The nature of future organizations can be projected by:

- reviewing expected changes in the environment and forecasting their effects on the organization
- reviewing population and demographic characteristics and the implications of such information
- analyzing trends in organization requirements, goal setting and functions
- analyzing management roles required in organic-adaptive organizations
- predicting the structure of future organizations

The appraisal of societal and environmental trends provides a basis for projecting future qualities of organizations. The results of such appraisals enable managers to achieve a better perspective for objective-setting process.

2.1.2 Objective Setting Is a Vital Process in Organizational Renewal

The trends outlined above are relevant to education in at least two ways. It is obvious that they will affect the kinds of competencies, skills and abilities desired of citizens in our society and, correspondingly, the kinds of demands placed upon educational organizations.

Education is an arena where adaptation to external stress is critical for success, and it will require creativity and innovativeness for satisfactory response to changing conditions. If educational organizations are to renew themselves and be responsive to the changing needs of society, then objective-oriented methods-means are required to search for, assess and solve problems and, thereby, adapt the organization and its objectives to changing goals. Such conditions as the following can be expected to make organizational achievement more difficult:

- reduced real time available for decision making
- increased demands for establishment of time horizons
- increased need to limit time in execution of plans
- limited resource availability
- increased cost of operation
- increased competition for available talent
- increased complexity of educational requirement and tasks
- increased demands for quality performance in achievement

These conditions will constrain organizational efforts

in renewal. Organizations must establish and maintain formal and continuous provisions for objective setting. The objectives developed are used as performance guides in renewal and as referents for progress evaluation.

2.1.3 Objective Setting is an Integral Component of the Internal Relations of an Organization

The structures, patterns and actions of an organization influence and are influenced by the objective-setting process. For example, objectives are the operational statements that provide a reference base for organizational decision making. Decision-making structures and actions are supported by a time-phased, integrated hierarchy of objectives. Therefore, objective-setting processes encompass the policy-making or strategic planning, managerial and operational levels of performance.

2.1.4 Participative Management and Objective Setting

A management perspective for objective-setting based on a philosophy of participative management is more likely to yield objectives that are consistent with the significant aspects of the larger environment. If educational organizations are to set objectives which are solidly grounded in the realities of the local environment and which are consistent with higher level educational decisions, then the efforts of more than one individual are required. The varied inputs and outputs that occur as a result of several individuals participating in the

objective-setting process ensure objectives that are more consistent with societally, organizationally and individually valued outcomes and benefits.

Participative management offers new opportunities for management in organic-adaptive* organizations. The importance of objective setting in such organizations cannot be overemphasized. Effective problem finding, problem solving and decision making require objectives. An organization cannot know where it is, where it's going, how it's going to get there, or how well it's progressing without objectives. More importantly, the members of that organization cannot function effectively without knowledge of organizational objectives.

2.1.4.1 Participative management emphasizes or can be characterized by:

- motivation based on satisfactions intrinsic to tasks
- undistorted lateral and vertical communication
- an organizational climate supporting trust and openness in interpersonal relations
- decentralized decision making
- problem finding and problem solving as foci for organizing and obtaining information
- decisive action

*Organic refers to the living or dynamic qualities of organizations that are adaptive or able to change to fulfill new requirements, satisfy changing needs and/or achieve new purposes.

--effective leadership styles based upon goal emphasis, planned interaction-influence, work facilitation and supportiveness

It is based on the principle of supportive relationships which Likert states as follows:

The leadership and other processes of the organization must be such as to ensure a maximum probability that in all interactions and in all relationships within the organization, each member, in light of his background, values, desires, and expectations, will view the experience as supportive and one which builds and maintains his sense of personal worth and importance.³

2.1.4.2 Participative management assumes:

- high performance goals
- a well-organized plan of operation
- high technical competence

2.1.4.3 Within the realm of participative management, one can expect variance in the type and amount of involvement, interaction and influence exhibited by an organization's members.

2.1.4.4 Several considerations temper the effectiveness of participative management. They include:

- leadership ability of the manager
- past experience, knowledge, skills and attitudes of participating members
- the nature of the task (some tasks are more amenable to group efforts than others)

³Ibid., p. 103.

--organizational climate

--the environmental setting of the organization

Objective setting is a task that is uniquely suited to group processes. The more individuals are involved in determining organizational goals and objectives, the more enthusiastic they are likely to be in carrying through to the achievement of those objectives. Furthermore, the varied inputs of several individuals are prerequisites for effective objective setting. Therefore, a management perspective that includes participative management facilitates effective objective-setting processes.

2.1.5 Objective Setting is Influenced by and Influences the External Relations of an Organization

The relationships between an organization and other organizations, society, and the environment are important factors in the objective-setting process. The present and futures states of these external forces must be taken into consideration. Section 3.1 of this text provides guidelines for assessing these external factors.

2.2 Defining Roles and Responsibilities in the Objective-Setting Process

2.2.1 Legal Roles and Responsibilities in Education

2.2.1.1 The state legislature and state, county and local boards of education possess primary legal

responsibility for setting educational objectives.

2.2.1.2 State, county and local superintendents of schools, as executive officers of their respective boards, have legal responsibilities for executing policy decisions.

2.2.2 Delegated Roles and Authority

2.2.2.1 The local superintendent of schools, as executive officer of the board of education, is responsible for managing objective-setting processes in the local educational agency. Among his objective-setting responsibilities are:

- mobilizing and integrating objective-setting task forces
- checking and balancing involvement to assure representative participation
- managing (personally) the development of policy objectives
- determining the quality of objectives as organizational guides to action

2.2.2.2 The local superintendent of schools usually delegates objective-setting managerial authority to subordinates in the areas of:

- program objectives
- curricular objectives
- instructional objectives

2.2.2.3 The superintendent cannot delegate his responsibility for managing the objective-setting process. The process proceeds most effectively when it takes place at levels of organization where influence from three different factors is appropriately applied. The

influence from each factor is congruent with the other two as follows:

- (1) The influence of positional authority is congruent with
- (2) the influence of personal or group competence. The influence of both 1 and 2 are congruent with
- (3) the influence of organizational information required to make the decision.

2.3 Setting Objectives in Organizations--A Group Process

From the discussion of participative management, it should be obvious that objective setting is more likely to be effective, valid, reliable and relevant when carried out within the context of a group.

2.3.1 Mobilize an Objective-Setting Task Force

2.3.1.1 Draw many and varied individuals into the objective-setting group pooling the experience, information, expertise and judgement of the individuals. A group (particularly one in which most members are knowledge workers with strengths in different disciplines and/or functional areas) will increase:

- the range of meaningful alternatives presented
- the probability that predicted outcomes are valid, relevant and accurate
- the organization's sensitivity to external and internal realities
- the probability of successful implementation
- the commitment of its members

2.3.1.2 Determine who should be involved

There are two obvious groups of individuals who should be considered for involvement in the objective-setting process--those within the organization and those outside the organization.

Organizational members who will be required to implement the objectives should be involved in the objective-setting process. Individuals located in the school community are also demanding involvement in the objective-setting processes of educational organizations.

The involvement of the implementors and community representatives is necessary if educational objectives are going to reflect societally-valued outcomes and serve as acceptable guides to action.

A number of positive attitudes results from involvement in the objective-setting process. Once action is initiated toward achieving the objectives, those who participate are more likely to feel that:

- the objectives set are clear
- the objectives set are practical
- there is effective coordination of parts of the organization in implementing the objectives
- tasks directed toward achieving the objectives are being performed without undue burden or dependence on the manager for direction, instruction and/or clarification

The unique capabilities and strengths of different people in the organization and outside the organization should be utilized in structuring a group to set objectives. People with different

interests, cognitive styles, disciplinary strengths and talents are needed to achieve a balanced pattern of group involvement. They will contribute differently to such functions as writing and structuring the statement of the objective, clarifying and justifying intent, checking feasibility and keeping the group moving and working well together. A suggestive list of such capabilities follows:

--people with different cognitive styles, including those:

- who can write and think with semantic clarity and conciseness
- who are uninhibited by set ideational patterns
- who think critically about all details of a problem
- who think well deductively
- who think well inductively
- who can conceptualize in such areas as organizational development and renewal, management and operations

--people with expertise in and/or knowledge about:

- learning and learning environments
- psychological and sociological processes of learners
- child growth and development
- society and cultural environments
- methods-means-media and instruction
- target populations to be served

- school-community relations

- inputs available and outputs expected

--group members who are:

- task-oriented

- supportive of other group members

- skilled in sensing the environment

- skilled in listening and reacting to thoughts and ideas of others

- providers of tension relief in a group

2.3.1.3 Develop a plan for balanced involvement and representation in the objective-setting process

Although many advantages accrue from the participation of a wide range of people in the objective-setting process, care must be taken to achieve balance among different points of view. Recognize that different people will have different personal value preferences. Try to ensure that all are represented so that bias and weighted opinions introduced by one source can be balanced by offsetting bias and opinions from other sources.

2.3.1.3.1 Secure inter-organizational representation

The views of higher levels of organization in the educational system must be represented. Occasionally, they may be represented personally by consultants from federal, state or county agencies.

More often, group members will have to be attuned to requirements and opportunities provided by other levels of organization which will affect objective-setting processes at lower levels. Examples include:

- the United States Congress
- the Department of Health, Education and Welfare
- the United States Office of Education
- the State Legislature
- the State Board or Commission of Education
- the Regents and Trustees of Institutions of Higher Education
- the Institutions of Higher Education
- the Intermediate or County Boards of Education
- the Intermediate or County Education Agencies

2.3.1.3.2 Secure extra-organizational representation

Special interest groups in the school community often want to be given an opportunity to be heard on the topic of policy, program and curricular objectives. The following are examples of such interest groups:

- parents and patrons (taxpayers)
- learners and organizations or agents representing them
- community action groups
- community advisory groups
- business, industries and/or their representatives such as chambers of commerce, manufactures' associations, etc.
- employees' agents and organizations
- private, parochial and special schools
- county, city and regional planning agencies

2.3.1.3.3 Secure intra-organizational representation

Among the groups who shall be represented within the organization are:

- students and their parents or agents
- certificated and classified staff members
- administrators and managers
- policy makers or board members

2.3.1.3.4 Secure balanced rationality in decision making

Any of the individuals, groups or levels of organization which are represented in the objective-setting process may give undue emphasis to one type of decision-making rationality to the

exclusion of others. It is best if the following decision-making rationales can be balanced in structuring a group to set objectives:

--technical

--economic

--social

--legal

--political

The objective-setting task force resulting from the mobilization effort should be well balanced in terms of viewpoints, attitudes, skills, knowledges and abilities to work in the group situation.

2.3.2 Define Roles and Responsibilities of the Group Leader(s)

In every instance of objective-setting, someone must assume roles and responsibilities necessary for moving the group toward its prespecified ends. The following is a list of some of the important leadership behaviors which will facilitate group objective-setting processes. The leader:

--plans for the involvement of organization members who will add unique capabilities to the group

--acquires and organizes material resources and facilities to be used in the process

--defines the problem with which the group must be concerned

- delegates tasks and responsibilities involved in the objective-setting process to individual group members and helps others in the group to appreciate individual strengths and contributions
- facilitates interaction among group members and draws out various attitudes and ideas
- facilitates the gathering and dissemination of all information relevant to the objective-setting task
- provides standards for evaluating group progress and assumes responsibility for orienting the group to the task
- provides goal emphasis and high expectations for the group
- finds and protects a regular time period for the group to work
- makes sure that inputs have been received from all relevant sources and the proposals of interests external to the group are documented and represented

The following guidelines may help the group leader to fulfill the roles and responsibilities outlined above:

- be sensitive to guarded expressions of resentment-- don't be blinded by concentrating on the line of thought under discussion at any particular moment
- use long pauses, when necessary, to encourage group members to take a more active part in the discussion
- accept expression of feelings. Do not reject, disagree or argue with such individual expressions
- listen attentively and strive to understand each participant's thoughts, positions and feelings without evaluating them
- ask other members of the group if they understand the points being made or the issues raised for discussion
- request illustrations when points or issues seem ambiguous
- question the person who expresses an unusual idea in order to encourage expansion of his intentions

- ask exploratory rather than judgmental questions
- separate idea collection from idea evaluation
- periodically review those points on which group members agree and disagree
- periodically summarize group activities to help the group stay on the track

2.3.3 Define Roles and Responsibilities of Group Members

After accepting the opportunity to participate in the objective-setting process, group members are responsible for operating in a manner conducive to the expression of differing opinions and the specification of mutually agreeable objectives. Behavior in the group should reflect a willingness to contribute information and opinion, a toleration of viewpoints differing from one's own, a willingness to compromise and cooperate to achieve an end state that is acceptable to all.

The following is a list of group-member behaviors and indicators of effective group process:

- Members openly give and ask for orientation and information. They willingly repeat, clarify and confirm their positions.
- Members openly give and ask for opinion, evaluation, analysis and expression of feelings.
- Members listen carefully while others are speaking.
- Members openly give and ask for suggestions and direction.
- Members demonstrate the ability to release tension when it arises.
- Members show solidarity, raise other members' status and give assistance.

- Members help assume the responsibilities of moving the group toward its goals.
- Members show a willingness to tolerate opinions different from their own. That is, they accept the divergent beliefs and roles of others as valid phases of group process.
- Members attempt to understand one another and work together without destroying one another's differences.
- Members demonstrate the ability to mutually modify their views.
- Members demonstrate a commitment to group goals and objectives and value their group membership.
- Members demonstrate a spirit that indicates they are motivated to effectively resolve the problems before the group.

Both members and leaders are responsible for maintaining a group atmosphere that is conducive to good communication and that permits constructive resolution of conflicts within the group. Conflict cannot be dealt with constructively unless:

- There is open confrontation on the issue.
- The discussion is focused on the task and the decisions to be made.
- Confidence and trust pervade group relationships.
- Group-process problems are dealt with as soon as they surface. Resolution of group process conflicts is necessary to maintain the group's working effectiveness.

2.3.4 Disseminate Information Regarding Objective-Setting Activities

Good communication is necessary to achieve effectiveness in objective setting. There should be open communication within the organization, as well as between the organization

and the larger society. In order to assure representation of all relevant viewpoints and complete, accurate and timely information, communication networks must be established and utilized. They should be designed and maintained to keep participants and the public informed of objective-setting activities and facilitate contributions.

2.3.4.1 The procedure to be followed by the objective-setting group is made visible through advanced announcement of hearings, reports, reviews and meetings. Each group meeting should have a specific purpose which is announced in advance with details about where and when it will occur.

2.3.4.2 Meetings should be scheduled regularly and frequently enough that discussion can occur in a non-pressured atmosphere.

2.3.4.3 Memos describing the results of each meeting should be circulated to all interested groups and individuals.

2.3.4.4 Information-feedback linkages that will provide the objective-setting group with information relevant to their task should be established between the group and other members of the larger society.

2.3.4.5 Concerned outsiders should be informed of the

purpose and content of scheduled meetings, as well as details of time, place and the procedure they should follow to get their views heard. Such communication should be sent in time for them to react without completely disrupting their own scheduled activities and to enable considered preparation of their position.

2.3.4.6 Within an organization there are likely to be several objective-setting groups. Competing and conflicting objectives are somewhat reduced when all groups within the system receive communication about the other group's objectives.

2.4 Reviewing Management Considerations in Objective Setting

2.4.1 Order in Objective Setting

The order in which objectives are developed affects the effectiveness of the entire process. Higher order objectives set the frame within which others are developed. Policy objectives are necessary prerequisites for defining program, curricular and instructional objectives. Get them set first.

2.4.2 Level of Organization and Objective Setting

The amount of time and effort necessary to ensure cogently and clearly-stated objectives varies directly with the level at which the objectives are being set. More time and effort is required in deriving policy

objectives because it is at this level that significant economic, technical, legal, social and political issues must be dealt with and strategic decisions made.

2.4.3 Record Ancillary Ideas Presented During Objective Setting

During the process of specifying performance objectives, many ancillary ideas will be produced by group members and others. Many future problems may be identified and possibly averted when the organization strives to achieve its stated objectives. Encourage this, and be sure to see that such ideas are recorded, classified and stored for easy future retrieval.

2.4.4 Record Irrelevant Ideas Presented During Objective Setting

Many ideas which surface during the objective-setting process will be judged irrelevant. They should be sorted, classified and stored for future reference. They may come up again and again unless they are explicitly stated together with corresponding statements defining criteria that were used to judge their irrelevance.

2.4.5 Influence of Priorities and Time on Objectives

Don't consider the task of objective setting finished until priorities are set and time periods have been allocated for their achievement. This will bring out latent disagreement, and it is particularly critical that differences of opinions have been brought to the surface and negotiated.

2.5 Integrating Objective-Setting Processes with Other Management Functions

2.5.1 Objective Setting as the First Stage of Management Action

The statement of an objective which proposes a state of improved functioning for an organization achieves nothing alone. Action must be initiated to overcome organizational inertia and stimulate movement toward the achievement of desired outcomes. Control procedures must be instituted to maintain order, method and/or uniformity in performance. In fact, the objective-setting process is just the beginning. All the qualities of a management system which are necessary to activate and regulate progress toward the effective and efficient achievement of the objective must be developed and installed before action toward achievement can begin.

2.5.2 The Influence of Objectives on Organization Members

Inevitably, not everyone will be involved in the derivation of all different types of objectives. Many people at the operational level may experience difficulty with objective-setting procedures. Unless higher-level objectives are properly introduced, they can easily be perceived as personal threats because they increase the visibility of the "job which must be done" and emphasize the fact that it is not satisfactory to allow things to proceed as they are at present. It is the manager's responsibility to involve the staff in the derivation of

their own objectives. This allows them to realize the potential benefits of using objectives and to experience their use as measures of control and evaluation rather than as higher-level threats.

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3.0 DERIVING AND SPECIFYING VERIFIABLE PERFORMANCE OBJECTIVES FOR EDUCATION

3.1 Deriving Performance Requirements and Relevant Information for Construction of Verifiable Performance Objectives

The construction of verifiable performance objectives requires information which can only be secured through derivation. Derivation is a deliberate process involving: (1) search for and appraisal of issues, alternatives, consequences and relations, (2) assessment of pertinent variables, (3) evaluation of each variable to determine its significance, and (4) interpretation of data and results to decide its pertinency in future performance. The process requires that past and present performance factors be identified, analyzed, defined, interpreted and evaluated to determine their implications for future performance. The nature and quality of future performance, states of being and performance conditions must be simulated based upon available evidence of current trends and expected changes.

3.1.1 Assess Changes in the Physical, Cultural and Ecological Aspects of the Environment

The environment exhibits the effects of man's exploitation and natural evolution. Environmental changes influence the behavior of human societies living within that environment. A system of interaction-influence* relations can be defined between a society and specific aspects in its environment.

*Interaction-influence is a process of reciprocal exchange between two or more entities that has the possibility of leading to a modification of present participant states.

3.1.1.1 Assess the interaction-influence of physical aspects of the environment:

- gravity, time and space
- water, land and atmosphere
- climate and weather
- natural resource.
- cultural products (materials, physical structures and improvements)

3.1.1.2 Assess the interaction-influence of cultural aspects of the environment:

- non-material culture
 - knowledge (concepts, principles, disciplines, etc.)
 - social organizations (families, clan, peer group, etc.)
- life styles and statuses
- social modes and states
- political modes and states
- technical modes and states
- economic modes and states
- legal modes and states

3.1.1.3 Assess the interaction-influence of ecological aspects of the environment:

- human life space and habitat
- factors in the biological context
- society-environment relations

3.1.2 Assess Reports of Present and Probable Future Society-Environment Relations

Many problems evolve as a result of human impact (both specific and general) on the environment. Specific effects are usually local in nature while general effects produce world-wide influences. Many technical reports are available as aids for assessment. They present critical evidence that bears directly or indirectly on education. Among the most important society-environment relations are the following problem areas:

- radioactivity and radio-active fallout
- water and air pollution
- exploding world populations
- greenhouse effect of increased atmospheric carbon dioxide
- intersocietal aggression
- cultural evolution
- depletion of natural resources
- land and water use management
- renewal of human resource potentials
- social and political unrest

3.1.3 Analyze, Evaluate and Interpret Forecasts of Probable Alternative Future States to be Experienced by Society

Many different types of periodic forecasts are developed to meet the planning requirements of specific social organizations, fields of study or areas of concern. They center upon the strategic interests of sponsoring agencies and are based on evidence derived, using various analysis

techniques. The evidence, insight and intuition gained during analysis are used to build models, formulate hypotheses, simulate future states and make specific predictions. Such forecasts characterize significant aspects of possible alternative future states to be experienced by society. They should be analyzed, evaluated and interpreted for their educational implications.

3.1.3.1 Analyze, evaluate and interpret ideological forecasts

The body of orderly knowledge passed on through education is constantly subject to change. Many ideological innovations are presented in forecasts made by scientists in the disciplines which contribute to educational theory. Educators must analyze, evaluate and interpret information presented in forecasts in such areas as the physical, biological, behavioral and ecological sciences for their educational implications.

3.1.3.2 Analyze, evaluate and interpret technological forecasts

Many technological innovations are presented in the forecasts of the applied sciences. Technical methods-means which may have significant implications for education and learning are often