A Study of the Feasibility of Developing a Training Model to Incorporate Management by Objectives in Higher Education in Iraq

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A STUDY OF THE FEASIBILITY OF DEVELOPING
A TRAINING MODEL TO INCORPORATE
MANAGEMENT BY OBJECTIVES
IN HIGHER EDUCATION IN IRAQ

by

Nadhim J. Bakri

A dissertation
Submitted to the
Faculty of The Graduate College
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requirements for the
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Western Michigan University

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A little knowledge that acts is infinitely worth more than much knowledge that is idle. This little knowledge that is acted upon is nobler and more supreme than fame. As the worth of knowledge gains recognition, a yearn for more knowledge became greater. Rather than the end, this little knowledge that is acted upon, is only the beginning.

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Nadhim J. Bakri
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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

Background of the Study

The Middle East is rapidly progressing, from being characteristically an agrarian society, to achieving world status as a modern industrial nation. The Middle East, like many third world countries, has an increasing demand for a highly trained manpower force (Pour-Maghaddas, 1975; De La Gueriviere, 1978). There is a growing concern among educators, sociologists, and economists in that region over the role of education in general, and higher education in particular. Their concern centers around the expectations of the nation and the ability of the educational system to provide for basic educational needs, and to supply leaders in diversified fields.

Educational poverty is a common problem in developing countries (Adam and Bjork, 1969). Its form is often unique and shaped by external powers and influences, as well as, by cultural factors, which include tradition, and religious values. Also, bureaucracy plays a major role in limiting the progress of education in developing countries. These factors place constraints on educational development.

Consequently, the growth of an educational system is
limited by the amount of societal support it receives, and by the rate at which resources and facilities can be developed.

In recent years, particularly since the nationalization of the oil industry, Iraq—as an example of a Middle Eastern country—has become one of the richest countries in the world. The oil industry brought in foreign companies, and with them the diverse technologies they needed for their operations. This helped encourage the natives to leave the traditional tribal boundaries, to urbanize, and mix with foreign races and cultures that were brought in by the oil industry. The social milieu changed rapidly from nomad-rural communities, to highly concentrated urban settlements. Those settlements formed the nucleus of modern cities, which were quite different from what most of the nomadic population was used to.

The societal changes noted above, which changed Iraq from a closed nomadic society to an urban society, created a demand for rapid development in education. While education needed to change quickly to meet the new needs of the urban society, it faced several obstructions to its progress in being effective in a new industrial and urban society. The obstructions were a result of the lack of a parallel pace of development between a tradition-bound society and the suddenly accelerated industrialization and urbanization. Specifically, the tradition-
al social and religious values impeded the progress and change that were necessary in education. The traditional societal influence was such that it had an impact on the extent and type of schooling one sought.

Prior to the 1960s, all forms of formal education were under the realm of the Ministry of Education. The Ministry of Education provided free public education to all citizens at the elementary, secondary and post-secondary degree levels. In the early '60s, the new Ministry for Higher Education and Scientific Research evolved, and what used to be the Ministry of Education, limited its jurisdiction to Kindergarten through Secondary schools. The two ministries adopted a plan for building a national educational system which was based upon a figurative pyramid. The elementary program (K to grade 6) provided a basic education for the largest population, and its prime thrust was to reduce national illiteracy. On this base rested the other components of the pyramidal system, the intermediate (grade 7 to grade 9) and secondary (grade 10 to grade 12). The levels of the pyramid mentioned so far were under the jurisdiction of the Ministry of Education. The next level was under the jurisdiction of the Ministry of Higher Education and Scientific Research. Then there was a layer of Vocational Training. At the apex of the pyramid were the universities providing undergraduate and graduate education.
The two ministries, The Ministry of Education in conjunction with the Ministry of Higher Education and Scientific Research, defined their responsibilities as:

1. Building schools,
2. Supplying schools with teachers and administrators,
3. Supplying equipment and books,
4. Establishing the curricula,
5. Establishing the criteria for granting degrees, and
6. Administering examinations.

To further facilitate the new thrust of the ministries, the Government moved towards centralization thus eliminating the influence and input from individual communities.

In spite of the effort and great emphasis put on educational development, many indigenous problems remained unsolved. The first of the unsolved problems was an enrollment boom which began in the 1960s, and necessitated the need for faster educational system development. The second problem, more detrimental than the first, was the growth of bureaucratic stagnation within the system (a legacy of the Ottoman and British Colonial Occupations), which contributed to systemic confusion and delayed the achievement of the general goals. This acted as a drain on the motivation of the people involved in
the process. The structure and nature of Iraqi society, which is the third problem, further contributed to the delay of any progress in education.

With the institution of public education for all classes of the population, the government issued the law of compulsory education. The law requires that all children go to school for at least and up to the age of fifteen. This, together with the new and more advanced health technology, and the increased national economic revenue from the oil industry, greatly directed the government towards educating the masses. Also, the government implemented adult or continuing education to decrease levels of illiteracy. For this purpose, night classes were opened for the working class. Finally, as a measure of enforcing this law, the government imposed testing procedures as measures to determine merits for salary promotion.

Weber in his *Ideal Model of Bureaucracy* deals with the characteristics of a bureaucratic organization. Weber's model, as translated and explained by Henderson and Parsons (1947), is applicable to profit-making organizations. While the schools and institutions of Higher Education in the Middle East are non-profit organizations, some analogies can be drawn to show the presence of bureaucracy and its damaging results in the educational system in Iraq.
A bureaucratic organization is characterized by a well-defined hierarchy and multiple levels of authority so that duplication of effort and conflicts are kept to a minimum. Work is divided and assigned to different levels of employees to facilitate speedy achievement of the goals and objectives of the organization. However, the system, because of its levels, creates a sub-system of red-tape involving voluminous paperwork. As the paperwork is to go through all the channels and levels for approvals, it is apt to be lost or misfiled and delayed. The effect is an inordinate delay in the decision-making process or the absence of a decision for a problem or proposal.

Along with a bureaucratic style of management, the nature of the tradition-bound Iraqi society further complicated and perpetuated the system. The Middle Eastern society is a religious society and reflects the spirit of Islamic brotherhood. Its values and traditions are different from the American and European societies. The employees are from a tradition of helping their immediate family members, their relatives and the people from their villages and towns. Most of this came from the tradition of the extended family. All the employees have to abide by the norms of their community, failing which they are condemned and excommunicated. These traditions, in addition to being obstacles to scientific progress, brought
in to the government hierarchy administrators who were not really qualified for the positions in education.

The relationships between employees also reflected the traditions of Iraqi society. For example, the relationship between the teachers and their Principal was based on how well the teachers catered to the needs, often personal needs, of the Principal, rather than on how well the teachers worked towards the achievement of organizational goals. The same was true of the relationships between the Principals and the Superintendents.

The problems discussed earlier, namely, the lack of synchronization between the fast development needed and the enrollment boom in schools and the bureaucratic stagnation and anarchy which were further reinforced and perpetuated by a traditional society, hindered the objectives and purposes of education in general and specifically in Higher Education. Educational development relies on and is limited by societal support and the rate at which resources, teachers, and administrators can be developed. The constraints discussed earlier hindered such development. Specifically, the following were the constraints that Iraq faced. These are not unique to Iraq; all the developing countries face them at one time or other. They are:

1. Supply of manpower,
2. Maintenance of internal consistency,
3. Simultaneous growth at all levels of education from elementary education to higher education, and

4. Financial resources.

These constraints should be borne in mind and considered as changes are planned in the educational systems of developing countries like Iraq.

The Problem Statement

The investigator conducted a study of a training model for professional administrators in Higher Education in Iraq. The initial decision to undertake this developmental study was an insight to the need for a more humanized administrative system that would replace a stagnant and obsolescent system in Iraq. This understanding dictates a need for a systematic, comprehensive, and task-oriented educational administration within the present system.

The model suggests a means for an effective transition to Management by Objectives. Since professional development focuses on the preparation to implement management by objectives, commonly referred to as MBO, the investigator incorporated the principles of MBO in the training model. MBO, as originally practiced, leaned toward the bureaucratic structure. Its main emphasis was on accountability and performance appraisal, which was
perceived by employees as a threat to their security. As it was practiced over the years, considerable motivational elements were introduced to humanize it by increasing the participation of employees in the setting of goals and the formulation of individual objectives. So, the thrust of the training model is to develop a sense of ownership and commitment through the involvement of employees at all levels in the design and development of a model for their professional growth.

Based on the investigator's experience, observations, and interviews, it was concluded that the kind of participation that motivates people and fosters a sense of ownership and commitment does not exist in the Middle East. What does exist in the Middle Eastern countries today is a very rigid system. Every curricular decision comes from the central authority, the Ministry of Higher Education and Scientific Research. The role of the university administrators and faculty is solely to execute what they had been instructed. This situation brings about a great deal of dissatisfaction among the administrators, who consider themselves as experts in their areas. Therefore, the need for participation and involvement in policy-making and decision making is crucial. A change in the decision making patterns used by the executive level national policy makers could boost the morale of the faculty and administrators in the Uni-
The rationale for the study rests on the specific needs of educational administrators for professional development specifically as it relates to an MBO system. This study focuses on the design, implementation and evaluation of the training model. Such a training model should be systematically organized in terms of its design, the identification of tasks or activities and their description.

Numerous statements of rationale for MBO in education were found in the literature reviewed. The following are statements that promote the use of MBO in education. At least one of the sources consulted is cited for each of the statements. All the literature sources reviewed strongly suggest that MBO is important for educational administrators. The statements are:

1. The popularity of MBO in education can be traced in part to the strong pressures on educators to be more efficient and more accountable. It provides a systematic way of organizing and operating a complex organization in the most effective manner (Harvey, 1974, p.1).

2. MBO is particularly helpful to educators who
become top-level administrators without proper preparation in administration or management. It is helpful because, when properly applied, the MBO system provides for the effective planning, organizing, directing, controlling and evaluation necessary for an organization to succeed. In short, to properly apply MBO one is forced into doing those things which must be done by an administration if the organization or institution is to function properly (Harvey, 1974, p.1).

3. MBO is a way of getting improved results in managerial action. It is not an addition to a manager's job, it is a way of doing it (Deegan, n.d.).

4. Without substantial continuing growth in the competence of personnel, the entire concept of accountability has little meaning. The heavy reliance on people to perform nearly all tasks required for organizing and maintaining quality educational programs is a reality that cannot be treated lightly (Harris, 1980, p.13).

From the statements of rationale for the MBO in education stated above, one can conclude that because of the present magnitude of problems confronting the educational administrators in Iraq, the implementation of MBO, with adequate professional development, can be an effective solution.
The Purpose of the Study

The purpose of this study was two-fold. The primary purpose was to develop a model for professional development of educational administrators. This model was validated by a panel of experts. The second purpose was to establish a description of the tasks for making the model operational. The proposed tasks were based largely on a review of literature in chapter II and on the perceptions of the investigator. A panel of experts was used to validate the appropriateness and necessity of the task descriptions in the model.

Professional development was here regarded as synonymous with human resource development. Nadler (1979) defines human resource development as a series of organized activities conducted within a specified time and designed to produce behavioral change (p. 3). Further, human resource development, for the purposes of this study, was viewed as a process of providing continuous professional growth, and improving professional knowledge and competence of practicing educational administrators. A process was referred to as the methods used in presenting materials and ideas. Educational administrators were defined as any professional or certified members of an educational organization, who perform administrative duties.
Limitation of the Study

The study was limited by the following factors:

1. No effort similar to the one in this study has been undertaken in a developing country which practices bureaucracy;

2. The trial and error process as to the feasibility of implementation is based on selected samples;

3. The model resulting from the research is based on the wide parameters of the study conducted in the United States, where the organizational context and philosophy of education are very much different;

4. Time and money;

5. The design of the model was based upon review of only the professional literature published in the United States since 1950. Thus, the entire body of literature on the subject was not reviewed; and

6. The model and its task descriptions may be limited to professional development in the United States.

Summary and Organization of the Study

Chapter I has dealt with the background of the study, the problem statement, rationale for the study, purposes of the study, and limitation of the study.

The remainder of this study is organized and presented in five additional chapters.

Chapter II is a review of literature regarding the
professional development of educational administrators. The pertinent literature reviewed covered the topics: (a) evolution and current status of MBO, (b) general perspective leading areas to MBO, (c) need for training development, (d) perspective of an MBO training model, (e) planning for professional development training, (f) implementation of training development, (g) evaluation of training development, and (h) the models that influenced the study.

A description of the development of the training model, its components, and its structure—as validated by literature previously reviewed—is presented in the first section of Chapter III. In the last section of Chapter III, a matrix for organizing the proposed necessary task descriptions of each step within the three-stage model is presented.

Chapter IV deals with the design and method of task validation. In this chapter, the development of the instrument used, identification and selection of validating panel members, and the survey and data analysis procedures used are discussed.

Data from the written and follow-up responses of panel members are analyzed and reported in chapter V.

Chapter VI presents the summary, recommendations for implementation of the training model, and a discussion of some issues of concern for implementing the model.
CHAPTER II

REVIEW OF RELATED LITERATURE

Evolution and Current Status of Management by Objectives

As a system of managing, MBO was conceived in the world of business, and so far has achieved its greatest impact in the private sector. Thus, any discussion of the evolution of MBO must necessarily be addressed to the development of the system in business corporations. However, the increasing adoption of MBO by nonprofit organizations within the past few years has provided an additional body of MBO experience.

The writing of Drucker (1954) sets the first milestone for utilizing the objectives of management as the basis for a management system. He proposed that objectives would serve as the vehicle for administering and directing a system approach to managing an organization. Others would develop the system and render it operative.

The second milestone was the three stage evolution of MBO from its fledging stage to the present. Initially, almost complete emphasis was on improving the performance of the individual administrator—by providing him/her with goals toward which to strive and according him/her recognition for achievement.
Next, the emphasis switched to the organizational effectiveness on a short range basis. Finally, the long run future of the organization was emphasized by balancing and directing the results of individual administrators to achieve organizational priorities (Drucker, 1954).

The third milestone was realized when MBO advanced from a special purpose management tool or technique into a full-fledged management system.

The efforts of the pioneers in MBO arose primarily from a complete disenchantment with the techniques then popular for evaluating or appraising managerial performance. The evaluation techniques of the late 1950s measured the degree to which managers were thought to possess, or to fail to possess, highly subjective traits or factors. Factors commonly evaluated were: cost awareness, grasp of functions, initiative, punctuality, loyalty, cooperation, potential for advancement, and the like. The traits were not keyed to actual results achieved (Knezevich, 1972; Odiorne, 1972).

Gradually, measurable objectives and results replaced evaluations of traits. This required the development of effective objectives of administrators. The development of objectives appropriate for use in evaluating performance paved the way for allowing objectives to serve as the focal point for all other major parts of the
management process.

The Business Management Council (1968) reported that MBO could be achieved successful by a balanced, participative style, one that encouraged maximum participation while discouraging permissiveness. The balanced, participative style is usually defined as one in which the maximum number of the following attributes is actually practiced to the maximum degree:

1. There is an indepth delegation;
2. There is maximum participation in the objective setting and planning process;
3. Managers are permitted to make mistakes;
4. Change is encouraged and planned for;
5. Policies and procedures are minimal and subject to change when necessary;
6. Controls are tight, but only the minimum are imposed to keep the unit in control;
7. There is a meaningful reward system; and
8. Managers exercise a light degree of self management, self discipline, and self control.

An increased acceptence and use of MBO concept can be said to evolve through three stages (Howell, 1970 pp. 41-45).
Stage 1

This stage relies heavily on a more impersonal approach to managing people, and was characterized by emphasis on standards, work measurement, and methods improvement. Its leading advocates were Taylor and the Gilbreths.

During the past fifty years, social, political, economic, and technical changes have had a tremendous impact on the practice of management. Through a scientific approach to problem solving, more managers have developed the ability to understand causal relationships between organizational phenomenon. Within the United States, the first major steps in this direction were taken by Fredrick W. Taylor. Taylor (1947) and his followers sought ways to cut costs, improve efficiency, and measure the performance of workers by developing the best method for performance of workers by developing the most qualified workers for the job. Through his experimentation, testing, and writing, Taylor became known as the "father" of the movement referred to as scientific management.

Taylor's (1947), four principles of management that provide the basis for scientific management are:

1. Each element of work is to be analyzed scientifically instead of by rule of thumb.

2. Workers are scientifically selected, trained, and developed for positions for which they are best suited,
rather than letting them select their own work and utilize their own methods in performing jobs.

3. Cooperation is encouraged between managers who plan the work and those who perform the work to insure that all work is done in accordance with developed scientific principles.

4. Responsibility for the work is shared and assumed appropriately between those who plan the work and those who perform it.

Another principle of management noted by Taylor is The Exception Principle, "The manager should receive only condensed, summarized, and comparative reports including both the especially good and the especially bad exceptions" (1947, pp. 36-37).

One of the early scholars and writers in the field of management was Henri Fayol who stated that the nervous system in the animal sphere bears close comparison with managerial activities of a social organization (1949). For our purposes, the implication of this statement is that management is essential in achieving a coordination of activities when people band together for a common purpose.

Henri Fayol, a Frenchman who managed the Commentary Four-Chambault Mining Company from 1888 to 1918, developed one of the earliest and most comprehensive theories of general management. In three years as managing director
of the mining company, Fayol had moved it from a declining firm to one of France's greatest companies by developing and applying various managerial concepts. In recognition of his work, Fayol is considered the "father" of the management process point of view.

Since several of Fayol's ideas assist in clarifying the nature and content of modern-day management, they deserve added consideration. Three such concepts are: (1) management competence differs from technical competence; (2) the scientific nature of management; and (3) the universality concept of management.

Fayol (1949) stated that principles of management are not rigid since the same principle may not be applied twice in identical conditions. The application of principles is an art and must be capable of adaption. The principles Fayol most often referred to are:

1. Division of work—specialization of labor produces more and better work with the same effort.

2. Authority and responsibility—wherever authority is exercised, responsibility arises.

3. Discipline—obedience should be observed in accordance with the standing agreements between the firm and its employees; and it is essential for the smooth running of business, for without it no enterprise could prosper.

4. Unity of command—for any action, an employee
should receive orders from only one superior.

5. Unity of direction—for a group of activities having the same objective, there should be only one head and one set of plans.

6. Subordination of individual interest to general interest—the interest of one employee or group should not prevail over that of the total organization.

7. Remuneration of personnel—the price granted for services rendered should be fair and afford satisfaction to both personnel and the firm.

8. Centralization—the degree of initiative left to managers varies depending upon top managers, subordinates, and business conditions.

9. Scalar chain—the line of authority of superior ranging from the ultimate authority to the lowest ranks.

10. Order—one the jobs for essential, smooth running of the business have been decided upon and those people to fill such jobs have been selected, each employee occupies that job wherein he/she can render the most service.

11. Equity—for the personnel to be encouraged to fulfill their duties with devotion and loyalty there must be equity based on kindliness and justice in all employee dealings.

12. Stability of tenure of personnel—the more stable the managerial personnel of an organization, the
more prosperous will be the organization.

13. Initiative—the ability to think through and execute a plan is a powerful motivator of human behavior.

14. Esprit de corps—harmony, union among the personnel of an organization, is a source of great strength in that organization.

Gilbreth (1909), a pioneer in the study and development of standard methods, was concerned not only with the particular motions involved in a job, but also with standardizing the internal work environment. He, like Taylor emphasized the standardization and specialization of working conditions and the methods of doing a job as ways to increase productivity. Managerial concern was not with job efficiency, but with obtaining a rate of work that was felt to be acceptable in relationship to wages paid.

Trewatha and Newport (1976, p.187), said that, while procedures, methods, standards, and budgets can be beneficial in the achievement of organizational goals, they may also become stumbling blocks. Their impact depends on how they are established and implemented by various organizational members.

Without question, few organizations can achieve objectives without utilizing these tools. Yet, without a consideration of human needs and behavioral characteristics, they can become a source of anger, discontent, and
employee dissatisfaction. People like to have a voice in those matters that influence and direct their actions within an organization. Therefore, it becomes management's job to determine how their desire to participate can be utilized most effectively.

**Stage II**

This step was a swing toward more attention to human or personal factors in managing people. This stage was a natural outgrowth of the emphasis on the impersonal approach. Much of the thinking of this stage can be attributed to Elton Mayo and those who followed his work.

In the 1920s and 1930s, the emphasis of management study shifted to a more scientific examination of human beings in organizational settings. The study of interrelationships between people and work environments resulted in a new field of management called human relations. The efforts were directed toward a better understanding of human behavior in the work situation. Since the 1930s, contributions from areas such as psychology, sociology, and anthropology, have added significantly to the behavioral orientation of modern managers.

The Hawthorne experiments of the 1930s had provided a major challenge to the scientific management notion that the worker was primarily an economic animal who would work solely for money. Mayo (1933), Roethlisberger
and Dickson (1939), and Maslow (1954), took the basic Hawthorne finding that workers are as much social as economic creatures.

**Stage III**

This stage can be described as an era of discontinuity. During this period a sizeable chasm developed between the purists scientific management advocates and the behavioral scientists.

**Stage IV**

This was the move to participative management within the MBO system starting a narrowing of the gap between impersonal and personal management approaches. MBO, then, while continuing to emphasize the importance of achieving the necessary objectives of the organization, also placed a premium on marshalling and directing all the human assets toward those objectives.

Odiorne (1972), Drucker (1954), and McConskey (1973), have described MBO as a philosophy of management. It seeks to minimize controls and maximize internal motivation through joint goal settings and self control. Objective is to change behavior and attitudes toward getting the job done. It is result oriented and it is performance that counts.

The approach which many organizations are using to
make goals operational is management-by-objectives, commonly referred to by its acronym, MBO. The term MBO was first used by Peter Drucker more than twenty years ago.

In 1954, he wrote:

What the business enterprise needs is a principle of management that will give full scope to individual strength and responsibility and at the same time give common direction of vision and effort, establish teamwork, and harmonize the goals of the individual with the common weal. The only principle that can do this is management-by-objectives and self-control. (pp. 135-136)

Drucker then proceeded to expand on this perception of the MBO process. Since 1954, the basic concept of MBO has gained notable attention and acceptance in business firms, hospitals, colleges, government agencies and banks (Albanese 1975). In 1965, Odiorne provided a definition of MBO that is more well-known than any other. He wrote:

MBO is a process whereby the superior and subordinate managers of an organization jointly identify its common goals, define each individual's major areas of responsibility in terms of results expected and use these measures as guides for operating the unit and assessing the contributions of each of its members. (pp. 55-56)

Management literature is replete with assumptions regarding the advantages of adopting MBO. Lahti (1975) outlined the following benefits of MBO:

Other positive factors which should accrue to an organization through a well-implemented MBO system are improved planning, improved organizational and base-subordinate communication, a more objective base for measuring organizational and managerial performance, an improved participative style of management, better delegation, and better team building. (p. vi)
Harlacher (1975) is also complimentary of MBO, particularly because it is a system approach to managing. He wrote:

This systematic approach to management can increase productivity, improve planning, permit more objective evaluation of managerial performance, and improve morale throughout the organization by implementing participative management that involves supervisors and subordinates alike. (p. 29)

Albanese (1975) agreed with some of the benefits stated by Lahti and Harlacher. He stated that some of the assumed benefits of MBO are:

Improving short and long range planning; providing a basis for checking progress; improving motivation and commitment of managers; providing a results orientation; improving the clarity of a manager's role; providing feedback to managers; and increasing and improving the interaction between superiors and subordinates. (p. 91)

A review of the literature suggests that other benefits derived from implementation of MBO which are more related to employee performance. It is the aforementioned assumed benefits that are encouraging administrators to adopt and implement the MBO system of management. In addition, it is believed that if the assumed benefits are actual results of the adoption of MBO, then overall effectiveness of the program cannot help but improve.

In order to fully utilize the MBO system, it was important to this study that the components be identified. A review of the literature revealed that Vande Guchte (1973) identified twelve essential components of
MBO. The list of components is:

1. Overall organizational goals and purposes are defined and stated.

2. Organizational departmental units have stated goals and purposes.

3. Each worker states his major objectives for a future time period.

4. Each worker and his boss mutually agree on the worker's statement of objectives.

5. Boss and worker clearly understand how progress toward goals and objectives will be measured.

6. Workers set objectives and obligate themselves to the completion of these.

7. Goals of individuals and groups in the organization tie in with overall organizational goals.

8. Periodic review of progress towards objectives is made by boss and workers.

9. Boss and worker meet at end of time to review the degree of accomplishment of objectives.

10. Appraisal of performance is judged on the basis of the employee's accomplishment of objectives.

11. Top management (administration) is committed to MBO.

12. Efforts are made to train and develop worker capabilities so that the workers can reach objectives.

The advanced applications of MBO according to
McConskey, 1972, permit staff managers to write measurable objectives to measure rather finitely their contributions against their objectives, to receive deserved recognition in the process, and to take their proper place as members of the decision team.

One of the dramatic changes brought about by MBO has been its impact on measuring managerial performance. MBO has been instrumental in a three stage progression concerning managerial appraisals. Stage I (pre MBO) was a period in which the emphasis was on measuring performance by rating traits; stage 2 switched the emphasis to measurement based primarily on the achievement of present objects; stage 3 concentrated on measures designed to evaluate managers both on the degree to which objectives are achieved and on how efficiently the objectives are achieved. Table 1 highlights the major characteristics of each of the three stages (Koontz, 1971, p. 18).

General Perspective
Leading areas to MBO

The assumption that underlies this study is that the outputs of educational administration in organizations, i.e., their efficiency and effectiveness and, in general, the ways in which they respond to stimuli, are affected by the management structure, procedure, and style. The
manner in which the administration is organized for work and the form of its administrative processes are presumed to affect what gets done, how much and how well through people. It is almost unthinkable that this not be the case.

It would be most surprising indeed to find that outputs were only minimally dependent upon strategies of control in the organization, the extent to which decision making is shared rather than centralized, the kinds of objectives that have de facto importance, and the relative size of a system's bureaucracy. It is true, however, that it has not been established that this relationship exists in every case, nor do we know the important detail, i.e., which particular dimensions and sub-dimensions of the administrative process, nor do we know how strong and how important many of these relationships are. Therefore, much of the literature review will deal with the link between structure and output.
Table 1

History of approaches to managerial styles (from Koontz, H. 1972, p. 18)

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
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<tbody>
<tr>
<td>Measuring by Traits</td>
<td>Measuring by Objectives</td>
<td>Measuring by Objectives and Efficiency</td>
</tr>
<tr>
<td>Pre-MBO</td>
<td>1955-1972</td>
<td>1972--</td>
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- **Stage 1**: Measuring by Traits
  - Emphasis was on measuring managers based on traits factors, such as health, initiative, loyalty, punctuality, and grasp of function.
  - This was an extremely weak approach because it was not related to results which the manager achieved.

- **Stage 2**: Measuring by Objectives
  - Emphasis was on measuring managers based on degree to which they achieve, or failed to achieve their objectives.
  - This was a much better approach as it was result oriented. However, it sized effectiveness: were the objectives achieved or not? It failed to consider efficiency: was the achievement based on good management practices?

- **Stage 3**: Measuring by Objectives and Efficiency
  - Emphasis was on objectives and how efficiently managers achieved their objectives.
  - This had the added advantage of coupling effectiveness (were the objectives with efficiency? Did the manager accomplish the results by luck or by sound management?)
Within the past decade, public confidence in higher education has eroded considerably, not only in the U.S.A., but in another part of the world. The lack of confidence is due primarily to the belief that colleges and universities are being mismanaged. Richman and Farmer (1974) stated, "Today's chorus of critics of educational administrators believe that most universities and colleges are seriously mismanaged." Educators and laymen closely associated with higher education would probably agree that postsecondary institutions are difficult to manage effectively and efficiently. The nature of their goals, ambiguities relating to power, and the kind of professionals that work for academic institutions all contribute to the complexity of managing them (Richman and Farmer, 1974).

Perhaps Deegan and Fritz (1975) stated the case more pointedly than any other critics when they added:

And while many inside and outside the educational field lay the blame for increased costs on increased demand for degrees, on inadequate buildings, or archaic procedures, on militant unionism, or what have you, respected educational thinkers place the blame squarely where it belongs: on ineffective management. (p. 5)

The general public's belief in the mismanagement theory has reduced public confidence in higher education and has led to a demand for greater emphasis being placed on accountability in higher education.

At the heart of the mismanagement problem is the lack of goals and priorities of postsecondary institu-
tions. In 1970, management consultant Keane warned:

There will be increasing pressure on the nation's colleges and universities to make more effective use of available resources through improved management and administrative techniques. The most serious problem of most colleges and universities is that they do not have clearly defined goals. If an institution does not have a very clear idea of its roles and goals, it obviously has no basis for determining whether it is effectively organized or managed. (p. 56)

The president of the Academy for Educational Development, Inc., Alvin C. Eurich (1970), believed the key to survival was good planning—specifically long-range planning, which means setting manageable goals. Also, Eurich alleged that one of the critical problems facing colleges and universities today is vague, poorly defined goals. Lahti (1973) believed the direction an institution takes is determined in large part by goals and objectives established; if there are none, the answer is obvious. According to Richman and Farmer (1974), the whole question of goals and priorities in higher education—what they really are and should be at most academic institutions—has been obscure, inoperative, and unverified. Apparently, the matter of setting goals and objectives is generally becoming recognized as a problem of utmost importance, but there have been very few studies that have focused on this problem in a systematic or comprehensive way (Peterson, 1973; Gross and Grambsch, 1968, 1974; Gross, 1971). The emphasis on setting goals is necessary because the allocation and use of institu-
tional resources should be directly related to the institution's goals and priorities. If goals and priorities are obscure, then allocation and utilization of resources are not likely to be very efficient or effective (Richman and Farmer, 1974).

Lynn Townsend, a past president of Chrysler Corporation, once stated that Chrysler's business was no longer that of making cars, but selling satisfactory transportation service for extended period of time. Such an overall strategy attempts to answer the question, "what is our business?" To be effective, however, strategy must be translated into objectives and policies that will guide future thought and action. In this section of the study, the focus is directed specifically at objectives and policies as operational guidelines that influence employee behavior.

Peterson, Plowman, and Trickett (1962) defined objectives. They wrote:

Objectives give direction to individual efforts and may be defined as the targets people seek to achieve over various time periods. Therefore, an essential task of management is the formulation, clarification, reinforcement, and communication of objectives. (p. 53)

Dennison (1931) indicates that desirable actions result from appropriate direction. One way of providing needed direction is through policy statements. Policies guide thoughts and actions by identifying the boundaries of acceptable behavior. In turn, such boundaries are
essential in coordinating all of the decisions and actions related to an accomplishment of objectives. Cannon (1968) defined policies as "broad guides to the future decisions and actions required in achieving organizational goals" (p. 10). Thus, policies focus attention on various alternatives, consequences, and risks that must be considered in making a decision. In most business organizations the relationships between objectives, policies, and organizational decisions can be graphically indicated as shown in Figure 2. As indicated, policy formulation is based on the strategies and objectives which determine the directional thrust of an organization. It should be remembered, however, that the environmental factors affecting organizational objectives also influence policies. Stockholders, government, suppliers, labor unions, and the general public all have an impact on policy determination.

Policies fulfill many roles in an organization.
Since they serve to direct future action, they are important in: (a) achieving coordination, (b) economizing managerial time, (c) developing future managers, and (d) establishing an organizational image. Since policies reflect the basic thinking and attitudes of management, they portray an organizational image to the public. Stated policies inform customers, owners, employees, government, suppliers, and the general public about an organization's attitude and intentions. A policy statement is a broad general statement of institutional purpose which defines the parameters of the activities.

Harvey (1974) states that the whole MBO process rests on the precise definition of institutional direction. This is done in the MBO process through a clear delineation of the mission, goals and objectives. (p. 25)

Deegan (n.d.) contend that amongst those companies which manage with objectives, MBO concepts and procedures have become an integral part of the management process. He proceeds to explain that these companies begin by attempting to assure themselves that the goals of individual managers blend into a matrix of mutually supportive goals. It is the interaction of the ideas from below and the expectations from above that sound, meaningful objectives are developed. Degeen concludes that the planning effort is completed only where managers have achieved a network of goals that tie together into a
unified, co-ordinated effort that can be expected to achieve divisional goals. (p. 3)

After the fact, it is relatively easy to look back. But looking into the future, with its various degrees of uncertainty, is always hazardous. A recognition of the challenges facing management, however, makes us aware of the important role that managers must play in solving future societal problems. Additionally, it provides insights into management's past and present, and into the changes that are likely to take place in the future.

Throughout this chapter, it is indicated that management is caught up in a cross current of many environmental pressures. Some of these distinct forces are: (a) the organization and the jobs it provides, (b) society at large (economic, education, technology, government, religion, human values), and (c) the individual worker. Each is changing, but at different rates. Therefore, part of management's job is to equate organizational responsiveness with rapid changes in the needs of individual workers and society. Management implies the effective and efficient achievement of goals. Yet, this is not incompatible with a society desiring economic and psychological work satisfaction involving security, independence, self-esteem, and dignity. Consequently, the challenge is to provide a balanced relationship among human, technical,
Meeting the challenges of the future requires an understanding of the true nature of management—its functions and applicability. Resolving organizational issues requires more than a cursory view of the management process. A thorough understanding of management is essential if managers are to be prepared to give a balanced emphasis to its internal parts: that is, designing jobs, determining goals, establishing budgets, planning the introduction of new products, and much more. In addition, to fulfill goals and sustaining the vitality of an organization within a world of changing values requires innovation, experimentation, and flexibility in designing and implementing management systems.

**Schools of Thought**

In this section, the objective is to present various behavioral theories as they relate to an identification and satisfaction of individual needs. Early explanations of behavior are discussed first as a foundation for the examination of current theories. In the discussion of motivation, various theories are be assessed in terms of their applicability to current managerial practice. It is also important to remember that individual and group behavior occurs within organizational systems that include other people.
Some knowledge of the historical evolution of various behavioral theories provides a better understanding of current approaches to the motivation of employees.

The Mechanistic School

The mechanistic view holds that there are universal laws or principles which govern behavior. Advocates of this doctrine believed that laws from the physical sciences can be used for understanding and explaining human behavior. In other words, that behavior can be understood in terms of physical aspects of nature have a machine-like predictability and can be explained by physical causes. Thus, emphasis was placed on units such as an element, a particle, or an individual, rather than on a total system.

Building on this concept, Peters (1956) referred to Thomas Hobbes theory that explained all behavior in terms of physical motions, such as breathing, thinking, heart beating, and speaking. Further, Hobbes theory was based on psychological hedonism which views action as being governed by a law of nature where individuals seek pleasure and desire to avoid pain. In this respect, Hobbes system was based on the reasoning that action is initiated by an endeavor (which is something like a motive). He explained that if an endeavor is pointed toward a pleasant experience, the person's appetite is aroused and, in
turn, enhances the vital motions of the body. As the endeavor gains energy, the blood flow increases and results in a particular action.

Through his work, Hobbes offered the first real break from the rationalists. As indicated, he believed that behavior is not necessarily based on free will and an ability to logically select a goal or to follow a rational course of action to achieve it. Thus, Hobbes ideas suggest that behavior is influenced by motivational determinants.

The Organic School (Contingency Approach)

Flippo and Munsinger (1978) stated that there is no one best way to organize that suits all institutions. Classicists, however, tend to favor one general type which has been labeled mechanistic. Behaviorists favor an organic model, which is more human and less like a machine. The contingency approach to structure would accept the usefulness of both types, and more specifically, would attempt to design a structure to suit major situational factors. (p. 205)

The three most important situational factors in structural design are (1) the outer environment of the enterprise, (2) the type of technology by means of which tasks are to be accomplished, and (3) the nature and aspiration of the organization's human members. The
outer environment can be characterized as stable or dynamic, homogeneous or heterogeneous, and limited or abundant. If stable, there are few changes in demands made on the firm by customers, government, unions, and the public. If homogeneous, the significant demands are compatible and come from only one or a few major types of environmental elements. If limited, there are relatively few organizations in each category, for example, all output is sold to one major customer, or all employees belong to one union. Under these conditions, the mechanical type is probably most appropriate. (Thompson, 1967).

This structure is of a programmed type based on the assumption that the system can largely be closed. The stable, homogeneous, and limited outer environment enables a close approximation of the closed system. Thus, objectives can be specifically defined, decisions made mostly at the top of the organization, tasks preprogrammed and specialized, and a large number of detailed standards established to cover all members activities. Members are closely monitored by narrow spans of control, resulting in the formation of a tall structure. Their prime contacts are with superiors, who in turn are the primary means of integrating all activities in conformance with plans.

Should the outer environment be of the dynamic, heterogeneous, and abundant type, the task of management is
exceedingly more difficult. An open system is obviously present and the accent must be upon adaptive flexibility in reaction to many possible contingencies. Because there can be no "all-knowing" top management that is simultaneously everywhere, decision making must be decentralized to multiple points in the structure. Consequently, it cannot specialize all tasks, specify all roles in advance, or set numerous detailed performance and process standards. It is more heavily dependent upon organizational members to interact on the basis of unique problems and integrate themselves in response to the demands of the situation. Wide spans of control promote greater member freedom, resulting in formation of a flat type of structure.

Organic and mechanistic structures merely describe the extreme possibilities. It is apparent that an environment can be dynamic, yet homogeneous and abundant. It can be stable, yet heterogeneous and abundant. A contingency approach is a very demanding one in that the characteristics of one's particular environment must be diagnosed with care.

In general, behaviorists have very little sympathy with the mechanistic model for any situation. Believing that the dominant factor must be the capabilities and aspirations of people, the mechanistic structure is condemned as frustrating human growth (Maslow, 1954;
McGregor, 1960; Argyris, 1957; Herzberg, 1966). It is stated by behaviorists that even when the technology is well developed, jobs should be redesigned to permit individual and group control of such factors as output, quality, and methods. Member involvement and participation in all phases of managerial activity would contribute to effective operation, even in environments characterized by stability and homogeneity. Behaviorists contend that organizations designed for human use will happily produce economic as well as human values.

There is evidence to support the thesis that structure is being adapted to major situational factors. In research conducted by Lawerence and Lorsch (1967), it was found that firms in the container industry, characterized by stable environments, tended to develop more mechanistic structures. Those operating in the more volatile and rapidly changing environment of the plastic industry tended to develop flexible, organic structures. In environments characterized by intermediate degrees of uncertainty and change, tailor-made structures designed to produce values of both spontaneity and repetitiveness were created. Even within the single organization, varying types of structures are used. For the research and development unit, with its imperfect technology and
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mechanical</th>
<th>Organic</th>
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<tbody>
<tr>
<td>System</td>
<td>Closed</td>
<td>Open</td>
</tr>
<tr>
<td>Objectives</td>
<td>Specific</td>
<td>General</td>
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<tr>
<td>Strategy</td>
<td>Programmed</td>
<td>Adaptive/flexible</td>
</tr>
<tr>
<td>Decision making</td>
<td>Centralized</td>
<td>Decentralized</td>
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<tr>
<td>Standardization</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Specialization of tasks</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Role formalization</td>
<td>Narrow</td>
<td>Wide</td>
</tr>
<tr>
<td>Organization levels</td>
<td>Many/tall</td>
<td>Few/flat</td>
</tr>
<tr>
<td>Member interaction</td>
<td>Vertical</td>
<td>Lateral</td>
</tr>
<tr>
<td>Member orientation</td>
<td>Conformity</td>
<td>Fluidity</td>
</tr>
<tr>
<td>Integration</td>
<td>Hierarchical</td>
<td>Collegial</td>
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high degree of uncertainty, an organic structure is typically utilized (Burns and Stalker, 1978). In the production division, however, the buffered environment of the inner technological core enables a mechanistic structure to be established.

Thus, the contingency approach to structure relegates some people to mechanistic environments that behaviorists contend frustrate human growth and development. However, the degree of fit among the outer environment, technology, and structure is a major factor affecting the degree of competence on the part of organization members (Lorsch and Morse, 1974). If organic structures are developed and used for highly stable situations utilizing well-developed technology, the resulting confusion can be highly detrimental to morale. Holding discussions as to the next movement a crack drill team should execute is not conducive to precise task accomplishment. A feeling of incompetence is thereby generated. Even though individualism must be suppressed on the basis of situational requirements, resulting greater effectiveness can be conducive to group pride and accomplishment.

Under the thesis that a philosophy of management should find room for both behaviorally and classically oriented organization structures, this section of the study is concerned with a merger structure that can be
inserted. Prominent among these is a participative structure. In this context, it will examine the nature and importance of organizational climate, allocating specific attention to the open and participative climate advocated by behavioralists. This is be followed by a discussion of one of the best known participative programs, known as management by objectives. It will become apparent that the feasibility and success of a management by objectives program is facilitated or limited by the nature of the organizational climate that prevails within the enterprise.

Organizational Climate

Flippo and Munsinger (1978) defined organizational climate as "a global perception of a set of organizational attributes that exerts a unitary "main effect" upon member attitudes and behavior." (p. 394). It is described as a subjective and generalized view influenced by such factors as leadership style, immediate work group characteristics, size of organization, the communication system, degree of effort-reward hookup, and a vast array of specific experiences and encounters. Commonly recognized climate types would include the open-participatory on the one hand, as contrasted to the closed-threatening on the other (Lawler, Hall and Oldham, 1974).

Most organization psychologists recommend conversion
of all climates into one of an open, supportive, and participatory nature.

**Participative Climate**

The climate most usually advocated by organizational psychologists is the open and participative type. Argyis (1957) in his indictment of formal organizations and their negative effects upon human personalities, suggests more subordinate participation for improving these ills. In his interaction method of analyzing organizational behavior, Whyte (1961) consistently suggests that there should be more initiation of interactions from below in the hierarchy to approximate the number issuing from above. And McGregor's (1960) plea for "management by integration and self-control" is a reflection of this same theme. Behavioral recommendations that jobs should be enriched would entail restructuring to permit employee determination of methods, pace, and quality. Organization development programs purportedly provide the skills and attitudes that permit effective participation. Thus, the theme of participation runs through the concepts of maturation, theory Y, self-actualization, organic structures, motivator factors, power equalization, consultative and democratic leadership, job enrichment, organization development, and management by objectives.
Need for Training Development

With the role and function of educational administrators increasingly taking on different dimensions, educational administrators hold a wide range of responsibilities—from maintaining to managing the entire organization, and from motivating the community support to the accomplishment of ultimate educational aims. In addition to these roles and functions, educational administrators are confronted with forces and trends at work which portend changes for the educational program. Herrick (1965) admonished that "ignoring these forces in our curriculum planning and teaching can only lead to inadequate and dangerous educational programs for our society" (p. 71). The phenomena of change included such developments as the scientific and technological revolution, urbanization, the knowledge explosion and increased attention to international concerns (Saxe, 1968, p. 245). Additional phenomena, such as those described in the Educational Research Service Report (1974), have become apparent:

Societal change is so rapid today that many new issues and problems constantly face leaders in the educational field. Among these are: changes in the nation's economic, population and employment pictures; the urban crisis and the position of the disadvantaged; the changing life styles and values of youth; teacher organization and militancy; general public dissatisfaction with schools; and voter rejection for increasing spending on education. (p. 1)

So long as the forces and trends of change make a
difference in the function and roles of educational administrators managing the organizations, the effective professional development of the administrators will be a vital concern. Even if a fully qualified, ideally competent staff were available, time would gradually erode competence as conditions change and old competencies become obsolescent. Even if new knowledge could be gained from on the job experience, staff turnover and the need to speed learning processes for some would still demand professional development. The magnitude of the problems confronting educational administrators causes them to function under far from ideal conditions. The gap between what is known and what is practiced is enormous in nearly every educational system and institution (Rogers, 1972, p.7).

The gap between what staff members are allowed to do and what they are capable of doing is also enormous. Even the gap between what they are doing and what they want to do is very great for many educational administrators (Rubin and Hansen, 1980, pp. 5-6). Beyond such compelling needs there remains the long-recognized obligation of all professional personnel to seek to improve themselves throughout their careers in education.

The importance of professional development was emphasized by Richardson (1975):
If institutions can no longer be changed primarily by the process of adding new personnel then steps must be taken to help existing staff members adjust to new demands being made on them. The process of improving staff capabilities for dealing effectively with new and continuing responsibilities is most commonly referred to as staff development. (p. 303)

Also speaking about the necessity for staff development, Hirschowitz (1975) contended:

Staff development is not an organizational luxury or privilege, it is an organizational necessity. Commitment to staff development is necessary for the organization to thrive, build morale, increase its holding power, produce, and perpetuate itself. (p. 213)

Green and Winsteadt (1975) in their discussion on "Systematic Educational Planning", took the position that:

College and university administrators today are in a complex, rapidly changing environment. If it's not the energy crisis, then it's inflation. If it's not competition for students, it's the demand for accountability. The list goes on and on, more importantly, the list often changes from day to day. It has been said that there are only three things we know for sure about the future: it will not be like the past, it will not be like we think it's going to be, and the rate of change will be faster then ever before. We could also make a fourth prediction: Murphy's Law will prevail; or, if something can possibly go wrong it will. (p. 33)

Because of the present uncertain circumstances, educational administration is more complex than ever before. It requires different techniques and serves a different purpose. What is needed is dynamic, systematic professional development that is more comprehensive, better
organized and more responsive than most of the inservice training that has been conducted previously. The more complex, diversified, and decentralized an educational organization becomes, the more important it is to have systematic professional training development.

To enable administrators to meet the current challenges and to prepare them for the future, it is necessary for them to acquire knowledge and skills; to adopt new norms and procedures that would enable the organization constantly to monitor the changing environment; to compare the results of the organization's reactions with what it would accept if movement toward the goals falls below an established criterion. Gardner (1964, p. 1) addressed this matter as self renewal.

Institutional administrators can no longer rely on their preservice preparation to develop the needed skills. Corey (1957) pointed out the necessity for planned programs of inservice education for the improvement of school personnel, expressing the feeling that it was impracticable even then to depend entirely on preservice preparation and individual initiative. He further called for administrators to strive continuously to keep abreast of what they must know and be prepared to do. (p.1)

Staff development and program improvement activities, according to Bishop (1976):
are the career counterparts of preservice education. As such, they provide for change, renewal, quality education, and professional competence. What they seek is an affirmative response to the changing social and political scene and to criticism that curricula are not relevant, that professionals are not adequate, and that educational institutions represent lag rather than progress. Such efforts are important ingredients of the continuing curriculum for every career teacher and supervisor. (p. 1)

Truitt and Gross (1970) testified that educational administrators are professional people and professional people in many other organizations, whether profit making or nonprofit making, have found it necessary to keep themselves continually informed regarding the accumulation of knowledge and the changes that have taken place within their own professions. Most professionals realize that there are many methods of keeping pace with rapidly changing needs and requirements. It is logical that most professionals keep themselves informed through continuing education, attending conferences, reviewing current literature and research findings, and inservice education programs. They concluded that continued growth of the professionals is one of the distinguishing features of a profession and can be achieved through inservice education (pp. 212-214).

Stinnett and Huggett (1963, p. 456) contended that, "coinciding with teacher immaturity and insufficient work experience, a growing and changing society emerged." Teachers and administrators who were accustomed to dis-
seminating knowledge and following prescribed pedagogical theories of the time began experiencing questions concerning heritage, social change, and shifting values brought upon them by the impact of foreign influences. The changing role of the society and of the students created a complex but challenging concern for teachers as well as administrators. Following the turn of the century, more and more professional groups met this challenge by increasing certification requirements.

In order to meet current challenges and to prepare for the uncertain complexity of the future it becomes necessary for educational administrators to acquire the knowledge and skills essential to their careers. Inservice training is seen by numerous authorities as a feasible method for administrators to fulfill these needs; it becomes an essential means to an end. Professional growth depends on ongoing education. Highley (1974) cited the need for inservice training for institutional administrators thus:

In addition to being a means of keeping principals up to date and bailing out of emergencies, inservice training can become more forceful for changing the structure of the principalship. (p. 2)

Ecker, Ovellettee and Macrae (1970) were of the opinion that training is needed at every level. And they indicated that the most effective training programs are maintained on a continuous basis, not just for training new...
employees for "putting out fires" in trouble spots (p. 117).

The importance of staff development, or inservice education, according to Harris (1980), is:

Inservice education is to the educational administrators what good eating habits and balanced diet are to human growth and vitality. Without substantial continuing growth in competence in personnel serving in our elementary and secondary schools and colleges, the entire concept of accountability has little meaning. The heavy reliance upon people to perform nearly all tasks required for building and maintaining quality educational programs is a reality that gives inservice education both its importance and its urgency. (p. 13)

Some of the many other reasons that make professional development of educational administrators a necessity are: a need to keep abreast of new and complex higher education issues that have implications for administrative roles, responsibilities, and opportunities; a need for updating oneself in particular areas of administrative concern; a need, particularly in the case of novice administrators, for specific role guidelines and the development of individual skills, styles, and operating strategies relating to organizational behavior, interpersonal relations, communications, leadership methods, decision making, effecting change, time management, and delegation; and finally the need for personal growth (Edwards and Pruyne, as cited in Shtogren, 1978, p. 11).
Laird (1978) in answering questions on why have a training department, posited that training causes people to acquire new, predetermined behaviors (p. 9).

Thus inservice programs for professional development should allow administrators to acquire new horizons, new technologies, and new viewpoints in the management of their organizations and maintenance of their personnel. As educational administrators, they need at their command both scientific and normative ideas. As Levinson (1968) stated:

A professional is a person who must understand and apply scientific knowledge. Unless he does so, he will be buffeted by forces beyond his control. Given knowledge, the professional can choose courses of action; he remains in charge of himself and his work. (p. 1)

In summary, the importance of training, whether it is called inservice education, professional development, or continuing education is paramount in any form of organization. Educational organizations should undertake periodic reviews to determine the administrators' needs. Rapidly expanding human service areas require a broad range of professional knowledge and skills. Continuing professional development should aim at proficiency, at mastery, even at brilliance in the performance of management and administrative responsibilities.

Perspectives of an MBO Training Model

An effective professional development program is
expensive and is a continuous year round task. However, if the program is well planned and implemented, a professional development program can be a very beneficial investment. No educational organization can reach its potential effectiveness without assuming the obligation for updating and strengthening its leaders and staff. The well known method for improvement of leaders and staff is training. In this case, the training is referred to as professional development or inservice training.

Training is generally judged to be valid if it carries over to the job situation. Mosel (1957) said that in order to achieve this transfer, three conditions must be met. First, the training content must be usable. This is largely a matter of being similar enough to the requirements of the job to be applicable. Second, the trainee must acquire—i.e., learn—this usable content. To a considerable extent, this is a matter of motivating her/him to learn. The training situations must, therefore, set up rewards and deterrents which support and reinforce the acquisition of the training content. Third, the trainee must be motivated to change her/his job behavior to reflect what she/he has been taught in training (p. 56-64).

Mosel concluded by giving some alternative solutions for making training a successful event. One alternative was that training should start at the top, or as near to
the top as possible, and then work down. If this is done, each trained level will support and reinforce the training of the level immediately below. The persons at each level can be made to play active parts in determining training needs and in planning the training program. Such experiences, according to Mosel, often are highly therapeutic for executives concerned, giving them an increased awareness of their own behavior and of the climate they set below.

Another alternative is "vertical training", in which two or perhaps three levels are trained together as a group. To carry out this form of training, the first essential step is to break down the status barriers between levels and create a new social structure in which superiors and subordinates become committed in each other's presence to a new set of behavioral values. This creates a set of mutual expectations about how one should behave on the job (pp. 360-367).

Seldik, Magnus and Rakan (1980) contend that in developing a truly effective "training system", one that incorporates implementation, five subsystems must be included:

1. Developmental system,
2. Internal training system,
3. Installation system,
4. Performance system, and
5. Evaluation/Modification System.

They explained that a developmental system encompasses everything needed to produce an instructional training program from the analysis of job requirements to the design and development of courses and materials. This can be done through inhouse training capability or a combination of inhouse and outside resources.

An internal training system provides the internal training staff with the basic instructional skills required to produce and support training programs. This includes training in task analysis, developing objectives, structuring instructional strategies, writing course materials, providing lesson plans, planning lectures, packaging self-instructional materials, and so on.

The performance system, a frequently overlooked element in most developmental models, facilitates the transition of skills and knowledge from the training to the job. An effective performance system emphasizes transfer exercises as job performance aids.

The installation system, another frequently overlooked element, includes the information and controls required to install and implement training programs. The installation system provides the immediate managers or supervisors of trainees with the information needed to administer the training (if the course is taken in the field), to monitor each trainee's progress as each app-
lies what he or she learned, and to evaluate and counsel until desired performance is achieved.

An evaluation system, enables an organization to evaluate the effectiveness of courses in achieving specific organizational goals. This requires instruments and methods for sampling the quality of the curriculum and job performance to determine whether, and to what degree, goals are being accomplished (pp. 10-12).

Seldik et al., (1980) in addition, stress that an organization can achieve significant benefits by installing a "trained system" that incorporates: a systematic process for designing and developing effective training materials that can stand alone; a means to prepare training specialists and instructors to accomplish their roles; tools and techniques to help transition trainees from the course to the job; materials that allow supervisors to support and monitor trainee progress on the job; and a means to measure effectiveness and control the system output evaluation and modification system (pp. 10-12).

Claxton (1976) proposed the following guidelines to overcome the paradox of staff resistance to a development program:

1. Staff development is not "for someone else". Rather it is for everyone on the staff--faculty, administrators, student services staff, support staff, custodial
personnel, secretarial staff, and security officers.

2. Staff development is not something isolated from other activities of the organization. It is a continuous, interactive process that encompasses the entire institution and all its people.

3. Staff development is not a pre-packaged program brought in from the outside and imposed on the organization—rather, the staff looks at what is needed for this particular organization and the design of the program flows from the analysis.

4. A staff development program is not a haphazard use of resources. It is a planned resource allocation which is consistent with the goals of the institution.

5. Staff development is not a "bag of tricks". Instead, it is a context for selecting ways to achieve individual and institutional goals and a means by which they can be achieved. (p. 28)

In his explanation, Claxton suggested that the process of staff development should be a cycle which includes reviewing goals, assessing needs, sponsoring activities, assessing program effectiveness and feeding the results back into planning so modifications can be made.

Richardson (1975) indicated that staff development activities should expose staff members to new ideas and practices which can be translated into action which will contribute to the successful achievement of the goals of
the organization:

The extent of desirable changes which occur as a result of explicitly designed staff development experiences can be maintained depends upon ongoing processes, including committee activity, senates, staff evaluation procedures, and the behavior of those in positions of leadership. (p. 310)

Newman (1980) discusses the 10 guidelines for developing program policy:

1. **Statement of Mission**: The policy should include up front a statement of mission or purpose for the training function....The statement of purpose establishes the rationale for whatever else happens in the training function.

2. **Goals or General Objectives**: Goals or general objectives are statements which speak to some aspect of the mission statement and indicate in general the conditions which are desired to be achieved at some future point in time. They refer to the direction in which the training function intends to move.

3. **Objectives**: --- an objective specifies a single result to be achieved within a given period of time which will accomplish all or some aspect of a goal.

4. **Statement of Philosophy**: The statement of philosophy should be related to the statement of mission. It may amplify what is intended in the mission statement.

5. **System of Management**: Policy statements or guidelines should speak to the issue of organization and authority. There should be policy guidelines on plans for
training, or procedures, on scheduling, staffing, directing, controlling, review and evaluation.

6. **Revisions and Modifications**: Provision should be made for revising and modifying the statements in the light of changing needs and conditions. Provision needs to be made for exceptions to the rules. Policies should be an aid, not a burden. They should not be allowed to enslave the training function.

7. **Facilities and Equipment**: Policy statements should be included concerning the appropriate use of facilities and equipment.

8. **Needs Assessment**: Training experiences and events should be the response of the training function to the expressed needs of the participants. Unless training events are based on valid needs assessment information, then training is a shot in the dark.

9. **Costs and Finances**: Budgeting is a critical factor in every training program. Policy statements should be included which clarify how funds will be used to support the training function.

10. **Records System**: Some acceptable approach to record keeping needs to be designed and stated. This approach should take into consideration the needs of the agency or company, the appropriate information to include, the right to privacy of the employees and the specific uses to which this information will be put. (pp. 22-23)
Newman (1980) suggested that the above ten components were very crucial, and ideal for an effective training policy. However, it is also necessary for one to examine the size of the group to be trained, the budget that is available, and the expected outcome of training before deciding on developing the training policy. The three factors (group size, budget, and outcome) have great influence on policy statements for any form of training. If the training were for solving an immediate crisis, or short term range, and if the training function were not complex, the policy statement could be brief and simple. Some of the components listed above were used as bases for developing this writer's model for professional development.

Laird (1980) cites nine distinct activities of training and development for professional growth, namely: (a) analyzing needs and evaluating results, (b) designing training programs and materials, (c) delivering training programs and services, (d) advising and counseling, (e) managing training objectives, (f) maintaining organizational relationships, (g) doing research to advance the field, (h) developing professional skills and expertise, and (i) developing basic skills and knowledge. His belief is that training should take approaches which actually make a difference in the way of designing the training programs; relating at one extreme to clients,
learners, and staff; at the other, to the way the training is managed (p. 18).

Planning for Professional Development Training

In preparing professional development plans and procedures, Bishop (1976) explained that the best planning is for a relevant, need-oriented, well-conceived, and organized instructional improvement program. To this list of requirements must be added the importance of personal involvement, consensus, and commitment. Requirements not only have to be compatible with the ongoing context, but they also must include use of the mass media, community personnel, noneducational agencies, and a variety of learning sites. The activities planned need to be of an interactive and involved type. Once needs are identified, all personnel and faculty should be involved appropriately in the analysis of system needs (pp. 2-3). Bishop expressed the opinion that professional development should be a continuous responsibility, and must be considered as an integral feature of a system; it must be woven into the ongoing substantive, procedural, and organizational fabrics. It should be the process by which needs become objectives and objectives become programs.

Bishop further claimed that improvement and renewal activities should continue to be one of the major respon-
sibilities of those charged with leadership functions in the organization (pp. 14-15).

In using a system approach to plan a learning design, Davis, Alexander, and Yelon (1974) posited three principles: (a) system goals and resources are specified before design decisions are made, (b) the system design process provides for progressive correction, and (c) the system design process is iterative and interactive" (p. 312).

Principle one, system goals and resources are specified before design decisions are made, "allows the designer to generate many possible alternative solutions and judge the practicality of each one" (Davis et al., p. 312).

Principle two, the system design process provides for progressive correction, allows the designer to "check his work and determine whether the goal has been achieved. After designing and trying out the system, the designer determines the extent to which the objectives were achieved and what unforeseen problems developed. Then he redesigns the system to remove the indicated discrepancies" (p. 312).

Principle three, the system design process is iterative and interactive, allows the designer to design each component of the system to fit together with every other component. The designer "characteristically begins with
an overall plan consisting of general ideas—using the plan as a guide, he works on one part of the system at a time, putting in details—return to the same step—each time adding more detail or correcting errors” (p. 313).

This principle also allows the designer to keep in mind the requirements and the decisions made as each phase is related to and has implications for the requirements and the decisions made in the rest of the phases of the learning system design.

These principles, when used as design strategy, can help "the designer evaluate all important alternatives and arrive at solutions that most efficiently achieve the system goal" (p. 306). An illustration of these principles being used in the phases of system design strategy is as reproduced in Figure 2.

![Diagram](image)

**Figure 2. Basic Strategy of Learning System Design**
(from Davis, Alexander and Yelon, 1974, p.307)

In phase one, analyze system requirements, the designer should "specify and describe the system goals and the availability of resources and constraints" (p.306). Davis

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et al., claimed that "by considering goals, resources, and constraints together, the designer is in a position to evaluate all possible system components and methods of organizing them" (p. 306).

In phase two, design system, the designer should select and organize the particular components and procedures that will be employed in the system, and try them out (p. 306).

Figure 3. The Interrelationship Among the Phases in the Learning Design Process (from Davis, Alexander and Yelon, 1974, p.314)

In phase three, evaluate system effectiveness, the designer should "compare the actual performance of the system with the planned performance. The system may have to be redesigned, depending on the extent of discrepancy between planned and actual performance" (p. 306).

An illustration of the interactive nature of the phases of the design process is reproduced and indicated.

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by two way arrows, as shown in Figure 3. In order to approach training needs systematically, McGhee and Thayer (1961) suggested a three-fold approach to thinking about the training requirements of an organization or a component of an organization. It consisted of determining:

(a) where within the organization training emphasis can and should be placed; (b) what the content of training programs should be, based upon a study of the tasks or duties involved; and (c) what skills, knowledge or attitudes an individual employee must develop if he or she is to perform the assigned tasks of or job duties effectively (pp. 10-11).

Gross (1963) proposed several guidelines for in-service professional development, which included:

1. Each program must be planned, initiated and perpetuated in view of individual staff and institutional goals and needs.

2. Every inservice program should begin with a set of agreed upon objectives which give direction to the overall program.

3. Inservice programs must be continuously planned and maintained.

4. The inservice program should utilize the knowledge and skills of the participants as well as those of consultants and other resources.
5. Inservice program activities must be geared to the varying levels of the professionals involved and readiness of the participants.

6. Programs for inservice development should reflect needs of staff and organizations.

7. Inservice programs should use a variety of resources materials, techniques, procedures, and personnel.

8. Adequate budget and facilities should be assigned and made available to the inservice program.

9. Participants in the inservice program should be actively involved in program evaluation. (pp. 114-116)

McLaughlin and Berman (1977) claimed that an effective plan for inservice professional development should have a variety of options and a flexible program format (p. 191). The planner needs to bear in mind and recognize the fact that individuals differ in many aspects. These differences should be respected and accommodated in the planning of inservice programs, and a variety of options and flexibility in program format are vital (Hirschowitz, 1975, p. 213).

Bishop (1976) stated that, in planning an inservice program, it is necessary to design and institute a sequential and comprehensive plan. He concluded that each phase of planning should have the following states: decision making, management, feedback, evaluation, and re-
cycling (pp. 3-5). He further stressed that if the plans for inservice are to be effective, the implementation stage that follows should be clear and should define actions to be performed:

By so ordering the plans, it is possible to organize, specify, and develop; it is also possible to develop alternatives at each level, to prepare cost estimates, and to assign specific accountability measures at each level of operation. (p. 43)

Thus, planning should be the first stage in designing inservice professional development.

Kast and Rosenzweig (1974) presented a complete cycle of integration of planning and control. Planning and control were considered as two interdependent processes: objectives setting → planning → action → feedback → control (pp. 457-458).

Anthony (1965) explained that strategic planning has two control activities: "management control is the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives—operational control is the process of assuring that specific tasks are carried out effectively and efficiently" (pp.16-18).

To insure that a project is carried out effectively and efficiently, the project must be organized, planned, executed, and evaluated (Malcolm, 1958, pp. 177-187; Odiorne, 1970, pp. 180-182).

Planning, by definition, is arranging or laying out
a device or foundation aimed at achieving an end. Webster's dictionary (1970, p. 457) defined planning as "devising a scheme for doing". Since planners for a professional development training project are accountable for results in terms of outputs or outcomes, instead of processes, then sensible planning is the key (Kaufman, 1972, p. 22).

Planning does not mean that one is locked in and has to follow what has been previously specified. Planning is coordinating the various information-processing services, such as communications, records management, mailing, procuring suitable work site, equipping the work areas with functional, efficient and up to date equipment, staffing the office with qualified employees so that the work will flow smoothly and quickly (Keeling, Kallausm & Neuner, 1978. p. 5).

Planning should be performed at all levels of management, in order to achieve the objectives of the organization. Planning then is the management function of analyzing information from the past and the present and assessing probable developments of the future so that a course of action—the plan—may be determined that will enable the organization to meet its stated goals. Morse and Lorsch, as cited by Keeling, Kallaus and Neuner (1978) posited seven principles as guides to effective management of planning. Six of the principles, which are
applicable to this study, are presented below:

1. **Principle of objectives.** The objectives of a business or of a group of functions within the business must be clearly defined and understood (p. 52).

2. **Principle of responsibility.** Responsibility for organization exists with managers at all levels, beginning with top management and extending to the first line supervisor (p. 52).

3. **Principle of unity of function.** All business organizations are composed of various functions that are interrelated and which must work together to achieve the major objectives of the business (pp. 52-53).

4. **Principle of assignment of responsibilities.** An effective organization is made up of people who perform the work assigned (p. 54).

5. **Principle of delegating authority commensurate with responsibility.** Individuals in the organization must be given authority commensurate with their assigned responsibilities so that they can be held accountable for the performance of their duties (p. 55).

6. **Principle of unity of command.** For individuals to know clearly to whom they report, each employee should receive orders from and be responsible to only one supervisor (p. 56).

All of the above principles of effective management of planning were used as bases in developing the planning
stage and the task descriptions called for in each step of this writer's training model. From the principles posited above, Keeling, Kallaus and Neuner (1978) generated five essential tasks in securing effective planning, namely: (a) identifying the major objectives and purposes of the organization; (b) determining the activities necessary to carry out those objectives; (c) determining the most logical pattern of organization to carry out its activities and meet the needs of its workers; (d) fixing responsibility for the accomplishments of these objectives; and finally (e) establishing proper communications and relationships to unify all efforts and develop team spirit (pp. 52-53).

Following is the review of literature relating to implementation of professional development training.

Implementation of Training Development

Implementation, by definition, is carrying out or executing a planned set of activities in order to achieve desired outcomes. Webster's dictionary (1970, p. 303) defined implementation as "carrying into effect".

Seven essential tasks, according to Keeling, Kallaus, and Neuner (1978, p. 424), in securing effective implementation include: (a) identifying the training objectives, (b) outlining the scope and subject matter of the program, (c) identifying the training methods and techniques
that may be employed, (d) describing the types of trainees and instructors who will be involved, (e) assigning responsibility for developing training materials and course outlines, (f) providing for top management's review and approval of the training program, and (g) providing for periodic follow up to evaluate the effectiveness of the program.

The failure in bringing about positive differences in education and training—despite endless approaches, planning, and innovations—according to Kaufman and English (1975), was not due "to lack of energy or dedication but to some less than productive thinking" (p. vii). Specifically, the failure in training or in education was said to be due to the inability of those people responsible for it to specify and demonstrate an understanding of the needs of the participants. Most of the time the target objective and the goals "are not related to a useful and valued set of outcomes" (p. vii). It is difficult to know whether the targeted objectives have or have not been met when the targets are not specified.

Kaufman and English regarded needs assessment as an effective strategy in identifying educational or training needs. They concurred that:

Needs assessment is a critical tool—basic tool for productive, rational, and logical thinking about problems and solutions. It is a tool to be used to functionally separate means and ends. It is a way in which any educator, trainer, learner, or parent can
make sense of intended innovations ranging from program budgeting to locus of control. (pp. vii-viii)

Since needs assessment was accepted as a formal process which determined the discrepancy in and the gaps between the current outcomes and the desired outcomes, the correct analysis of needs ought to be accepted as a formal process of identifying what needs to be done in order to achieve the desired outcome. Stakenas et al., as cited by Kaufman and English (1979), contend that goals or missions often failed because they were selected and implemented without solid evidence of what they should accomplish (p. 11). Analysis of needs ought to be the basic and justifiable process of identifying and prioritizing what things were to be accomplished. Analysis of needs was conceptualized by several writers as a means of selecting successful interventions, after first defining and justifying ends to achieve, and choosing one of the alternative means of getting there (Kaufman, 1976; Kaufman & English, 1979).

Bishop (1976) agreed that the implementation stage is critical in any training project because this is where the plan is executed and effected (p. 115). This stage is often termed the installation or the operation stage (Carver & Sergiovanni, 1969; Tannenbaum, 1969; Kaufman, 1972). Bishop (1976) further testified that "implementation is a complex series of transactions that includes
all the previous phases and all the other processes" (p. 115). However, a well developed inservice education plan can explicitly guide implementation (Harris, 1980, p. 114).

Bishop (1976) stated that, operationally, the implementation stage commences once the decision has been taken to institute a particular planned program, whereas technically, it commences when planned change has been developed, approved and is ready for installation. The planned change, such as revision in content, instructional strategy, materials, equipment, etc., takes place after feedback has been obtained. All above mentioned activities including staff training and market awareness "can be viewed as first stages in the implementation scheme" (pp. 119-120).

The implementation phase, according to Bishop (1976), can be divided into subphases, i.e., preoperation and operation. In a task oriented phase of implementation, the emphasis is on individual roles and responsibilities rather than on structure, organization, or events (p. 123). This writer's model was designed to include all emphases, i.e., individual roles, responsibilities, structure, organization, and events scheduling. Precisely, the model emphasized all three major
phases of task, function, and process. Following is a listing on implementation processes, implementation tasks and implementation functions as listed by Bishop (1976, pp. 126-129).

**Implementation Processes:**

1. Directing--appointing--taking action or putting a decision into effect.

2. Consulting--judgments usually sought as to the most beneficial or worthy action, may propose alternatives.

3. Recommending--being definitely involved but not the decision maker.

4. Obtaining consensus--obtaining general agreement of collective opinion.

5. Conducting workshops--involving participants in activities designed for staff development.

6. Conducting training sessions--a limited involvement of participants designed to achieve specific objectives or skills.

7. Studying--researching--careful or disciplined inquiry directed toward the data collection, clarification, analysis, and/or recommendations for the resolution of a problem or for development.

8. Informing--responding--relaying or conveying information, limited response to a particular communication or situation.

9. Obtaining group decision electing--formal determination or selection of alternatives.

10. Utilizing--using or implementing as previously determined.
Implementation Tasks

1. Plant equipment--acquiring, building, or obtaining rights to large equipment, e.g., TV installations and computers, or significant building modification; making necessary changes, maintenance.

2. Policy--specifications regarding program needs and objectives, designation of budget requirements, high level procedures to insure progress and implementation; support of implementation procedures.

3. Evaluation program--evaluation of overall program, concern for balanced instrumentation procedures; utilizing standards and procedures, providing feedback.

4. Evaluation staff--determining personnel competencies to effect particular curricular changes; ongoing evaluation.

5. Evaluation learners--determining personnel competencies to effect particular curricular changes; ongoing evaluation.

6. Orientation climate--establishing tone or climate for change; maintaining a high level of understanding and commitment.

7. Training--involving participants in specific tasks necessary for achieving a particular outcome; maintaining and improving competencies.

8. Materials management--selecting, procuring, and distributing instructional materials; maintaining flow and coordination.

In each task description, a semicolon separates those aspects of implementation that are preoperation from those that are operation responsibilities.
9. Materials staff competencies—determining the performance levels of personnel for utilization of instructional materials; continuous evaluation of effectiveness of materials and use.

10. Organization school staff—determining criteria, patterns, and organizing staff to implement curriculum; making necessary staff adjustments.

11. Schedule school, pupil—developing or overseeing student schedules; making necessary changes and assignments to program areas.

12. Staff selection—selecting staff for specific assignments; making necessary adjustments.

Implementation Functions

1. Deciding—making the critical judgment with respect to what is to be done in a particular situation or course of action.

2. Implementing—directing—effecting previously determined decisions, policies, or procedures.

3. Monitoring—active surveillance or supervision with authority to intervene.

4. Designing—preparing plans that serve as guidelines for subsequent developments or actions.

5. Evaluating—determining the value or worth; making an appraisal in order to find strengths and weaknesses.

6. Analyzing—gathering evidence of and examining factors or parts in terms of the total.

7. Mediating—working with contending parties in order to bring about a settlement or compromise.

8. Training—helping others to become skillful or proficient in a particular task or process.

9. Planning—forming a plan (scheme or method) for doing something specific.
10. Organizing—making systematic or orderly arrangements for a program or activity.

11. Coordinating—performing integrating tasks or processes.

12. Communicating—relaying or conveying information.

13. Attending—being informed with interest or commitment. (Bishop, 1976, pp. 126-128)

Bishop concluded by claiming that:

Implementation is the culmination of a series of activities and events that began with diagnosis and proceeded through the planning stages of defining objectives, structuring and designing, developing, and validating. The implementation phase is where procedures, plans, and product impact to achieve the desired objectives. (p. 140)

To implement, according to Harris (1980), is:

to select a training plan, make arrangements, and lead participants through a sequence of meaningful learning activities; and to train personnel in specific procedures for conducting inservice training sessions to assure that basic techniques for leading discussion, presenting visualizations ... will be skillfully used. (p. 148)

In all phases of planning and implementation activities, Beckhard (1956) concluded, it is important that the members of the planning committee have: creative ideas; understanding of participants' needs; familiarity with meeting procedures, to include presentation methods and processing skills, subject matter knowledge and experience; skills in getting information from participants; acceptance as representative by peers, subordinates, and superiors; and skill in public relations (pp. 9-18).
Literature for planning and implementation of training development was reviewed and pertinent points presented in the two sections above. Following this, a review of literature pertinent to evaluation of training development was completed.

Evaluation of Training Development

As the importance of professional development and inservice training has gained broader awareness and acceptance, the need for evaluation processes has become quite evident. Inservice educators are being constantly confronted with the question, "what impact is the inservice program having on professional development?" Related questions concerning who should be involved in the evaluation process and what criteria and evaluation strategies can be used have made evaluation of inservice training a much discussed, yet little understood, topic. In an attempt to provide answers to some of the questions related to evaluation, this writer reviewed some pertinent literature on the subject which can be applied to inservice program and inservice design.

A conceptual and methodological definition of evaluation in that it is the procedure used in determining the value or worth of a process or thing (Phillips, 1968, p. 2). Stufflebeam (1971) defined educational evaluation as the process of delineating, obtaining, and providing
useful information for judging decision alternatives (p. 40).

Stufflebeam (1971) viewed the evaluation function as serving two main roles; providing information for decision making and for accountability. The former calls for a proactive evaluation application, as information is provided to decision makers in advance of when they must make decisions. Hence, the criteria for evaluation of such information are: (a) relevance to the decision to be served, and (b) time when the information is needed. This type of evaluation, in general, is equivalent to formative evaluation as defined by Scriven, cited in Stufflebeam (1979, p. 8). Formative evaluation can help in developing programs and ensuring their chances of success.

Providing information for accountability is a retroactive application of evaluation that provides information after efforts have been completed, and after all implementation decisions have been made. This kind of information helps hold the service organization accountable for the content and quality of their work. Evaluation for accountability is similar to what Scriven 1979, termed summative evaluation (p. 8).

In evaluation of a training program, especially an inservice program, the functions, according to Brinkerhoff (1980), are threefold, namely:
1. To facilitate planning: determination of program goals and strategies.

2. To facilitate and develop a program's implementation.

3. To assess the effects of inservice programs upon work environment. (p. 16)

Brinkerhoff (1980) says that there are two purposes in planning evaluation: (a) to determine the proper goals for an inservice program, and (b) to help determine the best strategy for meeting these goals. These purposes may be accomplished first by collection of information about needs, strengths, weaknesses, and other factors within the potential program's environment. Then, evaluation can be applied to identify, compare, and assess alternative strategies, or to determine the adequacy of a given approach (pp. 17-23).

Evaluation of implementation is dependent upon the developmental stage of the program, and will need to focus upon different purposes. Some alternative focuses for evaluation efforts during the implementation stage are evaluation of: (a) installation, with the purpose of determining the extent to which the program is being installed and is operating as designed; (b) processes, which focus on the intention of discovering and clarifying a causal relationship with the program's operation; (c) achievement of terminal objectives, which aim at
evaluating the "end point" objectives of the inservice intervention; and (d) documentation/quality control, which focuses on ensuring that the program is delivered within tolerable levels of variation from standard practice.

Impact evaluation has a threefold focus. It should aim to determine: (a) the extent to which inservice "graduates" are applying their skills to job performance, (b) the difference noted in job performance when the competencies acquired have been used, and (c) whether the conditions which inspired the inservice program have been altered in any significant way (Brinkerhoff, 1980, pp. 17-28).

Provus, as cited by Stufflebeam (1979) contended that evaluation always involves determining the discrepancy between performance and some standard. He also contended that a program staff should respond to discrepancy information by changing their performances so that the discrepancy will be removed. The discrepancy evaluation includes three stages, namely: (a) design--assesses the extent to which the program design is being properly implemented, (b) interim results--assesses whether the project is achieving its objectives. When the discrepancy between the interim results and objectives has been removed, the project is said to be stabilized and ready for the final two stages; and Stage 2--assessing the cost-
benefit effect (pp. 12-13). Thus, there are five stages overall, according to Provus.

Scriven (1974), in his Pathway Comparison Model for the evaluation of training program processes, outlined the steps of: (a) characterizing the nature of a program; (b) clarifying the nature of the questions to be addressed; (c) assessing evidence about cause and effect relationships between independent and dependent variables in the program; (d) comprehensively checking for likely consequences of the program; (e) determining and assessing the criteria of merit and the philosophical arguments pertaining to the program; (f) assessing various kinds of program costs; (g) identifying and assessing the program's critical competitors; (h) performing a needs assessment to determine the social utility of the program; (i) and forming a conclusion about the merit of the program (pp. 97-143).

The nine step guide to evaluation seems to encompass everything that is needed in an evaluation process, i.e., from planning of a program through modifying it based on the outcome of the evaluation. Though all the steps must be completed, they do not necessarily follow the outlined sequence. One can start the evaluation process by performing a needs assessment to determine the social utility of the program, or by characterizing the nature of a program. It is imperative to recognize that evaluation
of training must deal first with where the training is to be done and the purpose of the training. The major goal and purpose of training evaluation should be to help learn about training and to apply these learnings to the improvement of professional development planning, implementation methods and program content design to meet the required needs. Evaluation then, ought to help discover, define, clarify and analyze the mistakes made in training as a whole and as a part. The outcome of the evaluation should relate to whether training achieves or does not achieve what it sets out to do.

Brinkerhoff (1980) regards evaluation's function as assisting with the planning and designing of inservice so that it can avoid errors and be as responsive as possible to the identified needs. Such evaluation should be perceived as a formative learning process, and should recognize the magnitude of problems faced by inservice education (p. 5).

The concepts of the CIPP method of evaluation described by Stufflebeam (1971) are worth looking at. CIPP is an acronym for context evaluation (which proposes to assist in choosing goals), input evaluation (which proposes to assist in identifying and assessing the relative merits of alternative project designs), process evaluation (which proposes to assist in giving guidance to making implementation decisions), and product evaluation.
(which proposes to serve as a tool for recycling decisions) (pp. 23-28).

The CIPP evaluation model is especially well suited to the evaluation of inservice training, and formed the basis for the evaluation approach incorporated into the presently proposed model for training professional administrators.

Evaluation has often been regarded as ranging from the highly informal to the highly formal. Informal evaluation has consisted of judging, estimating, or giving opinions about the extent to which certain changes have occurred or goals have been met. Formal evaluation has involved carefully collecting and treating data about progress toward planned or prescribed goals (Provus, 1971; Stufflebeam, 1971; Scriven, 1979).

Keeling, Kallaus, and Neuner (1978), in viewing the principle of evaluation, stated that "a sound training program provides for periodic evaluation and measurement of its effectiveness" (p. 424). The eight tasks required in conducting the evaluation and measurement of a training program, according to them, included: (a) checking the results of the training against the objectives of the program; (b) establishing standards of learning time against which the progress of trainees may be checked; (c) developing data on trainee performance before, during, and after training; (d) obtaining reactions from the...
trainees, preferably in writing about what they liked in the training program, what they disliked, and suggestions for improvement; (e) keeping records on the progress of each trainee; (f) testing the trainees on the abilities, skills, and knowledge acquired; (g) providing for the instructor to rate each trainee during and at the end of the training program; and (h) following up on the trainees by periodically observing the long range effects of their training (p. 425).

A second acronym—CDPP, for Context, Design, Process, and Product—was developed by Randall (1969). In CDPP, the meaning of context is investigation of participants' needs and related problems, etc. Design suggests program development in which money, personnel qualifications, facilities, scheduling, and the like are instrumental. Process is the monitoring of program. Product means measurement of effectiveness of the program at its conclusion (pp. 40-44).

Another well known model for evaluation is the EPIC, or Evaluative Programs for Innovative Curricula. The cubicle model of EPIC shows one visible panel as Behavior, which is subdivided into the cognitive, the affective, and the psychomotor. A second visible panel is Instruction, which has within it organization content, method, facilities, and cost. A third visible panel is called Institution, which has these parts: participants, in-
structors, administrators, and society. The EPIC model, on the other hand, is said to reckon with five variables: Variable I—prediction sources, which call for examination of types of instruction; Variable II—descriptive variables, which includes instructional techniques and institution constraints; Variable III—variable of objectives of the program; Variable IV—variable of behavior which includes instructions, institution and participants; Variable V—variable of effectiveness, which requires analysis of all data collected (Hammond, 1971, p. 5).

Characteristics of evaluation, as pointed out by many writers (Kindvall & Cox, 1970; Kerlinger, 1973; Macy, 1975, etc.), were several: (a) Presence of values and valuing—the evaluators must consciously recognize the values that they hold for the evaluation and make value judgments regarding the effects of the evaluation at the conclusion or the evaluation; (b) Orientation to goals—evaluators must be consistent in both the evaluation devices and learning experiences expected of participants; (c) Comprehensiveness—the evaluators must make use of numerous and varied media, though some may have to be invented; (d) Continuity—the evaluators must evaluate frequently, and evaluation must be recurrent and continual if not continuous; (e) Diagnostic worth, validity, and reliability—the evaluators must use instruments
which are capable of: (i) diagnosing specific aspects of educational situations, (ii) describing what they purport to describe, and (iii) measuring the effects of an educational experience accurately on repeated occasions; (f) Integration of findings—the evaluation should serve to integrate findings about educational institutions and phenomena.

If an increased focus on professional development and inservice education is to be worthwhile, comprehensive evaluation that is responsive to the needs, purposes and outcomes is essential. From the literature review on this subject, one may conclude that evaluation is effective when it begins in the workplace—with broad context analysis to identify real needs—and ends by returning to the workplace to determine the impact of programs upon needs, and the impact of changing needs upon the design of future programs.

The evaluation designs and models discussed here were used as basic guidelines in developing the evaluation stage, evaluation steps, and evaluation task descriptions of the writer's model.

Models that Influenced the Study

Two models that influenced the writer's proposed model, which will be presented in Chapter III, are reviewed in this section. The two models are the OCUTE
Rubin and Hansen (1980) developed the OCUTE program development model, which can be utilized by a variety of groups, as shown in Table 3.

Table 3
The OCUTE Program Development Process (from Rubin and Hansen, 1980, p.109)

---

**Phase I - Develop proposal**

Step 1 - Analyze project environment
Step 2 - Determine possible project goals
Step 3 - Conduct preliminary needs assessment
Step 4 - Select project goals
Step 5 - Write proposal

**Phase II - Plan program**

Step 1 - Validate needs
Step 2 - Prioritize project goals
Step 3 - Determine program objectives
Step 4 - Design and develop programs

**Phase III - Implement program**

**Phase IV - Assess programs**

The OCUTE program development process has four phases: (a) develop a proposal, (b) plan the program, (c) implement the program, and (d) assess the program. In Phase I, five steps or activities are required. These activities are: (a) analyze project environment, (b) determine possible project goals, (c) conduct preliminary needs assessment, (d) select project goals, and (e) write
proposal. All the five steps are used to secure adequate information to be included in the proposal.

Phase II, plan program, has four steps: (a) validate needs, (b) prioritize project goals, (c) determine program objectives, and (d) design and develop programs. As commonly claimed and used by many practitioners, validation of needs assessment is here used as a crucial factor for determining the rest of the steps in the phase. Having determined possible project objectives, the planners reassemble to formulate the design and develop the program. An effort is made here to insure that the project objectives, the design and the programs developed, complement the requirements in Step 1 of Phase II.

Phase III and IV are phases for program implementation and program evaluation or review. There are no steps proposed for these phases. However, a brief explanation on evaluation was given:

The complexity of the evaluation depends upon how measurable they are. Both preprogram and post program measures are used, involving objective and subjective feedback from participants. This formative evaluation becomes a part of the inservice process. (Rubin & Hansen, 1980, p. 110)

Bishop (1976) also suggested possible steps and sequences in his model, named Project Tasks Process, as shown in Figure 6. In Figure 4, Steps 1 through 5 provide analysis of the needs of participants and of the objectives of training which are complementary to the organizational goals. Having determined the target pop-
ulation, a general format of the training activities is designed. Tasks 1 through 5 of Bishop's Project Tasks model are somewhat similar to Steps 1 through 4 in Phase I of the OCUTE program development process.

Tasks 6 through 10 of the Bishop model provide for synthesizing and implementing the plan for action (p. 61). Having accomplished all tasks from Step 6 through Step 10, a systematic plan will have emerged. The OCUTE program development process model embraces Bishop's Steps 6 through 10 in its Phases II through IV, although they are not spelled out. Phase IV of the OCUTE model also provides a means for recycling of the training plan, design implementation, and evaluation.

Both models illustrate the need to have a developed strategy in which the steps involved can relate to each other in achieving both a total process and a terminal point. Both models contribute to an understanding of what may transpire, as well as to assisting personnel in knowing that progress is taking place. Each model involves a decision making process, management process, feedback process, evaluation process, and recycling process. Likewise, in both, each phase is dependent upon each other, and each has subordinate elements.

Rationale for Developing a New Model

Corey (1957) stressed that professional development
Figure 4. Project Tasks Process (from Bishop, 1979, p.60).
programs, which he termed "inservice education" had not received sufficient attention in the professional literature and practice (p. 1). It was interesting to note that in recent years much has been done to improve training programs for professional development of educational administrators. Numerous models for the purpose were developed. Among those models which have been officially implemented are Crawford's (1971) Human Resources Research Organization Model for Curriculum Engineering, The Project Tasks Process (Bishop, 1976, p. 60), The Control Process for Solving Micro Training Needs (Laird, 1978, p. 76), and the Oklahoma Consortium for Urban Teacher Education (OCUTE) (Rubin & Hansen, 1980, p. 109).

All the above mentioned models were developed based on careful and thoughtful rationales. They had explicit justifications and directions. These models have been field tested, officially implemented and accepted. However, these models have a tendency to become more comprehensive as their distinctive goals are pursued.

In each of the above mentioned models, six modes of change process were apparent: (a) orientation, (b) preparation, (c) mechanical use, (d) routine and refinement, (e) integration, and (f) renewal (Loucks, Newlove & Hall, 1975, pp. 8-9). These modes of change process are crucial to all training models. However, these models do not evaluate each mode as they progress; evaluation is
only done at the end of the process. Thus the problems with these models are: (a) they tend to use only summative evaluation, (b) they lack formative evaluation, (c) they do not have self correcting procedures built into their phases.

Therefore, based upon the above deficiencies, a new model which incorporates both formative and summative evaluation, with self-correcting procedures built into each step and stage, was deemed necessary.

Summary

Chapter II has examined the literature crucial to:

1. The MBO concept, namely the areas of: (a) the evolution and current status of MBO, and (b) general perspective leading areas to MBO; and

2. Represents literature review crucial to MBO effective training development for educational administrators, namely the areas of: (a) the need for training development, (b) perspective of an MBO training model, (c) planning for professional development training, (d) implementation of training development, (e) evaluation of training development, and (f) models that influenced the study. The final section of this chapter was a presentation of the rationale for developing a new model.

How this review was used in developing the needed new model will be discussed in Chapter III. The differ-
ences between the above mentioned models and the proposed model will be demonstrated as one reviews the proposed tasks for operationalizing the model listed in Appendix D and introduced, with a matrix which served to organize them, in the final section of Chapter III.
CHAPTER III

MODEL DEVELOPMENT AND VALIDATION

Introduction

Chapter III presents a model for professional development of educational administrators that improves upon existing models. The validation of the model's states, steps and tasks, through the support of pertinent literature, follows the presentation of that model. Following the validation and model is a matrix for organizing the tasks proposed as necessary to operationalize each step within the model's three stages. The tasks themselves comprise the survey instrument that constitutes Appendix D.

Restatement of the Purposes

The purposes of this study were two-fold. The primary purpose was to develop an MBO model for professional development of educational administrators. This model is to be validated by a panel of experts. The second was to establish the descriptions of the tasks for operationalizing the model. The proposed tasks were based largely on literature reviewed in chapter II and on the preception of this writer.
Structure and Components of the Model

The model proposed represents a systematic and organized design, which can be used as an approach to and a tool for designing an MBO project. The model integrates the philosophy and theory obtained from the literature published from 1950 through 1980 into its framework.

There are three stages in the conceptual development of the model of professional development for educational administrators, viz:

1. Planning,
2. Implementation, and
3. Evaluation.

Within each stage of the model are four common steps, namely:

1. Analysis,
2. Development,
3. Operation, and
4. Evaluation.

These three stages and the four common steps within each stage are the result of an exploration of various sources in the literature on MBO projects and models. Included among those sources were Drucker (1974), Odiorne (1972), Kaufman (1972), Bishop (1976), Claxton (1976), Newman (1980), Rubin and Hansen (1980), and others.
The information gathered from those sources and others has been synthesized, along with the perception of the present writer.

Figure 5. is the model for an MBO professional development program. Each stage and step in the model is laid out in a natural sequence; there should be no dead ends until the whole process is completely finished and evaluated. All the stages and steps were designed to concur with a system approach. The system approach, in this context, offers a set of crucial strategies, represented in the figure by the outward bound large circle, each containing four blocks. The large circle represents the stages and the contained blocks represents the steps of the model.

As described by Davis, Alexander and Yelon (1974), a systems approach design includes both iterative and interactive processes (p. 313). The iterative and interactive processes among the stages and steps are indicated in Figure 6 (which is supplementary to figure 5), by the two-way broken and unbroken arrows pointing sideward, downward and upward until the cycle is completed and restarted.

Validation of the Model's Stages and Steps

Following is a discussion of the literature supporting the validation of the stages and steps in the model.
Figure 5. Model for MBO Professional Development of Educational Administrators
STAGE: 1.0
PLANNING

STAGE: 2.0
IMPLEMENTATION

STAGE: 3.0
EVALUATION

Figure 6. Subsection of Model for MBO Professional Development of Educational Administrators
Stages of the Model

The model offered a set of crucial strategies which were presented in three sequential stages. These three stages were Planning-1.0; Implementation-2.0; and Evaluation-3.0. In Figure 7 these three stages were represented by the largest circle.

The literature reviewed supported the notion that an MBO model should start with planning, followed by implementation and finally by evaluation (Malcolm, 1958; Odiorne, 1970; Kast & Rosenzweig, 1974; Bishop, 1976).

Planning-1.0.

Bishop (1976) states that, in developing a model for professional development of educational administrators, it is necessary to design and institute a sequential plan. Each part of planning should comprise decision-making, management process, feedback evaluation and recycling (pp. 3-5). On one hand, organized planning, as described by numerous authors, stressed the importance of realistic diagnosis of needs, adequate resource retrieval, collaborative planning and solution building, and systematic design and evaluation of alternatives (Gross, 1963; Claxton, 1976; Newman, 1980; Seldik, Mangnus & Rakan, 1980).

On the other hand, organized planning helps to or-
ganize, specify and develop plans, prepare cost estimates, and assign specific accountability measures at each step or level of operation. It is possible for an organized plan to spell out in detail the activities in terms of overall strategies and the explicit sequence of action steps that make up these strategies (Malcolm, 1958; Kaufman, 1972; Bishop, 1976; Rubin & Hansen, 1980).

Planning, shown as Stage 1.0 in the model, is perceived as necessary and important by this writer because a healthy and effective MBO program or project hinges upon careful planning of the steps that need to be taken and of the tasks involved in accomplishing each step if the particular needs of the people involved are to be addressed. The numerous resources on planning that were reviewed indicated that there is no one best MBO development approach, but that if MBO is to be effective, it has to be well planned and organized so that the needs and the objectives of the MBO program fit the nature of the tasks to be performed (Mosel, 1957; Higginson, 1976; Claxton, 1976; Laird, 1980; Rubin & Hansen, 1980).

This writer reasoned that since planning is the key to a successful MBO program, it must come before implementation. An MBO program without a plan is impossible to prepare for and impossible to evaluate. Good planning should insure appropriate use of energy and funds and bring about the right mix of resources, trainers, and
trainees aimed at achieving the common objectives.

The high degree of congruence between the literature reviewed and the present writer's decision in selecting planning as the first stage of an MBO project model testified to two conclusions: (a) the stage developed concurrently with the literature and thus is philosophically and theoretically valid; and (b) since it is a valid stage, a model including it can be responsive to the purpose for which it was established.

Implementation-2.0.

Kast and Rosenzweig (1974), and National Inservice Network (NIN) (1979-1980), emphasized that when a plan had been finalized the next stage should be implementation. Implementation is a complex series of transactions that include all the steps, phases, and processes developed in the planning stage (Carver & Sergiovanni, 1969; Tannenbaum, 1969; Kaufman, 1972; Bishop, 1976).

An effective implementation stage should be systematically planned and defined and should begin with diagnosis of needs and proceed through structuring, developing, and validating (Bishop, 1976; Claxton, 1976; Seldik, Magnus, & Rakan, 1980). In other respects, implementation is a critical stage and should be clearly defined, step by step, based on the agreed upon needs of the participants and the organization (Mosel, 1957; Gross, 1963;
Bishop, 1976; Claxton, 1976; Laird, 1980). The implementation process and tasks, if well stated and defined, make possible a smooth flow of activities and accomplishment of goals (Bishop, 1976; Harris, 1980).

Implementation, shown as Stage 2.0 in the model, is perceived as another universal and crucial stage if an MBO program or project planning is to eventuate. Operationalizing the planning activities is implementation, or installation of agreed upon actions finalized in the planning stage. Operationalizing planned activities hinges on a well stated and well defined implementation process, including functions and tasks. The present writer's decision to select implementation as the second stage of the model was based on its advocacy and validity as proposed in the literature.

Evaluation-3.0.

Many authorities in the field of professional development claimed that the final stage of an MBO program or project is evaluation, including Malcolm, 1958; Odiorne, 1970; Provus, 1971; Kast and Rosenzweig, 1974.

Evaluation as a final stage should focus on assessing the soundness of the planning, assessing the effectiveness of the implementation and assessing the effectiveness of the program. The information obtained from the evaluation in the final stage should serve as feed-
back for deciding whether the project is to be retained, modified or dropped (Provus, 1971; Stufflebeam, 1971; Scriven, 1974; Brinkerhoff, 1980). Brinkerhoff further claimed that evaluation, as the final stage, aimed at facilitating planning, facilitating implementation, and assessing the cost effectiveness of the project.

Selection of evaluation as the final stage in the model was based on adequate and sound support in the literature. Therefore, the selection was judged to be theoretically and philosophically valid.

Steps of the Model

The model proposed a set of common components which were presented in four sequential steps. These four steps were Analysis-1.1, 2.1, and 3.1; Program Development-1.2, 2.2, and 3.2; Operation-1.3, 2.3, and 3.3; Evaluation-1.4, 2.4, and 3.4.

In Figure 6, these four steps were represented by four blocks containd within each stage. As illustrated in Figure 7, the two-way unbroken arrows indicate iterative and interactive processes between the blocks. These four steps were laid out in sequential order. One has to start with step 1.1 and proceed to step 1.2, thence to step 1.3 and so forth. While working on any one step, one can go back to the previous step or to the next step and further work on it. However, for the model
to be effective, it is recommended that the steps be followed sequentially. The literature support for each step is cited below.

**Analysis-1.1, 2.1, and 3.1.**

Kaufman and English (1975) claimed that needs assessment and analysis served as a critical tool and as an effective strategy for identifying training needs and objectives (pp. vii-viii). The analysis of needs as a formal process for identifying, prioritizing and developing program objectives was supported by many other authorities in the field, including Bishop, 1976; Kaufman and English, 1979; Harris, 1980; and Rubin and Hansen, 1980.

Lack of an analysis of needs and/or a statement of program objectives has led to failure of goals or missions for MBO projects (Kaufman, 1972; Kaufman & English, 1975). Since needs assessment and program objectives were accepted as critical tools in an MBO project, and since they function as means of determining the discrepancy in and the gaps between the actual outcomes and the desired outcomes, **analysis** should be the first step within each stage of the model.

The support from numerous authoritative sources found in the literature gave evidence that analysis as a first step was valid philosophically and theoretically.
Development-1.2, 2.2, and 3.2.

Gross (1963), Bishop (1976), Claxton (1976), and Newman (1980), testified that when analysis of needs had been accomplished, the next step should be development. Further testimony was provided by Rubin and Hansen (1980).

Analysis is an important beginning step, but it is not sufficient in itself without further delineation as to how the program will be developed. This step is critical in all stages of an MBO project. Analysis and development are important because they focus on insuring the availability of the necessary training materials, facilities, equipment, personnel, ancillary services, and finance (Hamonds & Wallace, 1974; Bishop, 1976; Claxton, 1976; Newman, 1980; Rubin & Hansen, 1980).

The evident importance of development as an immediate next step following the completion of analysis of needs was strongly supported by the literature; therefore, the decision to include development as step 2.0 of the proposed model was judged to be valid.

Operation-1.3, 2.3, and 3.3.

Having completed the program analysis and development, the next crucial strategy is operation. Bishop (1976) termed the step as doing implementation tasks. The relationships between program development and program
operation is that the latter has to rely heavily on the former. Many writers contended that operation should be based on the strength of the available personnel, facilities, equipment, ancillary services, and financial calculations and then rationalized (Bishop, 1976; Harris, 1980; and Laird, 1980).

Keeling, Kallaus and Nuener (1978) stated that the step of operation should come after identifying training objectives and outlining the scope and subject matter (p. 424).

The proposed model's third step thus is congruent with the philosophy of MBO professional development pervading the literature. Since it is in line with the theory professed by writers who are authorities in the field, it was concluded that the development of the third step, i.e., operation, was philosophically and theoretically valid.

**Evaluation-1.4, 2.4, and 3.4.**

The fourth and final step proposed as necessary within each stage of the model was supported by prominent writers, including Provus (1979), Stufflebeam (1971), Scriven (1974), and Brinkerhoff (1980).

Hammond (1971) and Randall (1969) stated that evaluation is essential for measuring the effectiveness of the program at its conclusion. Other authors suggested
that evaluation of program is so necessary that it has to be an integral part of planning and should be done on a continuous basis (Gross, 1963; Davis, Alexander & Yelon, 1974; Bishop, 1976; Harris, 1980).

Since the literature reviewed posited that evaluation should be the final step, therefore, the step was judged to be valid theoretically and philosophically.

Evaluation, as proposed in the final step (3.4) of the model, differs from the evaluation as proposed in the final stage (3.0). Evaluation as a step (3.4) deals with formative evaluation. Evaluation as a stage (3.0) deals with summative evaluation of the MBO development project.

It is important to note that the four steps in every stage, though each appears three times, do not have the same goals and objectives. Step 1.1 in Stage 1.0, Analysis, deals with goals and objectives for the planning stage. Step 2.1 in Stage 2.0, Analysis, deals with goals and objectives for the implementation stage. Finally, Step 3.1 in Stage 3.0, Analysis, deals with goals and objectives for the evaluation stage. The same distinction could be made for each of the other steps within each stage.

Following is an introduction to the tasks judged to be appropriate and necessary in operationalizing the four steps in each of the three stages.
Task Descriptions

In order to operationalize the model, it was necessary to list specific tasks for accomplishing each step within each stage of the model. Most of the task descriptions were derived from the literature. However, the arrangement of the tasks generated from the literature and additional tasks incorporated in the list were based on the perceptions of the present writer. They constitute the instrument to be found in Appendix D.

The numbering system used in the listing of task descriptions was designed to indicate to which stage and to which step within that stage each task relates. For example, "1.1.1." indicates the first task in Step 1.1 (Analysis) in Stage 1.0 (Planning). The relationships

<table>
<thead>
<tr>
<th>Stage</th>
<th>Step</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>1.1 Analysis</td>
</tr>
<tr>
<td>2.0</td>
<td>2.1 Analysis</td>
</tr>
<tr>
<td>3.0</td>
<td>3.1 Analysis</td>
</tr>
</tbody>
</table>

Figure 7. Matrix for Organizing MBO Training For Professional Development Tasks
may be readily established by referring to the matrix in Figure 9, above.

Summary

Chapter III has provided a restatement of purposes for the study, need for the model and a conceptualization of the model (see Figures 5 and 6). It has described the structure and components of the model and has provided validation of each stage and step of the model. Figure 7 has provided a matrix for relating the stages, steps and numbering sequence in the model. Finally, a matrix for organizing the proposed task descriptions for operationalizing each step within each stage of the model was presented.
CHAPTER IV

DESIGN AND METHODOLOGY OF THE TASK VALIDATION

Introduction

The second purpose of this study was to validate the descriptions of the tasks proposed for operationalizing each stage of the model presented in Chapter III. The tasks proposed were based on the pertinent literature reviewed in Chapter II and the perceptions of this writer.

In order to accomplish the purpose of this study, four actions were required and these are discussed in this chapter, as follows: (a) developing an instrument, (b) selecting a panel of experts, (c) administering the instrument, and (d) analyzing the data collected.

Design of the Validation

The design of this study included a survey method which entailed development of a survey instrument containing structured questions. The survey instrument was comprised of the task descriptions introduced in Chapter III and detailed in Appendix D. It was intended to elicit the judgments and perceptions of the validating panel members as to whether the proposed task descriptions were appropriate and necessary. "Appropriate" was defined as the task being suitable for accomplishing the
goals of the model. "Necessary," in the context of this study, was defined as the task being required in order to operationalize the model. The structured follow up questions were developed to elicit further information concerning the tasks proposed.

Both the survey instrument and the follow up questions were administered to the selected panelists for their reactions. A "yes" or "no" response in both the "appropriate" and "necessary" columns was required for each item in the survey instrument and a written response was required for each follow up question. A "yes" response implied support for the proposed task and a "no" response implied lack of support for the proposed task. Responses for the follow up questions were used to supplement the information obtained through use of the survey instrument.

The Survey Instrument

The initial undertaking was the development of an appropriate instrument for surveying the reactions of the panelists as to whether each proposed task was appropriate and necessary. Due to the length of the survey, the instrument was broken into two parts. Part one listed the proposed task descriptions in a written survey form, and part two elicited supplementary information, through follow up questions, regarding the same subject matter.
The survey instrument was comprised of the task descriptions introduced in Chapter III. Since the items in the survey questionnaire were organized according to the model's three stages, it was decided to administer one stage at a time. Thus Stage 1.0 of the instrument asked for responses concerning the tasks proposed for each step in the Planning stage; Stage 2.0 of the instrument called for responses concerning the tasks proposed for each step in the Implementation stage; Stage 3.0 of the instrument elicited responses concerning the tasks proposed for each step in the Evaluation stage.

The rationale for dividing the survey instrument into three stages was that it was necessary to: (a) remind the panelists of the tasks proposed for each stage, and (b) break the monotony and boredom of having to respond uninterruptedly to the lengthy instrument.

The instrument is shown in Appendix D.

The Follow Up Questions

A set of four questions was developed for the follow up process. The purpose of the follow up questions was to elicit supplementary or additional information regarding the tasks that the present writer believed to be appropriate for each stage. The four questions are shown at the end of each stage and at the end of the survey.

Follow up questions 1 and 2 were asked after each
stage had been completed by the validating panelist. Questions 3 and 4 were asked after completion of the final stage. Responses obtained from these four questions helped the investigator to determine: (a) the adequacy of the proposed task descriptions, (b) tasks which were considered appropriate and necessary but were not included, and (c) the appropriateness of the sequence of the tasks.

Responses obtained from the survey are reported in Chapter V.

Pilot Test and Its Result

A pilot test of the survey instrument and the follow up questions was administered on November 19th, 1984. Persons involved in the pilot test were three doctoral candidates in the Department of Educational Leadership, one in the Department of Counselling and Personnel, and one director, College of Education, Western Michigan University.

The purposes of the pilot test were to: (a) establish the administrative procedures, and (b) ensure clarity and simplicity of the instrument's organization, concepts and wording.

No revision resulted from the pilot study of the instrument. Respondents involved indicated satisfaction with administrative procedures, the clarity, and the sim-
plexity of the instrument's organization, concepts and wordings.

Reasons for Using Panel of Experts

The task descriptions proposed for this study were based on many sources from the literature previously reviewed in Chapter II. However, the organization, the grouping, and the packaging of the tasks for each step within each stage of the model were accomplished by this writer. In order to validate whether the tasks were appropriate and necessary, two methods were considered; i.e., use of a field test and/or use of experts' opinions. Due to the time constraint faced by this investigator, the first method, field test, was not feasible. Thus, experts' opinions were sought.

According to Van Dalen and Mayer (1966) testimony of experts is often sought by researchers because experts are intellectual, trained, experienced and better informed than other people. However, total reliance on experts' opinions is said to be "a dubious if not a dangerous practice" (pp. 19-20). To avoid this danger, researchers were advised to exercise many precautions when identifying experts. One means of exercising precaution was said to be by establishing a set of selection criteria. Such criteria were used in selecting a panel for this study.
Selection of Panel of Experts

For the purpose of selecting members to serve on a panel of experts in this study, selection criteria included: (a) employment, (b) knowledgeability, (c) experience, (d) expertise, and (e) willingness to be involved in follow-up activities. These are expanded below.

Employment

Each member of the validation panel had to be currently employed in an educational organization or its equivalent in the U.S.A. Questions used to secure information concerning employment were: "Are you currently employed by an educational organization?" and "What is your current position?"

Knowledgeability

Each panel member had to be knowledgeable about the current trends in MBO, professional development and training. Knowledge could have been gained through work in related fields in accredited higher institutions. The related fields emphasized were educational administration, educational management, human resource development, etc. Questions used to secure information concerning knowledgeability were: "Do you read journals and books related to training and professional development?" "Have
you attended any seminars for training and professional development, and MBO programs within the last few years?" and "Are you familiar with systems design for training development?"

Experience

Each panel member had to be experienced in the field of management and training. Experience could have been gained through working as a consultant or with a training association or organization. Questions used for securing information concerning experience were: "Have you conducted, facilitated, or planned professional development seminars or programs?" "Are you a member of any training and development association or organization?" and "How many years have you been actively involved in training and development projects?"

Expertise

Each panel member must have demonstrated expertise in the field of management, training, research, or other scholarly pursuits. Examples of personnel believed likely to demonstrate such expertise included administrators, researchers, training and development officers, directors of programs for professional development, etc. The questions used to secure information concerning expertise were: "Have you had published any of your writ-
ings regarding management, organizational development, and training programs?" "Have you had any other evidence of training competence that you wish to share?"

Follow Up

Each panel member had to be willing to respond by telephone, at some future date, to additional tasks suggested by other panel members. The question used for securing their willingness to participate in the follow up was: "Are you willing to respond by telephone, at some future date, to additional tasks that may be suggested by other panel members?"

Panel Size

The panel had to be large enough to be representative of authorities in the field and small enough to be manageable. It was decided that between 10 and 15 members, each of whom conformed to the above criteria, would be representative enough for the purpose of validating the proposed necessary task descriptions for each of the four steps within each of the three stages of the model.

The Survey

Prior to administration of the survey instrument, permission to conduct the investigation was secured from the Human Subjects Institutional Review Board at W.M.U.
Following that, each validating panel member was orally questioned by telephone or in person, on personal vita to insure conformity to each of the selection criteria. Questions were as indicated above (see also Appendix E). During the period from December 3rd, 1984, 23 persons were queried, 15 were judged to meet all the criteria. Their names and position titles appear in Appendix A.

Each potential member was then apprised of the general nature and purpose of the study, and of the nature of the forthcoming survey. All 15 panel members indicated their willingness to participate, and thus were included as panel members.

On January 6, 1985, each member was given or mailed, three packets of materials. Overall, the instrument package consisted of the following three items: (a) the Instrument Cover Letter and General Directions (see Appendix C), (b) a Summary of the Three Stage Model (see Appendix B, (c) the instrument titled "Task Descriptions for a Training Development Program Model" (see Appendix D).

Upon completion of written responses of Stage 1.0, each panel member was then asked to answer Follow Up Questions 1 and 2. The panel member was then requested, in writing to proceed with Stage 2.0 package and after writing responses to it, was again asked to answer Follow Up Questions 1 and 2. Similar procedures were followed at
the completion of the Stage 3.0 package and, in addition, Questions 3 and 4 were asked.

Data Analysis Procedure

A descriptive analysis, using frequencies and percentages, was used to analyze the data collected. Tables which follow in Chapter V exhibit frequencies and percentages of positive and negative responses for each proposed task in each of the four steps of the three stage model.

The decision rule used for this study was that any task, to be retained, must have been supported by "yes" responses from a simple majority of responding panel members. The rationale for this decision rule was that no single series of task descriptions is perfect for operationalizing a training model. A "no" for the "Necessary" column did not necessarily mean "no" for the "Appropriate" column or vice versa. It was anticipated that an item might have received a "no" due to a semantic or sequencing problem, or both, not because the content was incorrect. Thus, simple majority support was considered a high standard.

Any tasks proposed by the investigator as both appropriate and necessary which did not achieve simple majority support was to have been deleted, and any new and/or additional tasks proposed by panel members were to
have been added. This would have meant a revalidation through telephone contact, of the new tasks proposed as appropriate and necessary by any one of the original panel of experts.

The recorded responses obtained from the follow-up questions are discussed in Chapter V.

Summary

Chapter IV has focused on the second purpose of the study, which was to validate the task descriptions proposed for operationalizing each step within the three stage model developed by the present investigator. This chapter has also discussed the design and the method of the study, including the development of the survey instrument, the pilot test and its result. The identification and the selection of the validating panel members, the survey activity, and the data analysis procedures have also been discussed in this chapter.

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CHAPTER V

REPORT OF THE FINDINGS

Introduction

This chapter is a presentation and discussion of the responses obtained from the fifteen-member panel of experts. The findings are presented in accordance with the discussion in Chapter IV dealing with the analysis of data. The first section of this chapter deals with the profile of the panel of experts. Twelve tables, 5 through 16, are presented, depicting percentages of responses for each task in one step within each stage, with corresponding discussion. Each content area is discussed in terms of the appropriateness and necessity of the tasks proposed, as perceived by the panelists. Additional comments, obtained through follow-up questions, from panel members are presented and are summarized as they relate to the content areas. A further table displays a profile of the panel members.

Profile of the Panel of Experts

The initial undertaking before the formal validation of the tasks proposed was a telephone and/or personal survey eliciting information regarding the qualifications of the validators. The information received was matched
against the selection criteria established as reported in Chapter IV. The criteria included employment, knowledge-ability, experience, expertise, and willingness to participate in follow-up.

Members of the panel included three authors and consultants, one chairman of department, one director of an academic center, one associate director, one manager of human resource development, two deans of a community college, six professors and/or associate professors (see Appendix A). Each member of the panel was either employed or is directly associated with an educational organization. Each member was a professional practitioner in the field of education, MBO, training, and development of professional administrators. Each member had demonstrated knowledge, experience, and expertise in the related area. As all validation panel members were experts in the field of professional development, their responses provided credibility for the appropriateness and the necessity of the task descriptions proposed. Following in Table 4 is a profile of the members of the panel of experts selected.

Report and Discussion of Findings

The following tables indicate a mean percentage of responses to the 196 tasks by 15 experts was 81% with a maximum of 185 and a minimum of 126 for both appropriate-
### Table 4
Profile of the Panel of Experts

<table>
<thead>
<tr>
<th>Person</th>
<th>CE</th>
<th>PR</th>
<th>AT</th>
<th>SA</th>
<th>CF</th>
<th>PM</th>
<th>NY</th>
<th>P</th>
<th>WP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>40</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>2</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>20</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>3</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>26</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>4</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>27</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>5</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>15</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>6</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>31</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>7</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>16</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>8</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>15</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>9</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>15</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>10</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>20</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>11</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>17</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>12</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>24</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>13</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>18</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>14</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>17</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>15</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>14</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

CE = Currently Employed, PR = Professional Readings, AT = Attendance of Training & Conferences, SA = Familiarity with Systems Design Approach, CF = Conducted, Facilitated or Planned Training, PM = Professional Membership, NY = Number of Years of Experience, P = Publications, WP = Would Participate in Follow-Up.
ness and necessity of all the tasks proposed for all of the four steps in each of the three stages of the model.

The mean percentage of responses to the 98 Appropriate tasks by the 15 experts was 91% with a maximum of 96 and a minimum of 77. Also, the mean percentage of responses to the 98 Necessary tasks by the same experts was 66% with a maximum of 87 and a minimum of 26 of all the tasks proposed for all of the four steps in each of the three stages of the model.

This was viewed as relatively high support for all of the proposed task activities, as the percentage of "yes" responses in both columns, for every individual item, exceeded the 51% required by the decision rule of retaining those activities achieving simple majority support.

Each table reports panel members' reactions to the tasks proposed for one of the twelve steps of the three-stage model.

Step 1.1

The perception of the panel regarding tasks for Step 1.1, Analysis, within Stage 1.0, Planning, is shown in Table 5.

Tasks 1.1.1 through 1.1.3, and 1.1.5 through 1.1.6 were viewed as completely appropriate by the experts. The 100 per cent "yes" response to task 1.1.1 indicated
unanimous perception of the task as both appropriate and necessary. The 93% response given to tasks 1.1.4, 1.1.7 and 1.1.8 as appropriate and to tasks 1.1.2, 1.1.3, and 1.1.5 as necessary were also high or above the 51% required by the decision rule of retaining those activities achieving simple majority support. Tasks 1.1.6 through 1.1.8 were viewed as unnecessary by the experts. The five panelists' reasons for not supporting tasks 1.1.6 through 1.1.8 as necessary included: (a) though most activities were appropriate, many or the same activity are not necessary, because doing them would mean that too much time would be spent on the planning of the project; (b) given the usual fiscal, manpower and time constraints, these tasks would not be feasible; and (c) the repetitious nature of the tasks.

Generally the comments attested that tasks could be worded, and the sequence is set up in a number of different ways.

**Step 1.2**

The perception of the panel regarding tasks for step 1.2, Development, within Stage 1.0, planning, is shown in Table 6.

Nine out of eleven tasks, i.e. tasks 1.2.1 through 1.2.9, were perceived as appropriate by the experts, as indicated by the 100% "yes" response for each. Tasks 1.2.10 and 1.2.11 received higher than the simple
<table>
<thead>
<tr>
<th>Step 1.1 Analysis</th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1 Identify the immediate and long range skill needs.</td>
<td>100 0</td>
<td>100 0</td>
</tr>
<tr>
<td>1.1.2 Rank order the immediate and long range skill needs.</td>
<td>100 0</td>
<td>53 47</td>
</tr>
<tr>
<td>1.1.3 Prioritize the problems, projects and/or outcomes to provide the immediate and long range skills needed.</td>
<td>100 0</td>
<td>54 46</td>
</tr>
<tr>
<td>1.1.4 Identify individuals to be part of the planning team(s) based on the key problems, projects and/or outcomes identified in 1.1.3.</td>
<td>93 7</td>
<td>100 0</td>
</tr>
<tr>
<td>1.1.5 Prepare materials for planning team(s) meeting.</td>
<td>100 0</td>
<td>73 27</td>
</tr>
<tr>
<td>1.1.6 Conduct an orientation meeting with planning team(s) members for clarifying priority problems, objectives and/or outcomes.</td>
<td>100 0</td>
<td>36 64</td>
</tr>
<tr>
<td>1.1.7 Divide planning team(s) members into small groups and allow reasonable amount of time on reworking the original list of activities.</td>
<td>93 7</td>
<td>14 86</td>
</tr>
<tr>
<td>1.1.8 Reassemble planning team(s) members to further refine the list.</td>
<td>93 7</td>
<td>14 86</td>
</tr>
</tbody>
</table>
majority. Task 1.2.1 through 1.2.8 received high support as necessary. Three tasks, 1.2.9 through 1.2.11 received lower than 51% support as not necessary.

This particular set of tasks generated two major comments from the panel members. Generally, the comments provided support of the logical and sequential nature of the tasks proposed. One comment stated that all stages are helpful, but not all are necessary. The concept of necessity would be operationalized differently for differing programs. Another member requested better instructions. Finally, other panel members indicated that tasks 1.2.8 through 1.2.11 were unnecessary because those tasks were normally subsumed under others and were given very little attention. However, if those activities were meant for starting a project in a new setting, it would be appropriate and necessary.

Step 1.3

The perception of the panel regarding tasks for step 1.3, Operation, within Stage 1.0, Planning, is shown in Table 7.

The fifteen-member panel of experts demonstrated high support for the appropriateness of all tasks for Step 1.3 as evidenced by the data in Table 7.

Four tasks, 1.3.1, 1.3.2 and 1.3.10 were viewed as completely appropriate by the experts. Task 1.3.7
Table 6

The Percentage of Responses to Step 1.2 Development Within Stage 1.0 Planning

<table>
<thead>
<tr>
<th>Step 1.2 Development</th>
<th>Appropriate % Yes %No</th>
<th>Necessary %Yes %No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.1 Identify any discrepancy between what exists and what is desired.</td>
<td>100 0</td>
<td>87 13</td>
</tr>
<tr>
<td>1.2.2 Identify program objectives and goals from the prioritized needs.</td>
<td>100 0</td>
<td>73 27</td>
</tr>
<tr>
<td>1.2.3 Identify specific outcomes to be achieved.</td>
<td>100 0</td>
<td>80 20</td>
</tr>
<tr>
<td>1.2.4 Identify instructional content.</td>
<td>100 0</td>
<td>73 27</td>
</tr>
<tr>
<td>1.2.5 Identify instructional activities.</td>
<td>100 0</td>
<td>71 29</td>
</tr>
<tr>
<td>1.2.6 Identify materials and other supporting aids (money and space) for instruction.</td>
<td>100 0</td>
<td>86 14</td>
</tr>
<tr>
<td>1.2.7 Identify potential resource personnel.</td>
<td>100 0</td>
<td>71 29</td>
</tr>
<tr>
<td>1.2.8 Prepare materials for meeting with members of the planning team(s) and resource personnel.</td>
<td>100 0</td>
<td>64 36</td>
</tr>
<tr>
<td>1.2.9 Obtain opinions and suggestions from members who attended the meeting.</td>
<td>100 0</td>
<td>36 64</td>
</tr>
<tr>
<td>1.2.10 Reassemble the members involved to further develop requisition procedure form.</td>
<td>69 31</td>
<td>15 85</td>
</tr>
<tr>
<td>1.2.11 Prepare program development requisition procedure form.</td>
<td>85 15</td>
<td>46 54</td>
</tr>
</tbody>
</table>

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indicated unanimous perception of that task as both appropriate and necessary. Task 1.3.6 was also perceived by all the panelists as 100% necessary. The high responses, ranging from 79% to 93%, was given to tasks 1.3.3 through 1.3.6, tasks 1.3.8 through 1.3.9 and tasks 1.3.11 through 1.3.13 as appropriate. Twelve of 15 members perceived task 1.3.2 as necessary. Eleven members perceived task 1.3.12 as necessary. Ten members perceived tasks 1.3.1, 1.3.4 through 1.3.5 and 1.3.10 as necessary. Nine members perceived task 1.3.3 as necessary. Eight members perceived tasks 1.3.8 and 1.3.9 as necessary. Two tasks 1.3.11 and 1.3.13 were perceived as not necessary and did not accomplish the simple majority required by the decision rule.

Step 1.4

The judgment of the panel of experts for the tasks in the Evaluation Step 1.4 within the Planning Stage 1.0 is reflected in Table 8.

The viewpoint of the panel was very positive on this set of tasks for the appropriateness, but again it reflected their not-so-positive reaction on the necessity of the tasks. The panel expressed high agreement and support to tasks 1.4.2 through 1.4.7, task 1.4.9 and tasks 1.4.12 through 1.4.13 as 100% appropriate. Thirteen of fifteen members perceived tasks 1.4.1, 1.4.8
Table 7
The Percentage of Responses to Step 1.3 Development Within Stage 1.0 Planning

<table>
<thead>
<tr>
<th>Step 1.3 Operation</th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%Yes</td>
<td>%No</td>
</tr>
<tr>
<td>1.3.1 Gather information regarding the characteristics and the competencies of the participants to be served.</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>1.3.2 Determine specific competencies the participants will be expected to possess.</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>1.3.3 Arrange and group participants' performance objectives to develop instructional packages.</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>1.3.4 Determine the instructional methodology best suited for achieving the program objectives.</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>1.3.5 Determine instructional equipment and materials best suited to the instructional methodology.</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>1.3.6 Identify competencies needed by the instructional staff.</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>1.3.7 Determine the number of staff persons needed.</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>1.3.8 Develop a procedure for analysis of potential participants' entry levels.</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>1.3.9 Develop a schedule of activities that must be completed before training starts.</td>
<td>93</td>
<td>7</td>
</tr>
</tbody>
</table>

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1.3.10 Develop a procedure for operational budget development.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Necessary</td>
<td>67</td>
<td>33</td>
</tr>
</tbody>
</table>

1.3.11 Prepare specifications for purchasing and installing new equipment.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>86</td>
<td>14</td>
</tr>
</tbody>
</table>

1.3.12 Identify potential personnel for instructional positions.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>87</td>
<td>13</td>
</tr>
</tbody>
</table>

1.3.13 Prepare a staff plan for requesting ancillary services.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>79</td>
<td>21</td>
</tr>
</tbody>
</table>

and 1.4.10 through 1.4.11 as appropriate. Tasks 1.4.2 through 1.4.6 and 1.4.11 through 1.4.13 exceeded the simple majority required by the decision rule as necessary activities, but tasks 1.4.1, 1.4.7 through 1.4.10 were perceived as unnecessary activities, and did not accomplish the required simple majority needed by the decision rule.

Generally the comments attested that tasks could be worded in a number of different ways. One member suggested a field test of its actual use and a case study report. Another suggested that there are other alternatives.

**Step 2.1**

The judgment of the panel of experts for tasks proposed for Step 2.1, Analysis, within the
Table 8
The Percentage of Responses to Step 1.4 Evaluation Within Stage 1.0 Planning

<table>
<thead>
<tr>
<th>Step 1.4 Evaluation</th>
<th>Appropriate %Yes</th>
<th>%No</th>
<th>Necessary %Yes</th>
<th>%No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4.1 Establish a committee to review literature on evaluation of training.</td>
<td>86</td>
<td>14</td>
<td>7</td>
<td>93</td>
</tr>
<tr>
<td>1.4.2 Determine the rationale for evaluation.</td>
<td>100</td>
<td>0</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>1.4.3 Determine type(s) of evaluation that should be conducted for each activity.</td>
<td>100</td>
<td>0</td>
<td>79</td>
<td>21</td>
</tr>
<tr>
<td>1.4.4 Plan for executing each evaluation activity.</td>
<td>100</td>
<td>0</td>
<td>87</td>
<td>13</td>
</tr>
<tr>
<td>1.4.5 Organize for participants' evaluation of course(s) and instruction.</td>
<td>100</td>
<td>0</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>1.4.6 Organize evaluation of faculty members.</td>
<td>100</td>
<td>0</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>1.4.7 Organize facility evaluation procedure.</td>
<td>100</td>
<td>0</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>1.4.8 Organize evaluation of supporting aids.</td>
<td>87</td>
<td>13</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>1.4.9 Organize evaluation of the planning, implementing, and evaluation.</td>
<td>100</td>
<td>0</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>1.4.10 Develop a plan to utilize the special committee in evaluation.</td>
<td>92</td>
<td>8</td>
<td>36</td>
<td>64</td>
</tr>
<tr>
<td>1.4.11 Determine data that need to be gathered from each activity.</td>
<td>93</td>
<td>7</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Task Description</td>
<td>Appropriate Yes</td>
<td>Appropriate No</td>
<td>Necessary Yes</td>
<td>Necessary No</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>----------------</td>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>1.4.12 Determine records and reports that need to be maintained by the evaluation committee.</td>
<td>100 0</td>
<td>80 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4.13 Prepare a schedule for executing various evaluation activities.</td>
<td>100 0</td>
<td>87 13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Implementation Stage 2.0, are displayed in Table 9.

Tasks 2.1.6 and 2.1.9 were viewed as completely appropriate by the experts. Tasks 2.1.1 through 2.1.5 all exceeded the simple majority of 51% required by the decision rule. The responses given to those tasks were 93, 92, 92, 93 and 67 respectively. Also tasks 2.1.7 and 2.1.8 were perceived as appropriate with responses from the panelists of 73 and 87 respectively. Thus, all activities in the appropriate column exceeded the required simple majority. Only one task in the necessary column was perceived as unnecessary by eleven of the fifteen experts. Task 2.1.7 was perceived by all the panelists as 100% necessary. The relatively high responses, ranging from 93% to 67%, in the same column, was given to tasks 2.1.1 through 2.1.4, task 2.1.6 and tasks 2.1.8 through 2.1.9. Generally the scores on this set of activities received unanomous or high responses far exceeding the simple majority required by the decision rule.
Table 9
The Percentage of Responses to Step 2.1 Analysis Within Stage 2.0 Implementation

<table>
<thead>
<tr>
<th>Step 2.1 Analysis</th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%Yes</td>
<td>%No</td>
</tr>
<tr>
<td>2.1.1 Decide on a management plan which identifies the activities to be completed in a particular program.</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>2.1.2 Decide on a management plan which identifies activities to be completed by particular personnel.</td>
<td>92</td>
<td>8</td>
</tr>
<tr>
<td>2.1.3 Decide on a management plan which identifies the target dates for completion of each activity.</td>
<td>92</td>
<td>8</td>
</tr>
<tr>
<td>2.1.4 Decide on the estimated expenditure for program, personnel, facilities, equipment, and travel.</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>2.1.5 Prepare a job description each individual involved.</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>2.1.6 Assign tasks and responsibilities to each individual identified and agreed upon.</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>2.1.7 Develop a survey of programs of interest.</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>2.1.8 Develop training and program objectives.</td>
<td>87</td>
<td>13</td>
</tr>
<tr>
<td>2.1.9 Decide on communication process.</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>
Step 2.2

The perceptions of panel members for tasks proposed in Step 2.2, Development, within Stage 2.0, Implementation, are exhibited in Table 10.

All tasks proposed for this step were perceived as appropriate by all fifteen panel members. Their acknowledgement of the necessity of the tasks was indicated by the 100% "yes" response for task 2.2.1. Tasks 2.2.2 through 2.2.5 which received "yes" percentages of 93, 80, 87 and 60 respectively. Also tasks 2.2.7 and 2.2.8 received "yes" percentages of 80 and 60 respectively. Task 2.2.6, although received 100% "yes" response for its appropriateness, did not accomplish the required simple majority set by the decision rule. It received 47 "yes" percentage as necessary, and was perceived as unnecessary by eight of fifteen members. Generally the comments attests that all the tasks were helpful except for the situational nature of "necessity".

Step 2.3

The proposed tasks for the operation Step 2.3, within the Implementation Stage 2.0, were reviewed by the panel and the results are demonstrated in Table 11.

The validating experts were totally in agreement with all the tasks proposed as being appropriate, with a
rating of 100% for six of seven tasks. The 73% response given to task 2.3.3 as appropriate was also high. In the "necessary" column, the tasks proposed were also supported but for task 2.3.3 which did not exceed the simple majority required by the decision rule. Major comments received for this area were very positive. The layout of the tasks and simplicity of the terminology used were well appreciated. Task 2.3.3 was criticized as a task with or without which the training project can be materialized. Furthermore, panel members pointed out that it was not necessary for a job description to be prepared or handed out for each individual involved. One should trust the capabilities and competencies of the personnel.

Step 2.4

Analysis of the Evaluation Step 2.4, within the Implementation Stage 2.0 is provided in Table 12.

Each of the tasks proposed was viewed as being appropriate, with a rating of 100% for five of six tasks. Task 2.4.4 received a high response of 87%. All tasks in the "necessary" column exceeded the simple majority required by the decision rule.

Comments received for this area were very positive. It provided additional insight into modification in the grouping of the activities, but did not in any way detract from the intent of the particular step and stage.
Table 10
The Percentage of Responses to Step 2.2 Development Within Stage 2.0 Implementation

<table>
<thead>
<tr>
<th>Step 2.2 Development</th>
<th>Appropriate %</th>
<th>Necessary %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.1 Obtain adequate financial support.</td>
<td>100 0</td>
<td>100 0</td>
</tr>
<tr>
<td>2.2.2 Approve individuals for staff positions.</td>
<td>100 0</td>
<td>93 7</td>
</tr>
<tr>
<td>2.2.3 Approve the schedule of classes, programs, instruction, personnel, facilities, equipment and target dates for completing all activities identified.</td>
<td>100 0</td>
<td>80 20</td>
</tr>
<tr>
<td>2.2.4 Decide whether to locally develop the materials for training or to purchase commercially prepared materials.</td>
<td>93 7</td>
<td>87 13</td>
</tr>
<tr>
<td>2.2.5 Assign individuals knowledgeable in the program area to locally develop prepared materials.</td>
<td>100 0</td>
<td>60 40</td>
</tr>
<tr>
<td>2.2.6 Assign individuals to purchase commercially prepared materials.</td>
<td>100 0</td>
<td>47 53</td>
</tr>
<tr>
<td>2.2.7 Approve specifications for purchasing of supplies, training materials, and services needed for program operation.</td>
<td>100 0</td>
<td>80 20</td>
</tr>
<tr>
<td>2.2.8 Prepare a plan for cataloging and controlling the distribution and use of materials by staff and participants.</td>
<td>100 0</td>
<td>60 40</td>
</tr>
</tbody>
</table>
## Table 11

The Percentage of Responses to Step 2.3 Operation Within Stage 2.0 Implementation

<table>
<thead>
<tr>
<th>Step 2.3 Operation</th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%Yes</td>
<td>%No</td>
</tr>
<tr>
<td>2.3.1 Review and decide on complete learning objectives.</td>
<td>100 0</td>
<td></td>
</tr>
<tr>
<td>2.3.2 Review and decide on performance standards.</td>
<td>100 0</td>
<td></td>
</tr>
<tr>
<td>2.3.3 Hand out job descriptions defining roles and tasks of each individual involved.</td>
<td>73   27</td>
<td></td>
</tr>
<tr>
<td>2.3.4 Determine the availability of training materials and other supporting aids required.</td>
<td>100 0</td>
<td></td>
</tr>
<tr>
<td>2.3.5 Check and approve the appropriateness of training materials against the objectives agreed upon and participants' entry levels.</td>
<td>100 0</td>
<td></td>
</tr>
<tr>
<td>2.3.6 Distribute list of descriptions of materials, facilities and equipment required to those concerned.</td>
<td>100 0</td>
<td></td>
</tr>
<tr>
<td>2.3.7 Monitor and provide procedure for corrective feedback.</td>
<td>100 0</td>
<td></td>
</tr>
</tbody>
</table>
### Table 12

The Percentage of Responses to Step 2.4 Evaluation Within Stage 2.0 Implementation

<table>
<thead>
<tr>
<th>Step 2.4 Evaluation</th>
<th>Appropriate %</th>
<th>Necessary %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4.1 Approve the rationale for evaluating training objectives, programs and contents.</td>
<td>100 0</td>
<td>86 14</td>
</tr>
<tr>
<td>2.4.2 Approve the rationale for evaluating the participants' achievement and program resources.</td>
<td>100 0</td>
<td>86 14</td>
</tr>
<tr>
<td>2.4.3 Approve the evaluative method to be used for each activity.</td>
<td>100 0</td>
<td>60 40</td>
</tr>
<tr>
<td>2.4.4 Approve areas to be evaluated; such as achievable goals, specific behavior, etc.</td>
<td>87 13</td>
<td>67 33</td>
</tr>
<tr>
<td>2.4.5 Approve instruments or procedures for collecting evaluation data.</td>
<td>100 0</td>
<td>67 33</td>
</tr>
<tr>
<td>2.4.6 Approve personnel to supervise and appraise evaluation data which will be gathered.</td>
<td>100 0</td>
<td>73 27</td>
</tr>
</tbody>
</table>

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Table 13
The Percentage of Responses to Step 3.1 Analysis
Within Stage 3.0 Evaluation

<table>
<thead>
<tr>
<th>Step 3.1 Analysis</th>
<th>Appropriate %Yes %No</th>
<th>Necessary %Yes %No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.1 Review and analyze evaluation requirements, plans, guidelines, formats, organizational decision and policy.</td>
<td>100 0</td>
<td>73 27</td>
</tr>
<tr>
<td>3.1.2 Review and analyze organizational requirements.</td>
<td>85 15</td>
<td>77 23</td>
</tr>
<tr>
<td>3.1.3 Review and analyze the established guidelines for evaluating each program, its personnel, materials, equipment, facilities, etc.</td>
<td>93 7</td>
<td>80 20</td>
</tr>
<tr>
<td>3.1.4 Gather and analyze the evidence of activity and process in terms of the total training achievement.</td>
<td>93 7</td>
<td>79 21</td>
</tr>
<tr>
<td>3.1.5 Review and analyze the evaluation procedures in order to find strengths and weaknesses of the training.</td>
<td>79 21</td>
<td>73 27</td>
</tr>
</tbody>
</table>

Step 3.1

Table 13 represents the responses of the members of the panel of experts to the tasks proposed for Analysis, Step 3.1, within the Evaluation, Stage 3.0.

This was another set of tasks proposed which received high acknowledgement as being both appropriate and necessary. The results, as depicted in Table 10, show...
the "yes" responses for each task far exceeded the simple majority decision rule.

**Step 3.2**

Table 14 displays the responses of the panel members for the activities proposed in Step 3.2, Development, within Stage 3.0 Evaluation.

Task 3.2.1 was given a "yes" rating of 100% as being appropriate, while tasks 3.2.2 through 3.2.4 were given a rating of 93, 80 and 93 respectively. In the "necessary" column task 3.2.1 received 93%, task 3.2.2 received 71% and task 3.2.4 received 69%. Task 3.2.3 was perceived as unnecessary by 8 of 15 members and thus, missed the simple majority rule by a very narrow margin of 3%. This is because panel members perceived it to be too ideal for a project, and therefore did not support it as being necessary for practical reasons.

**Step 3.3**

The judgment of the panel members regarding the activities proposed for Step 3.3, Operation, within Stage 3.0, Evaluation, are disclosed in Table 15. The results indicate that "yes" responses for each task in this step, other than task 3.3.1d in the "necessary" column, exceeded a simple majority requirement. Task 3.3.1d was perceived as unnecessary by 8 of 15 members. Comments rais-
ed on this area of activities were (a) members suggested that the word attitude for activity 3.3.1b be changed to behavior because behavior is measurable and attitude is not, and (b) task 3.3.1d would never be carried out.

Table 14

The percentage of Responses to Step 3.2 Development Within Stage 3.0 Evaluation

<table>
<thead>
<tr>
<th>Step 3.2 Development</th>
<th>Appropriate %Yes %No</th>
<th>Necessary %Yes %No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2.1 Approve evaluation requirements, plans, guidelines, formats.</td>
<td>100 0</td>
<td>93 7</td>
</tr>
<tr>
<td>3.2.2 Approve organizational requirements and records.</td>
<td>93 7</td>
<td>71 29</td>
</tr>
<tr>
<td>3.2.3 Approve the established guidelines for evaluating programs, personnel, materials, equipment, facilities, etc.</td>
<td>80 20</td>
<td>50 50</td>
</tr>
<tr>
<td>3.2.4 Approve procedures to find strengths and weaknesses of the training.</td>
<td>93 7</td>
<td>69 31</td>
</tr>
</tbody>
</table>

Step 3.4

The perceptions of the panel regarding the tasks proposed for Step 3.4, Evaluation, within Stage 3.0, Evaluation, are displayed in Table 16.

All tasks proposed for this step were perceived as appropriate by all 15 panel members, as indicated by the
100% "yes" for each activity. In the "necessary" column, the tasks proposed were also highly supported, since the percentage of support received exceeded the simple majority required by the decision rule.

In addition to the above analysis, it is recommended that an aggregate account of the most critical comments that were raised by the panelists, be considered in conjunction with the preceding analysis. This step will enhance further understanding of the panelists.

Table 15
The Percentage of Responses to Step 3.3 Operation Within Stage 3.0 Evaluation

<table>
<thead>
<tr>
<th>Step 3.3 Operation</th>
<th>Appropriate</th>
<th></th>
<th>Necessary</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%Yes %No</td>
<td></td>
<td>%Yes %No</td>
<td></td>
</tr>
<tr>
<td>3.3.1 Synthesize the various evaluation data gathered</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>during stage 2, step 4 to determine:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. appropriateness of training.</td>
<td>100 0</td>
<td>79 21</td>
<td>100 0</td>
<td></td>
</tr>
<tr>
<td>b. attitude change.</td>
<td>93 7</td>
<td>71 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. achievement of stated objectives.</td>
<td>100 0</td>
<td>86 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. teaching abilities of instructors.</td>
<td>93 7</td>
<td>50 50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Participant's achievement.</td>
<td>100 0</td>
<td>86 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. relevancy of facilities, equipment, supporting</td>
<td>100 0</td>
<td>71 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>services and cost benefit ratio.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Table 16
The percentage of Responses to Step 3.4 Evaluation Within Stage 3.0 Evaluation

<table>
<thead>
<tr>
<th>Step 3.4 Evaluation</th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.1 Evaluate procedures used by participants for evaluating course(s) and instruction.</td>
<td>100 0 86 14</td>
<td></td>
</tr>
<tr>
<td>3.4.2 Evaluate procedures used by instructors for evaluating the participant's performances and achievements.</td>
<td>100 0 86 14</td>
<td></td>
</tr>
<tr>
<td>3.4.3 Evaluate procedures used for evaluating program goals and objectives.</td>
<td>100 0 79 21</td>
<td></td>
</tr>
<tr>
<td>3.4.4 Evaluate procedures used for evaluating each course's goals, objectives and achievements.</td>
<td>100 0 71 29</td>
<td></td>
</tr>
<tr>
<td>3.4.5 Evaluate procedures used for evaluating facilities, equipment and supporting services.</td>
<td>100 0 64 36</td>
<td></td>
</tr>
<tr>
<td>3.4.6 Reassemble all personnel involved in planning, implementation and evaluation processes:</td>
<td>100 0 60 40</td>
<td></td>
</tr>
<tr>
<td>a. to assess the strengths and weaknesses of planning, implementation and evaluation processes, and activities.</td>
<td>100 0 60 40</td>
<td></td>
</tr>
<tr>
<td>b. to brainstorm for ideas, suggestions and recommendations.</td>
<td>100 0 60 40</td>
<td></td>
</tr>
<tr>
<td>3.4.7 Based on the evaluation data analysis, the report on strengths and weaknesses of the program, and the outcome of the brainstorming session, make a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
responses to the task descriptions that was presented to them for validation.

It was felt by most panelists that all items were rated as appropriate. The set of forms, and the tasks listed, will vary in importance or need according to the setting. The constructs remain important, but subtasks may vary in "necessity" based on organization and maturity level of both trainers and trainees.

Another set of comments stressed the importance of the appropriate tasks, but considered "necessary" as a highly structured procedure that might lead to many organizational dysfunction, such as (a) creates a straight-jacket for the organization, (b) slows the creative individual, (c) assumes that all members of a team are equally committed to the goals, (d) spends too much time on job descriptions of professionally-trained people hired to do what they are trained for, (e) calls for things that cannot be done: deciding on complete learning objectives is like examining all possible alternatives, (f) fails to recognize different personalities, different
life situations, different commitments, and (g) fails to anticipate totally unforseen events.

A third set of comments were generally concerning semantics, definition of terms, instructions to panelists, and the repetitious nature of the tasks.

A fourth set on comments suggested a field test of its actual use and a case study report.

Finally, a set of comments acknowledged the well-planned and well-defined tasks. They also recommended some thoughts be given to combining some steps.

No revalidation was necessary, as no panel member proposed additional task. Consequently, this writer agrees with the above recommendations and will modify the survey, especially in the area of the administrative procedures, the clarity, and the simplicity of the instrument's organization, concepts and wordings. However, since the intent of this writer is to field test the model in Iraq, at a later period of time, it was seen more practical to postpone any changes till that part of the study is accomplished and responses are analyzed.

Summary

Chapter V has presented a profile of the panel of experts, with their suggestions and discussion of the findings regarding their opinion. Chapter VI, which follows, will provide a summary of the findings and some
conclusions of the study, along with some recommendations for adopting and/or implementing the model in a different situation.
CHAPTER VI

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter will provide the reader with a review and summary of the purposes and design of the study, present conclusions based upon the findings and make recommendations for adopting and/or implementing the model and its task descriptions. The chapter concludes with a discussion of some issues pertinent to implementing the model.

Summary of the study

The major purposes of this study were two: firstly, to develop a training model to incorporate MBO for professional development of educational administrators, and secondly, to establish a set of task descriptions for operationalizing the model.

Through review of the literature of professional development in the United States, the works of prominent authors and practitioners in the field of training, education and development were observed. Their work became the theoretical base for the development and validation of the model.

The task descriptions established for operational-
izing and achieving the goal of the model were validated in the United States. A panel of experts—each of whom was directly involved, conversant, expert, experienced and knowledgeable in MBO training for professional development—were the validators.

Conclusions

Findings from the Literature

The following findings resulted from the literature in validating the model. An MBO training program must be planned and each part of the planning should comprise decision making, management process, feedback evaluation and recycling. The planning stage must spell out in detail the activities in terms of overall strategies and the explicit sequences of action steps that make up the strategies.

When the plan has been finalized, the next stage should be implementation. Implementation is a complex series of transactions that includes operationalizing all the steps, phases and processes developed in the planning stage.

The final stage of an MBO training program is evaluation. Evaluation here should focus on assessing the soundness of the plan, the effectiveness of the implementation, and the effectiveness of the total program. The information obtained from the evaluation should serve
as feedback for deciding whether the project is to be retained, modified or dropped.

Steps that are crucial to an MBO training project comprise the following common components: (a) Analysis—which serves as a critical tool, and as an effective strategy for identifying training needs and program objectives, and gives direction to program identification and development; (b) Development—which focuses on how the training program is to be developed, insuring the availability of personnel, materials and money; (c) Operation—which comes after analysis and development, is crucial because of its function in making possible a smooth flow of activities and accomplishment of goals; and, (d) Evaluation—which is the final step, should be done on a continuous basis and is essential for measuring the success of the program at its conclusion.

Conclusion 1

Since the development of these stages and steps of the model were in congruence with the theory and philosophy of MBO models and projects professed in the literature, it was concluded that the model was theoretically and philosophically valid.

Findings from the Field Validation

The following findings are from the field validation
of the task descriptions by a panel of experts.

Each of the 98 task descriptions proposed as appropriate and necessary for operationalizing and achieving the goal of the model received high support from the validators. In most steps within the three stage model, "yes" responses to 81% of the task description exceeded a simple majority, the decision rule used as to whether to reject or to retain each task description.

It is recommended that a decision to reject the tasks that were viewed as "not necessary" by the experts in the U.S.A., be delayed till the tasks are field tested in their intended natural setting in Iraq. Should they prove to be unnecessary and not applicable for implementation, then a decision to reject and remodify the task descriptions will be effected and retested in the Ministry of Higher Education and Scientific Research in Iraq.

Otherwise, the task descriptions proposed were judged to be well organized in sequence and groupings. They were viewed as systematic, comprehensive, accommodating, instructional, and meaningful for operationalizing a training model.

Conclusion 2

The information received from the formal validating process demonstrated the established task descriptions as a set of valid activities for reference by human resource
development practitioners.

Conclusion 3

Since the model is a valid model based on the support of the literature and since the task descriptions are both appropriate and necessary, based on the judgment of all members of the panel of experts, therefore, the model and its task descriptions are valid and together can serve as a useful approach to and as a tool for establishing a training program to incorporate MBO.

Recommendations

The following recommendations were based on the present investigator's perceptions; however, the decision of whether to act upon these recommendations is primarily that of those in authority at the Ministry of Higher Education and Scientific Research, Iraq.

1. It is recommended that this model and its task descriptions be adopted in Iraq. Testimony to the validity of the model and its task descriptions' acceptance indicate the model's strength. Some of the principles that justify the model and its task descriptions, as suggested by the literature, include: (a) any training project should be based on identified needs of the participants and the institution; (b) the project should have clear and attainable goals; (c) the project should have
personnel, fiscal and material support adequate to achieve the defined goals; (d) the project should eventually have both instructional development and institutional development dimensions; (e) the project should have support from institutional and internal leadership; (f) the project should create a sense of institutional ownership; (g) the project should have a built-in accountability mechanism both to the institution and involved personnel; (h) the project should have a structured, ongoing evaluation process (formative and summative) designed into it from the beginning; and (i) the project should be organized for flexibility. All these principles were utilized in order to allow the model and its task descriptions to make a significant contribution to future training for professional development of educational administrators.

2. Since the model and its task descriptions are responsive to the design and established purpose it is recommended that the next step be a field test in Iraq.

3. If field testing is supportive as well, the model should then be implemented.

4. Finally, since the model and its task descriptions are valid, they can be used as an approach to and as a set of tools for initiating planned change in the organization and development of a training mode for the Ministry of Higher Education and Scientific Research.
However, certain issues of concern must not be ignored when adopting and/or implementing the model in a different situation. Those issues are included and recommended to the attention of those who may be concerned. They involve change agents, resistance to change, and adoption and diffusion of innovation. Each is discussed in the following section.

Issues Related to Implementation

Change Agent

The intent here is to analyze the change agent, her/himself, as an instrument for change, as suggested by Rothman (1974). The change agent who enters an organizational setting with knowledge acquired from a foreign country, though known for her/his ability to bring about change, might have to face certain forms of resistance to change. Several methods, paraphrased from Rogers and Shoemaker (1971, p. 234), could be used to reduce the degree of resistance: (a) one has to make a conscious effort to understand the history, customs, language, politics, and the culture generally; (b) one has to work with the internal opinion leaders, build a relationship, share the belief in how the organization works, and empathize with others in the situations within which a change is to take place. One needs to work through the opinion leaders in order to halve the social distance between oneself
and the majority of the clients and to shorten the original gap of credibility for the change agent's innovation by gaining endorsements of the opinion leaders.

Resistance to Change

To reduce the resistance to change brought about by knowledge acquired elsewhere, the investigator here recommends that both the diagnosis of the situation leading to the change and the design of the change itself in all cases be a collaborative process, with support from the literature.

Watson (1969) identified some variables in his principles for overcoming resistance to change. According to him, resistance will be less if:

1. Administrators and leaders feel that the project is their own, not one devised and operated by outsiders.
2. The project clearly has wholehearted support from top officials of the system.
3. Participants see the change as reducing rather than increasing their present burdens.
4. The program offers the kind of new experience which interests participants.
5. Participants feel that their autonomy and security are not threatened.
6. The project accords with values and ideals which have long been acknowledged by participants.
7. Participants have joined in diagnostic efforts leading them to agree on the basic problem and to feel its importance.
8. The project is accepted by consensual group decision.
9. Proponents are able to empathize with opponents to recognize valid objections, and to take steps to relieve unnecessary fears.

10. The project is kept open to revision and consideration if experience indicates that changes would be desirable (pp. 22-23).

The principles as paraphrased above do hold some promises for overcoming resistance, as they are supported by research.

**Adoption and Diffusion of Innovation**

In regard to both the innovation to be adopted and the process for adoption and diffusion, Rogers (1972) referred to communication through channels, over time, in a social system. The communication takes place between a source (e.g., an inventor, a change agent, or an opinion leader) and a receiver (member of a social system). Channels include mass media and/or interpersonal exchanges. Effects of communication include more receiver knowledge regarding the innovation, a change in his attitude toward it, and eventual adoption or rejection. The adoption process as outlined by Rogers and Shoemaker (1971) included stages of (a) awareness, (b) interest, (c) evaluation, (d) trial, and (e) adoption (p. 25).

These stages are perceived as appropriate processes in bringing about adoption and diffusion of the training model developed in this study because the intent is fundamental change in the nature of the Ministry of Higher
Education and Scientific Research, Iraq, rather than the more straightforward adoption of a given innovation.

Summary

This chapter has dealt with the summary of the purposes and design of the study, and has presented conclusions based upon the findings from the literature and the responses of the panel of experts, and the recommendations for adopting and/or implementing the validated model and its appropriate and necessary task descriptions. Finally, this chapter concluded with a discussion of some issues pertinent to implementing the model and its task components.
APPENDIX A

NAMES AND POSITION TITLES OF VALIDATING PANEL MEMBERS
NAMES AND POSITION TITLES OF VALIDATING PANEL MEMBERS

Dr. George S. Odiorne: Professor of Management, author, prominent authority on MBO, and consultant.

Dr. Arthur X II. Deegan: Associate Professor of Business Administration, University of Michigan, MBO consultant and author.

Dr. James L. Harvey: Senior Vice President and partner, McManis Associates (consulting firm in higher education). President of Prince George's Community College, Maryland. Author of Managing colleges and universities by objectives.

Dr. D. L. Stufflebeam: Professor and Director of Evaluation Center, Western Michigan University.

Dr. James Sanders: Professor and Assistant Director of Evaluation Center, Western Michigan University.

Dr. C. S. Phillips: Professor of Political Science, Western Michigan University. Author of Nigerian bureaucracy after thirteen years of military rule.

Dr. V. J. Ramsey: Associate Professor of Management and Director of Faculty Development, Western Michigan University.

Dr. Henry Beam: Associate Professor of Management, Western Michigan University. Author of Bringing MBO back to the basics.

Dr. E. Kelley: Chairperson, Department of Educational Leadership, Western Michigan University.

Dr. J. R. Rizzo: Professor of Management, Western Michigan University.

Dr. R. Brinderhoff: Associate Professor of Educational Leadership, Western Michigan University.

Mr. J. Platte: Dean of TeleCommunication and the Arts, Lansing Community College.

Dr. L. B. Kocher: Dean of Student Services, Kalamazoo Valley Community College.

Dr. J. Peterson: Associate Professor of Sociology, Western Michigan University. President, Association of Voluntary Action Scholars.
APPENDIX B

SUMMARY OF THE MODEL
Figure 5. Model for MBO Professional Development of Educational Administrators
Figure 6. Subsection of Model for MBO Professional Development of Educational Administrators
APPENDIX C

INSTRUMENT COVER LETTER AND GENERAL DIRECTIONS
January 3rd, 1984

Dear

Your responses to some criteria questions indicate that you are eminently qualified to serve as a member of a panel of experts concerning training development to incorporate MBO in higher education. You are hereby requested to complete the attached Tasks for Training Program Model instrument.

Your responses will help me determine whether the tasks proposed are necessary and appropriate. It is extremely important for you to understand that the purpose of this study is to examine the appropriateness and necessity of the task descriptions proposed and not to scrutinize the professional development activities at your institution.

Completion of the survey instrument and answering of some of the follow up questions will involve approximately an hour of your time. Your cooperation in spending the time to complete the instrument is greatly appreciated.

Thank you for your assistance.

Sincerely,

Nadhim Bakri
Doctoral Student

C. Wurfield
Dr. C. Wurfield.
Advisor
Department of Educational Leadership
General Directions

This survey instrument is divided into three stages. **Stage 1.0** consists of proposed tasks for completing the **Planning** of training model to incorporate MBO. **Stage 2.0** consists of proposed tasks for **Implementation** of such a program. **Stage 3.0** consists of proposed tasks for completing **Evaluation** of such a program.

You will be receiving three separate sealed envelopes, each containing **one stage**. After each stage is completed, two short follow-up questions will be asked (questions 1 and 2). Following your responses to those, the second stage of the instrument will be answered. The same procedure will continue for stage three. Upon your completion of all the three stages of the instrument, two additional questions (questions 3 and 4) will be asked.

Please respond to each item in the questionnaire by circling either a "Yes" or a "No" response to each of the questions. **Appropriate** is defined as the task being suitable for accomplishing the goals of the indicated stage of the model. **Necessary** is defined as the task being required in order to operationalize the model.
Appendix D

Task Descriptions for an MBO Professional Development Program Model
Stage 1.0 Planning

Planning herein refers to planning for the four steps of 1.1 analysis, 1.2 development, 1.3 operation, and 1.4 evaluation. For each step, a set of tasks is proposed. Please respond to each task proposed by circling "Yes" if appropriate or by circling "No" if inappropriate. Please also indicate whether you consider the task necessary by circling "Yes" or unnecessary by circling "No".

<table>
<thead>
<tr>
<th>Step 1.1 Analysis</th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1 Identify the immediate and long range skill needs.</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
<tr>
<td>1.1.2 Rank order the immediate and long range skill needs.</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
<tr>
<td>1.1.3 Prioritize the problems, projects and/or outcomes to provide the immediate and long range skills needed.</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
<tr>
<td>1.1.4 Identify individuals to be part of the planning team(s) based on the key problems, projects and/or outcomes identified in 1.1.3.</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
<tr>
<td>1.1.5 Prepare materials for planning team(s) meeting.</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
<tr>
<td>1.1.6 Conduct an orientation meeting with planning team(s) members for clarifying priority problems, objectives and/or outcomes.</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
<tr>
<td>1.1.7 Divide planning team(s) members into small groups and allow reasonable amount of time on reworking the original list of activities.</td>
<td>Yes No</td>
<td>Yes No</td>
</tr>
</tbody>
</table>
1.1.8 Reassemble planning team(s) members to further refine the list.  

**Appropriate**  |  **Necessary**  
---|---  
Yes | No  
Yes | No  

**Step 1.2 Development**

1.2.1 Identify any discrepancy between what exists and what is desired.  
1.2.2 Identify program objectives and goals from the prioritized needs.  
1.2.3 Identify specific outcomes to be achieved.  
1.2.4 Identify instructional content.  
1.2.5 Identify instructional activities.  
1.2.6 Identify materials and other supporting aids (money and space) for instruction.  
1.2.7 Identify potential resource personnel.  
1.2.8 Prepare materials for meeting with members of the planning team(s) and resource personnel.  
1.2.9 Obtain opinions and suggestions from members who attended the meeting.  
1.2.10 Reassemble the members involved to further develop requisition procedure form.  
1.2.11 Prepare program development requisition procedure form.  

**Step 1.3 Operation**

1.3.1 Gather information regarding the characteristics and the competencies of the participants to be served.  

**Appropriate**  |  **Necessary**  
---|---  
Yes | No  
Yes | No  

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1.3.2 Determine specific competencies the participants will be expected to possess. | Yes No Yes No
---|---
1.3.3 Arrange and group participants' performance objectives to develop instructional packages. | Yes No Yes No
1.3.4 Determine the instructional methodology best suited for achieving the program objectives. | Yes No Yes No
1.3.5 Determine instructional equipment and materials best suited to the instructional methodology. | Yes No Yes No
1.3.6 Identify competencies needed by the instructional staff. | Yes No Yes No
1.3.7 Determine the number of staff persons needed. | Yes No Yes No
1.3.8 Develop a procedure for analysis of potential participants' entry levels. | Yes No Yes No
1.3.9 Develop a schedule of activities that must be completed before training starts. | Yes No Yes No
1.3.10 Develop a procedure for operational budget development. | Yes No Yes No
1.3.11 Prepare specifications for purchasing and installing new equipment. | Yes NO Yes No
1.3.12 Identify potential personnel for instructional positions. | Yes No Yes No
1.3.13 Prepare a staff plan for requesting ancillary services. | Yes No Yes No

Step 1.4 Evaluation

1.4.1 Establish a committee to review literature on evaluation of training. | Yes No Yes No
1.4.2 Determine the rationale for evaluation. | Yes No Yes No

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<table>
<thead>
<tr>
<th></th>
<th>Determine type(s) of evaluation that should be conducted for each activity.</th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4.3</td>
<td>Yes No Yes No</td>
<td></td>
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<tr>
<td></td>
<td>Plan for executing each evaluation activity.</td>
<td>Yes No Yes No</td>
<td></td>
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<tr>
<td>1.4.4</td>
<td>Yes No Yes No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organize for participants' evaluation of course(s) and instruction.</td>
<td>Yes No Yes No</td>
<td></td>
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<tr>
<td>1.4.5</td>
<td>Yes No Yes No</td>
<td></td>
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<tr>
<td></td>
<td>Organize evaluation of faculty members.</td>
<td>Yes No Yes No</td>
<td></td>
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<tr>
<td>1.4.6</td>
<td>Yes No Yes No</td>
<td></td>
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<tr>
<td></td>
<td>Organize facility evaluation procedure.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
<tr>
<td>1.4.7</td>
<td>Yes No Yes No</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Organize evaluation of supporting aids.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
<tr>
<td>1.4.8</td>
<td>Yes No Yes No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organize evaluation of the planning, implementing, and evaluation.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
<tr>
<td>1.4.9</td>
<td>Yes No Yes No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop a plan to utilize the special committee in evaluation.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
<tr>
<td>1.4.10</td>
<td>Yes No Yes No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Determine data that need to be gathered from each activity.</td>
<td>Yes No Yes No</td>
<td></td>
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<tr>
<td>1.4.11</td>
<td>Yes No Yes No</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Determine records and reports that need to be maintained by the evaluation committee.</td>
<td>Yes No Yes No</td>
<td></td>
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<tr>
<td>1.4.12</td>
<td>Yes No Yes No</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Prepare a schedule for executing various evaluation activities.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
<tr>
<td>1.4.13</td>
<td>Yes No Yes No</td>
<td></td>
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</tbody>
</table>
Stage 2.0 Implementation

Implementation herein refers to implementation of the four steps of 2.1 analysis, 2.2 development, 2.3 operation, and 2.4 evaluation. For each step a set of tasks is proposed. Please respond to each task proposed by circling "Yes" if appropriate or by circling "No" if inappropriate. Please also indicate whether you consider the task necessary by circling "Yes" or unnecessary by circling "No".

<table>
<thead>
<tr>
<th>Step 2.1 Analysis</th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1 Decide on a management plan which identifies the activities to be completed in a particular program.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2.1.2 Decide on a management plan which identifies activities to be completed by particular personnel.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2.1.3 Decide on a management plan which identifies the target dates for completion of each activity.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2.1.4 Decide on the estimated expenditure for program, personnel, facilities, equipment, and travel.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2.1.5 Prepare a job description for each individual involved.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2.1.6 Assign tasks and responsibilities to each individual identified and agreed upon.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2.1.7 Develop a survey of programs of interest.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2.1.8 Develop training and program objectives.</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
2.1.9 Decide on communication process. Yes No Yes No

**Step 2.2 Development**

2.2.1 Obtain adequate financial support. Yes No Yes No

2.2.2 Approve individuals for staff positions. Yes No Yes No

2.2.3 Approve the schedule of classes, programs, instruction, personnel, facilities, equipment and target dates for completing all activities identified. Yes No Yes No

2.2.4 Decide whether to locally develop the materials for training or to purchase commercially prepared materials. Yes No Yes No

2.2.5 Assign individuals knowledgeable in the program area to locally develop prepared materials. Yes No Yes No

2.2.6 Assign individuals to purchase commercially prepared materials. Yes No Yes No

2.2.7 Approve specifications for purchasing of supplies, training materials, and services needed for program operation. Yes No Yes No

2.2.8 Prepare a plan for cataloging and controlling the distribution and use of materials by staff and participants. Yes No Yes No

**Step 2.3 Operation**

2.3.1 Review and decide on complete learning objectives. Yes No Yes No

2.3.2 Review and decide on performance standards. Yes No Yes No

2.3.3 Hand out job descriptions defining roles and tasks of each individual involved. Yes No Yes No
2.3.4 Determine the availability of training materials and other supporting aids required.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

2.3.5 Check and approve the appropriateness of training materials against the objectives agreed upon and participants' entry levels.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

2.3.6 Distribute list of descriptions of materials, facilities and equipment required to those concerned.  

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<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

2.3.7 Monitor and provide procedure for corrective feedback.  

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<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

Step 2.4 Evaluation

2.4.1 Approve the rationale for evaluating training objectives, programs and contents.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

2.4.2 Approve the rationale for evaluating the participants' achievement and program resources.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</tbody>
</table>

2.4.3 Approve the evaluative method to be used for each activity.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

2.4.4 Approve areas to be evaluated; such as achievable goals, specific behavior, etc.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

2.4.5 Approve instruments or procedures for collecting evaluation data.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

2.4.6 Approve personnel to supervise and appraise evaluation data which will be gathered.  

<table>
<thead>
<tr>
<th>Appropriate</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>
Stage 3.0 Evaluation

Evaluation herein refers to evaluation of the four steps of 3.1 analysis, 3.2 development, 3.3 operation, and 3.4 evaluation. For each step a set of tasks is proposed. Please respond to each task proposed by circling "Yes" if appropriate or by circling "No" if inappropriate. Please also indicate whether you consider the task necessary by circling "Yes" or unnecessary by circling "No".

<table>
<thead>
<tr>
<th>Step 3.1 Analysis</th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.1 Review and analyze evaluation requirements, plans, guidelines, formats, organizational decision and policy.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
<tr>
<td>3.1.2 Review and analyze organizational requirements.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
<tr>
<td>3.1.3 Review and analyze the established guidelines for evaluating each program, its personnel, materials, equipment, facilities, etc.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
<tr>
<td>3.1.4 Gather and analyze the evidence of activity and process in terms of the total training achievement.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
<tr>
<td>3.1.5 Review and analyze the evaluation procedures in order to find strengths and weaknesses of the training.</td>
<td>Yes No Yes No</td>
<td></td>
</tr>
</tbody>
</table>

Step 3.2 Development

| 3.2.1 Approve evaluation requirements, plans, guidelines, formats. | Yes No Yes No | |
| 3.2.2 Approve organizational requirements and records. | Yes No Yes No | |
3.2.3 Approve the established guidelines for evaluating programs, personnel, materials, equipment, facilities, etc. 

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3.2.4 Approve procedures to find strengths and weaknesses of the training.

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Step 3.3 Operation**

3.3.1 Synthesize the various evaluation data gathered during stage 2, step 4 to determine:

<table>
<thead>
<tr>
<th></th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. appropriateness of training.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>b. attitude change.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>c. achievement of stated objectives.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>d. teaching abilities of instructors.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>e. participant's achievement.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>f. relevancy of facilities, equipment, supporting services and cost benefit ratio.</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Step 3.4 Evaluation**

3.4.1 Evaluate procedures used by participants for evaluating course(s) and instruction.

<table>
<thead>
<tr>
<th></th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3.4.2 Evaluate procedures used by instructors for evaluating the participant's performances and achievements.

<table>
<thead>
<tr>
<th></th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
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</tbody>
</table>

3.4.3 Evaluate procedures used for evaluating program goals and objectives.

<table>
<thead>
<tr>
<th></th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3.4.4 Evaluate procedures used for evaluating each course's goals, objectives and achievements.

<table>
<thead>
<tr>
<th></th>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
3.4.5 Evaluate procedures used for evaluating facilities, equipment and supporting services.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

3.4.6 Reassemble all personnel involved in planning, implementation and evaluation processes:

a. to assess the strengths and weaknesses of planning, implementation and evaluation processes, and activities.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
</tr>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

b. to brainstorm for ideas, suggestions and recommendations.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
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</table>

3.4.7 Based on the evaluation data analysis, the report on strengths and weaknesses of the program, and the outcome of the brainstorming session, make a plan for either retaining the program or recommending necessary changes or modifications for meeting the rest of the needs identified and for future training needs.  

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Necessary</th>
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<tbody>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Follow Up Questions

1. Did you respond to all items posed in the questionnaire for this stage? If not, why?

2. Are there any other tasks that you believe should be included? If yes, why?
3. Please comment on each item that you have not supported. Do you think this item is inappropriate or unnecessary? Why? Do you think this item does not belong in this stage but does belong in another? Why?

4. Are there any comments or suggestions for further improvement?
APPENDIX E

SELECTION CRITERIA QUESTIONS
SELECTION CRITERIA

These questions were designed to elicit information about the validating panelists. The information obtained was checked against the selection criteria as described in Chapter IV of the Study. Respondents who conformed to the selection criteria were selected to serve as members of the validating panel of experts. The questions used as criteria were:

Criterion 1: Employment

1. Are you currently employed by an education organization?
2. What is your current position?

Criterion 2: Knowledgeability

3. Do you read journals and books related to training and professional development?
4. Have you attended any seminars for training and professional development programs within the last few years?
5. Are you familiar with the systems design for training development?

Criterion 3: Experience

6. Have you conducted, facilitated, or planned professional development seminars or programs?
7. Are you a member of any training and development association or organization?
8. How many years have you been actively involved in training and development projects?

Criterion 4: Expertise

9. Have you had published any of your writings regarding training programs?
10. Have you had any other evidences of training competence that you wish to share?

Criterion 5: Follow-Up

11. Are you willing to respond by telephone, at some future date, to additional tasks that may be suggested by other panel members?
BIBLIOGRAPHY


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Stufflebeam, D. L., Foley, W. J., Gephart, W. K., Guba, E. G., Hammond, R. J., Merriman, H. O., & Provus, M.


