At this time, those responsible for the retarded are asked to be accountable for new dollars spent. In most cases, tools and techniques that can be used to develop accountability models have not been integrated into systems that serve the retarded. This presentation deals with philosophies, tools, and techniques that can be used to improve present management systems. These new philosophies, tools, and techniques fall under the heading of Formative Management, which is discussed and compared with traditional techniques. (Author/WCM)
FORMATIVE MANAGEMENT: A MEANS OF MOLDING WINNING PROGRAMS
James F. Budde, Elaine M. Eklund, and John P. Hanna

ABSTRACT

Presently those responsible for the retarded are asked to be accountable for new dollars spent. In most instances tools and techniques that can be used to develop accountability models have not been integrated into systems that serve the retarded. This presentation deals with philosophies, tools, and techniques that can be used to improve present management systems. These new philosophies, tools, and techniques fall under the heading of Formative Management, which is discussed and compared with traditional techniques.

INTRODUCTION

Amid a rising national debt, and increasing trade deficits with other nations of the world, federal spending is and will undergo closer scrutiny. The area of services for the retarded is no different from any other in that those responsible are being asked to account for dollars spent. The following quotation from the Federal Register, Volume 36 -- No. 249, Part II, reflects the current trend toward evaluation and accountability:

The State Council shall be responsible for obtaining evaluation information and data from within the State. The State program and project evaluation information and data shall be prepared in a format approved by the Administrator and consisting of a narrative statement and statistical data, reflecting a scientific and modern managerial point of view. It shall communicate easily and readily, in an objective manner, the accomplishments and effectiveness of programs operating in the State. (Author's italics)

Although accountability is concerned with more than efficiency, efficiency remains a paramount issue--and not a new one at that. Although philosophies of treatment have changed (Wolfensberger, 65-143), efficiency measures have been
will continue to be an issue. Few would disagree that efficiency is essential in providing the best services for the least cost, but often efficiency comes in the arbitrary form of meager budgets and fund cuttings. These do not necessarily insure efficiency. In fact, inadequate funds can often create loss of effect and efficiency.

Accountability and efficiency measures are becoming evident in human service projects and will continue to confront administrators and service providers. Management philosophies will need to be modified. New management tools and techniques will need to be integrated into present service systems if the charge of accountability is to be answered. The purpose of this article is to illustrate one means of bridging the gap between present and future management systems.

The General Problem Solving Model

Over the past decade administrators have found it necessary to modify general management problem solving strategies to make them more effective. The general problem-solving model has some inflexible features that limit change within the structure of an organization. This inflexibility is often found in organizations dealing with human services. The following are elements of the general problem-solving model: 1) needs definition, 2) goal determination, 3) solution development, 4) solution implementation or "try out." and 5) solution evaluation.

A graphic interpretation of the general problem solving model appears in Figure 1.
Limitations of the General Problem Solving Model

Goals are ambiguous. Goals cannot be ambiguous if an organization is to know if it is proceeding in the right direction. Instead, goals must be translated into measurable objectives which include criteria for performance measures.

Measurable objectives have gained widespread attention, and are gaining popularity in the area of human services. More traditional evaluation and performance measures have come under question. Thomas A. Morehouse has written:

Obviously, if the principle purpose of evaluation is to determine the extent to which a program achieves its objectives, then objectives must be clearly defined and stated in such a way as to permit the necessary measurements to be made.

Executive administrators attempt to make decisions concerning the nature, scope and context of services. This can be a slow and awkward process, inhibiting creativity and flexibility at all management levels. When this is the case, concentration of power at the top is not necessarily equivalent to control. If objectives are to be achieved and changes made, the employees doing the work and observing progress are in the best position to deal with the problem and should be made responsible. Accordingly, they should have an opportunity to be made responsible, and held accountable.

The "general problem-solving" model implies summative evaluation. Human service organizations have typically considered evaluation as the last function to be performed, often only evaluation is made when time and money were available. As a result, evaluative information has often been
lacking and administrators have had incomplete information with which to evaluate their programs.

FORMATIVE MANAGEMENT

Formative management is a dynamic approach that can be used in everyday operation of organizations. Initially, consumer needs are assessed for the express purpose of specifying a target population and their particular needs. Measurable objectives are written by all employees at all levels in order to meet the needs of the target population. Timetables for implementing those objectives are then scheduled. While programs are being implemented or operated they are also being evaluated on a systematic basis. Evaluation is conducted by those who developed and implemented the objectives. If problems are encountered, there is a mechanism available for needed change. A representation of the Formative Management Model is shown in Figure 2.

FIGURE 2

The individual elements that constitute the formative management process appear in the cells of the formative management model above. Each of these elements will be described in greater detail in the sections that follow.

Where to Start (Needs)

The first planning step is to define population needs. No successful business would attempt to market a product without conducting a market
survey to determine consumer need. The same principle can be applied to human service organization: we must first define the needs of those to be served, then plan services and products accordingly.

In the past, human service organizations have not been required to produce products or even identify products within these service systems. Yet, as with any business, products have been produced. The day has arrived when it is necessary not only to identify, but to document the quality of the products. These products will undoubtedly be called service units or service products.

Procedurally, a needs survey for human services is not unlike a market survey in business. The first step is to specify where the service area will be located. Next the population and their behavioral, physical, and medical needs must be identified. Tools such as behavioral check lists or profiles, client-teaching systems, and in some cases, professional diagnosis and evaluation can be used for this purpose. In some organizations this information is readily available and only requires integration into a statement of need.

Available resources are the predominant factor affecting needs surveys. With minimal resources it is difficult to collect adequate information.

Some needs information reflecting the scope of service or service products to be provided is always better than none. Attempts must be made to collect this minimal information.

Determining Service or Program (Solutions)

With needs identified, solutions or services needed must be defined. To make a final service selection, priorities must be established. It is usually best to set priorities by using two methods. First, each service should be assigned a priority ranking according to client population need. Then, programs should be priority-ranked according to feasibility. Feasibility is
typically concerned with the availability of resources. Both feasibility and need should be weighted against one another to determine final priorities. Once final priorities are determined, those most needed and feasible should be included in the final service selection.

The Program or Service Model

Although services are selected to meet specific needs, precision of selection does not guarantee precision of service implementation or operation. If a builder were to identify the general type of structure for meeting a family's housing needs, his job would be partially complete. In order to insure standards, he would develop a blueprint. Human service programs are complex and if we cannot identify them with precision, then we will not be able to control them. Components of our service will not fit or work if they are not developed to some standard, just as pieces of a house will not fit if they are not built according to a blueprint.

Traditionally we have defined service programs with written documentation, or left detail open to interpretation. Systems models such as Figure 3 can be used to provide a service blueprint. These models provide a major framework, and when criteria are added for specific services or flow between the services, a blueprint is at the manager's disposal.

The program model in Figure 3 exemplifies how human services under the Developmental Disabilities Act of 1970, P.L. 91-517, can be defined graphically.

This seven-cell model represents a simplified structure. If this same model were developed in greater detail, 400 service components or more might be illustrated to define the relationships of the various components and
subcomponents constituting the services. Although a 400-service component model may seem complex, the complexity is much less than might be required to describe the services in writing.

Developing Measurable Program Objectives

Inherent in the formative management concept is specification of performance criteria. Measurable objectives are used for this purpose. Measurable objectives typically state: 1) the condition for performance, 2) the performance expected, and 3) the criteria or standard for performance. For example, the objective of a vocational training service might be that shown in Figure 4.

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>CONDITIONS</th>
<th>PERFORMANCE</th>
<th>CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocational Training</td>
<td>With $8,500, three existing training rooms and equipment</td>
<td>train twenty moderately and severely retarded clients to perform job skills</td>
<td>that meet minimum requirements for entrance into one of the three highest community placement areas.</td>
</tr>
</tbody>
</table>
For too long in human services planning, the assumption has been that administration planning is critical only at top management levels. The results of such planning end up as broad program goals which say little about the content of subsequent levels of service. Program planning traditionally begins with a table of organization which is expected to assume programmatic control and to develop objectives. Tables of organization account only for how people are to relate authoritatively. Unless service content is planned at all levels of management, unless measurable objectives are stated for those levels, and unless managers are made responsible for specific objectives, it is doubtful that service impact can be measured or controlled.

Developing Measurable Implementation Objectives and Schedules

The implementation cell of the formative management model represents an extremely important step. All previous planning will be of no consequence if objectives for activating plans are undefined. Implementation objectives provide the criteria for setting up a service or modifying an existing one. The same format used for measurable program objectives can be used to develop measurable implementation objectives. Once these objectives are defined, an implementation schedule becomes an effective tool which can be employed in the implementation phase. A cutaway portion of a sample implementation schedule appears in Figure 6. This type of schedule provides management with a multidimensional view of tasks to be performed.

**FIGURE 6**

<table>
<thead>
<tr>
<th>Service &amp; Tasks</th>
<th>Personelle and Percentage of Time Allotted</th>
<th>-Days-</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabricate Heat Sealer</td>
<td>Jones 100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install Bulk Packager</td>
<td>Smith 50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Plastic Shrinker</td>
<td>Smith 50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assemble Bulk Packages</td>
<td>Jones 100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct Initial Intake</td>
<td>Smith 50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop Training Materials</td>
<td>Jones 100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct Staff Training</td>
<td>Jones 100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The implementation schedule can be used to specify implementation objectives, responsibility for the objectives, personnel, and project deadlines. Once implementation schedules are developed, staff will plot actual progress in terms of goals met by estimated deadlines. If estimates are incorrect or if intervening variables delay a task, the staff member responsible for attaining the objective must seek alternatives and make adjustments. This usually requires a joint decision with a higher level of management.

A key factor is that the implementation schedule can and should be used by employees at all levels. In fact, the implementation schedule will be least effective when confined to the top levels of an organization. The further down the organizational ladder the implementation schedule is used, the more effective implementation will be. It should also be noted that a Program Evaluation and Review Technique (PERT) or Critical Path Method (CPM) could be used for the same purpose.

Feeding Back Evaluative Data

Most traditional management approaches contain provisions for evaluation, but the actual management of most projects is conducted on a "critical incident" basis. If something occurs that interferes with operation of a project or organization, management attempts to make the necessary adjustments. This type of evaluation and subsequent modification is formative in a sense, but it is often used on the basis of incomplete information. A critical incident does not reflect the total or even the short term scope of a project. While it does reflect that something is wrong, it often fails to pinpoint the source of the problem. The critical incident may generate one or several changes, which may solve the problem.
Without criteria, this objective is at best a program goal. Inclusion of criteria provides a standard comparable to structural dimensions in the blueprint for a house. As the model in Figure 3 is developed to include a finer level of service components, criteria and responsibility for each component must be defined with a measurable objective or a number of measurable objectives. The criteria in the service objective on the previous page also defined the parameters for subsequent objectives. Figure 5 is an example of a subsequent objective which was devised from the criteria in Figure 4. One of the three highest placement areas was in the packaging occupations, then the necessary packaging skills can be defined.

**FIGURE 5**

<table>
<thead>
<tr>
<th>SERVICE COMPONENT</th>
<th>CONDITIONS</th>
<th>PERFORMANCE</th>
<th>CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Shrinker Training</td>
<td>With a plastic shrinker</td>
<td>the trainee will package ten (10) different customer products</td>
<td>so that the cover layer of plastic is unwrinkled and attached to the full edge of each side of the back cover. (Rate differential for each product).</td>
</tr>
</tbody>
</table>

Management of the total system is distributive. Those responsible for any particular component are correspondingly responsible for evaluating the objectives of that component. Criteria within the objectives provide an immediate reference for evaluation, just as the blueprint for a house can be used to evaluate the performance of the builder. As objectives are developed for the finer levels, the criteria, and therefore the evaluation, become more precise. This is formative management in its best desirable form. When a particular service component is not producing the desired effect, efforts can be made to determine what modifications are in order.
The most common type of evaluation takes place at the end of a project, if then. The results of these evaluations are typically used to improve the structure of future projects or satisfy governmental regulations. This is long range evaluation, often referred to as summative evaluation. Summative evaluation lacks the capability for making immediate corrections often needed in daily or weekly operations. Summative evaluation is needed, but a great deal of summative data must be based on combinations of daily and weekly data acquired through formative evaluations.

Formative Evaluation and Feedback

Evaluation and feedback are discussed together due to the complementary nature of the two methods found within the formative management process. Evaluation of objectives at many levels must take place many times over throughout the life of a service program. On the basis of the results of these evaluations, information is fed back to the management or staff who are responsible for the various objectives.

One of the major benefits of formative evaluation and feedback is that programs do not go on for six months or a year before evaluation reveals costly errors in overall services or service components. As evaluations are performed and discrepancies detected, corrective action can be taken by the manager or personnel responsible. It is through this process of formative evaluation, feedback, and modification that formative management gets its name. It is, in fact, formative.

CONCLUSION

What Heraclitus said in the fifth century before Christ—"There is nothing permanent except change"—is very compatible with the formative management
concept. However, the process outlined in formative management provides evaluative data as to what and when changes are needed and provides the framework so that needed changes or modification can be made. Formative management recognizes and accepts the premise that plans made today are based on the knowledge of today and do not reflect what can happen tomorrow. It also recognizes that standards must be provided, and an organization should only be modified when there is data to support change.

It would seem that if we are to be accountable we must be concerned with effectiveness, efficiency, and modification. We must be able to specify what is effective, and use modification to make our service organization more effective. We must also attach a cost to the effect and modify our processes to make the effect more efficient.

Talking about change and modification is one thing, doing it is something else. Publius Syrus wrote in A2 B.C., "It is a bad plan that admits of no modification." Even at that early time there was no question of the need for modification. However, the tools and techniques that tell us when and if we should modify and how to do it effectively are the present key problems.

There are tools and techniques available that can be used to solve at least some aspects of these problems. Several of these tools and techniques have been described or illustrated in this article. It would seem that if we are sincere about accountability and quality services for the retarded, and efficiency of these services, we should seriously consider application of tools and techniques described in this article.
REFERENCES


