The rationale, operational framework, and implementation case study of a planning-evaluation model for a medium-size school district are discussed. The system defines a management information function in the three components of planning, operations, and evaluation. The relationship among these components is presented in both diagram and narrative form. The skills needed by personnel and the objectives they are to attain are identified. A description is given of the computer-based management tools particular to each component. The purpose of the system is to provide timely and accurate information to educational managers, which allows for discrimination between alternative courses of action at any time during program development or operation. The ultimate goal of the system is to relate the benefits of a program to the costs through a well defined and specified plan of operation. (Author)
Planning-Evaluation
in a
Medium-Size School District

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INTRODUCTION

"Planning-Evaluation in the Medium Size School District" is a working document which has been submitted to the management of the Duluth Public Schools as a base for developing an operational system of planning and evaluation. The conceptualization is founded on several observations by the author, which are presented in this introduction as theory. The assumptions of the theory are:

1. In all phases of school system planning and evaluation the individual student is the unit of analysis.

2. Student-teacher interaction is the primary function of the school system.

3. All tasks and processes of a school system can be defined in relation to the individual student's behavior resulting from student-teacher interaction.

4. The process of planning and evaluation should initiate and terminate with the individual student.

5. Between initiation and termination the process of planning and evaluation provides information to several decision makers separated by various
degrees of time, physical location and awareness from the point of student-teacher interaction.

6. The greater the degree of separation between the decision maker and the point of student-teacher interaction,
   
   (a) the greater are the number of students and points of student-teacher interactions considered in the information base for decision-making, and
   
   (b) the more general are the statements of expectations for students and student-teacher interaction.

7. The degree of specificity required in an information base for decision-making is not related to the degree of separation between the decision maker and the point of student-teacher interaction. Rather, the degree of specificity is related to the effectiveness and efficiency of the decision.

8. The effectiveness and efficiency of a decision-making process is determined by three criteria:

   (ii)
(a) The satisfaction of student needs resulting from maintenance or change in student-teacher interaction.

(b) The time lag between the identification of student need and the satisfaction of student need.

(c) The cost in human and material resources for maintaining or changing student-teacher interaction.

Acceptance of the theory leads to several conclusions pertaining to a planning and evaluation process:

1. The definition of a planning and evaluation process should be initiated with the individual student and the individual point of student-teacher interaction.

2. At each level of decision making, the data base and resulting information base should be expanded to include all students and points of student-teacher interaction affected by the decision.

3. Decisions at a given point of separation from a point of student-teacher interaction should be preceded by decisions at points of decision making in greater proximity to the point of student-teacher interaction.

(iii)
4. The creation of the data and information base should be an accumulative function following an unbroken chain of communications consistent in content and degree of specificity.

At present, planning and evaluation models tend to emerge at an organization level between top management and the field administrators. The models are primarily designed to provide middle and top management with an information base. At best, these models reach down to the level of teachers using the management-by-objectives concept as a planning and control mechanism. In most instances the objectives are set by administrators and teachers for themselves without being preceded by a student needs assessment. In this situation the management structure tends to hover above the student and the point of student-teacher interaction, with an occasional and somewhat random connection.

The dysfunction resulting from initiating a planning and evaluation process at a location other than a point of student-teacher interaction is often obviated at the federal level by guidelines for which school districts cannot identify data-based needs; evaluations designed to measure objectives different from those of the local districts; and discrepancies in role definitions for federally funded local school staff and the tasks these staff members perform.

The state departments of education administering the programs add an additional set of decisions several steps removed from the
point of student-teacher interaction, which in turn are filtered through the central administration of a local school district. Through the central administration of a local school district, another set of decisions is superimposed on the point of student-teacher interaction.

Considering the local district planning and evaluation process independent of federal funding, the dysfunction is much the same. A system for planning and evaluation is developed somewhere in middle management or purchased from an educational management corporation. The structure is then tailored to accommodate program titles usually correlated with central administrative positions presently in existence. A set of forms is then sent to the schools for the principal to complete, in which the line item budget is divided among program titles. Teachers, principals and central office administrators generate objectives particular to their role, usually in the context of task performance. These objectives, combined with the program budget, are then presented as a systems approach to school management, i.e., the resultant product of a planning process.

The general framework for the planning and evaluation process presented in this paper is based on the premise that individual student needs must be identified and performance objectives generated before other steps in the planning process can be initiated. Two basic companion systems are proposed. The first
describes a goal-setting structure and the second describes the
management component for implementing the system. The paper does
not contain extensive descriptions on documentation of software
used to implement the system. These materials are being prepared
under separate cover.

A feasibility study testing the mechanics of the goal structure
is presently being attempted in the area of word attack skills
based on the Wisconsin Design for Reading Skill Development and
a Computer Managed Instruction System developed by the Duluth
Public Schools in conjunction with the Research and Development
Center for Cognitive Learning of the University of Wisconsin.
In brief review, the program requires the teacher to administer
a baseline test and, after reviewing the pre-test score of each
student and the past performance of the student, the teacher gener-
ates levels of expectation for each student in terms of their anti-
cipated progress (number of skills to be mastered). Based on a
simple accumulative function, levels of expectation are then
generated for the classroom, the grade level within the school, and
the grade level within the district. It is anticipated that the
system will be expanded within the next school year to other
elements of the Wisconsin Design and to a math program and skills
list developed by the Duluth Public Schools.

In those areas for which hard data measures are not available,
perception instruments have been used to obtain student baseline
information and individual student expectations. A system is also being developed to quantify individual student objectives for supportive services, such as, social work, psychologists, speech therapy, etc.

Implementation for the management component of the Planning-Evaluation System is being developed in the context of federal programs, most specifically, Title I. Although some setbacks have been experienced, the basic elements of the management model have been initiated and the documentation for role definitions, task performance, the management of each component process, resultant products from each component, and the sequence of project feedback have been completed and a report on the first year’s effort is now scheduled for August of 1973. A second year of implementation will center on task analysis in relation to the objectives. The attempt will be to quantify the specific tasks which lead to the attainment of the student objectives so as to allow for analysis in conjunction with the budget allocations. The basic approach presented in The Milwaukee Approach to Cost/Effectiveness* will be employed.

Statement of the Problem
Rationale for Planning-Evaluation

The problem facing an educational decision maker is one of having to choose among alternative courses of action which have not been quantified and, in most instances, have not been sufficiently defined or identified. The problem is usually characterized by the definition of goals and processes in terms which fail to communicate the specific information needed to discriminate between alternatives. A partial solution to the problem, and a needed base for evaluation, is the definition of goals in terms of specific and measurable objectives and the definition of processes in terms of tasks which consume human and material resources and are scheduled to take place within a set period of time.

For example, the goal of one project may be "to improve the educational environment" and the goal of the second project may be "to improve the curriculum". Until these goals are defined in more specific terms, the decision maker cannot be certain of what he is considering. If the goals are described in terms of specific observable tasks such as "to purchase 500 volumes for the library" (i.e., to improve the educational environment) or "to introduce a course on consumer economics" (i.e., to improve the curriculum) the decision maker is at least able to discriminate between the kinds of alternatives open to him.

Although these objectives are defined sufficiently for some decision making, they are not sufficiently defined for consideration of
quality of output or cost of production. For example, the decision maker may consider an addition of 500 volumes to the library desirable if, (1) the volumes relate to subjects which are in need of source material, (2) they can be obtained in a ten-month period, and (3) the total cost is less than five dollars a volume. The decision maker may also consider the course on consumer economics desirable only if (1) the course satisfies an identified student need, (2) the course complements the established curriculum, and (3) the course can be initiated at an expense of less than $3,000 for an academic year.

If the decision maker should decide to implement either or both of the projects, he must next be concerned with the alternative means of attaining the desired outcomes. It is at this point in the decision-making process that the definition of processes needs to be stated in terms of specific tasks to be performed. The decision maker needs to identify the most efficient and most effective course of action by which to accomplish the objectives. The tasks should consume minimum resources and yet achieve a desired quality of performance.

A basic element of the approach to the decision-making process, via planning and evaluation, centers on several assumptions. The decision maker has identified a need and the satisfaction of the need has been given a high priority, thus the decision maker has completed his choice of the kind of objective to pursue. In addition to the choice of objective, the decision maker has determined a level of performance or an expectation for quality.
At this point the decision maker must choose a solution which may be either successful or unsuccessful. If the solution is unsuccessful he must find another solution. He may not conclude that because the solution is unsuccessful he must eliminate the project and thus the objective. The decision maker must ultimately choose between processes as opposed to projects.

If a school has identified a need (such as higher student achievement) and initiated a solution (a special reading program) which failed, the decision maker must avoid eliminating the project in such a way as to eliminate the objective and thus ignore the need. Rather than ask the question of whether the project succeeded or failed, he must identify the components of the project which were most successful and also those components which were least successful. In the act of discriminating between levels of success, he must also consider the costs of the components. These conditions of the decision-making processes form the need on which the conceptualization of evaluation must be based.

The operational structure of an educational system, however, is necessarily ill-suited to a classical application of a research design. The application of classical research presupposes control over the operation of a program. As has usually been the case, control, such as defined in a classical control/experimental research design, is seldom evident in school operations. For example, experimentation with a new method of teaching, a new textbook, or new equipment would be introduced to a sample of students from a defined
population. The use of the textbook would be controlled and most intervening variables, such as class size, facilities, the teacher, etc., would also be variables controlled and accounted for. The achievement scores of the experimental group of students would then be compared with the achievement scores of a sample of students drawn at random from the same population, but who were not exposed to the innovation being tested. All variables in both samples would be controlled.

In most school situations, however, control is not present. Students are subject to innovative practices on the basis of need without concern for a research finding, thus eliminating the selection of a control group (e.g., all underprivileged children will benefit from a federal project). Teachers’ assignments are often made on the basis of scheduling needs, not on the desire to test a hypothesis. Control of inputs (books, supplies, etc.) are often dependent on operations outside of the school setting, such as a central administrative office.

Uncontrolled variables present in a given operational situation greatly hinder a researcher’s ability to generalize from findings. This situation necessitates the development of an evaluation component which, rather than operate on the assumption of control, is designed to account for the lack of control. The model must be set somewhere between the goal of describing an existing structure which is buried under a facade of confusion and the goal of accounting for
the lack of structure. The model must be both a descriptive tool by which to compare alternative processes to accomplish similar objectives and a manipulative tool by which needed future directions can be identified for decision making. As previously mentioned, the evaluation component is a descriptive tool which does not interfere with or manipulate project or program operations. The application of the model is to provide for a comparison of project processes as opposed to projects.

**Definition of Evaluation**

Evaluation is the assessment of performance by a target population toward the attainment of specified objectives. It is comprised of those acts of designing and instrument development, data collection and analysis, and report preparation.

I. Resultant Product—Decision Making Data Relative To

A. Feedback of findings and conclusions of program effectiveness.

B. The equating of expenditures with a measure of the utility and/or effectiveness of a process or program for:
   1. the identification of most useful and/or effective processes for the least expenditure as they apply to diverse target populations; and
   2. the determination of areas of program weaknesses.
C. Identification of program thrusts most likely to meet specified program needs and a means of quantifying the impetus to thrust.

II. Overview

The planning-evaluation design recognizes limitations from both the fiscal and evaluative perspectives that are placed upon the role and scope of planning and evaluation in the public schools. The evaluation section of a planning-evaluation model is composed of two components: formative evaluation conducted at interim points of a program's duration and summative or final evaluation. The former would be conducted by local program personnel with assistance from central administrative personnel. Methods of data collection would be similar to that now employed, with teacher-made tests and some district-wide testing instruments being the primary tools. However, the use of the data would be far more reaching.

Most evaluation presently being conducted within and by a school is for the measurement of pupil achievement for the purpose of evaluating the student not the educational program or process contributing toward that achievement. Most evaluation results identify global areas of needs, but this is a residual not primary product.

The proposed planning-evaluation design, while not minimizing the need nor product of student evaluation, will utilize these same results to better enable local teachers and administrators in altering the programs and processes to increase student achievement toward the desired goals and objectives.
The summative evaluation would be a major source of information for the program renewal phase of a program and act as a source of baseline data with which to compare formative evaluation results. Summative evaluation would provide data in terms of the cost/utility of a program and process. The evaluation designs would be developed as the programs are initially developed and would necessarily vary from program to program. Assessment would be directed toward measurement of a process’ contribution to students in attaining the level of performance specified in an objective (achievement and attitudes).

A major component of summative evaluation would be data from the formative evaluation conducted regularly. This data would be reported periodically to the Department of Planning and Evaluation and provide a monitoring device on a program for management.

III. Evaluation Configuration

A. The development of the instructional program would start with the assessment of individual student needs and the statements of expected achievement for each individual student through a uniform structure. These statements of expectation constitute specific performance objectives for each individual student. Objectives for students provide the basis for stating the objectives for the classroom.
The objectives for the classroom provide the basis for determining the objectives for the grade level within the school. The objectives for the grade level within the school define the objectives for the grade level across the city. These objectives, in turn, define the goals toward which the entire school system is directed.

B. The configuration for the evaluation process is identical to those of planning and programming.

1. As the composite incremental objectives are achieved, a supra-objective is attained.
2. As a supra-objective is attained, the more broadly stated goals are attained.

C. Evaluation, then, is based upon an approach where the attainment of the parts leads to the attainment of the whole.

IV. Evaluation Procedures
A. Formative Evaluation
1. Baseline data is collected during the previous summative evaluation.
2. Instruments are developed and administered by local program personnel.
3. Results are compiled by local program personnel.

4. Results are reported to the Department of Planning and Evaluation on forms required by the particular design of the summative evaluation.

5. Evaluation is conducted "periodically" to:
   (a) measure student achievement for grading purposes, and
   (b) measure interim student achievement to determine effectiveness of processes and activities.

6. Data in normative references would be used to alter program processes and activities to increase effectiveness toward student achievement.

B. Summative Evaluation

1. The evaluation design and instruments would be developed and administered under the direction of the Department of Planning and Evaluation.

2. The data would be compiled and reported by the Department of Planning and Evaluation.

3. The findings and conclusions would be submitted to the Duluth Public Schools management and program personnel for interpretation.
C. Program Evaluation Analysis

1. The interpreters of evaluation data determine where programs may or may not have succeeded.

2. Criterion of interpretation for evaluation data:
   (a) Were the specified processes and activities carried out?
   (b) Were the specified processes and activities properly carried out?
   (c) Were the specified processes and activities incorrect for the target population?
   (d) Have conditions changed, causing previously stated processes and activities to fail?
   (e) Does a completely new need or problem exist which takes priority over the present program or project?

Goal Structure

The model for the goal structure of a school system is an abstraction of the administrative structure. In most instances the structure is pyramidal in form but does not represent a hierarchy of needs. It represents levels at which different types of information are appropriate to educational decision making. The essence of the goal
structure model as it differs from the models presented in the literature is that it starts with the identification of needs and statements of expectations for students at the base of the pyramid and from the identification of these individual student parameters all other objectives and goals are defined. Based on the premise that the whole consists primarily of the sum of the parts, and that assessment must begin with the smallest unit of analysis, the first sets of goals utilize expectations for the individual students. These expectations, stated in the form of specific performance objectives, represent the foundation on which rests the remainder of the structure.

Definition of Objectives

In order to insure commonality of definition of types of objectives, several distinctions will be noted. Instructional objectives will be defined as behavioral objectives which specify a desired level of performance for a student or a group of students.

Example:

During the thirty-minute "sharing time" each morning, Kim will make at least three voluntary statements per period for five days. A voluntary statement is one which is not prompted by a question from the teacher or another student.

Example:

During the first semester of the 1972-73 school year the average number of skills mastered by
Figure I

Goal

Performance Objective by Grade Level and/or Subject Matter Area, District-Wide

Performance Objective by Grade Level and/or Subject Matter Area by School

Performance Objective by Classroom

Performance Objective by Student
third grade students at P.S. 21 will be no less
than four as measured on the Criterion Referenced
Tests of the Wisconsin Reading Design.

The second level of a goal structure will consist of unit goals for
individual schools stated in terms of management objectives for
teachers and administrators. The management objective is a behavioral
objective which specifies a desired level of performance for a
teacher and/or an administrator as related to the objectives for the
classroom and the objectives for grade levels within the schools.

Example:

The teacher will visit the homeroom for each student
at least once during the school year and will write
a report on each visit, to be shared with the parents.
A tentative schedule for the home visits will be
established by October 15, 1972.

When the management objective refers to the collective goals of the
individual teachers and/or administrators within a school, they
then constitute mission objectives.

Example:

By the end of the school year the home of each student
enrolled in P.S. 21 will have been visited at least
once by a teacher and/or administrator.

The management and mission objectives serve as quality control
measures of task performance by the staff.
The third level of a goal structure is based on the identification of instructional objectives, management objectives, and mission objectives. At this level the objectives are stated to correlate with subject matter areas within the schools. They are identical in form to instructional objectives. They rely on the satisfaction of management and mission objectives. Their particular characteristic is in scope of coverage.

Example:

By the end of the academic year all students enrolled in Advanced English at the Kennedy Junior High School will attain a score on the Co-operative English Test equal to or greater than 70 percentile.

The final level of the goal structure, and the pinnacle of the pyramid, refers to the reporting of objective attainment on a district-wide basis. The goal statement is general in nature, does not change drastically over a long period of time, and usually takes the form of a school system's aspirations and priorities.

Example:

All students graduating from high schools in the school district will have acquired adequate skills in the areas of Reading and Mathematics to participate in the general workforce of the country.

The statements of objectives beyond the individual student and classroom levels are either predetermined by the student and classroom objectives or are directly supportive to the attainment of student and classroom objectives.
Planning - Evaluation Model

Tasks and Processes

The combination of resource allocation, development and evaluation embodies a systematic approach to supportive services for the administration of instructional activities. As viewed in one schema, resource allocation is a quantification of inputs in terms of program design; development is a quantification of administrative and instructional processes in terms of human activities (interactions) and time constraints; evaluation is a quantification of outputs in terms of changed human behavior in accordance with a predetermined set of standards. (See Illustration A.)

Illustration A

Planning - Evaluation Model

Inputs → Process → Outputs

Resource Allocation → Development → Evaluation

In terms of actual implementation the schema works in reverse. The involved departments would first identify the desired outputs (identification of specific performance objective based on needs assessment). The second series of tasks would consist of identifying those combinations of activities (series of tasks which consume human and material resources within predetermined time constraints) by which the objectives could be attained. The definition of these tasks and activities are the development phase of the planning process.

- 14 -
Inputs for the planning process are human and material resources reduced to the common denominator of a dollar figure. The identification of inputs is defined as program resource allocation. It is differentiated from the task of budgeting and accounting in that it requires the detailed study of program alternatives in an instructional context. Illustration B presents the functions of departments relative to the systematic planning schemata presented in Illustration A.

Illustration B
Planning - Evaluation Model

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Resource Allocation</td>
<td>Program Development</td>
<td>Evaluation</td>
</tr>
<tr>
<td>Identification and Allocation of Available Resources</td>
<td>Identification of Alternative Activities and Tasks</td>
<td>Definition of Performance Objectives</td>
</tr>
</tbody>
</table>

The description of tasks presented in Illustration B represents the planning process as it is manifested prior to the initiation of the operation of the instructional program. During program operation a second phase of planning takes place. This is program monitoring, and it is basically an interim accounting function by which
(a) resources being consumed are compared to resources allocated, 
(b) tasks being performed and activities being completed are compared to tasks and activities planned and time constraints imposed, and (c) the rate of objective attainment is compared to the end product standard as specified in the performance objectives. This is the quality control phase of the planning function.

The third phase of the planning function takes place at that period of time which can logically be identified as a completion point of a program or a completion point of a major program component. The completion point is identified as the point in time when the performance objectives are expected to be attained. At this point the determination is made as to whether the objectives have been reached, whether all tasks and activities were efficiently executed at an acceptable level of quality, and whether resources were efficiently and effectively allocated to the tasks and activities. It is at this point that major decisions concerning the program are made and the entire planning process is again initiated for future school system goals. Illustration C presents the completed picture of the process.
ILLUSTRATION C
PLANNING - EVALUATION MODEL

<table>
<thead>
<tr>
<th>Program Resource Allocation</th>
<th>Program Development</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td><strong>Process</strong></td>
<td><strong>Output</strong></td>
</tr>
<tr>
<td>Identification and Allocation of Available Resources</td>
<td>Identification of Program Activities and Tasks</td>
<td>Definition of Performance Objective</td>
</tr>
<tr>
<td>Interim Measure of Consumption to Allocation</td>
<td>Interim Measure of Performance to Planned Constraints</td>
<td>Interim Measure of Rate of Objective Attainment</td>
</tr>
<tr>
<td>Final Measure of Consumption Allocation</td>
<td>Final Measure of Performance to Planned Constraints</td>
<td>Final Measure of Objective Attainment</td>
</tr>
</tbody>
</table>

Phase:
- I Initial Planning
- II Monitoring
- III Terminal Assessment
The primary responsibilities of Program Resource Allocation in terms of tasks are

(A) Identification and Allocation of Available Resources

(B) Interim Measure of Consumption to Allocation

(C) Final Measure of Consumption to Allocation

In terms of processes the primary responsibility of Program Resource Allocation is coordination of Phase I, Initial Planning.
The primary responsibilities in terms of tasks for program Development are

(A) Identification of Program Activities and Tasks (Constraints)

(B) Interim Measure of Performance to Planned Constraints

(C) Final Measure of Performance to Planned Constraints

In terms of processes the primary responsibility of Program Development is the coordination of Phase II, Monitoring.
The primary responsibilities of Evaluation in terms of tasks are

(A) Definitions of Performance Objectives

(B) Interim Measure of rate of Objective Attainment

(C) Final Measure of Objective Attainment

In terms of process the primary responsibility of Evaluation is the coordination of Phase III, Terminal Assessment.
Planning - Evaluation Model

An Example

Phase I: Initial Planning

In order to meet the needs of evaluation according to the procedures as outlined in this paper, a program description should include specific performance objectives reflecting the findings of the basic needs assessment. These objectives should refer to behavior changes for all participants receiving service. If changes are expected for teachers or parents under the list of intermediate goals (parent or teacher behavior changes as an outcome of inservice which is expected to relate to student behavior changes), these, too, should be stated in specific performance terms.

Specific performance objectives for behavior changes should also be followed by a statement or statements describing the tasks which, when performed, will lead to the attainment of the objectives (management objectives). These tasks should be written so as to denote the specific consumption of human and material resources within a designated time period. Tasks should be described so that a manager can easily identify the point at which they begin, the point at which they terminate, and the outcomes that are dependent upon their completion.
Identification of Need (Hypothetical)

In three high schools the attendance figures are below 80%. Fifteen percent of the student body have been identified as chronic discipline problems, as evidenced by one or more suspensions during the academic year. The dropout rate in each of the schools during the junior and senior year is greater than 20%. Over 25% of the student body in each of the schools receive one or more failing grades during the academic year. Of the 20% of the student body who should have seen a counselor, 15% failed to do so. Through a survey of teachers, it was determined that 90% felt that they do not have the time to talk to the student with these difficulties and that the students made no attempt to talk to them. On the same survey the teachers indicated on the average that they thought that 20% of the students in their classes would not complete the academic year.

Specific Performance Objectives

Based on the needs assessment, the teaching staffs of the schools identified the following specific performance objectives for students:

To reduce the number of potential dropouts as perceived by the teachers in each of the three schools to 10% of the total student body as recorded on a questionnaire to be administered in January of the first year of project operation.

The number of failures of students identified as potential dropouts during the first year of project operation will decrease by 50% as compared to the year before.
The actual number of dropouts recorded by June of the first year of this project's operation will decrease by 50% as compared to the dropout rate of the year before as recorded in the school records.

For the students identified as potential dropouts, the number of days absent during the first year of this project's operation will decrease by 50% as compared to the number of days absent during the previous year (to be recorded in June of the first year of project operation).

At least 50% of the teachers who indicated that they seldom talked with students who were potential dropouts will indicate on a questionnaire to be administered in June of the first year of project operation that they have talked at least once with each of the students who were identified as potential dropouts.

The number of suspensions obtained by students identified as potential dropouts will be 50% less during the first year of this project's operation as compared to the preceding year.
On a questionnaire to be administered in June, at least 80% of the potential dropouts who remain in the school will indicate that:

A. There is at least one adult person in the school whom they like to talk to concerning their problems.
B. That they enjoy going to school this year better than they did last year.
C. That they hoped to complete their high school education.
D. That they have the ability to do well in school.
E. That they are no less able to perform well in school than are most of the other students.

Tasks and Processes--Resource Allocation

A handbook for working with students who are potential dropouts will be developed by project staff. The handbook will be ready by January 31 of the first year of project operation. The handbook will cost no more than $1,000.00 to publish. The handbook will require 200 hours or 4 working weeks of a project director's time ($1,500.00), ten work sessions of three hours each with fifteen teachers from each school ($157.50 per teacher, $7,087.50 total)
and thirty hours of work time with the counselors from each of the high schools ($150.50 per counselor, $472.50 total).

During the second semester of the first project year, counselors will visit each classroom teacher three times for one hour each to discuss the problems of specific students in each of their classes. On the average, preparation and the visits require 360 hours of counselor time and 90 hours of teacher time for each school. The estimated cost is $4,500.00.

Teachers will spend two hours each week talking with students identified as potential dropouts. Estimated cost, $572.00 per teacher.

Counselors will talk either by phone or in person at least once with the parent or guardian of each potential dropout. Estimated cost, $10.00 per student or $3,000.00 per school.

Phase II: Monitoring

The work accomplished in the initial planning phase is perhaps the most difficult in that it requires the greatest amount of creativity and innovation. The second phase, or monitoring phase, requires more technical than creative type of output. The attempt of the planning group of the monitoring phase is to provide for quality control during the ongoing operation of the project.
Tasks and Processes-- Resource Allocation

In the example proposal it was stated that a handbook for working with the students who are potential dropouts would be developed by the project staff by January 31 of the first project year of operation. It was also stated that the handbook would cost no more than $1,000. It would be the responsibility of the planning staff to inform project personnel sometime prior to January 31 as to what the cost of the handbook would probably be and as to whether the handbook would be completed on time. Project staff would also have to be informed as to whether the director had exceeded the time allocation of 200 hours, or four working weeks. The same type of information would be communicated concerning the work of the fifteen participating teachers from each school and the counselors from each of the high schools within the stipulated cost and time allocation of those groups.

During the second semester of the first project year the planning staff would have the responsibility of verifying that the counselors were visiting the classroom teachers under the stipulated schedule and that they were discussing the problems of the students in accordance with the guidelines of the proposal. The planning staff would also verify that these activities were being conducted within the stipulated time limits of 360 hours for counselors and 90 hours for teachers for each school. The last item of information communicated to the project staff would identify the degree of
A discrepancy between the amount of money budgeted for these tasks ($4,500) and the amount actually being spent.

During the second semester the planning staff would also verify that the participating teachers were spending two hours each week talking with students identified as potential dropouts and would indicate to the project director whether these contacts were being accomplished within the cost constraints of $572 per teacher.

The same verification process would be applied to the counselor’s responsibility to talk with the parents or guardian of each potential dropout at a cost no greater than $10 per student or $3,000 per school.

**Specific Performance Objectives**

The planning staff would inform the project director as to whether the dropout rate in the three schools was being reduced sufficiently on a month-to-month basis for the terminal objective of a 10% dropout rate to be reached.

The project director would be informed as to whether a 50% reduction of failures for the potential dropouts could be achieved by the end of the year.

The project director would be informed as to whether the actual number of dropouts could possibly be reduced by 50% at the end of the year as compared to the year before. The project director would be informed as to whether absenteeism for dropouts could possibly be reduced by 50% as compared to the year before.
The project director would be informed as to the number of teachers who could indicate that they were communicating more with the potential dropouts than they had the year before.

The project director would be informed as to whether suspensions of potential dropouts would be reduced by 50% as compared to the year before.

Overview

The project director would be given a series of recommendations for altering the program to counteract discrepancies anticipated in achieving terminal objectives.

Phase III: Terminal Assessment

The project director and all other school system administrators appropriately concerned with the project would be informed as to whether each of the performance objectives had been attained. The attainment of objectives would be presented in the context of the identified needs of the original proposal. The discrepancy between expectations and accomplishments would be noted and their degree of importance would be identified.

Example

Tasks and Processes—Resource Allocation

The project director and all school administrators who are appropriately concerned with the project would be informed as to whether the tasks of the project had been accomplished within the
specified time and resource constraints. The planning staff would also indicate to the administrators the degree of discrepancy between time and resource consumption and the time and resource allocations. A judgment would be made as to whether these discrepancies would be overcome in future operations or whether they are sufficient to warrant termination of the project.

The final communication of the planning staff to the administrators would be the relationship between the costs of the project to its overall judgments of efficiency and effectiveness. If, for example, the per pupil cost per counselor was successful in reducing the dropout rate by 50% but cost $200 more per pupil than what had been planned, the project staff would recommend to the administrators a judgment as to whether that cost was necessary, justifiable and still within the definition of an efficient program.