

Quality Indicators: Evaluation

Description of evaluation activities (Consolidated Plan Application, p. 8) should reflect sound practice that ensures high quality interventions and reform efforts. Evaluation activities are objectives-based and should provide useful information about the successful attainment of important educational outcomes as identified in the Action Plans. The primary evaluation focus is: what progress has been made toward accomplishing objectives? The evaluation is a focused, formal approach; a definite plan with detailed procedures; and a systematic (rather than sporadic) means to enhance educational decision making.

In the Consolidated Plan, goals are not identified, but Priority Needs are. Needs can be considered equivalent to goals (as included in many educational plans) as they describe desired outcomes or expected results; are timeless (e.g., no definite time period is specified); and are nonmeasurable. Priority Needs are broad statements of purpose that give direction to developing objectives, benchmarks, and activities. Priority Needs often remain the same from year to year as many cannot be accomplished within a given year.

It is assumed that Priority Needs are significant educational aims--of worth. In addition, to some degree, they should be feasible in terms of available human and material resources, and that accomplishing them would have a widespread and positive impact on student learning and development. Priority Needs are stated in terms of outcomes or desired results rather than in terms of programs or activities to be offered. It is critical to differentiate between outcomes and activities (which are the means to attend to the outcomes).

#1. Identify Measurable Objective(s).

Once Priority Needs and Underlying Root Causes are established, Measurable Objectives are identified. Measurable Objectives are specific outcomes with potential for correcting the underlying need or root cause. They target a definite quantity, amount, or degree that can be assessed, counted, observed, or determined within a given period of time. Examples include: (1) *By school year 2003-04, math achievement as measured by Terra Nova will show 95% of 2nd grade male and female students in all ethnic groups performing at an average to above level of proficiency (level 3 or above); 80% of 5th graders; and 78% of 8th graders.* (2) *By school year 2001-02 counseling programs will be in place and functioning effectively in all middle schools.* (3) *By school year 2002-03, instructional time allocated to reading and language arts instruction will be increased by 20% (with an increase in academic learning time) for all student groups.*

Measurable Objectives are linked directly to Priority Needs (and Root Causes) and describe desired outcomes in very specific terms (i.e., outcomes are attainable, can be measured, and can be accomplished within a particular time period). It is possible to state objectives in terms of specific percentages, numbers, and exact time frames or to indicate the level of performance or mastery required. Objectives describe desired results rather than the means to accomplish the outcomes. It is important that outcomes be identified and not the process (e.g., activity, program, service) to be used or offered. Identified results or outcomes may be wide ranging.

Objectives can identify cognitive as well as affective, personal, social, and/or psychomotor outcomes.

Objectives become the basis for assessing progress. When objectives are stated as outcomes, definite benchmarks and specific evaluation strategies can be designed. When objectives are stated as activities, it is difficult to directly assess the educational worth of a program other than to see if it was actually implemented and the numbers served. If the objectives are clearly stated as outcomes, the appropriate form of assessment is also clear.

#2. Develop Specific Benchmarks.

Benchmarks are defined as standards for determining progress; points of reference with specific descriptors; the means by which progress toward meeting the measurable objective will be assessed; specific measurements; ways to portray “What Is” (current state) and to project “What Ought To Be” (desired state).

Example of yearly Benchmarks using Terra Nova Math Scores:

Grade	2000	2002	2004
3			
% on level 3 or above	84	90	95
% at proficiency	55	63	70
5			
% on level 3 or above	68	72	80
% at proficiency	29	35	50

The beginning point for developing realistic Benchmarks is to ascertain baseline measurements or the current state (in terms of numbers, percentages, levels of performance, etc.) of the outcome addressed in the objective. Then project outcomes, by year for several years (3 years), in feasible (realistic, yet challenging) increments. These Benchmarks become the targets for the actions. If actions do not produce results as anticipated in the Benchmarks, then the evaluation data are used to revise and improve actions. Having yearly Benchmarks ensures correction of actions on at least an annual basis.

#3. Develop an Evaluation Plan (as an extension of the Action Plan).

After appropriate Measurable Objectives and Benchmarks have been identified, a detailed evaluation plan should be designed to parallel *each* Action Plan. The intent is to develop a plan that will provide appropriate (adequate and accurate) information with a minimum expenditure of human and fiscal resources. The plan should be as simple as possible. It is advisable to involve personnel responsible for evaluation activities in the development of the plan. This would include the educators who deliver the instruction or services as well as the program coordinators or administrators. An evaluation plan could be designed collaboratively to meet particular needs and possible constraints.

An evaluation plan should specify *what* (sources of data), *how* (procedures of collection and analysis), *when* (time frames), *by whom* (responsibility), *utilization of results* (how the results will be used to modify the

plan), and **communication strategy** (how evaluation results will be shared with key stakeholders).

What--Sources of data could include available reports or records, instruments, or products that provide information about the attainment of objectives and benchmarks. Readily accessible reports or records could include: attendance, discipline referrals, tardies, promotion/retention, teacher grades, diplomas granted, certificates awarded, test results, etc. Examination of appropriate data sources should provide indicators of progress toward meeting objectives.

It may be necessary to supplement readily available information. Additional evaluative information may be needed and can be generated through appropriately designed instruments. Examples would include: tests (teacher-made and standardized), questionnaires, interviews, self-report devices, rating scales, assessments by participants, checklists, observation notes, and anecdotal accounts. Products, samples of work produced, portfolios, or reports of actual performances can also provide valuable evaluation information.

Sources of data selected should provide precise, relevant information. As shown by the examples provided, it is appropriate to use both quantitative and qualitative sources. It is important to identify sources that will indicate progress toward all identified objectives or intended outcomes. In addition, the data collected should also produce information about any unintended outcomes of the program. Unintended outcomes are those side effects, either positive or negative, that may not have been original objectives, but are actual outcomes of the efforts.

How--An evaluation plan identifies specific procedures for collecting and analyzing evaluation information (i.e., surveys to be tallied; participation to be counted; scores to calculate gains). It may be necessary to collect the information from all participants involved, or it may be that a sample of participants will provide the necessary information. It is helpful to make decisions about the format for reporting evaluation information before collecting it. Developing and using worksheets or some “standard” form to record evaluation information will encourage more consistency. Summarizing and analyzing the information is then an easier process.

When--Yearly benchmarks provide target outcomes and ensure annual evaluations. Evaluations are strengthened when they include both formative and summative activities. Formative evaluations occur during the development phase of a program and are important in improving and strengthening the program or actions (i.e., during SY1, and possibly during SY2). Summative, or final, assessments occur at some end point and are needed to judge the worth of activities (i.e., possibly at the end of SY1 and/or SY 2 & 3). Before initiating activities, identify specific dates for formative assessments. They should occur at some future point(s) after the activity has been in place long enough to determine some degree of impact, but at a point short enough so that revision or modification is still possible. (For example, if the activity is started in August, December may be an appropriate time to conduct formative assessments. If an activity is multi-year, formative assessments may occur at several points.) Specific dates near an ending point should also be identified for summative activities. (For example, for many single school year activities, May may be an appropriate time to conduct summative assessments. For multiyear activities, the end of the third year may be more appropriate.)

By Whom--The person(s) responsible for collecting, analyzing, and reporting evaluative information should be identified in the evaluation plan. The person responsible will elicit the assistance of other appropriate individuals (e.g., teachers, administrators, parents).

Utilization of results--After formative or summative data are collected, they should be summarized, analyzed, and reviewed to determine the progress or outcomes to date. Identify specific dates for the review by appropriate individuals (i.e., the total Consolidated Planning Team). The task is to review results against Measurable Objectives and Benchmarks and to determine needed adjustments or changes in the action. For formative evaluation, the questions include: What is working? What needs to be improved? How can it be improved? If it can't be improved, when should it be discontinued? For Summative evaluation, the questions include: What results occurred? For what group? Under what conditions? With which components? With what training? At what costs?

After review and discussion of the evaluation data, the Team should come to agreement about specific steps to be taken to modify the action plans to produce more satisfactory outcomes. Action Plan activities are then amended to reflect the decisions. The evaluation results are then incorporated into the data base and used for continuing planning efforts.

Communication Strategy--Since communication activities are incorporated in each Action Plan, communication to key stakeholders should be ensured. The person designated as the one responsible for communication should prepare the results for final review by the Consolidated Planning Team and then distribute them to appropriate groups and individuals.

4. Initiate Action Plans and Evaluation Plans.

As the actions or interventions begin, so should the evaluation activities. They are concurrent processes. Prior collaboration and planning should allow activities to proceed as described in the evaluation plan. The Total Team should monitor the execution of the plans with the person(s) responsible. If problems occur at any point, adjustments can be made. Monitoring the evaluation plan also provides informal opportunities to assess the adequacy of actions at appropriate points (formative evaluation). When monitoring occurs systematically, modifications can be made in a timely and ongoing manner.

5. Summarize, Analyze, and Report Evaluation Information.

The *raw* data are rarely easily understood. Evaluative information should be summarized in some meaningful way as part of the analysis process. Evaluation data as recorded in log books, forms, anecdotal entries, test scores, and grades should be maintained and available, as well as summarized. Raw data such as untallied questionnaires or testimonials are not as usable as numerical total counts and findings of major patterns or themes. The significant findings from these data should be linked directly to the measurable objectives and benchmarks. The summarized data should accurately portray the outcomes or results of the particular activities. Once the data are summarized, then analysis and interpretation continues.

The major analysis activity involves determining the degree to which the desired outcomes (Objectives and/or Benchmarks) have been attained. The Objectives and Benchmarks are the standards against which decisions are made. The analysis should provide clear indications about the amount of progress (or lack of progress) toward the objectives. The analytic methods may be statistics-based or more naturalistic or qualitative in form. All Objectives should be analyzed and assessed in terms of how close (above, on, below) the actual performance relates to the standard. Analysis may also reveal those aspects of the activities that are not as positive as desired. Evaluative information should not be slanted or biased towards only the positive aspects, but should reveal actual performance, areas of strength and areas to be improved. If the results of the activities are not as strong or as positive as desired, possible changes may be in order. Some analysis should also focus on the cost of the activities (in terms of personnel, time, and resources) in comparison to the benefits (and/or gains by the students/participants).

Results of the analysis and additional supporting information should be reported clearly and succinctly. Reports about activity effectiveness could include: numbers of personnel hours dedicated to the activity (actions or programs), number of students served/participation level, summarized evaluation information showing progress on Objectives and Benchmarks, and any recommendations for future action.

6. Use Evaluation Information to Improve Effectiveness of Actions.

Clear reports of documented progress provide the necessary information for decision making. Careful analysis of evaluation information provides a means for examining current practice and for identifying any needed adaptations. If current outcomes are less than desired (i.e., not meeting Benchmarks), evaluation is a means for determining why. Determinations can be made about: the appropriateness of actions, relevance of the Measurable Objectives, effectiveness of the structure or organization of the activities, the needs of the target group, effectiveness of the personnel involved, adequacy of the resources, any constraints or other influences, and the delivery or instructional processes. If current outcomes are meeting or exceeding Benchmarks, evaluation can provide information that may be helpful in establishing programs/actions in other settings creating the same positive conditions in other activities (or moving current activities to higher levels). Evaluation data are “recycled” into the planning process as they are used to develop future actions.

References

- Bellon, J.J., & Handler, J.R. (1982). Curriculum development and evaluation: A design for improvement. Dubuque, Iowa: Kendall/Hunt Publishing Company.
- Madaus, G. F., Haney, W., & Kreitzer, A. (1992). Test and evaluation: Learning from the projects we fund. New York: Council for Aid to Education.
- Schumacher, S., & McMillan, J. H. (1993). Research in education: A conceptual understanding. 3rd edition, Harper Collins College Publishers.
- Worthen, B.R., & Sanders, J. R. (1987). Educational evaluation: Alternative approaches and practical guidelines. New York: Longman.