

Figure 5-6. Prioritizing Macro level needs.

Micro Planning: Defining and Delivering Individual and/or Team Results

KEY POINTS

- Micro level results are best derived from the institution's Mission Objective
- The accomplishment of the Mission Objective is the result of comprehensive Mission Analysis and Function Analysis
- Micro level needs assessment defines the results to be achieved by the individuals and small groups of the institution

MICRO PLANNING: AN OVERVIEW

THE Macro level institutional Mission Objective specifies results to be achieved for the institution and internal clients in precise and rigorous terms. Based on the Mission Objective (which, in turn, is linked to accomplishment of the Ideal Vision), the third level of Strategic Educational Planning and Needs Assessment involves defining and committing to useful results at the Micro level. The Micro level results are the Products, by and for the individuals and teams within the institution, which when combined will ensure the delivery of useful Macro level Outputs and the successful completion of the institution's Mission Objective. Like the Macro level Mission Objective (which was linked, aligned, and derived from the Mega level Ideal Vision), the Micro level results to be achieved (the Products of individuals and teams) are linked, aligned, and derived from the Mission Objective.

Tips for the Strategic Thinker

Even at the Micro level the focus remains on results than link to Macro and Mega Level results and consequences.

COMPLETING MACRO LEVEL PLANNING AND ASSESSMENT

With the necessary information for completing the Needs Assessment (both the What Should Be Mission Objective and the What Is performance data at the Macro level) the planning and assessment can prioritize the gaps in results (institutional needs) for closure (see Figure 5-6). The results of the Macro level Needs Assessment will provide the educational institution with clear and defined linkages to societal value added (the Mega level) as well as specifications for determining the final level of results (the Micro level). Only after all three levels of results have been defined (with performance criteria) should an institution select methods and means (i.e., activities, interventions, policies) for achieving those results.

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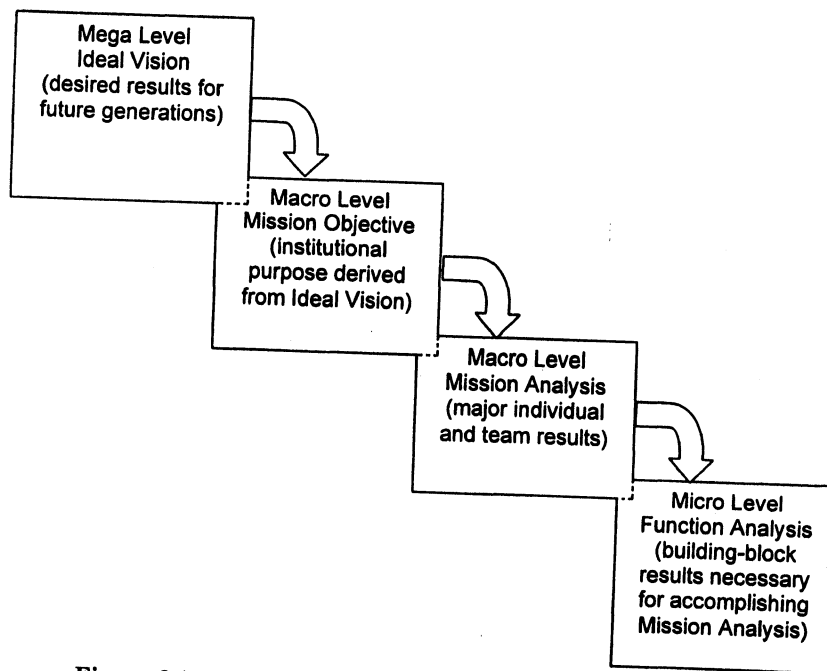


Figure 6-1. Defining results at the Mega, Macro, and Micro levels.

At the Micro level, Products are determined through tools called Mission Analysis and Function Analysis. The complete Mission Analysis should define the primary results required for achieving the Mission Objective in rigorous and measurable terms. Each of the results, like the results defined at the Mega and Macro levels, should be written as a results-focused objective. The Function Analysis will then provide the discrete results to be accomplished for each of the primary results defined in the Mission Analysis (see Figure 6-1). The sum of these results defines the interdependent success criteria (i.e., required results) for the educational institution's individuals and teams at the Micro level. Based on the Products derived from the Macro and Micro level Mission Analysis and Function Analysis, the appropriate Process (methods-means) and Inputs (resources) can then be derived.

DERIVING WHAT SHOULD BE AT THE MICRO LEVEL

The Micro level What Should Be dimension defines in results terms

the building block Products that must be achieved by individuals and/or small groups (i.e., teams) for the institution to accomplish its Mission Objective (i.e., Outputs). Like the previous levels of planning and assessment (Mega and Macro planning), Micro planning specifies only the results which are to be achieved, without including the Processes and/or Inputs that may be required. Micro level Products are best linked and aligned with the Mega level Ideal Vision.

While at the Mega and Macro levels relatively few What Should Be results were identified (i.e., the elements of the Ideal Vision and Mission Objective), at the Micro level the complexities of the institutional system, with all its subsystems, require that many more results be defined. What Should Be results at the Micro level include those for each individual department, program, faculty member, staff member, and other units or subsystems. These results for each individual, team, or small group should be defined as an objective with measurable criteria as well as be aligned with the other subsystems. Maintaining a system perspective is essential to avoid defining Micro level results that foster micro-managing.

To define the scope of What Should Be results at this level we begin with a combination of both Mission and Function Analysis of the institution's Mission Objective. The Mission Analysis is the first level of analysis following the Mission Objective and is included at the Macro level. The combination of the Mission Objective and Mission Analysis produces a Macro level Mission Profile for the institution (see Figure 6-2).

The Mission Analysis tells us what is required for resolution of institutional problems (i.e., accomplishment of the Mission Objective), while the Function Analysis helps us to ascertain in greater detail what has to be accomplished in order to meet the institutions requirements (at the Macro level). Neither analysis, however, specifies how the results may be accomplished. Complicated? Not really. Lock-step and linear? Not at all.

According to Kaufman, Herman, and Watters (1996) the Mission Analysis is a "step that reveals (1) what is to be achieved, (2) what criteria will be used to determine success, and (3) what the building

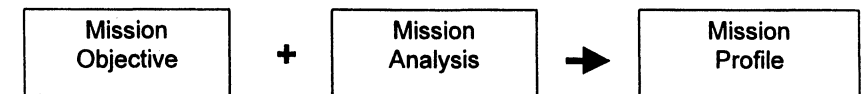


Figure 6-2. Mission Objective and Mission Analysis at the Macro Level Results in a Mission Profile for the Educational Institution.

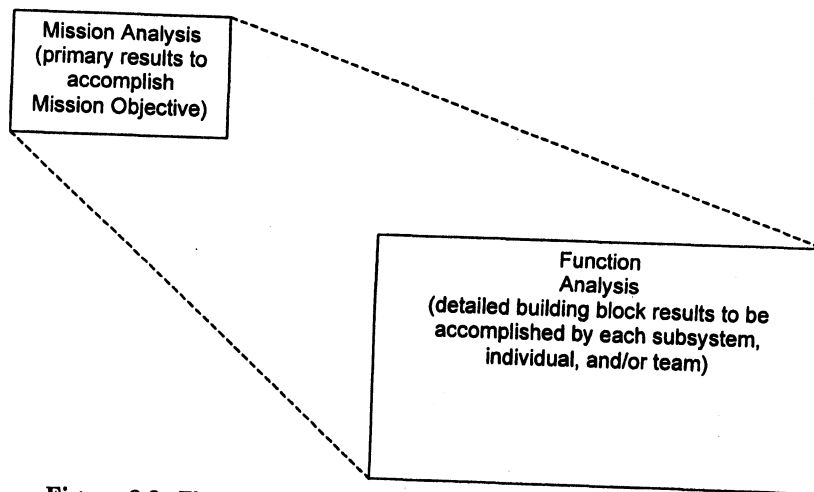


Figure 6-3. The Relationship of Mission Analysis to Function Analysis.

block results are and what order of completion will move toward the desired state of affairs." In other words, the Mission Analysis derives from the Macro level of Mission Objective and Needs Assessment (including the major performance requirements), thus furnishing the initial products that must be achieved for success.

This first lens (Mission Analysis) gives us the big picture at the Macro level, while the second lens (Function Analysis) shows us the smaller part of the total problem in greater detail at the Micro level (see Figure 6-3). The two analyses differ in degree but not in kind. And it is the combination of the Mission and Function Analysis that provides the entire institution with a clear picture out "where we are headed and how we know when we have arrived" and "what results have to be attained for each part of the Mission Analysis to be accomplished".

The defined What Should Be results at the Micro level, like those in the Macro level Mission Objective and the Mega level Ideal Mission, should be specified in "ideal" terms. For example, why would we want to settle for less than required learner competence and success? As Marshall and Tucker (1992) point out, "minimal standards" will not suffice.

While defining the ideal results at each of the three levels may at first feel uncomfortable to those who have been constricted in conventional planning and assessment by simply stating "attainable" results, this feature of pragmatic Strategic Educational Planning and

Needs Assessment allows for useful results to be achieved beyond the constraints and boundaries of the current paradigm. If we only plan for those results that we know are easily within our reach (i.e., attainable results), then we'll never achieve great successes. Again, it is important to remember that in our pursuit of the ideal, data regarding progress should be used for learning, revising, and rewarding . . . never for condemning individual or institutional shortcomings.

For if we do not intend to achieve "ideal" results at the Micro, Macro, and Mega levels, then what else could we, as planners and leaders, have in mind?

When the ideal results have been defined at the Micro level, along with the current (What Is) results for the Needs Assessment, a continuum of short-term and long-term objectives can be derived. These objectives, which specify required results, including measurable performance criteria, can provide the institution with benchmarks of success leading to the achievement of the Mission Objective.

The following terms are intended to provide a starting point for the creation of performance objectives. Notice none of these are verbs, and all avoid specifying how the ends are to be accomplished.

- accomplishment
- achievement
- assurance
- attainment
- completion
- contribution
- demonstration
- elimination
- generation
- performance
- production
- provision
- reached
- reduction
- supplied

Alternately, each of these terms could be phrased in terms of accomplishments in order to emphasize that planning is about ends and not means (for example, accomplished, achieved, assured, etc.). While either approach is acceptable, in no case should verb forms of words be used as performance criteria, since they deflect attention from the results-orientation of planning (e.g., accomplishing, achieving, assuring, etc.).

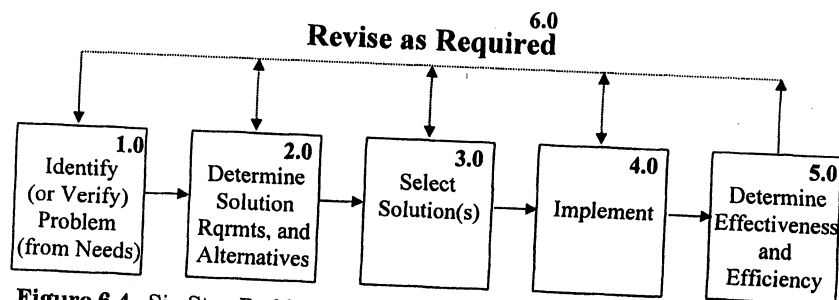


Figure 6-4. Six-Step Problem Solving model (Kaufman, 1972, 1992, 1998, 2000).

SIX STEPS TO SUCCESS: THE MISSION PROFILE

The underlying framework for the Mission Analysis will be a Six Step Problem Solving process (Kaufman, 1972, 1992, 1998, 2000). The Six-Step Problem Solving process (see Figure 6-4) is a general framework for the resolution of any individual and/or organizational problem. The Six-Step process begins, as expected, with the identification of needs (i.e., gaps in results to be closed). In deriving the Mission Analysis the identified need is specified from the Macro level Mission Objective and Needs Assessment. From there, results to be achieved for the completion of each of the identified six steps should be derived for specification in the Mission Analysis.

The combined Mission Profile (Mission Objective + Mission Analysis) and Function Analysis provides the graphic representation of the results specified in the Mission Analysis. The Profile gives an institution a "results-focused management plan" for the accomplishment of its Mission Objective through a combination of the Mission Analysis and Function Analysis. Constructing a Mission Profile begins by specifying the primary results to be achieved through the Mission Analysis. This initial level of results will provide the foundation for the Function Analysis (Figure 6-5).

STEP 1.0: IDENTIFY (OR VERIFY) PROBLEMS BASED ON NEEDS

The first task related to the Six-Steps Problem Solving process is to identify (or verify) the problem(s) from needs (provided by the Needs Assessment data). Recall that the Macro level Needs Assessment provided both the What Should Be (or Mission Objective along the performance requirements) as well as the What Is data. The Micro level analysis begins by defining the What Should Be results

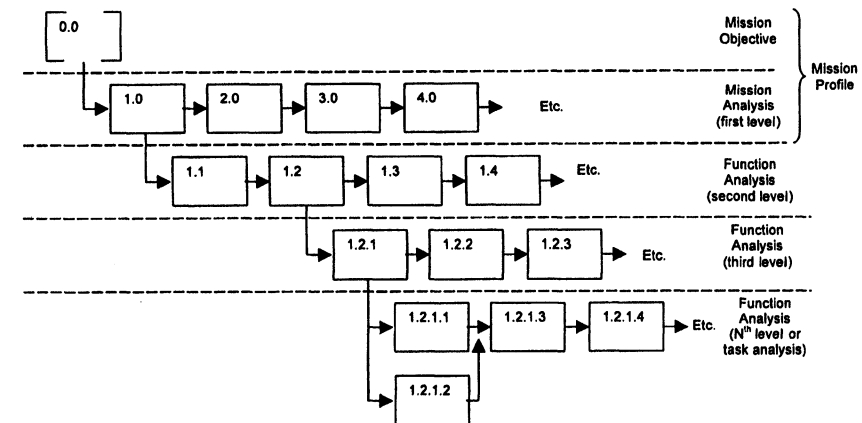
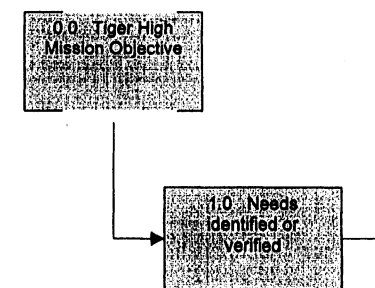


Figure 6-5. Levels of the Mission Profile (Mission Objective and Mission Analysis) with multiple levels of Function Analysis (based on Kaufman, 1998).

(i.e., Products) with the needs (gaps in results) identified at the Macro level.

All Elements of the Mission Profile and Function Analysis should be defined as objectives, including required results and measurable criteria. Statements of the potential processes for achieving those results should be noted but not included in the Mission Profile or the Function Analysis. This requires that statements be written in results terms that identify only the products to be achieved by individuals, teams, departments, and/or other groups.



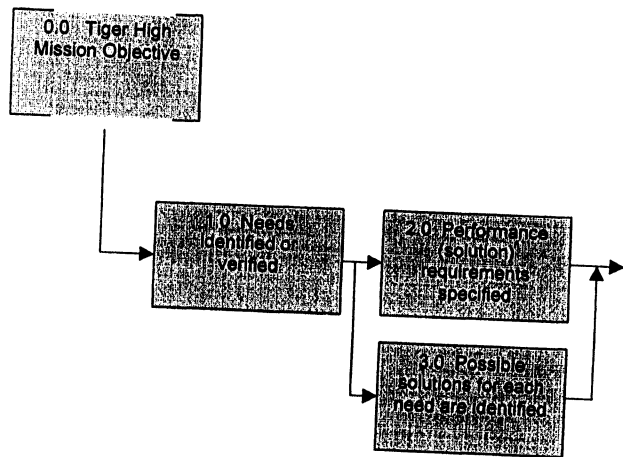
STEP 2.0: DETERMINE SOLUTION REQUIREMENTS AND IDENTIFY SOLUTION ALTERNATIVES

For each of the identified needs derived from the Macro level Needs Assessment, the second task of the Six-Step process is to determine

both the solution requirements (detailed specifications of required results) and solution alternatives (potential methods and means to that may meet solution requirements). At the Micro level, solution requirements for each of the needs should be determined by the criteria set in the Macro level What Should Be, as well as by What Is factors (such as budget limitations, federal and state mandates, etc.).

Each time we move from one result to be accomplished to the next, we should ask ourselves: "What is the next logical product required to be delivered if the Mission Objective is to be accomplished?"

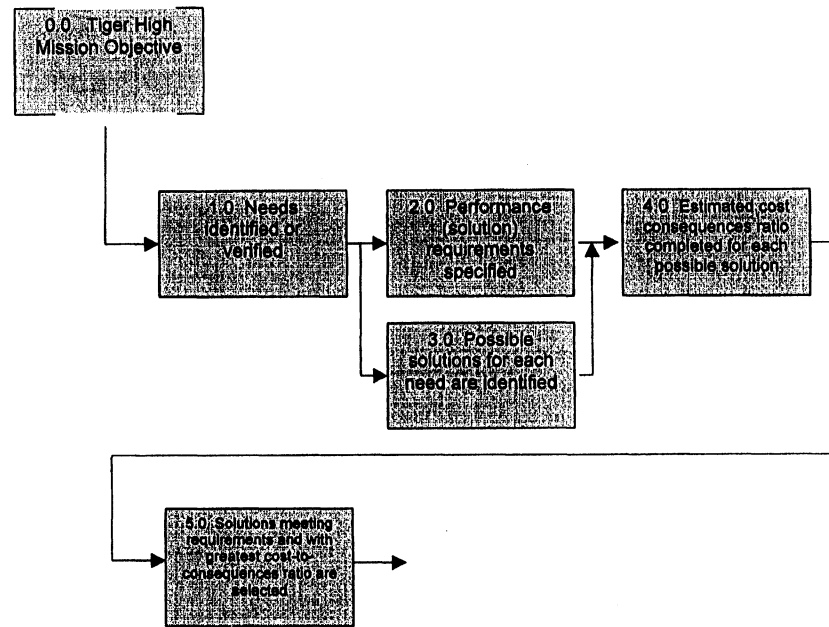
Results identified in the Mission Analysis may also include the identification—but not the selection—of potential solutions (meeting the solution requirements) for each need. While the Mission Analysis will include only the required result of identified potential solutions, any possible solution recommendations identified during the analysis process should be noted and retained for appropriate inclusion in the solution analysis process.



STEP 3.0: SELECT SOLUTION(S)

The next results that should be incorporated into the Mission Analysis relate to the selection of solutions for each of the needs (step three of the Six-Step Problem Solving model). In this step we take the data from step 1.0 and step 2.0 to select the best methods-means (i.e., activity, intervention, process) on the basis of meeting the performance requirements and the cost-to-consequences ratio.

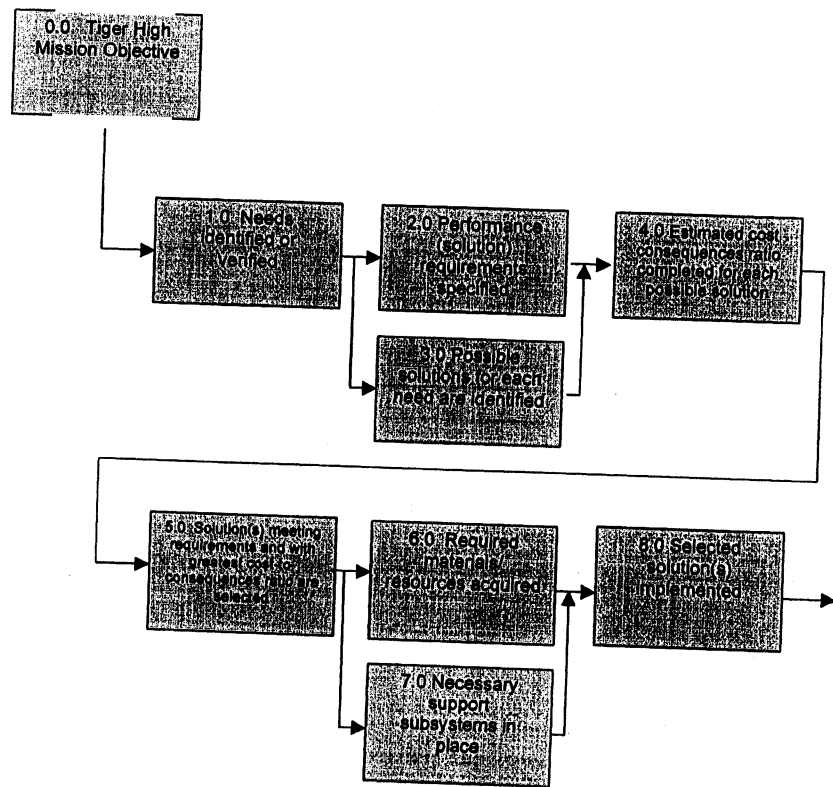
Tips for the Strategic Thinker
The Six-Step Problem Solving model is applied throughout all levels of the Mission Profile.



It should be noted that the degree of detail employed at the Mission Analysis level may vary across educational institutions. Greater detail in the Mission Analysis (i.e., identification in a greater degree of detail and number the necessary ends to achieve the Mission Objective) reduces the number of steps required in the ensuing Function Analysis. Likewise, a Mission Analysis with few details and broad specifications of ends will require a greater level of specification in the Function Analysis. Our experience has been that educational institutions committed to achieving useful results will conclude with a similar number of required results identified in the Mission Analysis and Function Analysis, though some institutions will provide greater detail in Mission Analysis, while others will provide the detail in the Function Analysis.

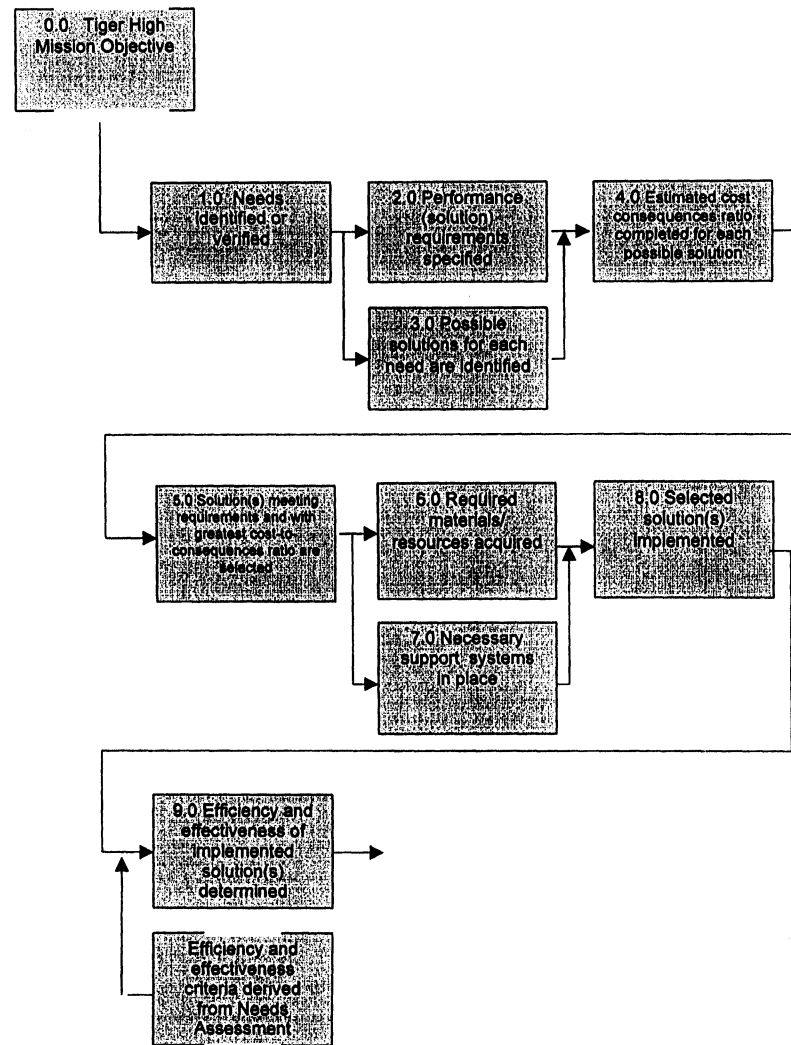
STEP 4.0: IMPLEMENT

Results required for the implementation of the selected solution(s) comprise step 4.0 of the problem solving process.



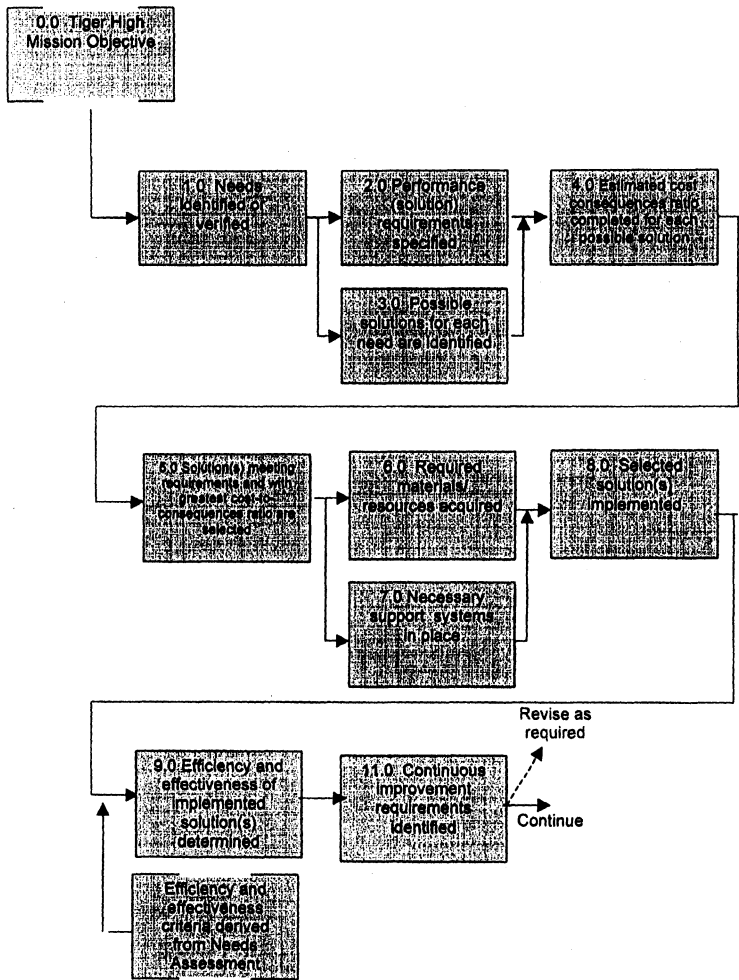
STEP 5.0: DETERMINE EFFECTIVENESS AND EFFICIENCY

The fifth step of the Mission Analysis is the specification of required results for the determination of performance effectiveness and efficiency. Like all previous steps of the Mission Analysis, the specification of results required for determining the effectiveness and efficiency of selected solution(s) is only in terms of the ends to be achieved without the identification of any the processes or resources that may be appropriate.



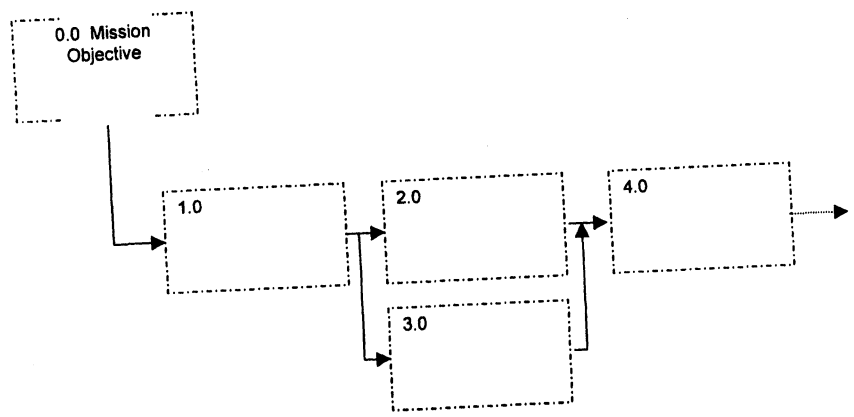
STEPS 6.0: REVISE AS REQUIRED

The concluding (and ongoing) step in the Mission Analysis is the identification of results required for the continuous improvement of the performance system. Though this step is represented in the Mission Analysis at the end of the graphical representation, the accomplishment of useful results requires that continuous improvement be implemented through all institutional processes.



Activity Worksheet 6-1. Creating Your Institution's Mission Analysis.*

The planning and assessment team should complete the Mission Analysis for your educational institution. Using "sticky notes" for each statement of required ends, the team should identify all of the necessary results that should be accomplished in order to achieve the Mission Objective. The Mission Analysis may or may not look similar to the one of Tiger High. Again, a Mission Analysis with few details and broad specifications of ends will require a greater level of specification in the Function Analysis. Here is a sample guide to get you started:



*The number of functions shown here is arbitrary. You might have more or less in your specific application.

The completed Mission Analysis should include the results identified in all six steps of the problem solving process. Keep in mind that if each of the identified results is accomplished, then the Mission Objective should be attained. That is, each of the building block results should contribute to a completed Mission Objective and useful educational results.

The system planning and assessment process will provide you and your institution with the results required to be successful . . . to get you from What Is to What Should Be at the Mega, Macro, and Micro levels.

FUNCTION ANALYSIS

A function is a building-block result, or product, to be delivered. Each function contributes to completing the Mission Analysis and achieving the Mission Objective of the educational institution, leading to useful consequences and payoffs for students, teachers, parents, and society. Finalization of the Function Analysis will complete the identification of Micro level results to be achieved.

Having started with Mega level results (i.e., the Ideal Vision), the institution has defined its purpose at the Macro level with a Mission Objective. Based on the Mission Objective the first level of Micro level building-block results was defined in the Mission Analysis. Now with the Function Analysis the partners and stakeholders will detail (in measurable results terms, without specification of the methods and means to be utilized) the many results required of each educational subsystem in order for useful results to be delivered.

It is essential that each function (regardless of level):

- States a product (results to be delivered; not the methods, means, or resources).
- Is precise and clear about what is to be delivered.
- Has measurable performance requirements for each function (these will later provide critical evaluation/continuous improvement criteria).
- Is linked to the Mission Analysis, Mission Objective, and Ideal Vision.

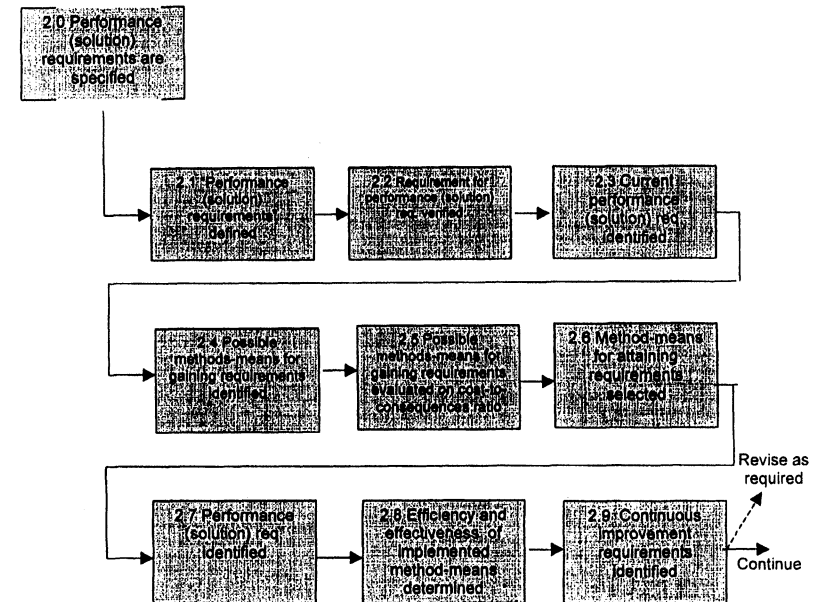
LEVELS OF FUNCTION ANALYSIS

The Function Analysis is a vertical expansion of the Mission Analysis. Each element of the Mission Analysis will be “broken out” into the functions that are required for the accomplishment of the necessary products. It is the role of the function analyst to identify, for each product specified in the Mission Analysis, all of the subordinate functions and their interrelationships. The levels of specification required for a complete Function Analysis will likely require more than one level of Function Analysis.

An important contribution of Function Analysis is the identification of the ways functions interrelate with each other (Kaufman, et al., 1996; Kaufman 1992, 1998, 2000). These interrelationships are called interactions. All systems have interactions, so a vital element of the Function Analysis is identifying interactions and planning for

and assuring a successful matching of parts. Rather than being rigid, structural, and linear, this approach defines a dynamic system network that moves continuously closer to completing its mission.

In completing a comprehensive and useful function analysis the partners and stakeholders should examine each of the identified functions from the Mission Analysis to derive the required results necessary for achieving vital contributions. As each function (or box) from the Mission Analysis and upper level Function Analyses is “broken-out” the Six Step Problem Solving Process can be applied. Additionally, each level of Function Analysis should maintain the results focus of the planning and assessment initiative by specifying results to be achieved as measurable objectives.



Based on the example level of Function Analysis from Tiger High, it should be noted that:

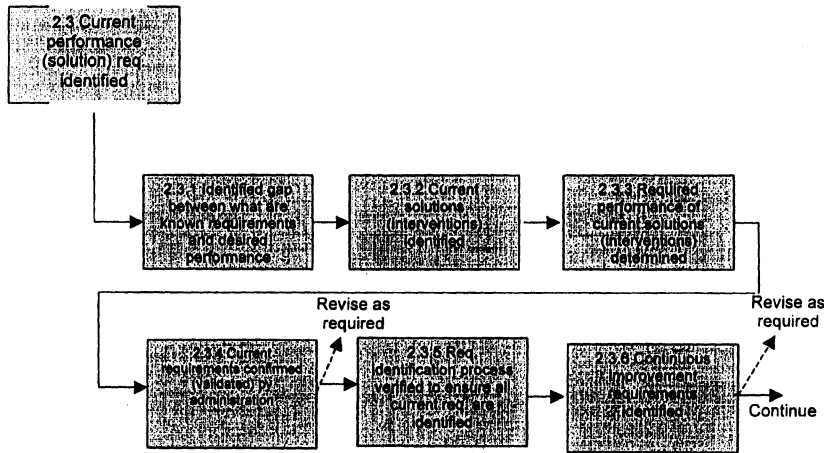
- The Six-Step Problem Solving model is the underlying framework for each level of Function Analysis (with step 1 of the problem solving model corresponding with functions 2.1 and 2.2, step 2 corresponding with functions 2.3 and 2.4, etc.);
- The graphical representation of the functions to be accomplished may differ (in the number of functions and

interrelationships of functions) across institutions and subsystems

- The degree of detail applied at the Mission Analysis level is factored into the degree of detail required at the Function Analysis level.

One question you can ask in deriving a Function Analysis is “if I were employed today to achieve this result in the next six months, what intermediate results would have to be achieved for success?” The continued focus on results will assure that you do not jump into selecting solutions before defining what results are to be achieved (and what criteria will be used to determine their acceptability).

For another example level of Function Analysis, let's again look at the Function Analysis of Tiger High.

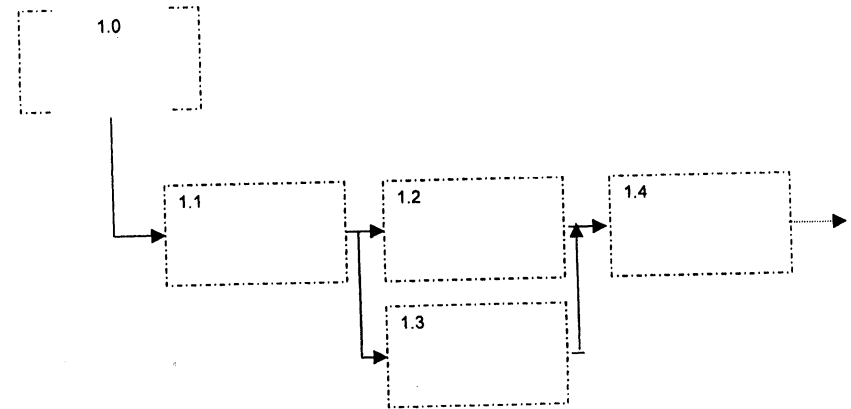


WHEN ENOUGH IS ENOUGH

The Function Analysis continues to break out results to be attained using the Six-Step Problem Solving process as of framework, until there are several levels to the analysis. There are no guidelines for how many levels of Function Analysis are required since each institution conducting the analysis will have unique organizational requirements and structures. We suggest the process should continue until you are confident that the functions are defined with enough clarity, precision, and scope to insure the achievement of the required results.

Activity Worksheet 6-2. Drafting a Function Analysis for Your Institution.*

The planning and assessment team should complete a Function Analysis for your educational institution. Using “sticky notes” for each statement of required ends, the team should identify all of the necessary results that should be accomplished in order to achieve the Mission Analysis and Mission Objective. The Function Analysis may or may not look similar to the examples from Tiger High. Either way it should define for your institution all of the building-block results necessary for achieving the delivery of useful results.



When complete, in each level of the Function Analysis you should be able to identify the clusters of functions that correspond with each of the six steps in pragmatic problem solving. Using a marker, draw a circle around those functions that correspond with each problem-solving step.

*Again, the number and organization of functions here is arbitrary.

The Mission and Function Analyses are tools for determining the results we want to achieve (where we are headed) and the criteria for success (how we will know when we have arrived). Like a microscope, the Mission Analysis provides the broader scope, whereas the Function Analysis magnifies the smaller pieces within the overall system (Corrigan and Kaufman, 1966; Kaufman, et al., 1996). This analysis approach to institutional planning and assessment is not uncommon in conventional planning models. The approach suggested in this book is, however, differentiated from conventional planning in that it:

- (1) begins with societal results (Mega level Outcomes)
- (2) specifies only results and not Processes or Inputs
- (3) incorporates a system perspective required to ensure that when all identified Products defined in the Mission Profile and Function Analysis were achieved, then the Mission Objective and the selected areas of the Ideal Vision will also be achieved without have negative influences on other systems and subsystems.

ENSURING USEFUL RESULTS AND CONSEQUENCES

The purpose of any practical Strategic Planning and Needs Assessment endeavor is to achieve results that are beneficial to society. As Peter Drucker (1999) reminds us, "the institution, in short, does not simply exist within and react to society. It exists to produce results on and in society." By starting at Mega, and the Ideal Vision, the planning and assessment process should define the results required of each subsystem (whether it be an institution, college, department, program, or individual). It should not, however, be assumed that the attainment of individual results identified at the Macro and/or Micro levels will guarantee the desired beneficial Outcomes for society. Efforts must be made to review all elements derived during the Strategic Educational Planning and Needs Assessment (including the Ideal Vision, Mission Objective, Mission analysis, and Function analysis) as a system.

Tips for the Strategic Thinker

A system perspective continues to be critical for success through all planning and assessment.

During a "system review" both the individual results to be achieved and their relationships to each other (as well as their relationship to other subsystems with which they interact) should be ex-

amined to ensure that the system perspective was not lost during the analysis.

"Systems design [or more accurately system design] seeks to envision the entity to be designed as a whole, as one that emerges and is designed in view of—and from the synthesis of—the interaction of its parts. A systems view assumes the essential quality of a part or component of a system resides in its relationship with and contribution to the whole. Systems design [and system design] requires both coordination and integration." Banathy, 1994, pp. 28–29

The Mission Profile (Mission Objective + Mission Analysis) and Function Analysis should not be a plan for micro-managing. The Mission and Function Analyses provide only the results to be achieved and their relationship with the other results at the Micro, Macro, and Mega levels. By not determining the processes (methods-means) that may or may not be appropriate for achieving these results, planning partners avoid the premature selection of solutions until the desired results have been defined in measurable terms. This approach differs from micro-management where the planning team often assumes they know the correct processes (methods-means) and simply inform the partners and stakeholders of what will be done.

DERIVING WHAT IS AT THE MICRO LEVEL

Similar to the processes used at the Macro and Mega levels, What Is data at the Micro level must be obtained for the completion of the Needs Assessment. It is only through the identification of these gaps in results (i.e., the gap between What Should Be and What Is) that needs can be identified and prioritized for closure.

For each element of the Mission Profile and Function Analysis, data indicating the current performance related to the measurable criteria of the objective should be obtained. Collecting What Is data and identifying needs (gaps in results) at the Micro level is best done in coordination with the institution's employees (whether individuals, teams, or departments) for several reasons:

- It would be burdensome for the planning partners to be responsible for collecting the necessary data for each of the many results levels required for the successful completion of the Mission Objective.
- The planning partners and stakeholders will rarely have detailed knowledge and understanding of the many processes

Activity Worksheet 6-3. A System Review of Your Institution's Strategic Plan.

Review the Mission and Function Analysis from a system perspective. Examine the relationships among the Products and Outputs, then appraise their linkages and alignment with the Mega level Outcomes specified in the Ideal Vision. Answer the following questions:

- A. Are the relationships among the results to be achieved in the Mission and Function Analysis valid? And useful?

- B. Will the accomplishment of each function in the Mission and Function Analysis lead to the achievement of the Mission Objective?

- C. Will the accomplishment of the Mission Objective lead to valuable contributions to the Ideal Vision?

- D. Is the Mission Profile and the Function Analysis focused on the delivery of useful education results? And societal value added?

that occur within the institution. This understanding is necessary for accurate, valid, and reliable data to be collected.

- Involving all of the employees of the institution in the Strategic Planning and Needs Assessment is necessary for attaining the required "buy-in" for successful implementation and achievement of results.

Achieving the desired "buy-in" of the institution's employees and educational partners, and attaining their assistance in the Micro level data collection and Needs Assessment, require that all partners are brought into the process and achieve a basic understanding of the fundamentals of and commitment to the results-based approach taken. Training for partners and stakeholders in the planning and assessment approach may be one desirable activity (i.e., solution, method, means) for gaining acceptance of the processes. Other performance interventions (job aids, computer-based instruction, instructional materials, etc.) should also be considered in achieving the desired participation. This book will also be useful in providing background for planning and assessment.

When the Micro level Needs Assessment is complete, each individual within the institution should have a document that identifies the:

- institution's societal contributions
- institution's Mission Objective
- required/desired results they should achieve
- relationships of results within the institution
- current level of results being achieved

COMPLETING MICRO LEVEL PLANNING AND ASSESSMENT

With the necessary information for completing the Needs Assessment (both the What Should Be and the What Is performance data at the Micro level from the Mission and Function Analysis processes), planning and assessment can prioritize the gaps in results (institutional needs) for closure (see Figure 6-8). The results of the Micro level Needs Assessment will provide the educational institution with clear and defined linkages to societal value added (the Mega level). Only after the three levels of results have been defined (with performance criteria) and prioritized (see Micro Level Cost-Consequences Analysis in Chapter 7) can an institution select methods and means (i.e., activities, interventions, policies) for achieving those useful results.

Activity Worksheet 6-4. Where Your Institution Plans to Head.

Complete the following table to ensure that a system perspective is maintained in all planning and assessment.

Mega Level Results		
Where We Want to Go	How Will We Know When We Have Arrived	Where We Are
Ideal Vision		
Macro Level Results		
Where We Want to Go	How Will We Know When We Have Arrived	Where We Are
Mission Objective		
Micro Level Results		
Where We Want to Go	How Will We Know When We Have Arrived	Where We Are
Performance Objectives		

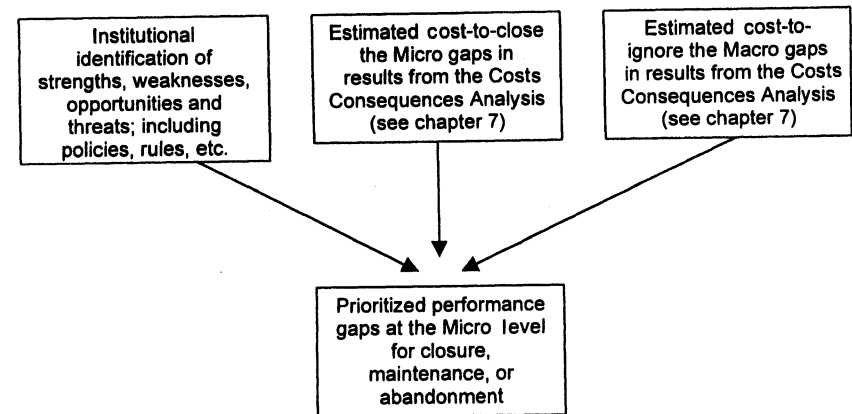


Figure 6-6. Prioritizing Micro level needs.

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