



A Framework for Student Case Preparation

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Another basic point in teaching through cases is the careful, step-by-step analysis of case facts as a prelude to discussion. Many students are tempted to read cases through quickly as a kind of story and then to engage in a rather haphazard, easygoing "bull session," so general and abstract to be of little value.

Glover and Hower (1951)

How long should I spend preparing? What am I supposed to do when I get to the end of the case and say to myself, "So what?" How many times should I read the case? . . . These are common questions students raise in wrestling with case preparation.

Erskine, Leenders, and Mauffette-Leenders (1981)

One of the most difficult issues instructors face in teaching a subject by the case method is students' lack of a consensual approach for analyzing and resolving situations. That is, students vary widely in the nature, explicitness and logicalness of their approaches to problem solving, decision making and planning.

Hogan (1984)

The case method is without a doubt one of the classic pedagogical approaches in business and management instruction. Its rich heritage and distinctive educational philosophy are chronicled in an ever-growing literature [see Christensen (1989) and Lundberg (1993a) for leads to this literature]. As the epigraphs indicate, most educators who use the case method agree that student preparation of cases prior to discussion is a critical factor contributing to effective learning. One of the ongoing debates among case method instructors, however, is the degree to which an approach or structure for case analysis and action planning should be provided to students. Instructors' methods vary widely—from requiring students to use specific analytic procedures to providing no structure at all in the hope that students will develop their own approach. This article

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attempts two things. First, it argues that a moderately structured framework for case analysis is, on balance, preferable to the two extremes just noted. Second, it describes and comments upon one such framework.

On Cases and Student Preparation

The case method is based on a philosophy of professional education which mates knowledge with action. This philosophy, in the words of Alfred North Whitehead, "rejects the doctrine that students should first learn passively, and then, having learned, should apply knowledge." Instead, the case method is based on principles first elucidated by John Dewey, namely that real education consists of the cumulative and unending acquisition, combination, and reordering of learning experiences. In Dewey's words,

Only by wrestling with the conditions of this problem at hand, seeking and finding his own way out, does [the student] think. . . . If he cannot devise his own solution (not, of course, in isolation, but in correspondence with the teacher and other pupils) and find his own way out he will not learn, not even if he can recite some correct answer with one hundred percent accuracy. (Soltis, 1971:83)

While cases may be relatively short or long, broad or specific, and have an almost limitless topic range, they are descriptions of actual administrative situations normally written from the viewpoint of the responsible actors involved (Paget, 1988; Stanford, 1988). As such, a good case, according to Paul Lawrence (1953:215):

is the vehicle by which a chunk of reality is brought into the classroom to be worked over by the class and instructor. A good case keeps the class grounded upon some of the stubborn facts that must be faced in real life situations. It is the anchor on academic flights of speculation. It is the record of complex situations that must be literally pulled apart and put back together again for the expression of attitudes or way of thinking brought into the classroom.

Experience has shown that fictional accounts of situations (so-called "armchair" cases), accounts written from generalized experiences, simple collections of actual organizational data, and articles from published sources about a company or industry do not make effective teaching cases. Rather, a teaching case is, as eloquently defined by Christensen (1987:27),

a partial, historical, clinical study of a situation which has confronted a practicing administrator or managerial group. Presented in narrative form to encourage student involvement, it provides data—substantive and process—essential to an analysis of a specific situation, for the framing of alternative action programs, and for their implementation, recognizing the complexity and ambiguity of the practical world.

The case method has an extraordinary power to involve students in a highly personal learning experience. While this involvement is the consequence of many factors, the main ones are:

1. The requirement that students repeatedly confront the intractability of reality—complete with its absence of needed information, its imbalance between needs and resources, and its ubiquitous conflict of objectives.
2. The requirement for students to relate analysis and action, to create doable, concrete action in the face of complexity, having only partial knowledge.
3. The requirement for students to practice pertinent managerial skills—diagnosing, deciding, observation, listening, and persuading—while preparing for case discussion.
4. The need to develop a general managerial point of reference—where action responsibility is informed by a sensitivity to action which is critical and possible in a multidimensional, multifunctional appropriately bounded context.

Effective learning through the case method is, of course, dependent on numerous factors such as repeated exposure to good cases, having a classroom where everyone can see and hear everyone else, and classes of sufficient length for full discussion. Perhaps the crucial factors, however, are the role of the instructor and student preparation.

The case discussion leader, in essence, guides a process of discovery. He or she forgoes the role and status of a center stage, intellectually superior authority figure to facilitate a process of joint inquiry (Dooley and Skinner, 1977). Artistry in case discussion facilitation requires mastery of a case's facts, a close monitoring of student analysis and presentation, and, occasionally, the provision of information and ideas to synthesize or contextualize the discussion. This involves asking questions which reveal the relevance of the case and discussion, weaving together individual contributions into patterns all can perceive, intervening to slow down or speed up the pace of discussion, and modeling skills of observation, listening, communication, and thoughtful decision making.

Student preparation for case discussion is generally acknowledged to require, at a minimum, a thorough mastery of case facts and some independent thinking about which are the relevant facts and what they mean. Beyond this minimum, however, opinions differ. Some instructors argue that dealing with ambiguity in analysis and action planning is of crucial benefit to students, and that to provide any framework for this work would detract from students' learning. The assumption made is that students will learn the nature of analysis and argumentation more effectively by deriving their own processes. Other instructors argue that a lack of consensus among students about problem solving and decision making can become a problem because of time limitations. Many instructors whose priority is to cover the subject matter of the course assume that the methods derived by students are seldom either very efficient or very effective, and in any

case take too much time away from content learning. These instructors therefore provide a framework or model that ranges from quite general (e.g., Elbing, 1978; Edge and Coleman, 1978; Ronstadt, 1980) to the relatively detailed (e.g., Hogan, 1984).

An instructor's choice of whether to provide analytic guidance, and if so, how much, will of course reflect his or her learning objectives and beliefs about the learning process. This choice is further shaped by the educational ethos of the school, which in turn reflects the relative weight given to the meta-objectives of knowledge acquisition, skill enhancement, and attitudinal modification (Lundberg, 1993b; Summer, 1956). Another factor is whether the other pedagogical methods that the students are exposed to have conditioned them to be a relatively passive audience, or abstract or casual in their thinking.

Since the case method is not the predominant pedagogy in most professional schools and the learning objective of "learning how to learn" is typically not given first priority over learning about marketing, accounting, organizational behavior, strategy, and other subject matter, most case method instructors opt for offering some degree of guidance to their students in the preparation of cases prior to discussion. As mentioned above, this guidance may be general or relatively structured.

An example of general guidance is provided by Borden (1986:2):

The case method first calls for you individually to read and think carefully about each case. You must identify problems, define alternatives, analyze data, make a decision, and outline a course of action.

The guidance may also be more structured, as in the typical six steps of Edge and Coleman (1978:28):

Step 1: Comprehend case situation.

- Speed-read the case.
- Read case carefully, taking notes, underlining.

Step 2: Diagnose problem area.

- Identify problem areas.
- List facts by problem area from notes on a rereading of case.
- Use evidence to diagnose each problem area in turn.

Step 3: State problems.

- State major problems.
- (optional) State minor problems.

Step 4: Generate alternatives.

- List solutions to major problem.
- (optional) List solutions to minor problems.

Step 5: Evaluate alternatives and select.

- Construct T-account for each alternative.
- List "pros" on one side and "cons" on the other side.
- Carefully weigh pros and cons, and select best alternative.
- (optional) Do above steps for minor problems.

Step 6: Defend implementation.

- List questions about the workability of the solution.
- Develop a defense for each question.
- (optional) Do these steps for the solutions to the minor problems.

A few even more structured case preparation guides also exist. One of the more sophisticated is offered by Hogan. She advocates first understanding the case situation, where "understanding" involves comprehending the causes and effects of various events and circumstances, and, second, offering "resolutions," defined as "courses of action (or non-action) appropriate for case characters to take to relieve problems, adapt to a diversity, take advantage of opportunity, or otherwise prepare for the future" (Hogan, 1984:40). Her model, similar to others, begins with problem identification but differentiates problems by level of analysis, source of the problems, problem perceiver, and probable cause. Her model also stresses causal chains and offers several criteria against which solutions should be judged for both implementation and evaluation.

Case preparation guides are used to speed up the learning curve of students. Ideally, they assist rather than supplant a student's acquisition of a personally useful managerial frame of reference (Schön, 1984). In addition, such guides should probably (1) counteract the pervasive student desire for simple, one-best-way, symptom fixing; (2) be applicable to both well- and ill-structured issues; (3) be useful in real-life situations as well as for written cases; and, (4) enable ongoing learning from experience. These criteria suggest a modestly structured guidance framework. One such framework for the Analysis, Diagnosis, and Action Planning (ADAP) of cases—the product of several years of class testing—is offered in Appendix A, written in the form of a handout to students.

The ADAP framework presented is similar to the others available in several ways:

- It outlines a series of steps or stages to follow (often recursively) in case preparation.
- Analysis precedes action planning.
- It is ostensibly applicable to all kinds of cases.
- It is intended to reduce the time a class spends in working through issues which arise from terminological differences as well as differences among students' intuitive analytical processes.

The commonalities between the framework presented and others are thus those of general purpose and general flow.

The framework presented, however, is also different in a number of important ways from other case preparation devices:

- After achieving some degree of situational familiarity, most frameworks begin with problem identification. The ADAP framework begins with a listing of symptoms and the assertion that we note symptoms so as not to confuse them with more underlying difficulties.
- Other frameworks do not ask for extensive listings of goals as does this one. Doing this early and thoroughly, however, both reinforces the notion of goal importance for purposive systems and, significantly, focuses diagnosis later on.
- Analysis and diagnosis, usually used synonymously, are clearly differentiated in this framework. Analysis comes first so that gaining a complete understanding of the situation isn't truncated by so-called problem identification. Of note is the degree of emphasis in this framework on systematic and thorough analysis, but without the specification of any particular analytic model. In fact, the emphasis on selecting appropriate ideas, models, etc., puts the onus on the student as well as allows for development over time.
- This framework defines "problems" somewhat strictly and clearly differentiates them from "predicaments," which are also carefully defined; these features clearly differentiate the ADAP approach from other frameworks. The emphasis this framework places on ordering problems and predicaments is also somewhat unusual.
- Action planning is given much more attention and importance in this framework than most others. Specifying criteria for judging action alternatives at the outset, for example, is unique and functional. Seeking actions that simultaneously solve, prevent, and improve broadens conventional thinking, too. Explicitly referring to action assessment as learning, something seldom done by other frameworks, has an appeal to students on the one hand, and seems appropriate given the increasing conditions of turbulence within and without modern organizations on the other.

Concluding Commentary

If careful preparation is one of the critical factors that enhance an effective case discussion, then an important issue is how to help students prepare better. This article has argued two things. First, offering students a moderately structured framework is educationally functional because, on the one hand, it eliminates much of the confusion, frustration, and time loss that invariably result when students are left completely to their own devices, and, on the other hand, reduces the dependence and the depersonaliza-

tion of approach that highly detailed case preparation guides tend to foster. Second, this article has argued for (and provided one example of) case preparation frameworks that clearly separate symptom recognition from analysis, that differentiate and enable clear problem identification, that promote action planning in terms of specific criteria and implementation steps, and that promote continuous learning.

Since successful managers have been characterized as being situationally well-informed, tough-minded and independent of thought, empathetic, and capable of exercising responsible pragmatic judgment, then case preparation devices such as the ADAP approach, which are intended to foster those qualities, should be beneficial to students.

APPENDIX A

The ADAP Approach to Case Preparation

Knowledge is the beginning of practice; doing is the completion of knowing. Men of the present, however, make knowledge and action two different things and go not forth to practice, because they hold that one must first have knowledge before one is able to practice. Each one says, "I proceed to investigate and discuss knowledge; I wait until knowledge is perfect and then go forth to practice it." Those who to the very end of life fail to practice also fail to understand. This is not a small error, nor one that came in a day. By saying that knowledge and practice are a unit, I am herewith offering a remedy for the disease.

Wang Yang-ming, 1472-1529 Chinese philosopher

Successful managers acquire competencies about many things and invest their time and energy in many ways. There are no universal principles which, if slavishly followed, automatically lead to success in all situations. While every manager and every situation are in some ways unique, and while many things may contribute to successful managerial practice, there are commonalities, such as:

- Since successful managers need to be well-informed about their current situation and their anticipated circumstances, they get and stay informed about the situations they are in and for which they are responsible.
- Successful managers are ever alert to those aspects of their ongoing situations that are presenting current difficulties or will likely produce difficulties in the future.
- Successful managers see that appropriate choices for corrective and preventative actions get made and that continual redesign that enhances performance occurs in a timely and effective manner, contributing to the well-being of the organization, its members, and the surrounding environment.

While this listing could easily be extended, it is clear that successful managers are both thoughtful and active. The real question is, how? While some managers prefer to act intuitively and some difficulties are so familiar that habitual decisions and actions suffice, most problems are so relatively unfamiliar, so relatively complex and encompassing, or so relatively important that a more thoughtful approach is preferable. The presumption we make here is that the more thoughtful we can be about our current situations and anticipated circumstances, the less naive, biased, and prone to error we

will be. In what follows, we offer a general yet systematic approach for understanding the organizational situations we find ourselves concerned with and for coming to and taking appropriate action. This approach is described as a sequence of six steps (outlined in Exhibit 1). Careful attention to each step in the process is advised, for each step is important as the foundation for those which follow.

Step One: Gaining Familiarity

The first step, obvious yet often underappreciated, is to acquire a thorough familiarity with the facts of the situation. If we are already in the situation it is easy to assume we are "familiar enough" with it. This is seldom the case simply because our current duties and recent behaviors mean that our attention has been focused on some things more than others. Taking the time to consciously review our situation in detail and to follow up by investigating that which has been out of attention is almost always helpful. If we are new to the situation or reading about it, acquiring familiarity simply means carefully learning about the place, persons, activities, and so on. This is usually done in at least two stages:

First, becoming familiar with the general situation, e.g., who, what, how, where, and when.

Second, thoroughly going over the situation in considerable detail. Being thorough usually means investing quite a lot of time, for a really thorough familiarization means appreciating both small nuances and major issues, seemingly minor as well as obviously crucial facts.

Gaining situational familiarity is aided by several things. One is to utilize any devices that prompt us to do a careful, wide-ranging, factual review. For example, it can help immensely to examine the situation in terms of several "levels"—i.e., individual, group, unit, organization, community, and society—to see the relationship within and among these levels, and to remember that these can be linked to a variety of nonsocial things, e.g., technology, physical things, formal structures, jobs, policies, goals, etc.

Situational familiarity is also enhanced by realizing that the information one has or acquires isn't all the same. Bits of information lie along a "continuum of certainty" depending on the degree of verifiability of the information. Information that is verifiable, that can be seen or heard by two or more people, is a *fact*. Information that represents your or someone else's judgment made on the basis of some supporting evidence is an *inference*. Information gleaned from the situation, but whose verification is not possible, is a *speculation*. Finally, information that is independent of any verifiable clues or evidence and arises entirely out of your or another person's mind is an *assumption*. In becoming familiar with a situation, we will acquire all of these types of information. Of course, facts are to be preferred over inferences, inferences over speculations, and speculations over assumptions—knowing the different types alerts us to seek facts.

One kind of information often overlooked and underappreciated in gaining situational familiarity is your own feelings. As you learn about situations, feelings do occur. Whether these feelings are positive or negative, focused or diffuse, noting them is important because they may be coloring your thinking about the situation as well as simply being significant facts in their own right. Knowing your feelings allows you to be somewhat more objective.

Step Two: Recognizing Symptoms

The second step in this approach is to carefully prepare a listing of the apparent symptoms in the situation. A *symptom* is any indication that something is not as you or someone else thinks it should be. Symptoms are indicators that there are more basic, more pervasive difficulties in the situation—just like having a fever is usually symptomatic of an underlying disease or illness. We advocate listing all symptoms early on so that you won't be tempted to simply correct or solve the symptoms instead of looking for the underlying issues.

At the outset of thinking about situations we must always be skeptical about what might be the real difficulties. A listing of symptoms will include any perceived inconsistencies, surprises, or oddities in the situation, and behaviors or actions that are over or under expectations and standards. It is also useful to note who seems to be impacted or bothered by these indicators. Be sure to list as a symptom any statement by any person in the situation who says there is a "problem"—often such utterances are indicators of a more basic issue or difficulty. The symptoms listed may or may not seem related. Remember, symptoms are indicators, and subsequent work will uncover which are the critical ones and which are indicative of underlying problems that must be dealt with. The important thing required for this step is a thorough listing of symptoms.

Step Three: Identifying Goals

The third step in this approach requires us to be as clear as we can about the multiple goals in the situation. This means creating several lists. Write a list of the goals held by each of the major entities in the situation, typically for each of the central characters, any work groups or teams, the work unit, and the organization. This sounds like an arduous task, and it often is, but making these lists is essential because, as we will appreciate later, identifying goals is the basis for clarifying basic issues.

Listing goals, however, is seldom easy because many goals are not publicly stated, written, or otherwise readily accessible. First list those which are known, then list all those relevant goals which can be reasonably inferred from the other factual information available. The trick, as always, is to be as thorough as possible.

Step Four: Analysis

After becoming familiar with the situation, recognizing symptoms, and identifying goals, the fourth step in our approach is to acquire a systematic understanding of the situation, that is, to do an analysis. A careful, full appreciation of what is really going on only comes when we systematically apply appropriate ideas, models, and theories to the facts of the situation.

Because the quality of our analysis will depend on applying the right conceptual tools, our first analytic task is to decide which ideas, models, or theories seem to be useful for thinking through the situation. Readily available facts and listed symptoms are usually suggestive of useful theories. Since we perceive what we are conceptually prepared to see, having a large mental "tool kit" of well-defined ideas and tested models and theories will allow us to think about the situation more clearly and more carefully. This is why successful managers keep adding to their intellectual capital.

With our initial conceptual tools selected, the real work of analysis begins. The ideal here is to be as thorough and systematic as our time, energy, and resources permit. If, for example, we apply an idea to one person in the situation, we should apply the

same idea to other key persons. Our ideas, models, and theories often prompt us to search for further information, and, as new information appears or old information grows in importance, we can add other ideas and models, our understanding increasing as we cycle back and forth between information and ideas/models. Partial analysis or overly focused analysis promotes blind spots and bias, so thoroughness is the byword for all analysis.

The wonder of a systematic analysis is that we come to *really* understand what is going on in the situation, to see what works and what doesn't. Often, such analysis leads us to appreciate certain facts, features, or factors that we had undervalued even given an extreme familiarity with the situation. We discover the key linkages in the situation, and, importantly, that immediate and direct causes are part of a complex causal network reaching back in time and into previously unforeseen places. A careful analysis almost always expands our focus; we begin to appreciate how aspects of the situation somewhat removed from the symptoms actually play a part.

Since a thorough analysis is plain hard work, it is often skimmed on. The felt pressure of time and the ego of some managers lead them to believe that they do or can understand the situation without careful and systematic sifting and ordering of facts—that familiarity is sufficient. Unfortunately, avoiding solid analysis often results in symptom fixing or intervening in habitual but nonrelevant ways. A real analysis requires us to be neither hard-headed nor hard-hearted, but rather “tough-minded” and reasonably skeptical of quick or easy answers.

Step Five: Diagnosis

Diagnosis, the fifth step in this approach, is the process of identifying and clarifying the roots of difficulties. Diagnosis is in essence comparison using goals and facts. First we look for *predicaments*. We compare the goals identified in step three, seeking inconsistencies both within the same entity—i.e., within the organization, within the work group, etc.—and between the various entities—e.g., do an individual's goals fit with his or her work group's goals? Second, we look for problems, any discrepancies between how something reasonably should be (a goal) and how in fact it is. Here the actual performances of individuals, groupings, and organizations are held up against their own goals, and all instances of over- or underachievement are noted. To reiterate, if a goal is not being achieved, this discrepancy is a “problem”; if there is intergoal inconsistency, a “predicament” exists. Be forewarned that situations seldom contain just one problem or just one predicament.

With problems and/or predicaments identified, the next thing to do is to order them. While any number of criteria may be used, e.g., impact on market share, profits, costs, morale, productivity, innovation, and so forth, two should always be considered: time and importance. Essentially we ask of our listing of problems and/or predicaments two questions: Which must be dealt with immediately? Which detract from overall performance? Note that each of these questions subsumes another vital one, namely, “for whom or what?” Ordering problems and predicaments enables us to sort out which must be attended to given the reality of limited resources, time, and influence.

Step Six: Action Planning

Action planning, the last step in the approach being outlined here, is the process of finding or designing appropriate actions (sometimes termed *interventions*) and scheduling their implementation and assessment. Action planning begins by specifying the

criteria which we use to evaluate possible actions. Criteria may be organizationally and/or situationally salient; examples are ethicality, low cost, receptivity by organizational members, fewest negative side effects, symptom elimination, and so forth. Regardless of which criteria are specified, it is important to prioritize them at the outset so that when it comes time to select an action sequence we aren't tempted to rationalize our favorites.

With action criteria specified, we then have to find one or more actions that would relieve, correct, and/or improve the predicaments and problems previously identified. In our search for action alternatives, we usually look first at our own repertoire of already familiar actions. Taking no action should always be one action considered. If none of the actions in our repertoire is plausible, we then extend our search to the experience of others. Then, if our search still does not locate any possibly appropriate actions, we must rely on invention—modifying some already known action to become more feasible or creatively combining parts of other actions, etc.

Consciously inquiring into the probable consequences of our action alternatives is the next, and very important, thing we do. We ask ourselves, in light of our analysis of the situation, What would happen if it were implemented? Will this action prevent future difficulties like those we now face? Is this action relatively consistent with how we do things around here? How will this action contribute to the longer-run well-being of the individuals, the unit, and the organization? Is this action ethically appropriate? Such questions sometimes prompt redesign or combination of the actions being contemplated—and if so we question their consequences all over again.

Eventually, however, our feasible action alternatives are evaluated against the criteria specified at the outset of action planning and one is tentatively chosen. This choice, we must emphasize, will seldom either maximize or optimize anything, given multiple action criteria and consequential reality. Most often we “satisfice,” that is, we accept that feasible/plausible action which meets the most important of our criteria. Additionally, a useful rule of thumb is to select an action that leaves other plausible alternatives available in the future in case of failure.

With an action alternative selected, we next specify a plan of implementation, that is, a time-ordered sequence of action substeps. Implementation planning boils down to specifying in detail who should do what, where, when, and with whom. It is essential to acquire the necessary resources and to assign responsibilities: Who will initiate action? Who has to support it? Who will monitor it? Who will ultimately assess it (and when)?

The last question above signals the final step in this approach—assessment of the actions taken. A plan for when and how and by whom recommended interventions will be examined is necessary, both to follow up on action effectiveness and to continue to learn from our experience. Knowing what works well and not so well, and knowing why, reinforces useful analytic, diagnostic, and action planning activities.

The approach outlined in the six steps above will initially seem time-consuming, certainly a bother, and perhaps stifling. Experience has shown, however, that such a process will improve the quality of your managerial thinking, decision making, and action taking. It will, with repetition, enhance your learning, and reduce the likelihood that you will have to resolve the same difficulties again and again. This approach need not, perhaps should not, be viewed as strictly an individual process. Two or more minds usually are better than one—collectively, they can recall more pertinent facts, make better inferences, share in the work of symptom and goal listing, bring more ideas to bear on the analysis, and so on. Working together with other students in a regular and increasingly disciplined way is commonly expected. Even on your own, with practice this approach will get easier and you will become more efficient. When you involve others, not only does the work become easier and the process more effective, but your learning about the process itself will be enhanced.

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EXHIBIT 1

An Outline of the ADAP Approach

Gaining familiarity: Step 1

- a. In general—who, what, how, where, and when.
- b. In detail—about the places, persons, activities, and contexts of the situation.
- c. Recognizing where acquired information lies along the continuum of certainty.
- d. Recognizing one's own emotional responses to aspects of the situation.

Recognizing Symptoms: Step 2

- a. List all indicators (including stated "problems") that something is not as expected or as desired.
- b. Note who in the situation is bothered by these symptoms.

Identifying Goals: Step 3

- a. List all goals of the major entities, e.g., people, groups, the work unit, etc.
 - 1. All that exist or are provided.
 - 2. All that can be reasonably inferred.

Analysis: Step 4

- a. Decide which ideas, models and theories seem useful.
- b. Apply these conceptual tools to the situation.
- c. As new information is revealed, cycle back to a and b.

Diagnosis: Step 5

- a. Identify predicaments (goal inconsistencies).
- b. Identify problems (discrepancies between goals and performance).
- c. Prioritize predicaments/problems regarding timing, importance, etc.

Action Planning: Step 6

- a. Specify and prioritize the criteria used to choose action.
 - Discover or invent feasible action alternatives.
- c. Examine the probable consequences of action alternatives.
- d. Select a course of action.
- e. Design an implementation plan/schedule.
- f. Create a plan for assessing the action to be implemented.