

## CHAPTER TWO

# the case difficulty cube and the three stage learning process

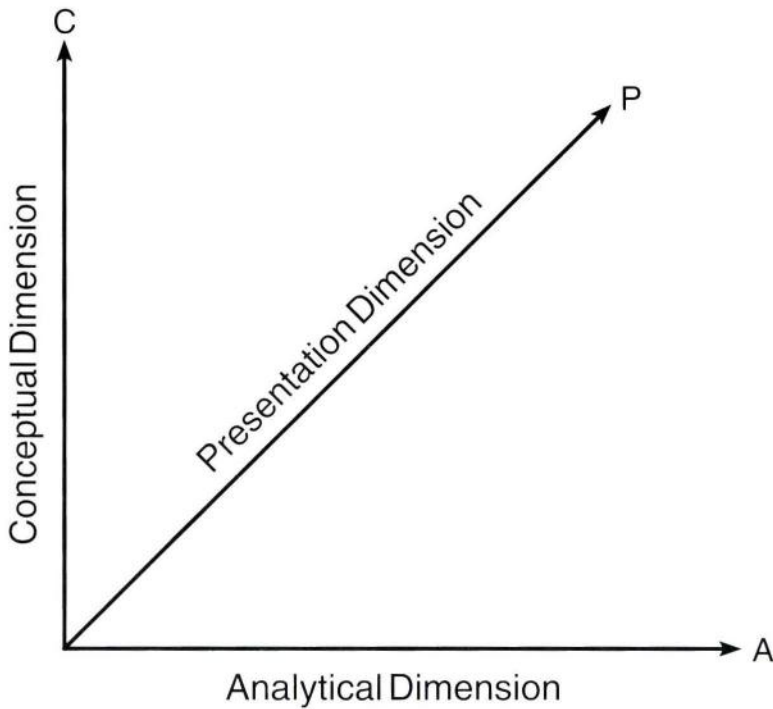
Your learning is far more enjoyable if you are convinced that what you are learning and how you are learning it make sense. Therefore, two frameworks are developed here to help you learn with cases: (1) an insight into the educational challenge presented in a case and how that challenge is translated into a Case Difficulty Cube; (2) an overview of the three stage learning process that forms the core of this text.

Participants in a case learning experience are always constrained by time. It takes time to read, analyze, and discuss each case. Your goal is learning how to prepare cases quickly and well. To reach this goal you need to: (1) have a better understanding of where to spend time on each case; and (2) develop a process for tackling cases that helps you achieve consistently superior results.

### THE EDUCATIONAL CHALLENGE OF A CASE AND THE CASE DIFFICULTY CUBE

The difficulty or the educational challenge of a case can be viewed as having at least three major dimensions: analytical, conceptual and presentation. Each dimension has three degrees of difficulty. In Exhibit 2-1 the analytical dimension is the A axis, the conceptual dimension the C axis and the presentation dimension the P axis.

Exhibit 2-1  
THE THREE DIMENSIONS OF CASE DIFFICULTY



### The Analytical Dimension

The analytical dimension of a case raises the question, “**What is the case reader’s task with respect to the key decision or issue of the case?**” The analytical task depends on how the decision is presented in the case.

The case may be written with the issue stated, plus the alternatives considered, the decision criteria used and the final decision taken. For example, “Susan Lee, the finance manager of Excelsior Inc., was seeking additional funds for an expansion project and, after considering debt and equity options, decided that borrowing the money was the best

decision.” The participant’s task becomes to assess whether the decision taken was, indeed, appropriate and the process followed correct, whether further alternatives might have been considered and what future consequences could be.

This kind of case has an analytical difficulty degree of one. In other words, the participant’s task is about as easy as it can get on the analytical dimension. By the way, these cases tend to be dull. Most participants in the case learning process recognize that by the time they get a chance to study a case, the situation described in the case has probably been decided in real life. Nevertheless, there is a difference between realizing this and being told so in the case. It is a bit difficult to work assiduously on these one degree of difficulty cases when you have already been given the final decision actually taken.

A case may be written about exactly the same issue, either with or without some alternatives provided, but excluding the final decision taken. This type of case is the second degree of analytical difficulty, the one most commonly encountered in cases. Using the example of Ms. Lee, above, the case would be presented as follows: “Ms. Lee, the finance manager at Excelsior Inc., was seeking additional funds for an expansion project and wanted to determine whether debt or equity financing would be the best way to secure new capital.” The participant’s task is now to analyze the situation, generate additional alternatives, evaluate all alternatives against specified decision criteria, make a decision, and develop an action and implementation plan.

A case moves to the third degree of analytical difficulty when even the decision that needs to be made is not identified. There is only a description of a situation. For example, “Ms. Lee, finance manager of Excelsior Inc., was reviewing the corporation’s current financial position.” Now the participant’s task becomes to analyze the situation, figure out whether a decision (or more) needs to be taken and what alternatives might be considered, what decision criteria should

be applied and which alternative is preferable, how it might be implemented and what the outcomes are likely to be. This third degree of analytical difficulty requires a lot of work!

Thus, the way the decision is framed in the case can represent different degrees of analytical difficulty for the participant. Presumably, the more difficult the analytical dimension, the more analytical time the case will require.

### **The Conceptual Dimension**

The conceptual or theoretical dimension of the case is concerned with the question, "What theories, concepts or techniques might be useful in the understanding and/or resolution of this case situation?"

Concepts or theoretical perspectives may be contained in chapters or article readings assigned with the case, or in the case itself. They may also have been covered earlier in the course or in other courses. Or they may come after the case, once the necessity for the theoretical perspective is established through the case. At the time of course design, the educator makes a decision as to how best to integrate the concepts or theory in a practical sense using a case. Cases often present and illustrate more concepts, theories, or techniques than most people realize.

Like the analytical dimension, the conceptual dimension of the case is divided into three degrees of difficulty. Difficulty in a conceptual sense has two aspects. First, how difficult is the concept or theory in or of itself? Can someone new to this idea understand it from just carefully reading about it in a textbook or an article without further class explanation? If so, this concept is simple and assigned the first degree of difficulty. Second, conceptual difficulty relates to the number of concepts to be used simultaneously to address the decision(s) or issue(s) on which the case is focused. One or two simple concepts constitute a difficulty degree of one.



One can easily see what increases the degree of conceptual difficulty in a case. The simple concept becomes complex, requiring extensive and repeated discussion and explanation in class, sometimes to the extent of lectures and/or problems or exercises. The single concept becomes many. This is why integrative courses, requiring a variety of other prerequisite courses and theoretical material, tend to have a significant level of conceptual difficulty.

Participants in the case study process require time to learn what the relevant conceptual or theoretical constructs are and how they might be applied in the context of each case. Conceptual difficulty is a relative notion. What may be difficult for some may not be equally difficult for others who are either adept at grasping a particular concept or who may have learned it earlier.

Taking some time to reflect on what concepts, theories or techniques are being raised in the case helps you prepare the foundation for your analysis.

### **The Presentation Dimension**

The third educational challenge in a case relates to the presentation dimension which provides an opportunity to develop skills in sorting and structuring information. It raises the question, "What is really important and relevant information here and what is still missing?"

The presentation dimension is also divided into three degrees of difficulty. At the first degree of difficulty the case:

1. is short;
2. is well-organized;
3. contains almost all relevant information;
4. contains little extraneous information;
5. is conveyed in a single, simple format, most often written.

Such a case can be read quickly and relevant information is accessed easily. Indeed, one of the criticisms of the case method is exactly on this point. The argument is that in real life problems and decisions do not come to the decision maker in such a nice, clean, well-organized fashion. Actually, well organized cases are useful for educational purposes, since they allow concentration on the other two dimensions of case difficulty without burdening students with a massive presentation challenge.

One can easily see that the degree of difficulty related to the presentation of the case can be increased by changing up to all five of the previously mentioned points. Thus:

1. short becomes long;
2. well-organized becomes disorganized;
3. available relevant information becomes missing relevant information;
4. little extraneous information becomes a lot of extraneous information;
5. a single format, probably written, becomes multiple formats such as written, plus video, plus database or whatever.

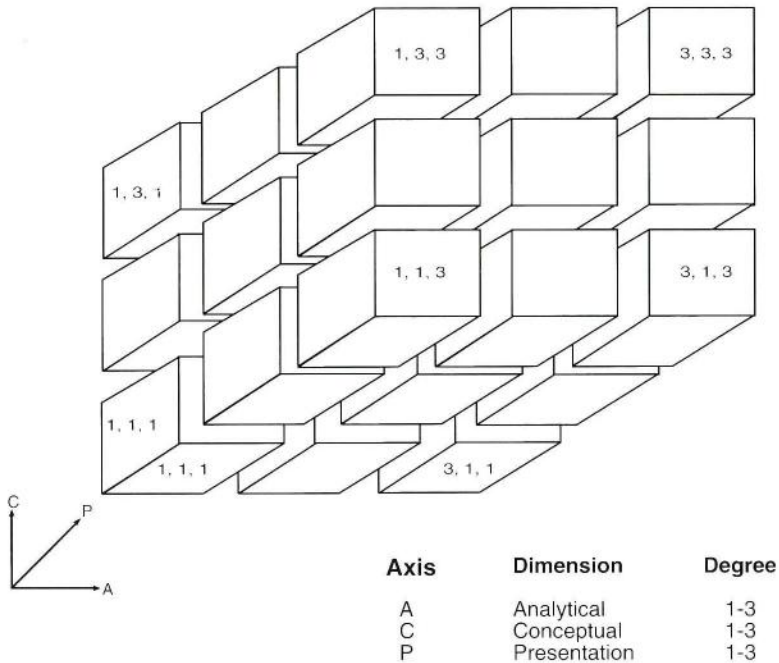
The greater the degree of difficulty in the presentation dimension, the longer the participant needs to spend on reading, sorting, prioritizing, identifying missing information, and organizing and structuring data. All of these are necessary and useful skills.

### **The Case Difficulty Cube**

Three degrees of difficulty along each of the three axes create a cube containing 27 sub-cubes (see Exhibit 2-2). Thus a (3, 3, 3) case is one where the learner will be challenged to identify the problem; may have difficulty understanding the concepts or theories which need to be used; and encounters additional difficulty because the case is long, with a lot of extraneous

information and, possibly, not clearly presented. Such cases are often used near the end of courses or programs.

**Exhibit 2-2**  
**THE CASE DIFFICULTY CUBE**



In contrast a (1, 1, 1) case is relatively simple and straightforward on each dimension. It identifies the problem and a solution, is simple in concept, and contains relevant, clearly presented material. Such cases are often used in the beginning of courses or programs.

A total measure of case difficulty may be established by using the arithmetic sum of the three dimensions. A total difficulty of 3 to 6, for example, ranges from easy at 3 to medium at 6. From 7 to 9 the case would be on the upper end

of the difficulty scale. You may encounter (3, 3, 3) types of cases that may, at first, look impossibly difficult. Rather than giving up without trying, you will find that the approach suggested in this book will allow you to make a reasonable start, even if total comprehension may not be achievable in the time available.

Understanding the difficulty cube position of a case allows you to allocate preparation time appropriately. A (3, 1, 1) case obviously needs more time on the analytical dimension than the other two dimensions. A (1, 3, 1) case requires significant concentration on the conceptual dimension and may be thought of as a “short read, long think” type of case. A (1, 1, 3) case needs a major information sorting and specifying effort. A (3, 3, 3) case will require an extraordinary amount of time and effort on all three dimensions.

The Case Difficulty Cube is a useful aid to help you focus your learning efforts on the most challenging dimensions of a case. The second framework in this chapter relates your quantity and quality of learning to the three stage learning process.

### **THE THREE STAGE PROCESS OF LEARNING WITH CASES**

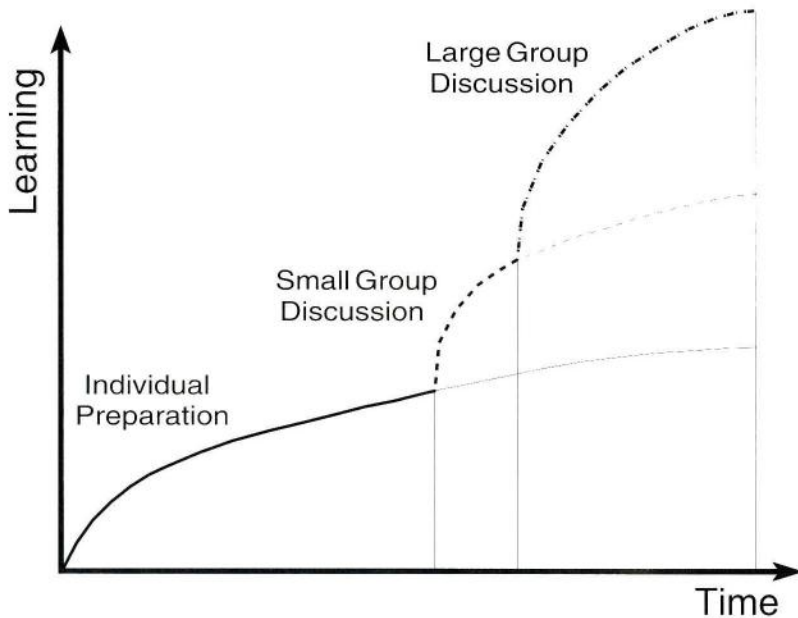
What a participant does with a case, once assigned, can be viewed as a process. The better that process is executed, the more rewarding the case learning experience becomes.

The case learning process is composed of three stages:

1. Individual Preparation
2. Small Group Discussion
3. Large Group or Class Discussion



**Exhibit 2-3**  
**THE THREE STAGE LEARNING PROCESS**



Each of these three stages is vital to effective learning and each contributes in different ways to maximizing the quantity and quality of learning. Exhibit 2-3 is a key diagram. It shows how each of the three stages contributes to the quality and quantity of your learning in a progressive and cumulative fashion. The aim is to help you achieve the best possible results in a minimum amount of time. The combination of all three stages, executed properly and in the correct sequence, assures effective learning. The following three chapters provide guidance and specific advice on how to execute these three stages. The introductory treatment in this chapter covers the basic logic as to why these stages are necessary and how they contribute to effective learning.

## Stage 1 - Individual Preparation

In learning with cases, individual preparation is the first step. It is the basis for all subsequent work and hence, the foundation on which quality and quantity of case learning depend. In individual preparation you take on the role and responsibilities of the decision maker in the case and the task of solving the issue confronting you. Thus you have to become acquainted with the information contained in the case, normally by reading. Next follows an analytical and case solving process. Also, if theoretical concepts are relevant to the case, additional readings might be helpful in the analysis and resolution of the case. As you will discover, the reading of the case and theoretical material is not a standard perusal of information. It is focused and selective. It forces the reader into the position and role of the decision maker in the case.

Note that you are not asked to take on the personality and gender of the individual in the case. The intent is to imagine the decision maker as lifted out of the situation at the time of the case and the reader as having moved in. Thus, you bring personal skills and background along with biases to the situation at hand. The decision or issue or opportunity becomes yours and yours alone during the individual preparation stage. The acceptance of this role and responsibility transfer is one of the major challenges in the use of cases. It is so much more comfortable to stay as an observer or commentator about the case situation. It is so easy to slip from owner to outsider role. "I think that the key person in the case should do this" is much less threatening than "I would do this under these circumstances." The earlier during the reading phase this acceptance of ownership of the situation and role takes place the better.

Good individual preparation demands a high level of self-discipline and hard work. There has to be hunger and commitment behind this search for the right analysis, solution

and implementation. It is related not only to true ownership of the case decision maker's role but also to individual motivation to do one's best. A simple way of thinking about it would be to compare it to the real life situation. "If I got fired if I made the wrong decision and promoted if I made the right one, how hard would I be working on this decision?" If real people in real life lost sleep about this situation and felt under pressure, is it not appropriate that this tension and stress also be felt by the ones that are supposed to be learning from this real life experience?

"How much can I accomplish alone within the time available?" is the continuing challenge in individual preparation. It is tempting to lean too heavily on the subsequent small and large group discussions to provide the answers. Nevertheless, there is great satisfaction in learning to "crack a case" on your own and becoming capable of doing the lion's share of the case analysis without the assistance of others.

Obviously, the better the individual preparation, the easier the following stages become.

## **Stage 2 - Small Group Discussion**

Small group discussion provides a vital link between individual preparation and class or large group discussion. Yet, curiously, it is the one step most frequently left out because many educators and students do not recognize the contribution of this step to the whole learning process. Below are eight reasons why you should make it a standard practice to have a small group discussion of every case.

### *1. Teach Others*

There is no better way to learn than having to teach others. The small group discussion provides each participant with the first test of the individual preparation, "Do I really understand

the issue and role I have taken over?" There is a huge difference between thinking you understand something and having to prove it. The whole process of learning with cases is based on the philosophy that you learn better by being actively involved in your own learning. If you can teach someone else what you know about a case so that the other person understands what you are talking about, then you also know.

### 2. *Encourage Individual Preparation*

It is the duty of every member to participate in the small group discussion. Peer pressure is strong on individuals in the group to prepare properly. Although it is possible for a student to hide lack of preparation in a large class, it is impossible to hide lack of preparation in a small group. Small group discussion is an opportunity to check insights, assumptions, and preparation against those of others; clarify understanding; listen attentively and critically to others; and argue for positions based on convictions developed during the individual preparation stage.

### 3. *Speak about Every Case*

Small group discussion provides the only chance for every member to speak about every case. There may not be enough time or opportunity in the large group discussion for every class member to get a chance to speak. Participating in the case learning process without getting an opportunity to talk about each case with others loses a lot of value. Knowing that one will not have a chance to talk about the case dulls the senses, turns individual preparation into a meaningless chore and the class discussion into a bore.

### 4. *Develop Communication Skills*

Small group discussion will give you practice in speaking, listening and other communication skills. Everyone gets to talk in the small group. Just as for musicians, actors or athletes, practicing is the only way to achieve high performance levels.



5. *Recognize Good Ideas*

It is just as important to learn to recognize good ideas as to be the originator of good ideas oneself. Being able to compare one's own ideas against those of others is a basic management skill fostered by cases.

6. *Foster Effective Teamwork*

Effective teamwork is fundamental to organizational success and participating in small groups provides valuable practice in learning to contribute to team success.

7. *Build Confidence*

Small groups also build confidence in each participant by showing that his or her understanding and analysis of the case is reasonable. Small group discussion makes it easier to debate viewpoints in the intimacy and safety of a small group than in front of the whole class. The classroom discussion process can be highly threatening to many; whereas the small group can provide a level of comfort when ideas generated in individual preparation and in the small group have merit and can, therefore, be safely voiced in a large group.

8. *Build Relationships*

Many past participants in the process of learning with cases remember fondly their small group discussions as a significant source of learning. Many also develop life long relationships with their group members.

As you can see, small group discussion is also tough. It requires constant alertness, a willingness to give and take, an ability to work both for the group and oneself and to share a common task quickly and effectively.

Please note that small group discussion is not a "now that we have all read the case, let's prepare it together" session. This bad habit requires too much time and absolves each individual

of thorough individual preparation. The small group discussion is instead a shared effort to help one another to understand the case situation better, to use the group synergy to see how far the group can push beyond the analysis reached by its members individually. This discussion is a critical, as well as a caring process. "I am here to help you, but that may also mean I may not agree with you and I will tell you why." A good small group discussion will complement and add to the individual preparation. It will bring a burst of new ideas that would have taken a lot more time for an individual to uncover alone.

It does not matter if some of the points you make in the small group never get raised in the classroom. Remember, you are responsible for your own learning. Be assured that your serious and active involvement in the small group will pay high dividends in terms of developing your professional skills.

Small group time should be short and effective. The purpose is not to "kill" the case. The placing of the small group activity right between individual preparation and class recognizes that still more learning will follow. However, the art is to push the learning as far as possible within the time available so that the large group discussion can start at a higher plane.

### **Stage 3 - Large Group Discussion**

Large group or class discussion is the final step in the three stage case learning process. Apart from later reviews, class discussion provides the last significant chance to develop a thorough understanding of the case. The learning diagram in Exhibit 2-3 makes it very clear that it is probably impossible for any individual or small group preparation to reach the level of understanding achievable at the end of the class. If, collectively, the class cannot push the total quality and quantity of learning beyond the level achieved in the individual and small group sessions, the class has not been a good one.

Inexperienced participants often feel frustrated by the seemingly inadequate levels of individual and small group accomplishment. Recognize that, in the first place, the key question at the end of the class discussion is, "Do I now understand what this whole situation is all about?" If the answer is "no," please make sure to find out from your instructor or a classmate why you still cannot comprehend the case after the large group discussion. If the answer is "yes," then the next questions become: (1) "In view of my understanding at the end of this class, what insights have I gained that can help me prepare better in the future?" and (2) "What can we do to have better small group discussions?"

This critical and ongoing feedback loop is essential to making the learning process continually improvable. Over time, the gap between the quality and quantity of learning achieved during individual preparation and small group discussion, and that achieved at the end of the class should be narrowing. If it is not, the feedback loop is not working very well.

The purpose of the class is not only just to reach a thorough understanding of the case and an optimal resolution of the issue or decision. The class discussion also gives class members the opportunity to practice in the large group, to share their individual and small group learning with others and to be evaluated by peers and instructors.

Fear of participating in the class discussion may stem from two major sources:

1. Inadequate individual preparation and small group work create fear. "You don't hide ignorance by talking" was one of the favorite sayings of Bud Wild, former head of the journalism department at our university. This kind of fear obviously can be handled by proper preparation.

Clearly, this does not mean that only the "right" answers are acceptable in class. From a teaching-learning

perspective “wrong” answers can frequently provide a valuable insight. In education, as in sports, practice means mistakes will occur and have to occur for true learning to take place.

2. An individual may find it difficult to speak up in a large group, regardless of the quality of prior preparation. Cultural, social and psychological factors may further reinforce personal reluctance to speak in class. This second kind of difficulty in speaking in the large group is tougher to deal with than the first. The first can be solved by adequate preparation. The second requires behavior modification. In Chapter 5 specific suggestions are given to help those who fall in this second category.

There are at least seven very good reasons why you should be prepared to participate in the large group.

1. *Learn by Doing*

Learning by doing is an essential part of the learning process. Knowing that one may have to participate in the large group discussion sharpens individual preparation, small group discussion and the quality of listening in the large group.

2. *Respond as Requested*

Instructors may ask you to participate.

3. *Teach Others*

Everyone in the class has the responsibility to help others to learn. Unwillingness to teach others and to share your insights prevents the class from having a superior learning experience. It also sends a message that you prefer to be a sponge; you will feed off the input of others but not contribute your share. Non-participation is often viewed as a lack of interest or a lack of care for the well-being and learning of your team, which will not do much for your reputation or acceptance among your



classmates. Given that your classmates may become a significant part of your post-graduation network, their opinion of you may have long term consequences.

#### 4. *Practice Public Speaking*

Many managers are called upon as part of their duties to present their views in front of others, whether they be employees, peers, superiors, a public, or the media. Public speaking skills are essential for any management position.

#### 5. *Be Included*

It is more fun to be part of the group and included in the process.

#### 6. *Test Ideas*

You may never know if your ideas were good enough to stand the rigor of class exposure. Your unwillingness to expose them to this test may raise the suspicion that you were unprepared.

#### 7. *Get Good Grades*

In many courses class participation counts towards the final grade. Unwillingness to participate may lower your grade or even cause you to fail a course. Please note that this argument has been put as the last reason, not the first one, because the other reasons are better. It should not be a fear of failing that drives you to participate. It should be the joy of learning that pulls you.

### **After Class Reflection**

It is extremely useful to have a short period of reflection right after class to evaluate your individual and small group preparation and large group participation against your understanding at the end of the class. Ask yourself, "What did I/we do right and why, and what did I/we miss and why?"

This critical reflection forms the basis for continuous self-improvement in your personal learning process. Too often, students charge out of class at the first opportunity without this quick reflection and lose the data necessary for continuous self-improvement.

## CONCLUSION

Armed with the insights of the Case Difficulty Cube and the three stage case learning process, you are now ready to tackle the details of each of these stages. Thus, the next three chapters will provide further details, first, about individual preparation; second, about small group discussion; and third, about large group discussion.