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AUTHOR Nuttall, Alice E.

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ABSTRACT

The development of case study training materials for an experimental research strategy is described, and the effects of such training are discussed. The theoretical foundation for learning strategies training was a social-cognitive/expectancy value model of college learning and teaching. In a posttest-only 2-group design, 54 students in an associate degree business program at a state university were given a short business management case with background information about the primary functions of management. Subjects completed analysis tasks during four 75-minute sessions over 2 weeks. Assessments of performance were made; and relationships among individual characteristics, experimental outcomes, learning strategy use, and strategy value were examined. The learning strategy training resulted in significant performance increases in listing the symptoms of case problems and in labeling them according to management function or process. Results indicate that task-related learning strategy training is a viable method for increasing academic performance; and that task-related learning strategy training may affect synergistic interactions among learning strategy use and value, performance, motivation, and individual characteristics. Implications for educational practice are discussed. Two figures illustrate the discussion. Five appendixes give instructions for the training sessions, guidelines for problem analysis, a review sheet on management functions, an example sheet, strategies hints, and a worksheet for the pretest case. (Contains 34 references.) (SLD)



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The Design of Effective Case Study-Related Learning Strategies Training

Author:

Alice E. Nuttall

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THE DESIGN OF EFFECTIVE CASE STUDY-RELATED LEAP.NING STRATEGIES TRAINING

by Alice E. Nuttall

Introduction

The purpose of this paper is to: (a) describe how case study training materials were developed for an experimental research study, and (b) discuss effects of such training.

Because the research study (Nuttall, 1991) examined the effects of task-related learning strategies training on performance and motivation in a case study task, it was necessary to develop both general case guidelines and learning strategy guidelines.

The Need for Learning Strategies Training

A dearth of experimental studies on achievement and motivational outcomes of training in self-regulated learning strategies suggests a need for research in this area. As stated by Dansereau (1985),

...at this point systematic learning strategy research is still in its infancy. Consequently, it is impossible to derive a solid set of principles that carbe used to plan and conduct future studies (p. 218).

One needed research area is the domain-general vs. domain-specific training question. For example, Mayer (1988) and Miles (1988) recommend the pursuance of domain-general or content-independent research, while Dansereau (1985) and Cook (1982, cited in Mayer, 1988) are pursuing domain-specific or content-dependent learning strategies training.

Researchers (i.e., DuBois & Kiewra, 1989) also recommend studying combinations of at least two or three strategies in a domain- (subject-or content-) based situation where individual outcomes can be assessed. Along that line, DuBois (1988) and Mayer (1988) recommend the study of which strategies make a difference and why. Furthermore, Mayer (1988), McKeachie (1988), and Weinstein et al. (1988) suggest that connections between student motivation and learning strategies skill be studied. As DuBois (1988) notes, "It is not enough to analyze GPA changes" (p. 17).

Among other needed research are: (a) classroom application studies (Doyle, 1986; Good & Tom, 1985; Martin & Briggs, 1986, Reigeluth, 1983)



and (b) the study of affective domain/motivation outcomes (Briggs, 1982; Como & Mandinach, 1983; Martin & Briggs, 1986; Reigeluth, 1983).

Learning Strategies Theory and Research Design

A theoretical framework of outcomes and influences of task-related learning strategy training appears in Figure 1. A diagram of the research design used to assess outcomes of learning strategy training appears in Figure 2.

The theoretical foundation for learning strategies training was a social-cognitive/expectancy-value model of college learning and teaching developed by McKeachie, Pintrich, Lin, and Smith (1986). This model hypothesized that: (a) student motivation and learning strategies knowledge not only affect each other but lead to both engagement in learning and academic performance; and (b) individual student characteristics may influence task-related motivation and academic performance.

In a posttest-only, two-group experimental design, Associate Degree introduction to management students in a comprehensive state university were given a short business management case or "incident" along with background information describing management's primary functions (planning, organizing, directing, and controlling) and processes (decision making and communication). During four 75-minute sessions over two weeks, 54 subjects were asked to complete three tasks: (a) list symptoms indicating that problem(s) existed; (b) categorize symptoms as appropriate function and/or process; and (c) state problem(s).

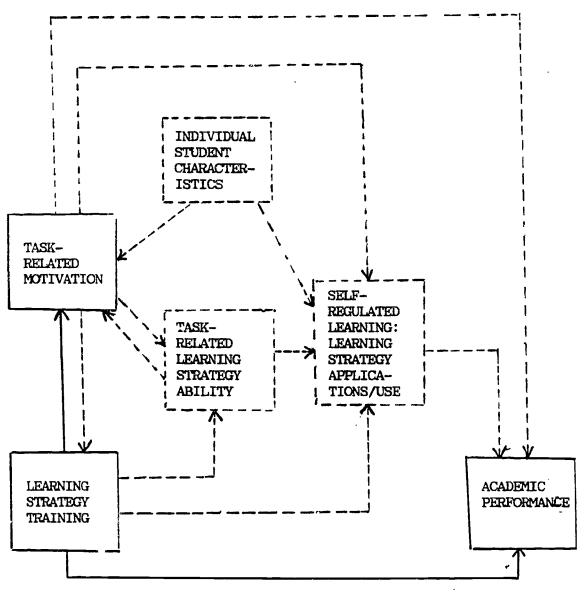
Both groups, control and experimental treatment, received training in how to analyze a business case study: in addition, the treatment group received task-related training in learning strategies and tactics.

Assessments were made for three performance outcomes (the tasks listed above) and three task-related motivational outcomes: (a) perceived task-related self-efficacy for learning; (b) expectations for task-specific academic success, and (c) desire to continue learning more about management in general as well as case study analysis in particular. In addition, relationships were examined between 22 individual characteristics, experimental outcomes, learning strategy use, and learning strategy value.

Since motivation is, by definition, consciously or unconsciously decided goal-directed behavior, task-related goal orientation and self-concept motivation variables were emphasized. Expectancy for success indicated the extent to which subjects felt they would obtain high scores on business case problem



<u>Figure 1</u>. Outcomes and influences of task-related learning strategy training: A theoretical framework

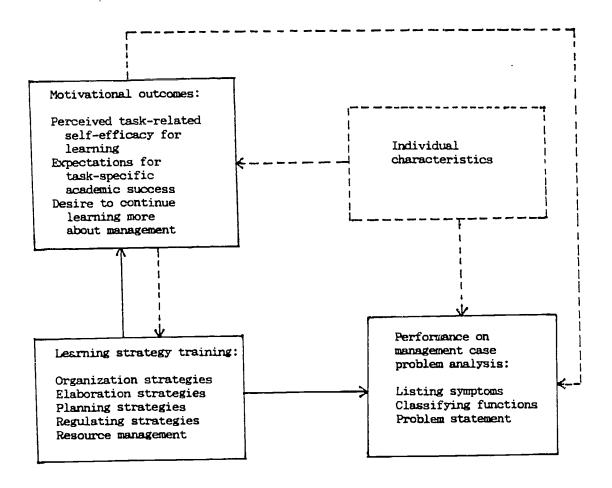


= Relationships of variables studied

---- = Theoretical explanation of relationships with other variables



<u>Figure 2</u>. Outcomes and influences of task-related learning strategy training: Experimental variables



= Relationships of primary variables studied

_____ = Post hoc analysis of effects of individual characteristics on experimental outcomes



tasks. Self-efficacy for learning components included understanding difficult written or oral information presented, learning basic concepts, mastering skills being taught, and confidence in completing assignments and tests involved in a case problem project.

Instructional Materials

Instructions for the experimental group, Research Group T, appear in Appendix A. Other materials used included: Guidelines for Case Analysis (Appendix B), including an example case (Appendix C); and Learning Strategies and Hints for Case Analysis (See two-page excerpt in Appendix D).

A six-page "Supplement to Learning Strategies and Hints for Case Analysis," illustrating examples of learning strategies applications, was also provided all the experimental subjects; this is available, by request, from the research investigator. All materials, as well as the documentation of their development, are also included in Nuttall (1991).

Instructions and materials that were given only to experimental Group T are noted in all capital letters in Exhibit A, "Instructions," and refer to learning strategies and hints for case analysis, as well as practice worksheets (See Appendix E for the example of a completed worksheet). Both groups received all other materials.

Development of Case Study Guidelines

Cases and instructions for case analysis were derived from a combination of published textbooks (Albert, 1988; Baack, 1988; Dietzer & Shilliff, 1977; Edge & Coleman, 1982; Jauch, Coltrin, & Bedeian, 1989; Schuler & Dalton, 1986; Tavernier, 1988; Wales, Nardi, & Stager, 1986) and the research investigator's experience teaching a course entitled Case Studies in Business Management Technology.

Development of Learning Strategies Training

Learning strategies training was based on strategies that were not only applicable to the task but were also strategies indicated as correlating with performance and such self-concept related motivation dimensions a self-efficacy and expectancy for success (See Eison et al., 1986; Pintrich, 1986, 1987; Pintrich & De Groot, 1988; Schutz et al, 1989).



The task was considered by experts to be one that required identifying important points, classifying information, and stating problems. Ability to read and handle a sheaf of written instructions and references was also needed.

Using definitions and instruments developed by Pintrich et al. (1988), as well as information processing or knowledge patterns described by DuBois and Kiewra (1989), a pilot study provided lists of useful task-related learning strategies and tactics as well as an assessment of the relationship to academic performance and motivation of four categories of strategies: organizing, elaborating, planning, and regulating.

The assessment of "other" strategies involved the reported use and value of twelve individual study techniques, rather than the use of composite groups of strategies described below, and included selected resource management strategies.

Organization strategies. Organization strategies included: (a) identifying important points in readings and notes; (b) outlining reading; (c) outlining notes; and (d) making simple charts, diagrams, or tables.

Elaboration strategies. Elaboration strategies included: (a) pulling together information from different sources (i.e., lectures, handout information, readings and discussion); (b) making connections between readings and concepts from lecture; (c) relating case to what student know; (d) writing brief summaries of main idea of case; (e) applying ideas to cases from other class activities (i.e., lecture and discussion); and (f) relating ideas from case studies to other courses.

<u>Planning strategies</u>. Planning strategies included: (a) before studying thoroughly, skimming reading material to see how it's organized; (b) making up questions about case; (c) setting goals for each period of study activities; and (d) thinking through topic of case problem rather than just reading it.

Regulating strategies. Regulating strategies included: (a) rereading when confused; (b) when difficult readings encountered, changing the way material is read; (c) adapting learning/studying style to instructor's requirements and style; and (d) when confused about notes or instructions, sorting out ideas or doing something about it.

Other strategies. Other strategies included: (a) having all materials organized before beginning task (organizing); (b) timing work (resource management); (c) asking others for help (resource management); (d) reading the case more than once (regulating); (e) underlining or highlighting important points (organizing); (f) writing notes in the margin of the case (organizing); (g) taking written notes about the case (organizing); (h) making a diagram of the



case facts (organizing); (i) using a worksheet to organize symptoms (organizing); (j) writing a rough draft of problem statement (organizing); (k) concentrating in a quiet place (resource management); and (l) referring frequently to instructions and other materials.

Application of strategies in instructional materials. Most of the abovelisted strategies were at least mentioned in the instructional materials, although extensive training was not provided. Strategies not mentioned or not readily evident in the materials included: (a) outlining reading and notes; (b) applying ideas to cases from other class activities; (c) setting goals for each period of study activities; (d) adapting learning/studying style to instructor's requirements and style; and (e) concentrating in a quiet place.

Discussion of Results

The treatment resulted in significant performance increases in two tasks:
(a) listing symptoms of case problem(s), and (b) labelling symptoms according to management function or process. These outcomes were viewed as possible evidence that the learning strategies treatment had had at least some effect on outcomes.

There was no significant increase for a third task, writing a problem statement. However, both groups performed better on the problem task than the other two tasks. Possible reasons for these results included: (a) Since there were no significant correlations between problem and either symptoms or functions tasks, perhaps different strategies were needed to write a problem statement; (b) the case study guidelines may have served as a "megastrategy" that gave both groups equal training in solving a problem task.

In assessing learning strategy use, two tactics were used by the treatment group significantly more than the control group: (a) referring frequently to instructions and other material, and (b) reading the case more than once.

In addition, post hoc analyses indicated differences between internal workings of the groups in unique correlations between learning strategies use, learning strategies value, self-concept related motivational variables (i.e., task-related self-efficacy and expectancy for success), performance, and individual characteristics.

Specifically, results confirmed the dynamism of continuing intrinsic motivation, which has been defined by McCombs (1984) as:

a dynamic, internally mediated set of metacognitive, cognitive, and affective processes (including expectations, attitudes, and beliefs about the self and the learning environment) that can influence a student's tendency



11.11

to approach, engage in, expend effort in, and persist in learning tasks on a continuing, self-directed basis (p. 200).

The study also confirmed that self-efficacy is a major recurring motivational factor (See Bandura, 1986; Covington & Omelich, 1987; McCombs, 1986; Schunk, 1986.

In addition, results suggested that learning strategies training can affect associations between variables related to performance and motivation, thus indirectly affecting performance (See Eison et al., 1986; McCombs, 1984, 1987; Pintrich, 1986, 1987; Pintrich & De Groot, 1988; Schutz et al., 1989), especially in the area of individual characteristics such as personal beliefs about the importance and value of both task and learning strategies.

Conclusions

Two conclusions are evident. First, task-related learning strategy training is a viable method for increasing academic performance.

Secondly, instead of directly affecting self-concept related motivation (especially in the areas of self-efficacy and expectancy for success), task-related learning strategy training may affect synergistic interactions between learning strategy use and value, performance, motivation, and individual characteristics.

Implications for Practice

Implications for practice include integrating into all instructional plans the following: knowledge of subject content, learning strategies, and attributions awareness (knowledge of how individual characteristics and motivation may affect learning).

Regarding motivational variables studied, it is recommended that self-efficacy and expectancy for success continue to be studied within the self-concept context. Desire to learn is a more complex variable in that it incorporates more than the self-concept context.

In addition, in conducting research in this area, two limitations of the current study should be addressed: use of self-report instruments and time period.

Regarding instrumentation, subjects need to be tested as to their actual knowledge and application of learning strategies.

Regarding time, adequate time--i.e., a minimum of three to six months-must be allowed for appropriate practice, mastery, and motivation for actual



Nuttall, Case Study Training, 9

use of learning strategies. In pilot studies, which took place over longer periods of time (up to two and one-half months), subjects enrolled in a case studies course showed significant gains in planning, self-efficacy, and expectancy for success. This type of long-term, classroom applications, research must be expanded.



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APPENDIX A

INSTRUCTIONS FOR CASE TRAINING SESSIONS - RESEARCH GROUP T

Your task is to analyze business management cases. Starting today, you will work on one case during each of the next three class periods. During the fourth class period you will complete a "test case" and a questionnaire. You will <u>not</u> be asked to recommend solutions. Instead, you will concentrate on identifying the problem(s) that exist in the case. To do this, you will:

- (1) List symptoms of the problem(s), which are facts that indicate something is wrong.
- (2) Label each symptom as one of the six management functions and processes described in the attached "Management Functions and Processes Review Sheet" (Planning, Organizing, Directing, Controlling, Communication, and/or Decision Making).
- (3) Write a problem statement in sentence/paragraph format. This is a statement of what is wrong in the case and explains, in approximately one to five sentences (a paragraph), the main cause(s) of the symptoms of discontent previously listed. There may be more than one problem and, because you may have incomplete information, you may have to make some assumptions (and guesses!) in deciding what are symptoms and what are problems.
- (4) BEFORE YOU WRITE YOUR PROBLEM STATEMENT, COMPLETE THE WORKSHEET ENTITLED "ORGANIZATION OF SYMPTOMS BY FUNCTION/PROCESS" (THREE BLANK COPIES ARE ATTACHED FOR YOUR USE).

More detailed instructions, including information about how to distinguish between symptoms and problems, appear in the attached documents entitled "Guidelines for Case Problem Analysis" and "LEARNING STRATEGIES AND HINTS FOR CASE ANALYSIS." NOTE, IN PARTICULAR, LEARNING STRATEGY EXAMPLE 5 FOR GUIDANCE IN COMPLETING STEP 4 ABOVE.

Completing Your Work. You may start working on your case as soon as you have read all the instructions and guidelines. After you have completed the answer sheet attached to each case, as well as the worksheet, you may obtain copies of both Answer Keys from your instructor. Compare your responses with the responses on the Answer Keys to determine how you can do better on the next case.

(Continued on next page)

Nuttall, Case Study Training, 14



Instructions for Case Training Sessions, Research Group, Page 2

Other Procedures. While you are involved in this project, please do not talk to anyone about the cases--before, during, or after class-- and do not share your notes with anyone. This is to insure that everyone has an equal chance at doing well on the cases. Keep these instructions, including the Management Functions and Processes Review Sheet, Guidelines, WORKSHEETS, LEARNING STRATEGIES AND HINTS, and all answer keys, for reference in doing your other case analyses.

Materials to Obtain from Instructor: Case A, Acme Machine Company (for first day); Case B, Management by Rushing Around (for second day); Case C, Conflict on the Plant Floor (for third day); and blank answer sheets and answer keys for each case (one case per class period).



APPENDIX B

GUIDELINES FOR CASE PROBLEM ANALYSIS

Introduction

The cases you will be studying are examples of situations experienced in the business world. Something has happened that has record one or more problems, and management must decide what to do to improve the situation. In order to recommend solutions to any problem, however, management must determine what the problem is; for without knowing what problem needs to be solved, any recommended solutions would be merely guesses.

As Gerald Tavernier, a management consultant has noted, more and more companies are realizing that the cost of trying to solve the wrong problems can be very high, and many companies have started formal training programs for managers on problem solving, "with particular emphasis on problem identification."

One example of poor problem identification is the situation where a company thought its problem was high inventory, when actually the inventory was uneven; the stock levels for factory supplies of each item were wrong, causing production to get behind schedule, even though there were surpluses of some materials. Another example was a West German firm that blamed its drop in exports on the high value of its country's currency, when the real cause was faulty engineering and a failure to meet market demand.

Guidelines about how to complete your cases problem instructions appear below. The attached case "No Business Like Snow Business" will be used as an overall case example. Refer to the answer key attached to these guidelines for examples of correctly stated symptoms, functions, and problem.

1. Listing Symptoms

Symptoms are evidence that a problem exists. List all facts that indicate that something is wrong or where a situation exists that could be improved. Be very specific in noting unusual behavior, conflicts, or changes. For example, instead of stating "poor morale," state that "employees were refusing to do their work or breaking the machinery." You will determine later whether or not this behavior was caused by poor morale or something else.

In addition, don't make value judgments yet; just describe what happened. Don't just say, "He didn't communicate well." Instead, list specific behavior

Nuttall, Case Study Training, 16



Guidelines for Case Problem Analysis (Page 2)

you observed that led you to this conclusion--i.e., "there was not much eye contact, the person's voice sounded harsh, the person fidgeted in his seat, folded his arms, looked away and sighed, interrupted others when they were talking, etc."

Also separate important facts from unessential facts. In the "Snow Business" case, information in the second paragraph about the SBA consultant was background information to set a general scenario and was not essential to the identification of case problems.

Finally, be alert to case terminology where symptoms may be called problems. For instance, in the "Snow Business" case, the last paragraph states, "The firm's questions and problems centered around the only cash register..." Here, the cash register was a symptom of a problem, not the problem itself. The root problems were planning and directing, as related to the cash register. Controlling was not a root problem because it was caused by something elseien, poor policies and procedures (planning functions).

2. Label Symptoms According to Management Function or Process

Now that you have a list of symptoms indicating that one or more problems exist, label each of these symptoms as one of the following six functions or processes of management: Planning, Organizing, Directing, Controlling, Communication, and Decision Making. These are described in your review sheet. This process will help pinpoint the main problem areas in the case. Note: It is possible that one fact could represent more than one management function or process. Before assigning more than one function, however, break down facts into smaller units if possible.

3. Write Problem Statement

The problem statement explains the main cause(s) of symptoms of discontent previously listed. Approximately one to five sentences (a paragraph) should be adequate to tell management what is wrong in a situation and what needs to be corrected. Concentrate on the major functions and processes of management you used to classify/label your symptoms.

As advice in writing your problem statement, note that: (a) Since symptoms may have many causes, there may be more than more problem; and (b) the problems you list should be significant ones. In the "Snow Business" case, for example, the shortages



Guidelines for Case Problem Analysis (Page 3)

in the cash register could have been due to at least two different problems: (1) Lack of appropriate policy and procedures (a planning problem) and (2) Lack of appropriate controls over the disbursement of monies (a controlling problem). In this case, lack of appropriate controls was caused by lack of appropriate policy and procedures, which makes planning the significant problem area.

In determining whether a problem is significant, ask yourself how many symptoms can be explained by it. The more symptoms a problem can explain, the more significant it is. In case study analysis, the most significant problems are called major problems, while less significant problems are called minor problems. For the purposes of your task, you will concentrate on major problems.

Distinguishing between Symptoms and Problems

A problem exists when there is a gap between an existing condition and a desired situation. Symptoms are the facts showing that something is wrong-that a problem exists. In identifying a problem, you might pretend that you are a detective looking for clues that something is wrong, in which case these clues would be symptoms of a problem.

Once you have identified the symptoms, you then make guesses on what caused them, since the cause of the symptoms is the problem. For example, a patient tells a doctor he has a high temperature and headache (a symptom), but the problem that is causing the headache could vary from a mild case of flu to a severe case of brain infection.

Examples of symptoms of business problems that you might be familiar with include high absenteeism, tardiness, and complaints about the work environment. Depending on other facts in a particular case and assumptions you make, the problem could be related to poor communication, bad leadership, inadequate policy or planning, inefficient organization of the work station, low pay, unfair standards of performance, etc.

3/19/90 Alice E. Nuttall Kent State University



MANAGEMENT FUNCTIONS AND PROCESSES REVIEW SHEET

Management Functions

PLANTING - Determines what needs to be accomplished and determines how and when it will be done; anticipates needs in establishing goals, objectives, policy, procedures, budgets, and schedules.

ORGANIZING - Arranges and coordinates resources so that objectives can be met; effectively organizes staff, materials and equipment, methods, procedures, and financial resources to meet organization's objectives.

Sets up organizational structure and chain of command.

DIRECTING - Through leadership and delegation skills, provides guidance to subordinates so they can accomplish their assigned work. Also recognizes individual differences in people and points of view and creates a motivational atmosphere that will build employee morale.

In the area of leadership, elicits enthusiastic cooperation and creative initiative from both subordinates and associates. Applies appropriate style of leadership to given situation; knows when to be directive and when to be a participative manager, whether in a small or large business organization.

In the area of delegation, delegates responsibilities as appropriate and effectively utilizes subordinates' skills. Knows how to clearly define and follow up on delegated responsibilities to the degree that subordinates carry out assignments even when not under constant supervision.

In carrying out management functions, knows how to make quantitative applications and consider both behavioral dimensions and environmental conditions of a given situation. Is responsible for organization's financial situation.

CONTROLLING - Appropriately measures results against established objectives and standards (i.e., quantity, quality, timeliness, and cost); monitors desired performance against objectives for both self and subordinates, and corrects procedures and performance as necessary.

Processes Used to Perform Management Functions

COMMUNICATION - Demonstrates effective writing, speaking, and listening skills in communicating with all levels of employees. Is sensitive to the role

(Continued on next page)



Management Functions and Processes Review Sheet, Page 2

personal values and attitudes, and other personal characteristics play in interpersonal interactions.

DECISION MAKING - In solving problems and making decisions, shows discretion and arrives at sound common sense decisions. Uses both fact and intuition-based problem solving strategies; demonstrates logical, clear, and consistent thought, as well as ability to generalize what is learned from one situation to another.

2/18/90 Alice Nuttall Kent State University

APPENDIX C

EXAMPLE CASE: NO BUSINESS LIKE SNOW BUSINESS

Bill and Janet Schneeman are co-owners of the Olympic Ski Haus, a new and small sporting goods store that specializes in ski and tennis equipment along with apparel accessories for both these sports. During the stages of incorporation, the Schneemans applied for a Small Business Administration loan of \$50,000. As a condition of receiving the loan, Olympic Ski Haus agreed to the services of an SBA consultant--a retired business executive with retailing experience.

During his investigative interview, the SBA consultant discovered, among other things, that when Bill and Janet incorporated the business, both agreed there would be no boss. "We share authority and responsibility equally here," they told the consultant.

Furthermore, they advised him that in the interests of equality, it was agreed that each party could independently make decisions and set policies for the management of the store. Each could give orders and instructions to the store's

(Continued on next page)



Appendix C, Example Case: No Business Like Snow Business, Page 2

two employees with the mutual understanding that, if any employee had questions or problems, he or she could appeal to either owner for help or advice.

"We are too small an outfit to be concerned about such things as objectives and policies here at Olympic. 'No business like snow business' is our store's objective. We take each day as it comes and try to increase our business volume.

"As for policies, we handle each situation as it develops--because each is different--and whoever is here will decide then and there what to do. If the hired help would get different answers or advice, it wouldn't really matter since we're so small. Right Janet?

"As for any market research to determine what our store potential is in this trading area, that's for big firms. We have neither the time nor the help to do this."

The SBA consultant discovered that many of the firm's questions and problems centered around the only cash register at Olympic. Both Bill and Janet take cash from the register to cover incidental expenses, including meals and beverages consumed during store hours. At the close of day either one present will count and balance the cash receipts against the register totals. Inevitably the cash register is short, and each day the sales clerks are notified of the shortage amount. Consequently, the consultant observed that the clerks feel mistrusted and hesitate to operate the register for fear of being accused of either theft or an inaccurate sales transaction. As a result, both employee sales and motivation seem low.

Source: Bernard A. Deitzer and Karl A. Shilliff. Contemporary Management Incidents. Columbus, OH: Grid, Inc. (1977), pp. 20-21. Copyright by Bernard A. Deitzer. Used by permission.



ANSWER KEY EXAMPLE CASE: NO BUSINESS LIKE SNOW BUSINESS

(One point for each of 12 symptoms and 12 functions)

	A. Symptoms	B. Management Function/Process
1.	No one boss; shared authority (Don't know who to listen to; no leadership)	Organizing (Also accept: Organizing and Directing)
2.	Shared responsibility (No boss; each gives orders)	Directing
3.	Independent or inadequate policy making	Planning
4.	Independent decision making (Situational individual decision making)	Decision Making
5.	No objectives/goals (Day-to-day outlook)	Planning
6.	No policies/procedures/ rules (Day-to-day outlook)	Planning
7.	No makert planning/research (Research alone = 1/2 pt.)	Planning
8.	Shortages in cash register	Controlling
9.	Clerks feel mistrusted (Won't operate register)	Directing (Also accept: Directing and Communicating)
10.	Low employee sales (Low morale and confidence) confidence)	Directing (Also accept: Directing and Communicating)
11.	Low employee motivation	Directing (Also accept: Directing and Communicating)
12.	Both owners take cash from drawer and balance (inaccuarate accounting cash)	Controlling



Example Answer Key
No Business Like Snow Business
Page 2

C. Problem Statement (6 points)

There is a need for better directing and planning. Specifically, management lacks: (1) clear, unified authority (a directing function); (2) clear plans and objectives (a planning function); and (3) policies or standards for operation that all employees can adhere to on an equal basis (both planning and directing functions). These policies and standards will provide controls needed.

3 KEY POINTS (2 points each):

- 1. DIRECTING (LEADERSHIP AND COMMUNICATION WITH EMPLOYEES)
- 2. CLEAR, UNIFIED AUTHORITY (FORMAL MANAGEMENT STRUCTURE/ORGANIZATION)
- 3. PLANNNING/PLANS: OBJECTIVES OR GOALS; POLICIES, STANDARDS, AND CONTROLS

NOTES:

- --Give only one point for two symptoms listed together.
- -- Give partial credit when more than one function is listed.
- --No points are subtracted for wrong answers.

3/19/90

Key developed 12/31/89 via input from R. Davis, R. Nay, R. Peterson, H. Tritt, & E. Villella (60% agreement required).

Final revisions and decisions about unclear items on key made in unanimous agreement by: J. Gailey, H. Tritt, and E. Villella at 1/2/90 meeting chaired by A. Nuttall.



APPENDIX D

LEARNING STRATEGIES AND HINTS FOR CASE ANALYSIS

The learning strategies described herein will help you obtain higher grades on each case task. Examples of these strategies are attached.

1. Plan Your Work

- a. Before you begin, be sure you have all your materials and notes together and that you understand the assignment. Assemble all the guidelines and other handout material provided by the instructor, and read all instructions, including this handout on Learning Strategies.
- b. Look at the clock to determine how much time you have, but don't hurry through the assignment.
- c. If you don't understand any part of the assignment, get help. Use a dictionary and/or ask your teacher.

2. Read Case for Understanding

- a. Skim the case by reading quickly without taking notes; this will give you a brief overview of the case.
- b. Go back over the case a second or third time, reading carefully and highlighting important points (underline, mark with a light colored thick felt pen, and/or write notes in the margin). SEE EXAMPLE 1.

While you're reading, concentrate on the case facts and keep an open mind. Don't make value judgments--i.e., good, bad, true, untrue, etc.--about evidence, people, organizations, or actions. For example, if you are "pro-union" and management is not accepting union demands in the case, do not let personal feelings affect your thinking. Make sure you consider all possible viewpoints. Later on, you will make judgments about the value or relevance to the case of each of these facts.

c. Take written notes about the facts of the case. Ask yourself who, what, when, where, why, and how questions: Who is involved? What is involved? What happened? When did it happen? Where did it happen? Why did it happen? How frequent, serious, and extensive is it? List key names, dates, events, or exhibits for later reference. SEE EXAMPLE 2.

Nuttall, Case Study Training, 24



Learning Strategies and Hints, Page 2

Think of the case as a play with actors (the "who"), props (the "what is involved"), action (the "what happened"), scenes ("when and where it happened"), causes ("why did it happen"), and significance of consequences ("how frequent, serious and extensive is it?"). SEE EXAMPLE 3.

d. If the reading is confusing, try going over it again more slowly to understand it.

3. Locating Symptoms

- a. Use your notes and highlighting as your main source for locating symptoms so you don't have to waste time by rereading the whole case.
- b. To separate symptoms from general case facts, code notes or underlining/highlighting by some method such as circling or using check marks. Example: Use underlining for major symptoms and parentheses for general background information. SEE EXAMPLE 1.

4. Classifying Symptoms according to Management Function or Process

Carefully distinguish among functions and processes by using underlining or highlighting on your Review Sheet to be sure that you understand the definitions of functions and processes.

5. Use a Diagram to Connect Symptoms and Main Events

A rough draft flowchart or "cluster diagram" will help you visualize the connections between symptoms and main events, leading to possible causes of theses symptoms. Simply draw lines and arrows between events that show possible causes and effects. A straight line might indicate a relationship, although not necessarily cause/effect, while an arrow could indicate cause/effect. SEE EXAMPLE 4.

6. Writing the Problem Statement

- a. Draw on your own personal work experiences or community activities, work experiences of your friends and family, and similar situations discussed in your business classes.
- b. Use your diagram to show the relationships of symptoms and other facts in the case. Ask what's leading to what. What situation/factor is causing most of the other factors? SEE EXAMPLE 4.



Learning Strategies and Hints, Page 3

- c. On your Organization of Symptoms by Function/Process Worksheet, list all the symptoms that relate to each category, then count the number of symptoms listed for each function/process. Ask which management functions or processes have the most symptoms listed.

 SEE EXAMPLE 5.
- d. Try brainstorming; write out your thoughts as they occur, then rewrite later. In your own words, based on your own experiences and your diagram of events (See Example 4), try to explain what the connections between symptoms are. Write a draft of what happened, along with reasons. This is called elaboration. SEE EXAMPLE 6.
- e. Rewrite your draft into a brief problem statement (See Answer Key). Using the management functions categories listed in your Worksheet (Example 5), state what the general problems are. Then back up this statement with examples. Say, "These problems are evidenced by...."

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APPENDIX E

EXAMPLE 5

WORKSHEET: ORGANIZATION OF SYMPTOMS BY

FUNCTION/PROCESS

PRETEST CASE: NO BUSINESS LIKE SNOW BUSINESS

PLANNING:

- 1. No objectives or goals (day-to-day outlook)
- 2. No policies, rules or procedures (day-to-day outlook)
- 3. No market planning or research

ORGANIZING:

1. Unclear chain of command; two bosses have authority

DIRECTING:

- 1. No one boss; no unity of command
- 2. Clerks feel mistrusted and won't operate register
- 3. Low employee sales
- 4. Low employee motivation

CONTROLLING:

- 1. Shortages in cash register
- 2. Both owners take cash from drawer and balance

DECISION MAKING:

1. Independent, situational decision making by co-owners

COMMUNICATING:

1. Employees don't know which boss to listen to or approach

an, 2/24/90

Nuttall, Case Study Training, 27

