EXPAND YOUR OPTIONS

6 DO-IT-YOURSELF MODULES
FIELD EXPERIENCE:
EXPAND YOUR OPTIONS
Six Do-It-Yourself Modules

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EXPAND YOUR OPTIONS THROUGH
PROBLEM-SOLVING SKILLS

How many years have you spent in the American school system? Do you ever feel as if you have been in a holding pattern for a long time, waiting for the opportunity to land and get on with the business of living? The field experience you are about to undertake may be that opportunity.

While in school you have acquired a great amount of knowledge and developed a number of skills. You would not be where you are if you had not done so. However, research has shown that the skills needed for superior performance in college coursework are not the same skills as those necessary for superior performance in professions and careers. So, here is a chance to develop some new skills. In fact, if you are going to make the best use of this opportunity and take greater responsibility for yourself and your education, additional skills will be needed. This will mean you have to move out of the dependent and compliant mode of existence that works well in most schooling environments and become more independent and assertive. These six modules are designed to help you do that.

You and other students in field experience education will encounter many situations requiring decision making and problem solving. Because of long experience in the school system, you may be tempted to pass the responsibility for decisions on to a supervisor, to play it safe by waiting for someone else to take charge, or to do nothing until told to do something. But students who see themselves as able to actively affect what happens to them (rather than accept situations and feel they have no control), who are creative in seeking alternative solutions
and who take initiative to seek new responsibilities and learning activities have a distinct advantage over more passive students. These modules are designed around problem-solving processes that will aid you in creatively seeking alternatives and making effective personal and professional decisions. These skills will be of immediate use in your field placement experience.

THESE MODULES WILL HELP YOU LEARN THE FOLLOWING SKILLS:

Module #1 Defining the Problem (page 4)
Module #2 Observing, Recording, and Interpreting (page 10)
Module #3 Generating Alternatives (page 21)
Module #4 Selecting an Option (page 35)
Module #5 Developing a Plan of Action (page 42)
Module #6 Field Testing the Techniques (page 44)

Appendix A A Comprehensive Checklist for Use in Field Testing (page 48)

Before you begin to use the modules we would like to say a word about the materials. First, there is a lot of material here, but it is organized in manageable pieces. You should be able to do each of the first five modules in an hour.

Second, this symbol indicates a chance to practice the techniques being described.

Finally, a few thoughts about the nature of this material:

1. The purpose of these modules is to enable you to take charge of your own education while in the field. If you don't, somebody else will.

2. Most of the things these modules seek to teach you—e.g., to observe, to generate ideas, etc.—you do already. We are trying to help you do two additional things:

a. Do them intentionally
b. Do one thing at a time. (Explanation: Usually you are interpreting at the same time as you are observing—trying to make instant sense out of what you see and hear, and, secondly, you tend to evaluate
ideas as you generate them. Superior performance in the world of work requires a separation of these processes. You need to make extensive observations before you try to interpret their meaning. You should generate numerous ideas before you evaluate any of them. In short we, in these modules, are trying to teach you to withhold judgment while observing and while generating ideas.)

3. You will not always be able to apply this set of skills as a sequential package; that is, in some situations you may be given a task to do in which the problem or task has been defined, clarified through observation and reflection, and the alternative possibilities identified. What you may be asked to do is evaluate the alternatives, select the most appropriate one (Module 4), develop a plan of action, and implement it (Module 5). Or, it may be that you will find greater utility for the skills in their individual application rather than as a part of a sequential problem-solving activity. It may be more important to you to develop skill in observing, recording, and interpreting human interaction or in generating ideas rather than in solving problems. That's fine. Use the skills in whatever ways best serve your purposes. Remember, you are in charge!

NOW, ON TO THE MODULES.
IDENTIFYING AND DEFINING PROBLEMS

Problem-solving processes may begin in several ways: Either someone brings us a problem by saying, "I'd like you to solve, or consider, or think about....", or they say, "Let's plan...." Or we discover for ourselves that something needs to be changed, or implemented, or improved.

There are six basic steps involved in solving problems. These are:

1. Identify and define the problem
2. Clarify the situation by accurate observation and careful interpretation
3. Identify alternative solutions
4. Select the most desirable alternative
5. Develop a plan of implementation
6. Carry out the plan

Every step in this process is important for a different reason. For example, how a problem is defined at the start will limit the choice of solutions and may determine whether the solution is workable or not.

FRANK & ERNEST
by Bob Thaves

I JUST CAN'T SLEEP, KNOWING THERE'S A BURGLAR DOWNSTAIRS.

THAVES 5-17
IDENTIFYING THE PROBLEM

A problem exists when there is a difference between the actual and the desired state of affairs. The identification of the problem begins with a statement of the differences between the actual and the ideal state. For example, the clients of a social service agency spend long hours waiting in the reception area to see staff members. They express their frustration and anger in a variety of ways. One staff member recognizes this situation as a problem because she feels there should be a way to shorten this waiting period. In the above example the actual situation is that clients wait two to three hours to see a staff member. The ideal situation would be that they waited no more than thirty minutes.

Throughout this module, we will describe some problem situations that students may encounter in their field placements. You will also be asked to identify some of your own. Think for a moment about how you can apply problem-solving processes to your current situation. Do you need to make a decision or accomplish a specific task, such as getting a job, selecting a term paper topic, organizing a softball team, or losing some weight?

Select two or three problems you have and list them in the spaces below.

________________________

________________________

________________________

DEFINING THE PROBLEM

Defining the problem is perhaps the most difficult step of the problem-solving process because we tend to seek solutions as soon as we realize there is a problem. Both
the "Peanuts" cartoon character and Frank and Ernest need to clarify the problem confronting them. Clear problem definition is especially needed when a group seeks to solve a problem. All participants need to be clear about the problem that is being dealt with before a solution is sought.

One way to be sure you have a clear, full understanding of the situation is to list all of the factors you can think of that are related to the problem. As an example of the process of defining the problem, we will take as a problem the assignment given to students in a course entitled Field Experience 400. The assignment is to select and carry out a project that will be useful to the agency you work in and acceptable to your supervisor and faculty adviser.

EXAMPLE: A list of the factors related to the project for Field Experience 400

It must include people

Something that can be useful in the community

Community advocacy can be a part of it

Should be completed by April 10

Must be accomplished in seven weeks

I would like to work with senior citizens

I like teaching about nutrition

Project should involve information gathering
Wonder what the instructor knows about food co-ops?
What agency has direct contact with senior citizens?

Now select one of the problems you identified on page 5 and list the elements and facts that come to your mind about people, places, resources, and questions you have about the problem.

__________________________
__________________________
__________________________
__________________________

Restating your problem so that the description includes the significant factors is the next step in defining the problem. Here is the example of how we incorporated our list of elements into a format that can be clearly explained to others.

EXAMPLE: Field Experience 400 course requires a project that can be completed in seven weeks and is useful to the agency involving human services or community advocacy. I would like this project to be involved with senior citizen concerns and nutrition because my career goal is to work in an agency related to one or both of these areas.

Restate your problem so that the description incorporates additional factors from the actual
and the desired state of affairs and will be clear to other people. Test it out by reading it to a friend.

Another part of defining the problem is to decide whether or not it is important enough to work on. Deciding this is often a matter of personal interest and a sense of urgency. Without appropriate motivation, problems seldom get solved.

Chubbo has identified a problem:

THE CURRENT SITUATION:
My clothes don't fit.
I'm ten pounds overweight.
I feel fat and ugly.

STATE THE IDEAL:
My clothes will fit.
I'll be a "normal" weight.
I'll feel slim and attractive.

HE ASKS THE QUESTION OF HIMSELF:
Is this important enough for me to solve? Yes? Then, he sets a goal.

In Module No. 1, you have learned to define a problem before jumping to finding solutions. You have also written a clearly defined problem statement so that others will understand your concern.
The next step in the process will include analyzing what you need to know in order to reach your goal or ideal state. Thus, you will learn how to gather information by observing and recording accurately in Module No. 2.

In Module No. 3, you will learn how to generate ideas in considering which course of action you should take.

In Module No. 4, you will learn how to evaluate alternatives and select the most appropriate one.

In Module No. 5, you will learn how to develop a plan of action.

In Module No. 6, you will be given an opportunity to field test the techniques you have learned.

SUMMARY OF PROBLEM-SOLVING PROCEDURES

Check yourself for the procedures outlined in Module No. 1 by numbering in correct order the three aspects emphasized.

____ a. Gathering information and recording it accurately.

____ b. Giving up and blaming someone for your rut.

____ c. Describing the current state you are in.

____ d. Describing clearly your ideal goal.

____ e. Figuring out what resources are available to solve problems.

____ f. Generating ideas and solutions to the problems.

____ g. Learning how to assess consequences of possible choices.

____ h. Learning how to assess your motivation for the concerns you have.

If you have chose c, d, and h, you are ready to move on to the next four modules and learn about a, e, f, and g in the list above.

NOW, LET'S LOOK AT MODULE NO. 2.
The next step in the process will include analyzing what you need to know in order to reach your goal or ideal state. Thus, you will learn how to gather information by observing and recording accurately in Module No. 2.

In Module No. 3, you will learn how to generate ideas in considering which course of action you should take.

In Module No. 4, you will learn how to evaluate alternatives and select the most appropriate one.

In Module No. 5, you will learn how to develop a plan of action.

In Module No. 6, you will be given an opportunity to field test the techniques you have learned.

SUMMARY OF PROBLEM-SOLVING PROCEDURES

Check yourself for the procedures outlined in Module No. 1 by numbering in correct order the three aspects emphasized.

_____ a. Gathering information and recording it accurately.

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_____ e. Figuring out what resources are available to solve problems.

_____ f. Generating ideas and solutions to the problems.

_____ g. Learning how to assess consequences of possible choices.

_____ h. Learning how to assess your motivation for the concerns you have.

If you have chose c, d, and h, you are ready to move on to the next four modules and learn about a, e, f, and g in the list above.

NOW, LET'S LOOK AT MODULE NO. 2.
OBSERVING, RECORDING, AND INTERPRETING

Observing our surroundings is second nature to us. Some observations are fleeting and leave little impression; some are undertaken in a very deliberate way; and some are controlled and recorded to be later shared with others. Field experiences, such as you are undertaking, require controlled, deliberate observing and recording. The purpose of this module is to help develop observing and recording skills. These skills are developmental and can be improved through practice. This module provides you with the fundamentals.

Observing means "to see or sense, especially through directed careful analytic attention" (Webster's New Collegiate Dictionary, 1974). All senses can be used in observing. Our eyes and ears generally do the bulk of the work, but taste, touch, and smell contribute important information. The second part of the definition, "through directed careful analytic attention," is the focus of this module.

Recording means "to set down in writing." While written records are the most common way to record information, audiotaping and/or videotaping are becoming more common. Suggestions presented in this module will deal primarily with the written format.

Social situations are complex: a great deal occurs at one time and over time. In any social situation different kinds of observable information are available to people. People can attend to what is said and how it is said. That is, what is being said is moderated by gestures, movements, tone of voice, rate and volume of speech, and facial expressions. All of these things contribute meaning to the messages or information being exchanged. Each participant in the interaction has past experiences that he/she brings to the interaction. Each has different levels of expectations for the interaction. A whole array of talk, actions, experiences, and expectations are taking place simultaneously. It is this complexity of social situations that makes observing and recording so difficult.
The information and practice in this module will help you to make more accurate observations. The information progresses from simple to more complex descriptions, examples, and diagrams that represent social interactions.

For example, picture yourself sitting on the steps outside one of the buildings on central campus. You are enjoying some fresh air and sunshine as you lazily watch the passing scene. Unless you fall asleep while in this relaxed condition you are observing, interpreting, and making decisions. You observe a young man and young woman strolling by. They are dressed in jeans, cotton shirts, and sandals. Each is carrying books in one arm and has the other arm encircling the waist of the other person. You interpret from this observation that they are students (their casual clothing and armfuls of books suggest this) and decide that they are romantically involved. The mental activity might look like this:

0 - Observing
I - Interpreting
MD - Making Decisions

You will note that the arrows connect these processes to form a cycle. We make interpretations on the basis of what we observe, and we make decisions on the basis of our interpretations. We might continue observing to check our interpretations and our decisions. The decisions we make in one of these cycles then affects the way we observe in another setting, which could occur soon thereafter or sometime in the future. These cycles occurring hundreds of times a day form a vast reservoir of PAST EXPERIENCES and EXPECTATIONS. Our past experiences from previous events and expectations derived from such experiences influence how we subsequently observe, interpret, and make decisions. The new dimensions added to the simple model above make it look like this:
A somewhat more complicated example relating to field experience illustrates the increasing complexity as other participants enter the interaction. Imagine that you are attending your first meeting with your field placement supervisor and a staff person. The purpose of the meeting is to get your field experience assignment. While you are waiting for the meeting to begin, you observe how the supervisor and staff person interact. On the basis of these limited observations you begin to interpret and make some decisions on how you will respond and interact with them when the meeting begins. The past experiences you have had in other jobs with supervisors and staff persons influence what you are observing, interpreting, and deciding. Some of your past experiences may have been positive and others may have caused anxiety and uncertainty. In addition to your past experiences you have expectations for this particular meeting. You expect to acquire certain information regarding your assignment such as what your responsibilities are, to whom you will report, who will assist you, when your assignment is due, how you will be evaluated.

The interactive processes of observing, interpreting, and making decisions becomes more complex when past experiences and expectations are considered. So far, we have just been talking about you. While you are involved in this process, the supervisor and staff person are simultaneously going through the same process and their own past experiences and expectations for this meeting influence them. Let's enlarge our model above to now include two other participants:
To continue our example, the supervisor and staff person recently had experience with a field placement student. The supervisor concluded that students need to be more responsible and that students profit from the field experience if directions are less explicit. On the other hand, the staff person felt that explicit directions were necessary in order to ensure that the work of the agency was accomplished on schedule. In our example the supervisor's and staff person's past experiences and expectations vary and will likely affect the interaction in this particular setting.

As the number of people increases, the interaction tends to increase in complexity. Careful observations become difficult and more important. As an observer, you need to be more consciously aware of what verbal and nonverbal information is available, how you interpret this information, and how you make decisions.

This description of the complexity of social interactions sets the stage as you observe and record information on your field placement. During your field placement you will likely be asked to be an official observer and recorder at a meeting or event. Careful observation and recording will be important. The first step is to clarify the purpose of and level of detail at which you will be expected to observe and record. Knowing what is expected of you will help you focus your observations. As you observe and record, your understanding of the situation may change, resulting in some shift in focus.

As you become more competent as an observer, you will learn to be more alert to what is going on and more sensitive to changes in behaviors. The following checklist can be used as a guideline to follow as you attempt to make observations and accurately record them. Remember that you improve with practice. Some items on this checklist may not be pertinent
to your particular observation. The four groupings on this checklist refer to factual items.

I. Physical setting

_____ Location (street number, building, city, state, county)

_____ Type of environment (e.g., outdoors, private office, conference room, classroom, reception area, hospital room, client's home)

_____ Characteristics of environment (e.g., weather conditions, space, colors, furnishings, temperature)

II. Purpose

_____ Formal (e.g., weekly staff meeting, appointment between social worker and client, team members reviewing project, legislative committee meeting, nurse and patient)

_____ Informal (e.g., gathering of people at an art show, restaurant, store, sports event)

_____ Social (e.g., party, wedding, reception, people gathering for a particular social purpose)

III. Participants

_____ Number, sex, age

_____ Names and positions

_____ Relationship to each other. Is one person in control? Are the participants interacting as equals? (e.g., president to congress, manager to assistant managers, social worker to client, engineer to draftsmen, teacher to students, nurse to patient, people playing a game)

IV. Type of interaction

_____ Lecture

_____ Consultation

_____ Project review

_____ Discussion

_____ Demonstration

_____ Team sport

_____ Dining

_____ Other
Example of recording observations based on the checklist. "This observation took place in a hospital room on the maternity floor at Good Faith Hospital on Health Street in Recovery, Michigan. The room contained four beds. I observed a 30-minute session on maternal and infant nutrition between the dietitian and the four patients in Room 400. The four patients were women in their early 20s who had each given birth to their first child. The dietitian routinely schedules 30-minute sessions with new mothers. She lectured for about 15 minutes, handed out printed materials concerning good nutritional practices, and then conducted a question and answer session with the women."

The observations recorded above are based on factual information. Not all items on the checklist are included; for example, the names of the participants are not. The recording of strictly factual information is relatively easy. But when you are recording facts involving the behavior of people, there is a tendency to go beyond recording the facts and include interpretation. One way to guard against that tendency is to ask yourself "How do the participants behave?" and look for the following cues and record them:

- Tone of voice
- Eye contact
- Gestures
- Articulateness
- Facial expressions
- Language (words used)
- Posture
- Position in room

In many situations, you will also need to make interpretation from your observation. As you move from recording facts to recording interpretations based on your observations, your past experiences and your expectations will quite properly influence what you record as interpretation. The format and examples below will help you distinguish between the recording of observations and interpretations.

An adaptation of a recording scheme described by Schatzman and Strauss (1974) will help you set up the format for note-taking. They describe three categories of notes:

- Observational notes are statements based on watching or listening to events. They are behavioral records of who said or did what, how it was said or done, and under what circumstances.
Interpretive notes are controlled attempts to derive meaning from observational notes. They can be inferences, hunches, the development of new ideas, or relationships to other sources of information.

Follow-up notes are instructions to oneself, reminders, questions to probe, or self-criticism.

Now let us return to the situation in the hospital room and expand on that recording of an observation.

Thursday, June 14, 1979. Room 400, Good Faith Hospital, Health Street, Recovery, MI

<table>
<thead>
<tr>
<th>Time</th>
<th>Observational Notes</th>
<th>Interpretive, Follow-up Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30</td>
<td>Dietitian and I enter Room 400 where four new mothers are to receive instruction on maternal and infant nutrition. Two women are in conversation; one woman is reading; one woman is in a semi-reclined position with her eyes closed.</td>
<td>The two mothers in conversation are well-groomed with fresh make-up, attractive hairdos, and becoming robes. They seem to be enjoying their conversation. The third mother seems absorbed in a book that appears to be a textbook. The fourth mother is heavy, somewhat disheveled, and appears to be uncomfortable. Remember to check her chart to see if there are health problems noted.</td>
</tr>
<tr>
<td>1:31</td>
<td>The dietitian says &quot;Hello everyone. I'm Jill Jones. I'm here to give you some information on nutrition... This is Jamie, she is here to...Please tell us your names and something about your baby, for example, sex, name, weight, and whether you are nursing.</td>
<td>The dietitian seems to be establishing a friendly, informal tone, frequently smiles and uses her first name rather than Miss Jones. Mothers 1 and 2 who were in conversation are cordial and seem to be proud of their babies. Mother 3 keeps her book open and provides the requested information directly--like a serial number. Mother 4 states only her first name and seems to show little enthusiasm for</td>
</tr>
<tr>
<td>Time</td>
<td>Observational Notes</td>
<td>Interpretive, Follow-up Notes</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1:35</td>
<td>&quot;Now for some pointers about nutrition for you and your baby....&quot; (Presents information from handout; answers questions....)</td>
<td>Her baby. She stares at the wall as she responds. All four women are nursing their babies. The dietitian makes eye contact with each woman in turn, smiles as she talks, gestures somewhat, sounds well-informed, and seems interested in what she is saying. Mothers 1 and 2 keep their eyes on the speaker, are smiling slightly, nod their heads as points are made. Mother 3 listens carefully, but appears to be somewhat bored. Mother 4 continues to stare at the wall or out the window. Occasionally she makes loud sighs. She does not return the eye contact of the speaker.</td>
</tr>
<tr>
<td>1:50</td>
<td>As Jill hands out a packet of materials to each woman, she asks for questions.</td>
<td>The dietitian seems to respond to each question/comment very professionally and sincerely, saying they are good questions/comments and reinforcing the effects of good nutrition for mothers on their babies. Cites a study.</td>
</tr>
<tr>
<td></td>
<td>Mother 1: &quot;I heard that if the mother eats onions it can cause gas pains in the infant. Is this true? Jill: &quot;That's a good question. There appears to be some relationship between some foods and the baby's comfort....&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother 2: &quot;I heard that if I drink beer, the baby will sleep better....&quot; Jill: &quot;Yes, but....&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother 3: &quot;How important is it to consider a balance of minerals and vitamins? Can this be</td>
<td></td>
</tr>
</tbody>
</table>
achieved with a vegetarian diet?" Jill: "I understand your concern...."

Mother 4: "I don't see the point of all this...."

1:59 Jill: "If there are no other questions now, I'll leave you to rest before your babies come.... If you have questions later, call me at (phone #).... Jamie or I will stop in tomorrow at 10:30 to answer questions...."

I have a hunch that three of the mothers will follow good nutritional practices. I have concerns that Mother 4 will have a negative effect on her baby's nutritional well-being. Her present obesity and apparent lack of interest in the information that the dietitian provided indicated that she may be unlikely to change her present eating behaviors. I will think about ways that I can provide her with information when I return tomorrow.

PRACTICE EXAMPLE

The following example provides practice for you to categorize observations. These excerpts have been adapted from an actual journal kept by a student on a field experience. (Names of places and people are fictitious.) In the blank space before each sentence indicate whether the statement is an observational note (O), an interpretive note (I), or a follow-up note (F).

Monday, May 10, 1979  City Hall, 201 Paved Street, Clever City, Michigan

My field experience is to assist Mr. Adams, the assistant city manager of Clever City. Today he has appointments
with two department heads to obtain information from them to prepare program budgets. I accompany him on these appointments and make these notes.

1. Meeting with Ms. Jones, the city clerk, started at 10:00. 2. Ms. Jones wanted to use the program budget to show that she needs more employees. 3. She was lobbying with Mr. Adams to demonstrate this. 4. Ms. Jones: "I have four full-time clerks. About four hours of overtime per week are submitted from the clerk's office." 5. Ms. Jones wanted to put 150% of her employees' time into the various categories. 6. Mr. Adams stated, "There is only 100% of their time to give." 7. Check payroll records for clerk's office. 8. Met at 11:00 with Mr. Smith, the city treasurer. 9. Mr. Smith talked about the information he had compiled by referring to tables and charts. 10. He knew exactly how everything should be divided. 11. I could see his accounting mind at work. 12. Compare this discussion with the one between Ms. Jones and Mr. Adams.

As this little exercise demonstrates, there can be some ambiguity in any given statement or action. Is it an observational note or an interpretive note that you have made? The follow-up notes are usually easily identified. Here is the way we categorize the twelve statements. 1. O; 2. I; 3. I; 4. O: 5. I; 6. O; 7. F; 8. O; 9. O; 10. I; 11. I; 12. F. Does our labeling correspond to yours?

ADDITIONAL PRACTICE

Some practice in the real world at this point will be beneficial. The following suggestions can be fun to do and can help refine your observing and recording skills.

With a friend observe and make notes about a setting that is not familiar to you. Some ideas are: a store that you usually don't patronize, a bar or restaurant, a church, riding on a bus or train, a bowling alley, a political rally, a party where you don't know many people, a sports event, a waiting room in a doctor's office. Select a social group to observe for ten or fifteen minutes. Observe and record their talk and actions. Later interpret your observational notes and make notes as to what you would look for if you were to observe again in such a setting. Compare your observational notes and interpretive notes with your friend. You can check each other for the accuracy of your observations and also compare how your individual past experiences and expectations influence your interpretations.
SUMMARY

Observing and recording human behavior is difficult because social behaviors are complex. Behaviors are influenced by what we observe, how we interpret our observations, and how we subsequently make decisions. Behaviors are also influenced by our past experiences, expectations, and what is taking place in the social event. Recording is difficult because we tend to intertwine what is taking place and our interpretations of those events. We need to be aware of the difference. To become an effective observer and recorder requires understanding of the processes involved and practice to develop the skills.

REFERENCES


GENERATING ALTERNATIVES

So far you've found out about the importance of defining the problem before beginning to solve it and how to observe, record, and interpret information. This module takes you the next step: How to generate alternative possibilities. There are many out-of-the-ordinary techniques for doing this. We will show you two and ask you to try them out.

In order to provide a realistic setting for learning how to generate alternative possibilities we are asking you to participate in a case study. We will give you information about a student on a field placement and ask you to use two idea-generating techniques in solving her problem, thus learning the processes by the direct application of them in a specific situation. The case study is not a full description of the student and her situation, but a thumbnail sketch. Where information is lacking, use your own imagination to provide the additional details. For instance, in Module 5 you are informed that Mary needs to find out "Who has the power to authorize the carrying out of the plan?" The answer to that question is not provided in the case study. In the practice exercise in that module you should select the most likely person you can imagine.

The Case Study: All students in the Community Service curriculum of State College must select, during the first few weeks of their field placements, a project to do during the assignment. Mary Herman is in a placement at the Office of the Michigan Consumer Advocates and sets out to solve the problem of what project she will undertake. She consults with her faculty adviser and is told that the project must satisfy certain criteria before it can be undertaken. It must be a project that is useful
to the agency, can be completed within the ten-week term, involves using some of the knowledge or skills related to course work in her program or needed in the profession, and is of interest to the student. The approval of her adviser and field supervisor will be based on these criteria.

Having identified the basis on which proposed projects will be accepted or rejected she sets out to develop a plan to use in collecting information on possible projects. She creates this by asking herself:

"What do I need to know to identify alternative possible projects?"
"Where can I find the information?"
"Whom should I talk to?"
"When would it be appropriate to gather the information?"
"How much do I need and how reliable does it have to be?"

In answering these questions, she decides to do the following things in order to identify as wide a range of projects as possible:

1. Read the following literature available on the work of the agency: manuals for volunteers, orientation booklet for new employees, consumer information pamphlets available on the literature rack in the agency waiting room, and reports and projects of former interns to see if adequate information is available to the public or if specific issues or problem areas are adequately covered by existing literature.

2. Talk with the following people to see if they can suggest projects that will help in the work of the agency: clients, former interns, present volunteers, paid staff, supervisor, the director of the agency. The purpose of these talks is to find out if the office and its staff have adequate information resources and skills to meet client needs.

3. Direct observation of the organization, physical layout and functioning of the office as they affect
the: handling of telephone inquiries or complaints, handling of inquiries or complaints made by clients in person, intraoffice communication processes, and the supervision of volunteers. Interagency liaisons are also to be examined.

She sets a timetable of two weeks in which to collect data as the basis on which she will generate alternative possibilities, look at the consequences and, using the original criteria, decide which project to propose to her adviser.

As she collects the information she finds she needs to sort it out and organize it under the major categories of the functions of the office:

1. Information dissemination (provided and needed)
   - Clients
   - Staff members
   - Volunteers

2. Handling inquiries and complaints (procedures and problems)
   - By telephone
   - In person

3. Managing the office (formal and informal aspects)
   - Intraoffice communication processes
   - Supervision of volunteers
She sets up three separate sections of her log (journal) for recording her observations, interpretations, and follow-up questions and the information she collects. At the end of two weeks she reviews all of her notes and summarizes her findings within the framework of the above outline. As she checks to make sure this information is sufficient and accurate, she finds a couple of weak spots about the processes used in handling telephone complaints, so she does some more observing, interviewing of staff members and clients, and rereads the volunteer manual. She now feels that she understands the agency, its functions, and its relationships with clients and community, and how it operates within itself enough to identify some possible projects.

Mary decides to use two techniques for generating alternative possibilities she has heard about in class, brainstorming and the matrix. She has the following information about brainstorming in her notes:

"BRAINSTORMING is not problem solving in itself, it is a process by which many ideas can be generated in a short time. The most important rule for brainstorming is that of DEFERRED JUDGMENT. No evaluation, criticism, or approval of an idea is permitted. Evaluation of the ideas is performed at a later time. Quantity is the goal of brainstorming."

"The originator of brainstorming, Alex Osborn, identifies four requirements for all who use brainstorming. If any one of the rules is ignored, the procedure is ineffective.

1. DEFER JUDGMENT (Criticism comes afterward)
2. FREE WHEEL (Hang loose - relax)
3. TAG ON (Don't wait for an idea. Make one out of a previous one by changing a part of it)
4. QUANTITY is wanted (Don't hold back for a moment)

Usually brainstorming is a group activity so that diverse experiences can stimulate the thinking process. Sidney Parnes, author of Guide to Creative Action, points out that individuals can use the same rules to stimulate their own production of ideas."
With these points in mind, Mary looks over her notes and quickly writes down as many ideas as she can in a period of five minutes. She does not evaluate the ideas or worry if they are possible. She then asks her roommate to read over her notes and together they spend 15 minutes generating ideas. Some ideas are really wild but intriguing. Together they come up with three pages of possible project ideas. Mary adds these to the page of ideas she has done herself and crosses off any that are duplicates. As she goes through that process she gets a few new ideas.

Here are a few of Mary's ideas:

1. Prepare a 60 second radio spot about MCA.
2. Review and revise policies and procedures manual for MCA employees.
3. Write a TV celebrity.
4. Hire a hot air balloon.

Now try your own hand at generating alternative possible projects for Mary using the brainstorming technique.

1. Prepare for your individual brainstorming session. Get a large sheet of newsprint or roll of shelf paper. Remember that you are thinking in QUANTITIES!

Find a marker or pencil that writes easily and remind yourself that you are going to be writing fast, in note form, so that you do not slow your thinking with your writing.

Review the four rules for brainstorming.

Set a time limit. You are not going to do anything else in this time period. Five minutes is enough.

2. Reread the problem (page 21) and GO!

(5 minutes)

3. STOP! Did you follow the 4 rules of BRAINSTORMING?

Did you Defer Judgment?

Did you Free Wheel?

Did you Tag On?

Did you get a lot of ideas?
4. Keep your page of ideas. After an hour, or the next day, or both, go back to it and add any ideas that you may have thought about. Sometimes ideas need to incubate for awhile and will come to you later, and sometimes when you least expect them!

GROUP BRAINSTORMING

The same rules and procedures are used in group brainstorming.

1. Select your group. Your friends, roommates, other field interns... a group of 4 to 12 people can quickly generate ideas in very short periods of time.

2. Assign one person as recorder. That person will probably not be able to generate as many ideas because he/she will be very busy recording. Remember to instruct the recorder to write quickly and not ask for interpretation or wording of the idea. That can be edited later.

3. Set your time limit. 10 to 15 minutes is enough.

4. Be sure everyone knows the rules and the problem. You cannot stop during the process to inform and keep the group effective.

5. All set? GO!

(10 - 15 minutes)

6. STOP! Check your session against the rules. Did you:

   Defer Judgment? _____
   Free Wheel? _____
   Tag On? _____
   Get Quantities of ideas? _____

7. If possible, get the group together after a day or so and ask if they had any after-thoughts. Remember that some ideas need incubation! Add those to the list.

A comparison of the individual and group brainstorming should validate the statements made earlier.
How did the number of ideas generated by you alone and by the group compare?

Fifty ideas in five minutes is not unusual for brainstorming groups.

The more people with different backgrounds and experiences in the session, the more ideas will be generated.

Ideas tend to generate out of ideas. The mind will kaleidoscope one thought on another or several others and come up with new thoughts. Did any of these things happen in your group?

REVIEW

Identify the procedures used in brainstorming.

1.
2.
3.
4.

State the four rules of brainstorming.

1.
2.
3.
4.

CHECKLIST

Check your procedures and rules against the following checklist. Did you:

1. State the problem
2. Prepare the group (or yourself)
   Materials
   Set time limit
   Identify recorder
3. State the rules
4. Brainstorm -- Test against rules
The four rules:

1. Defer Judgment
2. Free wheel
3. Tag on
4. Quantity is the goal

That is a fairly thorough introduction to the first technique Mary used, brainstorming. You recall, she also decided to use a second technique for generating ideas, a matrix. She found the following discussion of the matrix as an idea-generating tool among notes from her Creative Problem Solving course:

"A matrix is a technique for displaying and quickly seeing the interrelatedness of different facts about a situation. It consists of two axes, a horizontal one and a vertical one. These axes create specific intersection points among the facts where information pertaining to their interrelatedness may be presented or sought.

"Here is an example of a matrix found on many highway maps in which you find recorded the relationship between two cities, i.e., their distance from one another.

<table>
<thead>
<tr>
<th></th>
<th>Blind River</th>
<th>Hamilton</th>
<th>Sault Ste. Marie</th>
<th>Toronto</th>
<th>Windsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blind River</td>
<td>648</td>
<td>138</td>
<td>603</td>
<td>891</td>
<td></td>
</tr>
<tr>
<td>Hamilton</td>
<td>648</td>
<td>786</td>
<td>69</td>
<td>309</td>
<td></td>
</tr>
<tr>
<td>Sault Ste. Marie</td>
<td>138</td>
<td>786</td>
<td>681</td>
<td>1028</td>
<td></td>
</tr>
<tr>
<td>Toronto</td>
<td>603</td>
<td>69</td>
<td>681</td>
<td>377</td>
<td></td>
</tr>
<tr>
<td>Windsor</td>
<td>891</td>
<td>309</td>
<td>1028</td>
<td>377</td>
<td></td>
</tr>
</tbody>
</table>

"Besides presenting relationships, a matrix can also be used to investigate them. That is how it is used in problem solving, as a technique for discovering possible alternatives by exploring the relations among the
characteristics or attributes of a situation or the relationship of a set of characteristics to fact-finding questions.

"The principles to follow in developing a matrix are: (1) to identify a number of determinative aspects of the problem you are confronted with. The aspects might include the types of people involved, the physical characteristics of the setting, the psychosocial characteristics, the purposes to be served, the functions to be performed, the tasks of people in the situation—in short, any set of important characteristics that are part of the circumstances or facts about the problem. (2) Once you have identified several aspects of the situation, list under each of them as many specifics as you can think of (for instance, if you are dealing with an agency's problem, you might list the people in the agency and then list under that aspect: secretaries, volunteers, paid staff, directors, supervisors, custodians, clients, people who have come in to get warm, etc.).

"Having done these two steps you have three alternative ways to build a matrix; either

1. Select one aspect and the specifics within it (e.g., people) and list them in both the horizontal and vertical axes or

2. Select two aspects and their specifics (e.g., people and functions), place one set on the top of the matrix (horizontal axis) and the other on the left hand side (vertical axis), or

3. Select one set of characteristics (functions performed), decide which fact-finding question it answers (what, when, how, where, why, who?), and list those characteristics under that question as the vertical axis ("functions" answers the "what?" question). Having established your vertical axis, list the rest of the fact-finding questions across the top of the matrix as the horizontal axis.

"The matrix is now constructed. You can use it in generating alternative possibilities by systematically examining the relationships represented by each square moving across and down the matrix and by randomly selecting a square in the matrix and thinking of as many alternative possibilities as you can that are suggested by combining the two aspects represented by that square."
Mary was rather confused by what seemed to be a complex process but she decided to try it anyway. She took two aspects of the situation and identified a number of characteristics of each.

**People**
- clients
- volunteers
- custodians
- director
- secretaries
- supervisors
- counselors

**Functions Performed**
- intake interview
- telephone inquiries
- writing reports
- writing pamphlets
- follow up with clients
- follow up with agencies
- supervision of others

She decided to use the third alternative for constructing a matrix with the fact-finding questions and the functions performed. Her matrix looked like this:

<table>
<thead>
<tr>
<th>WHAT</th>
<th>HOW?</th>
<th>WHERE?</th>
<th>WHEN?</th>
<th>WHO FOR?</th>
<th>WHY?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intake interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone inquiries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing up reports of interviews and phone calls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assist Director with follow up of clients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Write pamphlets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

She generated the following partial list using the one category of "in-take interviews" in a couple of minutes and then had to go to class:

How to do an in-take interview?

How to improve on in-take interview practices in the office?

Where is the best place in the office to do interviews?

Does the place make a difference?
What about the place makes a difference?

When to do an in-take interview as opposed to having the person fill out a form first?

Which works best, filling out the form before or after the in-take interview?

Who should the interview be for?
- client to clarify his/her own thinking?
- agency--data collection?
- state--protection against fraud?
- case worker--data base for needs assessment?

Is a manual needed to train interviewers?

Is a checklist needed?

Could I tape record some interviews and get advice from the supervisor?

All of the ideas she generated were not projects, but each of them could be combined with one or two others to suggest a possible project. Use this matrix to generate some more ideas for Mary by working across and down the grid and see how long a list of possibilities you can generate for each of the functions. As you answer each fact-finding question for each function, ask yourself what possible projects are suggested by the question or the answers. After you have gone through the matrix systematically, pick a few random squares and see if you can think of additional possibilities. Use a separate sheet of paper to create your list of possibilities.

REVIEW

Identify the procedures used in building and using a matrix:

1.
2.
3.
4.
5.
6.
CHECKLIST

Check your procedure against the following steps. Did you:

1. Identify important aspects of the problem?
2. List several specific characteristics or attributes of each aspect?
3. Choose one of three alternative ways to build a matrix?
4. Construct the matrix with horizontal and vertical axes?
5. Work across and down the matrix, exploring relationships systematically and listing all suggested alternative possibilities?
6. Randomly select several squares in the matrix and list as many alternatives as were suggested by the relationships represented by the squares?

You now have two long lists of potential projects that Mary might do in her field placement. Put the two lists resulting from brainstorming and from using the matrix together, eliminating the duplication and combining ideas into large projects where it seems wise to do so. None of these have been evaluated. We have purposely held off judging the worth of any of them so that we could be open to new and unusual possibilities. As you look over the combined list, some projects will seem impossible, others ridiculous, some rather ordinary.
Select the ten most interesting ones, being careful not to
judge prematurely the unusual as impossible or foolish,
and list the ten you chose below.

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

You made your selection of the top ten project possi-
bilities on the basis of your interest in them and probably
on the basis of some sense of the contribution they might
make to the agency or your own knowledge and understanding.
There are other criteria that must be applied as you decide
which project Mary should undertake. We are going to learn
how to do that in the next module.

Before we turn to the next module, here is an observa-
tion and some food for thought. So far, very little new
information or knowledge has been provided you in these
modules. What has been new and different from what you
ordinarily do and have been doing are two suggested changes
in how you do things. You observe and interpret what you
see every waking moment of your life—that's not a new
activity. What's new is our suggestion that you separate
those two activities from one another and not observe and
interpret simultaneously the experiences you have. That is,
we are suggesting that you learn to observe and record what
you see, hear, or experience and then at a later time inter-
pret it. We live, work, and play under the pressure of
constantly needing to interpret instantaneously what is
happening so we can be on our toes, stay cool, not be caught
with egg on our faces or embarrassed because we don't seem
to know what is going on. Being able to make instantaneous interpretations and judgments about what is happening is a necessary survival skill (especially when crossing a busy street in 5:00 p.m. traffic). The difficulty is that this behavior is counter-productive in problem solving. Interpreting a problem situation on the basis of hastily collected first impressions, i.e., without understanding the many aspects of the problem, is like the soccer player saying, "The hell with the ball, let's get on with the game!"

What we have taught you about alternative-generating is similar. We want you to separate two activities you normally do simultaneously, idea generation and evaluation. You do both of these all of the time. The moment someone suggests an idea or possible activity, you've been trained to decide quickly whether it is a good or a bad idea. ("He who hesitates is lost.") We are telling you that you will get better ideas if you defer judgment, if you generate as many alternatives as you can, and then and only then decide which one is best.

The next module is on selecting a solution: about imagining consequences, developing and applying criteria, and picking the best solution from among the alternative possibilities you have generated.

NOW--ON TO CHOOSING A SOLUTION!
SELECTING AN OPTION

You are now ready to make a decision. You've defined the problem, observed, recorded and interpreted the facts about it, generated ten good alternative options. Now you have to choose. In the problem-solving process, the scrutinization, weighing, and selection of ideas is a difficult and crucial step. If left entirely to their own devices, most decision makers would evaluate ideas in a haphazard fashion relying primarily on intuitive guesses. If all ten of the ideas you selected from your brainstorming activities seem equally good you could, of course, leave the final selection to chance. You could write each solution on a separate sheet of paper, fold the papers neatly, place them all in a hat, mix them up well, pick one, and implement it.

Since all ten are probably not of equal value, you'll need to find some way to make a more reason-informed decision. Deciding is always hard work. It has something to do with the fact that it is a preliminary step to acting and that means taking a risk, putting yourself on the line, trying something you are not absolutely certain will turn out well. So, we resist making choices; in fact, we sometimes would prefer to have other people decide and tell us what to do. Then, if it doesn't work out right, we can blame them. Choosing is also hard work because we can never know for sure what the consequences of our actions will be. We are essentially choosing among things, the outcomes of which we have no certainty about. So, we are in for some hard work, but we may be able to make it somewhat easier by giving you a couple of alternative techniques you can use as aids in reaching a decision.
We will use two different techniques to demonstrate how you can select the best option from among several: (1) rank ordering according to the highest ratio of positive to negative potential consequences, and (2) a paired comparison analysis technique.

RANK ORDERING

One relatively simple way to select one option among many is to rank order or list them so that those with the best and most positive potential consequences head the list. Here's how you can do that, using the list you generated on page 33. Start with your first option, put it at the head of a piece of paper, and list all of the positive consequences you can think of which might result from doing that project. Ask yourself how it might benefit the agency, the staff, the clients, Mary—professionally, personally, and in her school work. Having listed all of the positive consequences you can imagine, ask yourself if there might be any negative consequences resulting from this project and list them. Leave some space after each list in case you think of some more later on. Now write down your next alternative option and do the same for it. Do the same for the other eight options.

After you have listed all the potential consequences for all ten options, go back over the list and rank order the options, placing the one with the best and the most positive consequences and fewest negative consequences at the top of the list and placing the rest of them in the list according to the quality and the quantity of positive to negative potential consequences. You can then choose one of the top two or three according to which interests you the most, or is the most manageable. In using this technique you are essentially selecting your solution on the basis of one criterion initially, i.e., favoring the solution with the highest ratio of positive to negative potential consequences and then using a secondary criterion of personal preference of manageability to decide among the top two or three. List here your top three choices and star(*) your final choice.

1.

2.

3.
Now, let's use another method to select the best option.

PAIRED COMPARISON ANALYSIS TECHNIQUE

The second technique we want to show you is somewhat more complicated. It is more complicated because it provides for a more precise selection process, allowing you to assign different weights to the factors you are considering in reaching your decision. It is also more complicated because more factors are being taken into consideration in making the choice. This method is called the paired comparison analysis method. (Even the name sounds complicated!)

Paired comparison analyses require (1) identifying criteria that are to be used in making the choice; (2) weighting these criteria; i.e., indicating the relative importance of each criterion in comparison with every other one; and (3) applying the weighted criteria to each of the options. One way to identify criteria you wish to use is to ask yourself, "What are the constraints or limitations under which I have to do this project or task or solve this problem?" Constraints have to do with the amount of time and money available to you; laws governing what you can and can not do; company, agency, or institutional policies; your own interests, values, and ethics; and physical limitations. In Mary's case she was provided with four criteria for her project that had to do with the constraints of time, institutional policy (it had to be useful to the agency and related to her profession or course work), and her personal interests. In many situations in which you are trying to take initiative and make things happen for yourself and those you are working with, you will have to generate your own criteria. The way to do that is simply to list the limitations you are faced with and write them up as criteria. If these limitations have to do with quantitatively measurable entities like time and money, be sure to specify the amounts (e.g., within ten weeks) rather than simply listing "cost" or "time" as the criterion. Without specificity they will not be very useful as bases for making a decision.

Once you have generated a set of criteria you will want to distinguish among them as to which are the more
important ones and how much more important one is than another. The technique for doing this is paired comparison analysis. It is a mechanism for comparing each criterion with every other one to determine the degree of importance of each. In order to illustrate this technique, we are going to ask you to use it in weighting, from your point of view, the four criteria Mary is to use in selecting her project. This analysis is done with the aid of a matrix. Each of the criteria is assigned a capital letter designation (A, B, C, and D) and listed in the vertical axis of the matrix. The representative capital letters are placed across the top of the matrix as the horizontal axis. Since we do not want to compare each criterion with itself, that box in the matrix has been eliminated.

Using the paired comparison analysis matrix below, assign a weight to each criteria. The four criteria are in the spaces provided in the left hand column of the matrix opposite the letters A, B, C & D. Follow the instructions at the bottom of the matrix.

<table>
<thead>
<tr>
<th>Makes contribution to the agency</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Sum of scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Slightly more important</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity to apply learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 = Moderately more important</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within time frame</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 = Much more important</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of interest to student</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Consider only the two factors represented by each box formed by the intersection of the two axes of the grid. (Example: In the left most box on the top row you compare criteria A & B, in the left most box in the second row you compare criteria B & C.)

1. Compare the two factors represented by each box and decide which is more important in your opinion.

2. Place the letter corresponding to the more important factor in the box.
3. Using the scale at the left of the grid, assign a weight (or degree of importance) to the letter representing that criteria. You are now saying how much more important the one criteria is than the other.

4. Complete the grid by considering each box (pair of factors) progressing from left to right and top to bottom.

5. Total the numerical scores received by each criterion (letter) to obtain the raw weights of the factors (proportional weights may be derived by using the lowest score as one and calculating the rest).

In order to use these weighted criteria in choosing among your ten alternative options, we will be using another matrix, an alternative selection matrix. In this matrix, the left hand or vertical axis will contain your ten alternative options (select the key words in the title of each possible project and place them in the space provided in the matrix.) The horizontal matrix consists of the four criteria Mary was given and the weights you have assigned to them through paired comparison analysis. Set up the matrix and follow the instructions as they are printed underneath it, working down the matrix, evaluating each alternative against the first criterion before moving across the matrix to evaluate each option against criterion #2, #3, and finally #4.
# Alternative Selection Matrix

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weighting</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alternative Possibilities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
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<tr>
<td>7.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rate each one of the alternatives first against the first criterion. Then, each alternative against the second criterion, and so on. Do your ratings vertically.

A rating scale of "5" is convenient. The number "1" means "poor," "2" means "fair to poor," "3" means "acceptable, average," "4" means "good," and "5" means "excellent or very well." Multiply the rating by the weight and place the product in the appropriate box.

Total up the cumulative scores for each alternative at the end of each line for final comparison.
The cumulative scores for your ten options, provided through this matrix, give you a numerical value for each option as judged against your weighted criteria. The option with the highest score is the best solution as judged against these criteria. Unless you wish to consider other factors in making your choice, this should identify for you the most appropriate project. You may, for some unlisted reason, be more attracted to an option with other than the highest score. There is nothing wrong with choosing such an option if you clearly understand and acknowledge the other reasons influencing the choice. The reason you do not have to choose the option with the highest score is that no technique should be allowed to choose for you. Remember, you are in charge! Some techniques may help you use rational processes to assist you in making the choice, but don't allow any of them to choose for you.

Write the option you chose using the Alternative Selection Matrix here:

1. ____________________________________

You have now chosen options with two different methods. You are ready for the next step using either one of these options. (You may have ended up choosing the same option using the two methods.) The next step is to implement or act on your choice.

MODULE 5 PROVIDES GUIDANCE FOR DEVELOPING A PLAN OF ACTION, SO LET'S MOVE ON TO IT.
DEVELOPING A PLAN OF ACTION

In the previous modules you have identified and defined a problem, generated and evaluated alternative possibilities and consequences, and picked the most appropriate alternative. In this module you will design a plan of action for the alternative you have selected from Mary's case study.

In order to take initiative and implement a plan of action Mary needs to do some:

1. RESEARCHING

   She must find out:

   a. Source of approval: Who has the power to authorize the carrying out of the plan (supervisor, faculty member, director)?
   b. How to secure approval?
   c. Who are the persons served by the project?
   d. How to enlist their help?
   e. What resources are needed and who has them?
   f. Time related information
      Best time?
      Amount of time needed?
      Continuous or discrete blocks of time?

2. ORGANIZING

   a. Developing a plan based on the above information
   b. Securing permission or approval, using the plan as part of the case you make for permission to be granted
   c. Gathering your needed resources
   d. Recruiting the necessary people to help you
3. IDENTIFYING STEPS TO BE TAKEN:

Develop a plan of action as if you were Mary using the alternative you selected on page 36 or 41 of Module #4. Describe the plan of action as fully as you can on a separate sheet of paper.

After you have completed the description of a plan of action for Mary, check your steps against this checklist:

1. Researching
   a. Source of approval
   b. How to secure it
   c. Persons served by the project
   d. How to enlist their help
   e. Resources needed
   f. Time factors involved

2. Organizing
   a. Plan developed
   b. Permission secured
   c. Resources gathered
   d. People recruited

3. Identifying the first step to be taken

Did you not include some steps? Was there any reason for not doing so, other than oversight on your part?

You have now been introduced to and tried out a couple of processes for generating alternative possibilities, the steps and processes related to identifying consequences, weighting and applying criteria, and developing a plan. You are almost in the same position as the farmer who told his County Extension Agent, "Don't send me any more pamphlets, I already know more than I'm doing." What you need to do now is start using some of the processes and evaluating your own performance. Module #6 provides you with the opportunity to do that. When you have gotten settled in your field placement you may wish to review modules 1, 2, 3, 4, and 5 and then start on Module 6.
FIELD TRIAL OF THE TECHNIQUES

This module is meant to be used after you have begun your field placement. Since you are in charge of what is to be learned, you will need to assume responsibility for checking on how you are doing. Here is one way you can do that. Pick a specific set of circumstances in which you are consciously going to apply the processes of this module and keep a written record of your efforts following the outline of the checklist in the appendix.

IDENTIFY A PROBLEM AND DEFINE IT

First you have to identify what it is you are wanting to accomplish in this particular situation: what is it you wish to do? Identify and carry out a project? Solve a problem? Make an important decision? Accomplish a specific task or mission? Settle a controversy? Acquire new knowledge or skill? Develop new attitudes or clarify some values you are unsure about and see how they compare with those of other people or the agency you are interning or volunteering in? Once you have clearly stated what it is you are trying to accomplish you need to
be sure you understand the context in which you are going to be working on this issue. Here you can bring your descriptive powers into play. You will want to ask yourself what you need to know about the context in which you are trying to accomplish your purpose because it will, in part, determine the alternatives you can use effectively. Make your own list of factors to investigate, but keep in mind ones you will need to be aware of in most circumstances, such as the nature of the physical and social environment and the events and opportunities that will occur during the times in which you hope to accomplish your purposes. Of special importance are the people you will be interacting with. You need to describe them: their ages, sexes, occupations, status, relationships with you, the nature of their roles, and the relationships of the people with each other. You will also need to pay attention to time constraints and the nature of the agency or company you are interning with. After you have described as many factors as you feel important, define your problem more fully by restating it in the light of these elements.

GENERATE ALTERNATIVES

Having identified and defined more clearly what it is you want to accomplish and the context in which you will be attempting it, you now are ready to generate some alternative possibilities. Use the two techniques described in Module #3 and generate as long a list as possible, remembering to keep separate the two functions of generating ideas and evaluating them. Having used the two processes to generate your alternatives, it is now time to examine what the consequences of some of the most attractive alternatives might be.

IDENTIFY POSSIBLE CONSEQUENCES

Pick the most interesting alternatives and use the brainstorming technique to list the possible consequences. Check out and expand the list for each alternative by asking a set of fact-finding questions. Ask yourself who it affects, how it affects them, where and when. Also ask yourself what it costs in time, money, and resources, as well as what skills are needed to do it. You will also want to look at the ethical implications and the extent to which the alternative might cause controversy, how serious that controversy would be, and if it would have strong negative effects on you or the agency or company you are working for.
DETERMINE CRITERIA

Having come to a better understanding of some of the more interesting alternatives you have generated, you are now in a position to evaluate them and select the one you wish to put into effect. In order to do this you need to find out what criteria to use in evaluating each alternative and their relative importance. There are probably three publics you need to be concerned about in identifying the criteria to apply: the agency you are working for (its clients and customers), the faculty member who is supervising your learning, and yourself. The first thing to do is to ask what criteria these persons would like you to use in choosing among the alternatives you have identified. They (and you) may not be consciously aware of any. If this is the case, you will have to take the initiative and ask some questions. You should generate your own list of questions (you are in charge, remember), but they will probably include some of the following: "Are there certain limits I have to stay within--time, money, and resources?" "Are there goals which must be met, specific skills required?" "Are there legal or other constraints?" You may find that some of the consequences you identified should be used as criteria for evaluating the alternative solutions.

EVALUATE ALTERNATIVES

After you have identified the most important criteria, you need to weight them using the paired comparison analysis technique and put them across the top of an evaluation matrix. List the alternatives for which you have identified the consequences in the vertical left-hand column of the matrix and, using the 1 to 5 rating scale provided, follow the directions provided on the form. Now you are ready to plan. Select the alternative that received the highest score (or the next highest one if you are more interested in it), and develop a plan of action for implementing it.
RESEARCH

This will require you to do some research. Find out who has the power to authorize you to do what you want to do and how to secure permission from that person. (You may wish to think of a number of ways to do this—brainstorming again, and select the most appropriate strategy, that is, the one most likely to succeed.) It will be helpful to the carrying out of your plan if you find out who will benefit from it and figure ways to enlist their help. You will also need to know what resources are needed and how much time it will take to do it.

DEVELOP A PLAN

Once you have this information, develop a plan for carrying out the alternative you have chosen including plotting each step in a chronological manner, identifying the days or weeks by which time you plan to have each step completed. Once you get your plan developed, use it as a basis for securing the permission, time, resources, and people you need. Now you are ready to implement step one and follow through.

TAKE ACTION AND EVALUATE

If you keep rather full records of this whole process, using the checklist as an outline, you will be able to analyze and document what you learned through your efforts to use these procedures. You will know for one thing whether or not you were successful in your efforts. You will have increased your awareness of the processes and will probably have developed some sense of ownership, comprehension, or understanding of them. You may even be able to explain or teach some of the processes to other people or you may find yourself integrating them with skills and knowledge you already possess and finding new ways to apply the techniques. Use the checklist to evaluate the extent and level of the learning you have acquired and share your findings with your supervisor and faculty adviser. You may wish to incorporate these demonstrated skills and some documentation of them in your resume.
COMPREHENSIVE CHECKLIST FOR MODULE 6

1. Identify a problem
   ___ Write down the original problem statement

2. Define the problem
   ___ List the related factors you feel are important
   ___ Restate the problem in the light of these factors.

3. Analyze the problem (observe, record, and interpret through reflection)
   ___ Collect information and opinions about the problem (observation notes): About which of the following elements did you make observations?
     ___ Place (physical environment)
     ___ Occasion (social environment)
     ___ Social context (nature of the agency or company)
     ___ Time constraints
     ___ People involved
       ___ age
       ___ sex
       ___ occupation
       ___ status
       ___ relationship with you
       ___ nature of their involvement (role)
       ___ relationship of people with each other
   ___ Reflect on the meaning of these observations (theoretical notes)
   ___ Keep observational and theoretical notes separate
   ___ Restate the problem in the light of these observations and reflections
4. Generate alternative possibilities using two techniques:

  ___ Brainstorming
  ____ State the problem
  ____ Prepare self or group
  ____ Review the rules
  ____ Follow the rules
      ___ Defer judgment
      ___ Free wheel
      ___ Tag on
      ___ Concentrate on quantity

  ___ Matrix
  ____ Identify important aspects of the problem and list
  ____ List specific characteristics of each aspect
  ____ Choose one of three alternative ways to construct a matrix:
      ___ Use the same characteristics for the X and Y* axes
      ___ Use the characteristics of two different aspects of the problem for the X and Y axes
      ___ Use fact-finding questions for the Y axis and a set of characteristics as the X axis
  ____ Construct the matrix
  ____ Generate alternatives by exploring relationships across and down the matrix systematically
  ____ Generate alternatives by random selection of squares on the grid and exploration of the relationships they represent

* X is the horizontal axis and Y is the vertical axis
5. Identify and list consequences for each alternative
   ____ Brainstorm a list of consequences for each alternative
   ____ Amplify list by asking fact-finding questions

6. Determine agency's, faculty member's, or your criteria
   ____ Ask for them--if not available:
   Ask questions to establish the criteria to use. Which of the following did you use?
   ____ Money available
   ____ Time available
   ____ Resources available
   ____ Skills needed
   ____ Goals which must be met
   ____ Legal limitations
   ____ Other constraints
   ____ Select the five to eight most important criteria
   ____ Weight them using the paired comparison technique

7. Select the alternative to use
   ____ Use alternative selection matrix

8. Develop plan of action
   ____ Research
   ____ Develop plan including time line
   ____ Secure permission or approval
   ____ Gather resources
   ____ Take first step
   ____ Follow through on plan

9. Evaluation
   ____ Which of the following outcomes occurred:
   ____ Increased awareness of the processes
   ____ Acquired a better understanding of the processes
   ____ Can explain the processes to others
   ____ Applied the processes in other settings