

ON



A Personal Training Program For Interpreters

GOVT. DOCUMENTS
DEPOSITORY ITEM

OCT 20 1976

CLEMSON
LIBRARY



PRODUCED BY
NATIONAL PARK SERVICE
DIVISION OF INTERPRETATION
WASHINGTON, D. C. 20240

1976

FOR WHOM IS THE TRAINING PACKAGE INTENDED?

This training package is designed for use by both new and experienced, seasonal and permanent interpreters and rangers in the National Park Service and other agencies that provide interpretive services to visitors in parks, historical sites, monuments, and recreation areas.

Interpreters who will probably profit most from participating in this training are those who are working at improving their skills and understanding of interpretation and who become actively involved in trying these ideas.

This training package consists of five 1/2" videotapes and this syllabus.



DOES THIS SOUND FAMILIAR?

"Visitors often see the park through the eye of the park interpreter. . . Visitors depend on park interpreters to tell them what it's all about...And many interpreters, at least in practice, seem to accept this role, maybe even enjoy it."

"Park interpreters, often dedicated but overworked men and women, can easily fall into a rut. The interpreter is so busy answering questions, she/he may forget to ask a few now and then...she/he feels it's his or her responsibility to interpret the surrounding wonders rather than inspire the visitors to do their own interpretation!"

"Interpretation is not just giving facts, not the explanation of an event or natural phenomenon...it is arousing the curiosity of a visitor, inspiring new attitudes, and assisting the visitor in the visitor's attempts to interpret his or her own park...Park interpreters are not teachers as much as they are friendly facilitators."

"Once visitors realize they can interpret a park, they can communicate with their surroundings without knowing scientific names and data, we may enter a new era in park use. When visitors can begin to feel as one with their environment, a real part of it, rather than an external 'visitor', maybe greater park respect and concern will be evidenced. Park interpreters can help visitors recognize and realize their own special potentials."

Tom Danton, Park Technician,
Rocky Mountain NP
from: In Touch, March 1975

Experienced field interpreters like you and Tom Danton know very well the shortcomings of traditional "teaching" methods: nearly everyone's formal schooling illustrates that.

This training package acknowledges that:

1. Being the "teacher with all the answers" is tough, the chances of making mistakes seem considerable, and visitors don't seem to get much out of the experience.
2. We know what is expected of us as "teacher-interpreters," and the possibility of losing control of, or respect from, a group of visitors probably is more frightening than not knowing "the answers."
3. We already use other more effective ways of learning that don't depend on a teacher.

This training package can help you strengthen and consciously apply these other more effective methods to improve the park experience for the visitor and yourself.

If this interests you, read on...

What's in the package?

- * 5 units of study, with videotapes, requiring from 3 to 6 hours each.
- * Chances to practice these skills on the job as you learn about them.
- * An introduction for each section, and you can skim these and glance at the exercises to get a taste of the whole package before you decide whether to go on.

You will have control over judging how well you perform, and the package tells you how.

So, if you're willing to use this package, it promises, by providing study materials and instructions for practicing on the job, to help you to:

1. Recognize ways that you can help the park visitor interpret the park environment for himself.
2. Apply these skills to your own interpretive activities.
3. Evaluate your own performance to improve your use of these skills.

CONTENTS

APPROXIMATE TIME FOR STUDY

Format of Training Package . . . . .	.10	
How Do You Know You're a Good Interpreter? . . . . .	.11	
MODULE 1		3 hours
Three Components of Interpretation . . . . .	.16	
Workshop A: The Park. . . . .	.18	
Workshop B: The Visitor . . . . .	.20	
Workshop C: The Interpreter . . . . .	.24	
MODULE 2		6 hours
Questioning Strategies . . . . .	.28	
Workshop A: Rewriting Questions . . . . .	.37	
Workshop B: Identifying Levels of Questions . . . . .	.38	
Workshop C: Sequencing Questions . . . . .	.43	
Workshop D: Varying the Sequence of Questions . . . . .	.46	
Workshop E: Planning an Interpretive Activity to Enhance Visitor's Meaning . . . . .	.54	
MODULE 3		4 hours
Structuring Strategies . . . . .	.58	
Workshop A: Verbal Structuring . . . . .	.59	
Workshop B: Nonverbal and Written Structuring . . . . .	.62	

Workshop C: Logistical Structuring 65

Workshop D: Using Logistical Structures 85

MODULE 4

5 hours

Responding Strategies 90

Workshop A: Identifying Responsive and Verbal
Structuring Behaviors 100

Workshop B: Creating Responsive Behaviors 103

Workshop C: Using Questions and
Responsive Behaviors 104

Workshop D: Using Responsive Behaviors in
Interpretive Activities 106

MODULE 5

4 hours

Putting It All Together 108

Workshop A: Modeling 109

Workshop B: A Synthesis 114

Workshop C: Self-evaluation 115

All the videotapes in this package are candid, unrehearsed, and taped on location in Everglades National Park and Castillo de San Marcos National Monument in Florida. You will notice that the quality varies a bit with the conditions of the settings.

Four seasonal interpreters from Everglades and one permanent interpreter from Castillo de San Marcos participated in the production of the tapes. Arthur Costa and Larry Lowery were the instructors. These two pages introduce them to you. You will meet these people on the tapes and in this syllabus working with and demonstrating the skills and techniques discussed in this training package. You will also see them participating as visitors on some of the tapes.

LARRY Lowery was born and raised in Oakland, California. He is currently a professor in science education at the University of California, Berkeley. Although an author of several dozen books and numerous articles and films, he mostly enjoys teaching and working with others.



ART Costa was born in Florida and raised in California. He is currently an Associate Professor of Educational Administration at California State University, Sacramento. He attended the University of Southern California and University of California, Berkeley. He has authored several books and articles in the field of teacher education and learning. He enjoys boating and skiing.

NANCY Shives began life in Ohio. Since her graduation with a BS degree in Agriculture from Ohio State University, she and her husband, Jim, have worked together as year-round seasonal interpreters. Her experiences have been at Wind Cave, South Dakota; Shenandoah, Virginia; and Everglades, Florida.



STEVE Nelson is from Jefferson, Iowa. His interests range from backpacking and camping to photography and rocket building. He is a graduate of Colorado State University with a BS degree in Botany. Since 1973 he has worked for the Park Service at Timpanogos Cave, Utah; Joshua Tree, California; Crater Lake, Oregon; and Nez Perce, Idaho, and Everglades.



MICK Novak spent the first 18 years of his life in the tiny New England village of Ware (Mass.). He graduated from Colorado State University with a BS in Fishery Biology. He likes photography, fly fishing, and visiting remote areas of this country. He has worked at Grand Canyon, Arizona; Everglades, Florida; and Yellowstone NP, Wyoming.



JAN Self was born and raised in the deep South. She is a graduate of Birmingham-Southern College, Alabama with a degree in Drama and Speech. She has worked at Gulf Islands National Seashore, Florida; Cape Hatteras, North Carolina; and Everglades, Florida.



CHUB Robshaw, Jr. is from St. Augustine, Florida. He attended St. Johns River Junior College, has a wife and six children. He is a winner of the Merit Achievement Incentive Award and currently serves as a member of the Safety Committee at Castillo de San Marcos where he is the Instructor of Living History Demonstrations.



FORMAT OF TRAINING PACKAGE

This training package is divided into five modules, each dealing with a different aspect of improving your skill as an interpreter. Each module has several parts, or workshops, and is accompanied by one videotape. The modules are generally designed to be studied in sequence with each subsequent module building upon skills introduced in the previous one. However, any of the first four modules may be approached individually without significant loss of effectiveness. Also, don't feel pressured to finish the whole training package. It will be better to take all the time you need with each module, allowing plenty of time for practice, even if you don't finish them all, than to try to rush through the five modules.

The approximate study time indicated in the table of contents and in each workshop does not include practice time. How long it takes you to complete each module will vary according to your own energy level and commitment, whether you work alone or with others, and of course, how busy your schedule is. As you complete each workshop, you may want to take some time to think about it, try some of the ideas, and then go back and revisit the ideas presented before going on to the next workshop.

The ideas presented in this training package are suitable for all interpretive environments. Because of individual differences, some ideas might work better for you while other ideas might work better for other interpreters.

There are certain materials and pieces of equipment you will need in order to use this training program. They include:

- a 1/2 inch reel-to-reel videotape recorder and monitor
- a portable audiotape recorder and blank tapes
- this training package which includes this syllabus and five videotapes
- a pen or pencil

We invite you to get started and get involved in the program. Try the ideas several times, reflect upon your experiences and the reaction of your visitors. Only you can be responsible for your own improvement.

How Do You Know You're

A Good Interpreter?

How Do You Know You're A Good Interpreter?

In the space below, jot down thoughts you have that answer this question: *"How do I know I'm a good interpreter?"*

After you have listed your ideas and thought about them for awhile, go to some of your fellow interpreters and ask them the same question. List their ideas below.

What new ideas did you gain? How do your fellow interpreters' ideas compare with your ideas?

The interpreters at Everglades compiled a listing of their ideas. Each idea was an indicator to them that they had done a good job.

a. Audience Responses

- shows humor
- has eye contact
- gives positive facial expressions
- pays attention
- becomes involved verbally, giving responses or asking questions
- indicates some emotional response
- photographs or tape records during talk
- seeks more information after talk
- uses information learned to express a "bigger" understanding of the ideas presented
- reexperiences the tour on his own
- revisits, brings others
- spends more time in the area
- writes a positive letter after departure

b. Interpreter's Feelings

- has a sense of meeting the goals of the presentation
- has a sense of knowing the park well
- feels enthusiastic about the subject
- feels confident to be flexible in the presentation while still meeting the goals

Using your own list (page 12), the list of your fellow interpreters (page 12), and the lists from the Everglades interpreters (page 13), synthesize a final list of five or six (or more) main characteristics of a good interpreter.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Three Components Of
Interpretation

Module One

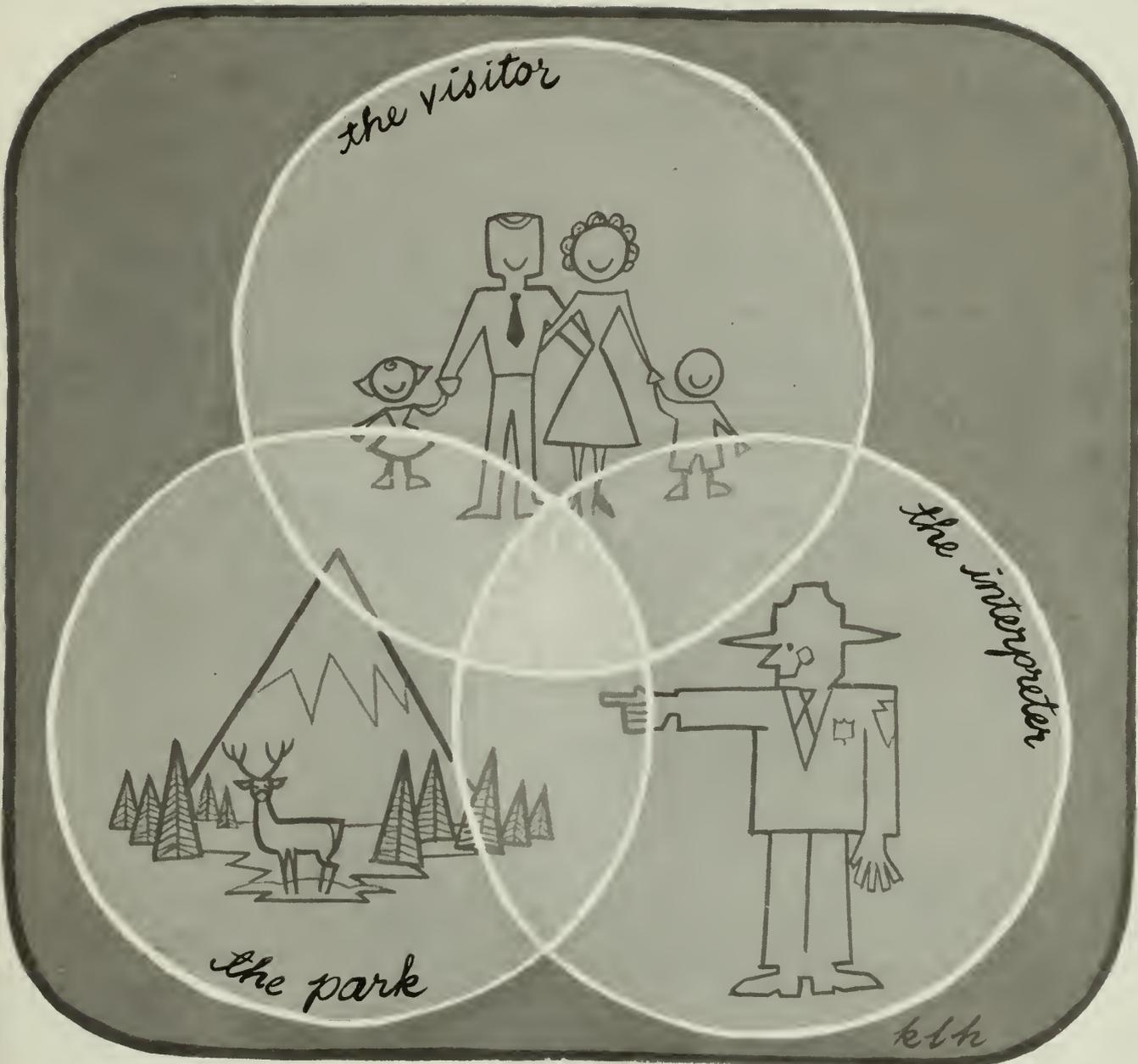
THREE COMPONENTS OF INTERPRETATION

Frameworks are organizations of basic elements that might lead to a better understanding or general improvement of what we are doing. In practice, a framework can aid an interpretive program by identifying important aspects or problems, by keeping a program in some perspective to other programs, and by suggesting important areas that can be studied and/or improved.

One possible, descriptive framework for interpreter programs might be composed of three related factors and represented by three interwoven circles:

- 1) The Park Environment - involving the organized knowledge and ways of knowing within the areas to be interpreted.
- 2) The Visitor - including the many aspects related to background experiences, perspectives, interests, and learning abilities.
- 3) Interpretation - encompassing, in the broadest sense, anything that enables the visitor to better understand that which is to be experienced including the physical and non-physical structuring of the interpretive situation and the verbal and non-verbal interactions among individuals.

Although each component of the framework can and should be examined as a discrete entity which contains its own elements, organizations, and regularities, the intersections of the components, if carefully explored, examined, and properly understood, can help serve as a framework for improving interpretive programs. Explore them, examine them, understand them.



klh

WORKSHOP A: The Park

The purpose of this workshop is to focus upon one of the components of the framework presented in this Module.

Every park environment, whether a national monument, historical site, or recreation area, illustrates certain concepts that interpreters hope visitors will come to understand and remember. The visitor's understanding of such concepts or ideas is considered to be the goal of an interpretive program or talk. Usually, these concepts are the "big" ideas rather than the specific pieces of information such as the names of certain plants, animals, generals or battles.

Think about your own park environment. What are some of the "big" ideas you hope to get across to visitors? In the space below, list some of the goals related to your environment.

After you have listed your goals discuss them with your fellow interpreters. Ask for their thoughts.

Think about the ideas or goals you listed, and those suggested by your fellow interpreters. How are your goals useful to the visitor? How do they help the visitor derive meaning from your park environment?



WORKSHOP B: The Visitor

The purpose of this workshop is to focus upon another component of the framework presented in this Module. It consists of four pages in the syllabus and Video-tape 1 of Module I. The workshop will take about 30 minutes to complete.

Each visitor comes to a park area or other interpretive situation filled with certain preconceptions. Some preconceptions are accurate; some are inaccurate. Many visitors come motivated to better understand something. A few are just passing through. The visitor is a complex creature, and when visitors gather as a group, the combinations within the group are even more complex.

Certainly each visitor leaves an interpretive experience knowing something he had not known before or feeling something he had not sensed before. A change in cognition or attitude is clearly an indication that the visitor has learned something. If one considers the visitor as a potential learner, then much can be done to understand and cope with the complexity of visitors in any interpretive situation.

There are some things we know for sure about how visitors derive meaning from environments:

- a. Visitors learn best from firsthand experiences. If a park interpreter pours some water on dried or dormant resurrection moss to demonstrate its properties, the experience for the visitor is indirect; however, if the visitor is allowed to pour the water, the experience, becoming personal and firsthand rather than passive and secondhand, has a powerful effect upon the visitor's deriving meaning from the situation.



- b. Visitors learn best when an experience is close to them in time and space. It is difficult for a visitor to comprehend such ideas as: *"The fossil in this sedimentary rock is four million years old and was set down beneath the waters of a great sea that covered one-fourth of the United States."* What people remember from experiences like this is that there was a sea shell in some dirt and the shell was very old. Meaning comes about by helping the visitor realize how one determines (today) that a great sea covered such a vast area. An interpreter might allow visitors to interpret for themselves by asking, *"If a geologist studying this layer of sediment followed the layer as far as he could, like following a line, and found the layer in New Mexico, Texas, Louisiana, and several other states, what might that observation suggest to him?"* Such a question, building upon observed data and comparisons of data, can bring a large or remote idea closer to the visitor's personal place in time and space, thus the concept will be remembered for a long time.

Viewing Video-tape 1, Module 1.

This video-tape will take about 15 minutes to observe and will provide you with additional information on how visitors perceive and derive meaning from a park environment.

Use the space below to keep any notes that you think will be useful to you.

After Viewing

Take a few moments to mentally recall the key factors that explain how visitors derive meaning from park environments.

Did you know that...

- a. recalling after learning reduces the amount of information a visitor forgets? At the end of an interpretive experience, a review of the structure or key points by the visitor (not the interpreter) facilitates learning.
- b. advanced organizers improve understanding? An advanced organizer is an early indication given by an interpreter of the experiences that will take place or the sequence of the key points to be experienced. Advanced organizers provide visitors with a mental structure that helps them interrelate ideas. The mental structure also improves memory of the experience.
- c. increasing the number of ways by which a visitor can look at something rather than looking at many things in just one way, helps a visitor derive meaning from an environment? If a visitor always looks at leaves only in terms of color and shape, then that individual is limited in what he can perceive in any environment. However, if a visitor is allowed to investigate firsthand, other characteristics of leaves such as venation, serration, tip variation, base variation, odor, and texture, he will perceive many more possibilities in other situations.

Now reflect on two final questions:

How has this interpreter training program made use of the three principles listed above to help you derive meaning about interpretation?

When you are in the role of a visitor in an unfamiliar environment, how do you derive meaning?

WORKSHOP C: The Interpreter

The purpose of this workshop is to focus upon the third component of the framework presented in this Module. It consists of two pages in the syllabus and Video-tape 2 of Module I. The workshop will take about one hour to complete.

Interpretive programs take on many forms from brochures and self-guided nature trails to campfire presentations and interpreter-led walks. The form discussed here involves the interpreter as a person in contact with other persons.

Creating an interpretation is closer to being an art than it is a science. In attempting to determine the important elements that comprise interpretive skills, one is continually confronted with the problem of identifying, describing, and organizing good interpretive techniques in a way that allows the interpreter to use them on a consistent basis. A few elements for good interpretation have been clearly identified. They involve using different types of: questioning strategies (recall, process, and application questions can enable visitors to actively think about their experience); structuring strategies (verbal, non-verbal, and logistical structures can efficiently guide learning and improve remembering); responding strategies (clarifying and accepting responses provide important behavioral models and often facilitate ideas on the part of visitors).

Viewing Video-tape 2, Module I

This video-tape requires you to interact with this syllabus and the video-tape at the same time. This experience will take about an hour to complete.

Before viewing the tape, study the next page.

Interacting With The Video-tape

On this video tape you will be making some comparisons between two examples of interpretive behaviors and visitors' reactions. This page will help you make the comparisons. The examples you will see are real and unrehearsed.

Example 1

During this example note what you see the interpreter do and watch how the visitors react. Stop the tape after the first example and describe in the columns below what the interpreter does and how the visitors react. When finished, start the tape again.

<u>Interpreter's Actions</u>	<u>Visitors' Reactions</u>

Example 2

During this example you will see a very different set of interpreter behaviors. Again, watch for the behaviors and the visitors' reactions. At the end of the example, stop the tape and describe the behaviors.

<u>Interpreter's Actions</u>	<u>Visitors' Reactions</u>

Now compare the two examples. In which did you see the most visitor involvement? In which was the visitor gaining the most meaning? In which did you see behaviors which were closest to the criteria you listed for good interpretation?

The framework introduced as an advanced organizer at the beginning of this module suggests that the value of an interpretive program is directly related to the inclusion and quality of the areas represented by the three interwoven circles. To omit one or more of the circles significantly reduces the value of the program.

For example, if a person (The Visitor) came to a park area (The Park Environment) that had no interpretive program (Interpretation), the amount of understanding of the experience by the person would be minimal. When the third circle of the framework is included, there is an increase in the meaning derived by the individual.

Similarly, if only the interpreter (Interpretation) and a person (The Visitor) come in contact independent of the real environment (The Park Environment), the benefit to the person is diminished. (Interpretive activities at campfires that fail to utilize or compete with the immediate environment, such as slide shows, are examples of two-circle programs.) Even an interpreter (Interpretation) and his topic (The Park Environment) are of little value if the visitor is not considered in the program. (Many self-guided nature trails are two-circle programs because they are designed without giving much thought as to how visitors derive meaning from the environment.)

Perhaps the goal of interpretation is not to interpret a situation for others but to enable others to interpret the situation for themselves.



Questioning Strategies

Module Two

QUESTIONING STRATEGIES

The purpose of this module is to provide you with knowledge and practice in the first of several effective interpretive strategies. Upon completion of this module on questioning you should be able to:

- 1. Identify from a list of written examples, three levels of questions that interpreters can use to enhance visitor understanding.*
- 2. Identify the use of these three levels (recall, process, application) of questions from a video-taped example of interpreter/visitor interaction.*
- 3. Create, both orally and in written form, examples of these three levels of questions.*
- 4. Plan an interpretive activity incorporating the three levels of questions.*
- 5. Analyze and evaluate your own activity and its effect on the visitor when you use three levels of questions.*

This module consists of five workshops in the syllabus and Video-tapes 1 and 2, Module II. The total experience will take about six hours of work and study.

Ask a group of visitors a question such as:

"How many of you have been to this park before?"

Or:

"How many of you plan to take the boat tour today?"

What do you think the reaction of the visitors will be?

What probably happens is that many hands are raised. People learn very early in their lives that they are expected to respond to questions asked of them. Think back in your life. When did you learn to raise your hand? In kindergarten or first grade at school? Because of our early learning, it is the interpreter's questions from which the visitor derives his cue for what is expected of him.

Questions are the intellectual tools by which interpreters can elicit desired behaviors in the visitor. Questions are often used for a variety of purposes. They can be used:

To give directions:

"Will all of you gather around this rock now?"

To control behavior:

"Hey, little boy, what are you doing there?"
(Carving initials in rock)

To monitor the visitor's attention:

"Can everyone see the fossils in this rock?"

To generate data about a group:

"How many of you drove into the park from the north?"

To motivate the group:

"Wouldn't it be nice if we took a walking tour around the grounds?"

Another type of question that is often asked is called a rhetorical question. A rhetorical question contains the answer within it:

"If you look at a piece of granite, you can see mica, quartz, and feldspar, can't you?"

Rhetorical questions never allow visitors to explore, discover, or think for themselves.

Questions That Help Visitors Derive Meaning From Environments

Questions are important to ask because they elicit certain intellectual or thinking processes in visitors. Such questions invite the visitors to think about and thereby better understand the environment. The interpreter's skill of questioning is directly related to the type and quality of meaning that the visitor derives from the setting. Several examples follow.

- a. The interpreter can cause the visitor to recall something that was learned in the past or to identify and describe something that can be directly observed:

"What were the names of the three minerals found in granite?"

"What is the name of this glassy, black rock with shell-like sides?"

"What do you see on the rock's surface?"

- b. The interpreter can cause the visitor to analyze, compare, or reason:

"Having found seashell fossils and sedimentary rocks here, what can you suppose about these hills?"

"How does the surface of the limestone rock compare with the surface of the lava?"

"How do you think those scratches got on the face of that mountain rock?"

- c. The interpreter can cause the visitor to predict, to evaluate or to apply information:

"What do you think this park would be like today if we did not restrict people to the marked trails?"

"Do you think it is good that Congress spent money to set aside this land as a national park?"

"From what we've learned about sedimentary rocks, can you look about and find other examples of this type of rock?"

The three types of questions described above appeal to the visitor's intellectual powers and involve him in thinking. Through such questions, the interpreter enhances the visitor's meaning concerning the park environment.

In this module you are asked to consider these three levels of meaning more closely. The purpose for learning to use these levels is to insure that the visitor becomes intellectually involved with the park environment. The three levels are:

RECALLING
PROCESSING
APPLYING

While all three levels are important, merely having the visitor recall names, dates, and terminology engages him only at the lowest level of meaning. Without processing such facts, the facts are often soon forgotten; Processing helps visitors see relationships among the facts and is a higher level of thinking. When the interpreter helps visitors achieve the level of application, he has tapped the fullest level of the visitor's intellectual involvement.

A skillful interpreter poses these levels of questions with care. If too many questions are asked or if the questions are confusing or not really questions, visitors will respond inappropriately or become passive and not respond at all.

Since one of the purposes of interpretation is to have the visitor derive meaning from the park environment for himself, then the interpreter, working toward this goal, poses questions intended to have visitors perform these thinking processes rather than using questions that are unrelated to this goal, ambiguous, or rhetorical.

Recognizing Levels Of Thinking

Because questioning is such a basic part of the act of interpretation, and because questions cue the visitor to respond accordingly, this module stresses the formulation and use of precise questions which invite visitors to think about and derive meaning from the park environment. It is hoped that you will consciously utilize these questions in planning and conducting your talks.

1. The RECALL question is designed to draw out information from past experiences, feelings, or observations. It is a question that invites the visitor to gather data or draw upon remembered, stored information. Some of the types of thinking that visitors might use at the recall level are:

completing	naming	observing
counting	identifying	recalling
describing	listing	selecting
	matching	

The following are some examples of questions that interpreters might ask to invite visitors to respond with these recall level behaviors.

<i>"What are the states that border California?"</i>	listing or naming
<i>"How did it feel when you touched the snake?"</i>	describing
<i>"What is the definition of the word 'interdependence'?"</i>	defining
<i>"What did you see the ranger doing in the film?"</i>	observing
<i>"What is the name of that bird?"</i>	identifying or naming
<i>"What did the birds do at night?"</i>	recalling
<i>"How many of you are buying boat ride tickets today?"</i>	counting
<i>"Can you spot the blue heron in the flock of storks?"</i>	selecting

2. The PROCESS question is designed to have the visitor draw some relationships among the data or information recalled by comparing, inferring, or explaining. Some of the types of thinking that visitors use at the process level are:

analyzing	distinguishing	inferring
classifying	experimenting	making analogies
comparing	explaining	organizing
contrasting	grouping	sequencing

The following are examples of questions that interpreters might ask to involve visitors at the process level of thinking.

<i>"How does texture of these two types of lava compare?"</i>	comparing
<i>"Could you explain how Columbus came to believe he could get to the east by sailing west?"</i>	explaining
<i>"How did the directions in which the rivers flow affect the outcome of the Civil War?"</i>	drawing cause and effect relationships
<i>"We saw what happened when we put water on the resurrection moss. Now what do those results mean to you?"</i>	inferring
<i>"Can you put into groups the things a magnet will or will not pick up?"</i>	classifying
<i>"How can we solve this problem about congestion in the park?"</i>	problem solving
<i>"How can you arrange the rocks so that they are in order of their hardness?"</i>	sequencing
<i>"Is there something you could do to test your idea?"</i>	experimenting
<i>"What kitchen appliance does this geyser remind you of?"</i>	making analogies

3. The APPLICATION question is designed to cause the visitor to go beyond the data or concept which he has developed and to use it in a new or hypothetical situation. There are several types of thinking that people use at this level:

applying a principle	forecasting	inventing
building models	generalizing	judging
evaluating	hypothesizing	predicting
extrapolating	imagining	speculating
finding examples		theorizing

The following examples of questions invite the application level of thinking in the visitor.

"What do you think would have happened to the Indians of the desert if they had had all the water they could use?" hypothesizing

"What can you say about countries that are dependent upon only one crop?" generalizing

"What will happen to our weather if a high pressure area moves in?" forecasting

"If our population continues to grow as it has, what will life be like in the 21st century?" predicting

"Can you imagine what it would be like to be an alligator peering through the sawgrass?" imagining

"How could you arrange these materials to show us how the layers of earth have folded?" model building

"Since the amount of heat affects the speed of molecules, what will happen when the rock heats in the summer sun?" predicting

"Which of the solutions to the problem of the congestion in the park do you think is the best?" evaluating

"From what we've said about animal adaptation, can you find some other examples of adaptation while we are on our walk?" applying a principle

SUMMARY OF
QUESTIONING STRATEGIES

BEHAVIOR LEVEL	INTERPRETER Initiates with:	VISITOR Responds by:	INTERPRETER Responds to VISITOR with:
DATA RECALL	<p>Questions or directions which cue the visitor to respond with a descriptive statement, to recall, to recite, to list, or to enumerate. EXAMPLE: "What colors do you see in the snake's skin?" "What did you find in the palm tree?" "What did you see on the bird's beak?" "How does this snake's skin feel to you?"</p>	<p>Recalling facts, previously learned information or sharing observations. EXAMPLE: "I see a red spot on the beak." "The snake's skin is smooth."</p>	<p>Cues which maintain or reinforce the level of the person's thinking. EXAMPLE: "OK." or directions for follow-up or questions. EXAMPLE: "Do you remember what that was for?" "Did all the birds have this red spot?"</p>
DATA PROCESSING	<p>Questions or directions which cue the visitor to use the data collected to show cause and effect relationships; to synthesize, classify, analyze or compare data. EXAMPLE: "How do the scales of these snakes compare?" "Why do you think the water snake and the land snake have different scales?"</p>	<p>Explaining, inferring, analyzing or showing relationships between the data.</p>	<p>Acceptance, elaboration or clarification of responses which maintain the inference level OR follows with another data processing question.</p>
APPLICATION	<p>Questions which cause the visitor to predict, theorize or apply a principle in a new situation; to do divergent thinking. EXAMPLE: "What do you think will happen to the wildlife in the Everglades as the water gradually dries up?" "Do you think that allowing the water to rise in the Everglades would be a good thing to do?"</p>	<p>Predicting, hypothesizing, or applying the principle he has learned previously to a new situation.</p>	<p>Acceptance, elaboration, clarification which maintain this cognitive level.</p>

Notice that the RECALL question is often asked in the past tense: "What did you see?" "When did you leave home?" "What were their names?" "How was the table arranged?" Although it is not always true, the past tense is often a clue to identifying the recall level question. When the visitor speaks in the past tense, it is often a clue that he is operating at the recall level of thinking.

The PROCESS question is often asked in the present tense: "How can we solve this problem?" "How does this object compare with that one?" "Why do you think so?" When you observe or hear visitors using the present tense, it is often a clue that he is thinking at the process level.

The subjunctive and future verb forms as well as conditional clauses generally set the tone for APPLICATION questions: "What will happen if...?" "What might be the outcome if...?" "What should we do if...?" Another clue to the application question is the inclusion of a value-laden word. Such a word causes the visitor to make value judgments or to evaluate. For example: "Would it be better if we started on the trail or in the cave?" "What would be the fair thing to do?" "Of all the parks you've visited, which one do you prefer?"

It is the syntactical construction of a question that cues the visitor into a particular type of response. When a question is phrased in the past tense, it elicits past tense thinking in the visitor. Hypothetical or conditional phrasing of a question causes hypothetical thinking in the visitor. Only you know the kind of thinking you would like the visitor to do to enhance and extend his understanding of your park environment. Only you can formulate the question that elicits that particular level of meaning.

Video tape 1 of Module II summarizes this introduction to questioning strategies. View the 4 minute tape and then go on to Workshop A.



WORKSHOP A: Rewriting Questions To Elicit Higher Thinking Levels

The purpose of this workshop is to develop your ability to rephrase questions for the purpose of eliciting higher levels of thinking in visitors. It consists of one page and will take about 30 minutes to complete.

Study the two samples of questions below. Each sample recasts a recall question into a processing question and an application level question.

SAMPLES OF REWRITTEN QUESTIONS

Recall	Processing	Application
1. <i>"What do you see in this room?"</i>	<i>"How does this room compare with your own room or office? Why do you think it is arranged as it is? What factors influenced its arrangement?"</i>	<i>"How do you think this building would be arranged differently if it were built today? How would you like to live or work here?"</i>
2. <i>"What was the weather like yesterday?"</i>	<i>"How does the weather today compare to the weather yesterday? Why is our weather so different today? How does the weather in Sacramento compare with the weather in Tokyo? How are they the same? Why are they so different?"</i>	<i>"What do you think the weather will be like tomorrow? What can you say about cities that have weather like ours? What kind of weather do you most enjoy? What would happen if the weather was uniform all over the world? How would you build a city to make the weather uniform all over the city?"</i>

Now rewrite each of the recall questions below so that they elicit higher levels of thinking. When finished, discuss the rewritten question with other interpreters.

1. <i>"Who discovered Yosemite?"</i>		
2. <i>"What is the capital of Arizona?"</i>		

WORKSHOP B: Identifying Levels of Questions

This workshop provides you with practice in identifying levels of questions. It consists of five pages and Video-tape 2 of Module II. The workshop will take about 45 minutes to complete.

Identify each type of question in the written examples. Mark each question with:

Rif it asks a visitor to recall, identify, or enumerate

Pif it asks a visitor to process data

Aif it asks a visitor to apply, predict, or theorize.

When you are finished, compare your answers to those on page 40. If you are working with other interpreters, you may wish to discuss your answers with them.

<u>Level</u>	<u>Interpreter's Question</u>
--------------	-------------------------------

1. *"What do you see on the surface of these boulders?"*
2. *"What differences do you see between the boulders in the canyon walls and those on the mountaintop where we started?"*
3. *"How would you explain why we find fossils of sea animals so high on this mountain?"*
4. *"How would you explain why salmon always return to spawn in the same river in which they were born?"*
5. *"What do you think will happen to the Rocky Mountains when a new glacial age returns?"*

- ___ 6. *"Which states bound Colorado?"*
- ___ 7. *"What do you observe the seagull doing with the sticks?"*
- ___ 8. *"Who can summarize some of the things you learned about the desert?"*
- ___ 9. *"In what ways do the desert Indians and the Seminoles differ?"*
- ___ 10. *"How do you think their lives would be different if they had all the water they needed?"*
- ___ 11. *"For what reasons do you think the tribes fought each other?"*
- ___ 12. *"Are there any other ideas you have which would explain why the Indians disappeared so abruptly?"*
- ___ 13. *"From what we have discussed, what are some laws that both governments have in common?"*
- ___ 14. *"What are some of the similarities between our concept of law and the concept held by the ancient Hawaiian Chiefs?"*
- ___ 15. *"What would life be like if there were no laws?"*
- ___ 16. *"What are the parts of this plant?"*
- ___ 17. *"How do pine trees compare with cactus plants?"*
- ___ 18. *"What do you think might happen to a salt-water fish if it were placed in a fresh-water aquarium?"*
- ___ 19. *"In what ways are interpreters and teachers similar and different?"*
- ___ 20. *"What do you predict this area will be like in the 21st century?"*

Comparing Responses

Compare the answers you gave on the previous page with those listed below. If you miss more than four of them, you may want to review the first part of this module.

<u>Question</u>	<u>Level Of Response By The Visitor</u>
1. <u>R</u>	RECALLING (by observing)
2. <u>P</u>	PROCESSING (by comparing)
3. <u>P</u>	PROCESSING (by explaining)
4. <u>P</u>	PROCESSING (by explaining)
5. <u>A</u>	APPLYING (by predicting)
6. <u>R</u>	RECALLING (by naming or listening)
7. <u>R</u>	RECALLING (by observing)
8. <u>P</u>	PROCESSING (by summarizing)
9. <u>P</u>	PROCESSING (by comparing)
10. <u>A</u>	APPLYING (by imagining or speculating)
11. <u>P</u>	PROCESSING (by explaining)
12. <u>P</u>	PROCESSING (by explaining)
13. <u>P</u>	PROCESSING (by comparing)
14. <u>P</u>	PROCESSING (by comparing)
15. <u>A</u>	APPLYING (by speculating)
16. <u>R</u>	RECALLING (by naming)
17. <u>P</u>	PROCESSING (by comparing)
18. <u>A</u>	APPLYING (by hypothesizing)
19. <u>P</u>	PROCESSING (by comparing or contrasting)
20. <u>A</u>	APPLYING (by predicting)

Viewing Video-tape 2, Module 2

This tape requires you to interact with this syllabus and the video-tape at the same time. It will be helpful to you to read this entire page before viewing. This experience will take about 30 minutes to complete. You will see the interpreters working with visitors and be asked to listen to the questions asked. In the spaces below you will be asked to identify each type of question. For your convenience, there is a pause in the tape following each question. When finished, check your answers with those provided on the next page.

<u>Interpreter's Question</u>	<u>Level of Question</u>
1. <i>"Would anybody like to pick him up?"</i>	_____
2. <i>"What's he doing right now?"</i>	_____
3. <i>"Why do you think he coiled up just like that?"</i>	_____
4. <i>"What do you think would feed on him?"</i>	_____
5. <i>"What do you think would happen to the wildlife?"</i>	_____
6. <i>"Why don't you think a possum would do that?"</i>	_____
7. <i>"Does that (answer) sound pretty good?"</i>	_____
8. <i>"Look into the sun and what do you see?"</i>	_____
9. <i>"Why does the bird need a hook on its bill?"</i>	_____
10. <i>"What do you think is the most important thing we've seen today?"</i>	_____

Now compare your answers to those on the next page.

After Viewing

This page allows you to check yourself on your identification of the three levels of questions. Match the answers below with those you wrote on the previous page.

1. RECALLING - identification of people who want to pick up the snake.
2. RECALLING - the visitor is asked to make observations.
3. PROCESSING - explanations of why he coiled up.
4. PROCESSING - inferences about who feeds on caterpillars.
5. APPLYING - predictions of what will happen in the future.
6. PROCESSING - explanations and reasons.
7. APPLYING - evaluations of the answer.
8. RECALLING - visitor's observations.
9. PROCESSING - reasons for the shape of the bill.
10. APPLYING - value judgments of importance

If you missed more than three of the items, you may wish to review pages 31 through 35 of this syllabus and view the video-tape once again.

WORKSHOP C: Sequencing Questions

The purpose of this workshop is to assist you in sequencing levels of questions in a way that is both efficient and effective in enabling visitors to gain meaning from your park environment. It consists of two pages. The workshop will take about 30 minutes to complete.

It has been found that when questions are asked in a certain sequence, the questions help visitors derive more meaning than when an interpreter asks questions in a random fashion, jumping back and forth between application, recall, and process levels. If the random fashion were tracked, it might appear like this:



In the pattern, the interpreter started with a recall question, asked another recall question, jumped to an application level question, then a process, then application, and so on. It has been found that each time an interpreter changes the level of thinking of a group of visitors, some members of the group drop out of the interaction. They no longer remain involved or contribute further to the discussion; if they do, their responses are bizarre or unrelated to the topic.

The three levels of questions introduced in this program are cumulative. Process thinking includes recalling data. Application thinking includes both processing and recalling. If visitors have not gathered data, they have nothing to process. If they have not processed data, they cannot apply or use the data.

An effective way to plan your activity is to start with recall questions, letting visitors recall, make observations, and collect information. Then after ample data has been gathered, raise the level of the visitors' thinking by shifting to process level questions, letting visitors make comparisons, inferences, and analyses. Toward the end of your talk, raise the level of thinking higher, by asking application questions. Such an activity would look like this:



When activities are sequenced in this "stair-step" fashion, more visitors continue to participate throughout the discussion, and their contributions are more pertinent to the topic. In other words, they derive more meaning from their environment.

Developing a Sequence of Questions

The following exercise will give you a chance to try developing a sequence of questions. After you have read the poem below, compose *three* questions that would cause visitors to identify, list, or recall; *three* questions that cause them to analyze, compare or explain; and *three* questions that cause them to predict, apply, or hypothesize.

WHAT DO YOU KNOW OF LIFE?

by
Stewart Grosckamp*

What do you know of life?
Till you feel the force of the wind,
Till you know the bite of the rain,
And you face them and fight them,
And your flesh is wrought with hunger and pain.

What do you know of life?
Till you've stalked as a savage and killed like a wolf,
Till you've tasted of brine and bane.

Go! Walk in the fields of fragrance and fern,
And wade in the stream of fear.
Your bones will be weary, your cheeks will be haggard,
Your skin will be swarthy and tan.
But you will taste the sweetness of earth,
And come to know more of life and man.

*STEWART GROSCAMP (1866-1938) was born in a log cabin in Illinois. He attended a one-room school and later taught in the same kind of school. Growing up on the American frontier, he experienced many of the hardships he was later to write about. His Life in Forest and Plain describes the hardships of pioneer families as he knew them personally. His Frontier Life in America entailed many of his experiences and won the Pulitzer Prize in 1920. After teaching, he became editor of a frontier newspaper, a position he held until his death.

In the spaces below, develop three questions for each level of thinking that could be derived from the poem.

Recall Questions:

1. _____

2. _____

3. _____

Processing Questions:

1. _____

2. _____

3. _____

Application Questions:

1. _____

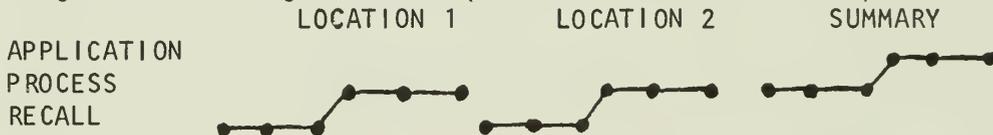
2. _____

3. _____

WORKSHOP D: Varying The Sequence Of Questions

The purpose of this workshop is to introduce you to variations in the "stair-step" sequence of questions and to illustrate how an interpreter can use the levels to effectively involve visitors. It consists of eight pages and will take about 45 minutes to study.

There are several variations to the "stair-step" sequence of questions. You might consider using one or more of them depending upon your particular environment. For example, some interpretive activities might include several locations, environments, or stops along a path. You might plan to use the three levels at each stop. Or you might use the higher level questions at the last stop:



The above variation can be found in the script of an interpreter's activity on pages 51 through 57.

Sometimes it is helpful to the visitor to return to the next lower level. This allows missing data to be generated or allows the visitor to reexamine his ideas. This is best to do only after the lower levels have been performed. The variation might look like this:



The above variation can be seen in the following interaction between the visitor and interpreter during the latter part of the activity.

Interpreter: *"As a result of our tour, what do you see as some of the most important factors influencing the environment here?"* (Application Question)

Visitor: *"Water."*

Interpreter: *"Why do you say water?"* (Process Question)

Visitor: *"Because so much wildlife is dependent upon water for survival."*

Interpreter: *"Can you recall examples of wildlife dependent upon water?"* (Recall Question)

Visitor: *"Yes, alligators, birds, fish...etc."*

Interpreter: *"What do you think would happen to the wildlife if the flow of water through here were allowed to dry up?"*
(Application Question)

To illustrate how an interpreter can use levels of questions in various ways to involve the visitor in interpreting the environment, the following transcript was prepared. It is a transcript of an actual presentation; however, space does not permit the reproduction of the total activity. Only illustrative portions have been selected and slightly edited so that they will make sense to the reader. You will have to use some imagination to piece it together. The main purpose is to illustrate how an interpreter uses questions.

SAMPLE OF AN INTERPRETIVE PRESENTATION
INCORPORATING LEVELS OF QUESTIONS

Imagine that this presentation takes place around an historic battlefield. There are several stops along the tour route. The interpreter has some purposes in mind for the tour: He wants the visitor to understand some of the history of this battlefield and to relate the conditions that contributed to the American victory. Most importantly, the interpreter hopes that the visitor will perceive the significance of the victory as a turning point in the history of the United States and that this particular victory affected the future of the United States as a world power.

Comments about what
the interpreter did

Interpreter - Visitor Interaction

AT TOUR STATION ONE

Starts with a broad view of the area. Asks first recall question.

Int: From this vantage point overlooking the battleground we can get a view of the total area. Let's look over the area. What do you observe about the terrain here?

Vis: It's flat.

Vis: It's swampy.

Vis: Not many trees.

Asks another recall question to cause the visitor to observe more specifically.

Int: OK, you've said, then, that its a rather flat open area. Look over to the far left of the field. What do you see over in that area?

Vis: It looks like a swamp.

Asks another recall question to cause visitor to describe vegetation.

Int: Yes, that is a swamp. What types of vegetation do you see there?

Vis: Thick trees.

Vis: Palmettoes and grasses.

Comments about what
the interpreter did

Interpreter - Visitor Interaction

Asks a rhetorical question with an obvious answer.

Int: Do you think it would be easy to walk through that swamp?

Vis: No.

Vis: Too muddy and soft and wet.

Int: OK, now look over to our right, what do you see over there?

Vis: The river.

Vis: The levee.

Provides additional data after the visitor has made his observations. Asks visitor a process question to analyze the situation and give reasons.

Int: OK. The distance between the river and the swamp was about one mile. Actually, back in 1815, the river was about 850 feet more to the east. Over time, the river has changed its course. Now General Jackson knew that the British troops had landed and were marching toward New Orleans up the river. Now why do you think he chose this spot to set up his defense lines?

Vis: Well, it was a rather narrow spot and he could concentrate his troops here.

Int: OK, so Jackson's troops wouldn't be spread out so thin--they could all concentrate here at this point.

Vis: Another reason might be is that the British couldn't escape that way or this way (pointing)--they couldn't get away, they could only retreat.

He accepts and extends the visitors' ideas. Keeps the level of thinking at the process level by asking for other reasons.

Int: Yes, the swamp on the east and the river on the west prevented escape routes. Are there any other reasons?

Vis: I think another idea might be that the warships on the river could fire on the British from this distance, and Jackson may have wanted to keep the British troops within range of the ship's guns.

Int: Yes, the warship Carolina did fire on the British.

Vis: He could have wanted to use this house as his headquarters--a place to stay.

Int: Well actually, this old house was built in 1830 and the battle took place here in 1815 so it

Provides some corrective information to the visitor but builds on the visitor's idea.

wasn't here at that time. But this was a plantation then and there were some buildings here. If you'll look out across the field you'll see a long mound running from the swamp to the river. This mound was built by Jackson's armies. It follows the drainage canal which ran from the swamp to the river. When this was a plantation, the water drained out of the swamp so the fields wouldn't flood. Let's go down to the mound and we'll examine it more closely.

TOUR STATION TWO

The interpreter provides additional information and asks the visitor to explain by using a process question.

Int: Along this long mound is where General Jackson set up the American Defense lines against the British. It runs right along the edge of the drainage canal from the swamp to the river. General Jackson's troops dug out mud from the canal and piled it into a mound about one mile long and four feet wide. They used wooden fence posts, rails, kegs and anything they could get their hands on to reinforce the embankment. Now why do you think they built such a mound?

Vis: For protection.

Interpreter clarifies the visitor's term.

Int: OK, what do you mean by "protection"?

Vis: Well, they needed something to stop the bullets and cannonballs.

Int: OK, and this four-foot mound was thick enough to stop the cannonballs which the British used at that time.

Vis: How about rockets? Didn't the British use rockets? Would it stop those?

Interpreter responds to the visitor's question by providing the data requested. He maintains the process level thinking by asking for other reasons.

Int: Well, rockets of those days weren't the same as we use today. They were scary and loud and bright. You remember "The Rockets Red Glare"? But they weren't very destructive. They were more like our Fourth of July fireworks rockets. Can you think of some other reasons why they built this mound?

Vis: Well, the land here is so flat, there are no hills or rocks to hide behind.

Comments about what
the interpreter did

Interpreter - Visitor Interaction

- He accepts the visitor's idea and provides additional data.
- Vis: There aren't any trees either.
- Int: So you're saying there was no other form of cover so they made one for themselves. The canal already provided a slight depression in the land. They dug it out some more making it even lower and piled the mud along the bank to make it higher.
- Vis: Well, another reason was so that the British couldn't see them and then they could surprise the troops.
- The interpreter adds some data and asks a recall question.
- Int: OK, the Americans did surprise the British. Did any of you get up early this morning and look out the windows about daybreak? What did you see?
- Vis: It was foggy.
- He extends and adds more information.
- Int: Yes, there was a low fog and it was like that - foggy on the night of the battle here; remember, it was between Christmas and New Years that the British were moving up toward New Orleans. We often have ground fogs in winter and early spring along the river here. So the Americans were hidden and the British couldn't find them. The Americans did attack the British several times before they got to this spot so the British knew the Americans were in the area but they didn't know the exact spot. But if the British were in this area, then why didn't they dig a similar trench and build a mound for themselves?
- He then asks a process question asking for an explanation.
- Vis: Well, if they didn't know where the Americans were, then how would they know where to dig a trench?
- He accepts the ideas and asks for more.
- Int: OK, so you're saying the British had no reason to dig a trench because they didn't know where the Americans were. Any other reasons? (No response from visitors.)
- He asked a process question which could not be answered by the group-- they didn't have any data. He returned to the recall level to get out more information.
- Int: Well, how many of you have ever seen movies which took place during the Revolutionary War or the War of 1812?
- Vis: Several hands go up-- I have.

Asks for the recall
of more information.

Int: What do you remember about how the British fought
in those days?

Vis: They just kind of walked forward in waves or
lines firing their guns as they moved.

The interpreter builds
upon the visitor's con-
tribution and provides
more information.

Int: Yes, actually the rifles they used at the time
could only fire one round at a time. They were
muzzle loaded. This meant that they fired once
and had to reload. They came down the battle-
field in waves. The front line would kneel
down, fire, and drop back to reload and so on.
These were England's most skillful troops at
the time. But their style of fighting was just
no match for the Americans who were used to
fighting in this area. They had used "guerrilla"
tactics in the Revolutionary War about 30 years
earlier; they were skilled in using every oppor-
tunity to out-wit, surprise and ambush the enemy.
So here was one more time when a simple American
frontier type technique out-maneuvered the
sophisticated British.

Vis: I think another important thing is territoriality.

Seeks clarification.

Int: I'm not sure we know what you mean by "territori-
ality".

Vis: Well, it's like, you know, how some animals stake
out a territory and protect it. In the same way
the British were invading our territory and we
were more protective of our own land than they
were.

He asks the visitor to
hypothesize or apply
his idea under a new
set of variables.

Int: Do you think the British would have fought dif-
ferently then, if it were the Americans who were
invading British territory?

Vis: Sure, because then the British would be even
more committed to protect their own homeland--
just like we were here.

Int: OK, let's move on to the last stop of our tour.

TOUR STATION THREE (At The Visitor Center)

Invites the visitor
with a recall question.

Int: Let's take a look at this map of the Mississippi
Valley. Can someone find New Orleans on the map?

Vis: Points to New Orleans on map.

Int: Yes. Notice that it is at the mouth of the
Mississippi River and the whole river system

Comments about what
the interpreter did

Interpreter - Visitor Interaction

He builds data by using map as a data source. He asks the group to explain or reason by asking a process question.

drains the rich agriculture plains states and provides transportation for all the Mid-west. (Gestures toward map) It was from New Orleans that all the products of the Mid-west were transferred to ships and transported to the rest of the United States and the world. Can you see some reasons why both the British and the Americans as well as the French and the Spanish wanted to control New Orleans?

Vis: Well, whoever controlled New Orleans controlled the whole Mississippi Valley.

Vis: Another reason is that it provided a good shipping port on the Gulf of Mexico.

Asks group to make inferences about Napoleon's meaning.

Int: OK. Napoleon once said, "Whatever nation controls the Mississippi Valley would be a world power." What do you think he meant by that?

Vis: Well, they'd own all the rich agricultural land--the corn, wheat and cotton grown here.

Vis: And the oil.

Vis: I think that it's the fact that the river provided a means of transportation--transporting the products--it was necessary to world trade and to link the other states together.

Here the interpreter comes to the main purpose of the talk. By asking this application question he invites the group to deal with the importance of this battle as a turning point in U. S. history.

Int: OK. What do you think might have happened then, if the U. S. had lost the Battle of New Orleans and the British had won the War of 1812?

Vis: New Orleans might belong to the British today.

Vis: We might not have had the westward expansion to the Pacific Coast.

He causes the visitor to explain his idea.

Int: Why not?

Vis: Well, because the British would control the Mississippi Valley and we probably would have stopped moving west.

Vis: England would still probably own the U. S.

Comments about what
the interpreter did

Interpreter - Visitor Interaction

The interpreter adds
more information to
reinforce the visitor's
ideas.

Vis: The U. S. would never have grown to be a world power, because it would be poorer without the riches of the Mississippi Valley.

Vis: And we may not have become a world trade nation because we wouldn't have the port on the Gulf Coast.

Int: All those ideas are probably true. And you remember, too, that at the time the United States was not looked upon by any nation as a particularly strong or powerful country. As a matter of fact, the world could hardly understand how this little upstart of a nation could overcome the powerful English fleet and the crack British troops.

Vis: We really showed the rest of the world, didn't we?!

WORKSHOP E: Planning An Interpretive Activity To Enhance Visitor's Meaning

The purpose of this workshop is to help you plan an interpretive activity using a questioning strategy, carry out the activity, and assess its effectiveness. The workshop consists of two pages in the syllabus. It will take about two hours of work and practice.

Visitors who process data and apply ideas derive more meaning from a park environment than those who merely recall facts and names and dates. A successful interpreter will cause the visitor to operate at higher levels of meaning. The interpreter does this by posing questions that invite the higher levels of thought. Now that you know the types of questions that do this, you can plan an activity that incorporates all three levels.

The chart on the next page will help you plan. To use the chart, first acquaint yourself with your environment. Determine what meanings you want the visitor to derive. Then, plan the questions that will elicit those meanings. Below is an example of how to use the chart.

Meanings I Want The Visitor To Derive	Questions I Could Ask The Visitor
<p>1. To observe the characteristics of a variety of snakes. (RECALL)</p>	<p><i>"What colors do you see in the snake's skin?"</i></p> <p><i>"How does the snake's skin feel to you?"</i></p> <p><i>"What shape are these snakes' eyes?"</i></p>
<p>2. To distinguish between poisonous and non-poisonous snakes. (PROCESS)</p>	<p><i>"How are these snakes' eyes different from those in the case over there?"</i></p> <p><i>"How do the colored bands around these snakes compare with the colors of those snakes?"</i></p> <p><i>"Why do you think I'm handling these snakes but leaving those snakes alone?"</i></p>
<p>3. To predict effects on the environment if the snake populations were reduced. (APPLICATION)</p>	<p><i>"What do you think would happen to the wildlife here in the park if we killed all the snakes that were poisonous to people?"</i></p>

Now use the chart below to review or develop one of your own programs. Describe the levels of thinking or the meanings you want visitors to derive from their experience with you. Write the questions you might ask to elicit such visitor meaning. Talk your questions over with colleagues. Try your questions on a small group of interpreters or an individual visitor. See if they respond to your questions as you hoped.

PLANNING CHART

Meanings I Want The Visitor To Derive	Questions I Could Ask The Visitor

Now conduct your presentation and tape record it. The chart on the next page will help you analyze your activity.

Analyzing An Interpretive Presentation

At the beginning of this training program you were asked to make a recording of one of your activities. Listen to this early recording and tally the number of times you asked a question at each level of meaning. Enter the totals in the chart below. Do the same for the activity you just completed. Compare your first activity with the one you just analyzed and answer the questions at the bottom of this page.

Questions That Elicited:	1st Activity Tallies	Total	2nd Activity Tallies	Total
Recall				
Process				
Application				
Questions I Could Not Identify				

1. How do the number of questions in the second activity compare with the number in your first activity?
2. Compare your sequence of questions. What sequence did you use in each recording?
3. What proportion of each type of question do you see? Is there more balance in your second tape?
4. Are there fewer questions on the second tape that you cannot identify?
5. Describe how your visitors responded differently between the two activities.
6. What will you plan to do differently in your future activities?

Structuring Strategies

Module Three

STRUCTURING STRATEGIES

The purpose of this module is to provide you with knowledge and practice in the second interpretive strategy: structuring. Upon completion of this module you should be able to:

- 1. Distinguish between four types of structuring: written, verbal, non-verbal, and logistical.*
- 2. Compose verbal structuring statements that will cause desired behavior in visitors.*
- 3. Give a description of some desired behaviors of visitors, select the logistical structuring that would best contribute to the performance of those behaviors.*
- 4. Plan an interpretive activity incorporating various structures that enhance visitors' meaning.*

This module consists of four workshops in the syllabus and one video-tape. The total module will take about 5 hours to complete.

The purpose for structuring is to give visitors some idea in advance as to what they might expect from the experience. Structuring helps the visitor understand what is to happen to him and to know the types of activities in which he will be engaged. It insures that the visitor can achieve satisfaction and success in the group task. It focuses his attention on the meanings you hope he will derive.

Every interpreter in every setting structures that setting in some way. This might be done consciously or unconsciously, directly or indirectly. Just the fact that an interpreter is present affects the way visitors behave.

Structuring is most effective when the interpreter does it consciously, deliberately, and clearly, and when it relates directly to the meanings the interpreter wants the visitors to acquire.

Interpreters usually establish structure in these ways:

1. verbally - orally communicating directions to visitors.
2. non-verbally - communicating by gesture, motion, or some other "body" language.
3. by writing - communicating directions through the use of signs, bulletin boards, and brochures.
4. by logistics - organizing and reorganizing the physical arrangement of the people and materials so as to accomplish certain tasks.

WORKSHOP A: Verbal Structuring

The purpose of this workshop is to let you practice verbal structuring. It consists of two pages in the syllabus and will take about one hour to complete.

Verbal structuring means that the interpreter states the objectives, purposes of the activity, describes any ground rules, outlines tasks, identifies any constraints or directions. Some examples of verbal structuring might be:

"We are going to see a short film today, showing an enactment of the battle. After the film, we will tour the battleground."

"The tour will take about 45 minutes."

"Let's move, now, to the second stop on our tour."

"Please do not touch any of the geologic formations along the route."

"Now, if you have any questions, I would be glad to try to answer them."

"If you'll move up closer, perhaps you can see better."

"I would like each of you to think back over the tour and tell the group what one thing was most important to you."

Meaning will be enhanced for the visitor if the interpreter clearly communicates the purposes, directions, and tasks and any ground rules prior to the activity. If the directions are confusing, incomplete, or too complex, the visitor will not be able to focus properly on what meaning you want him to derive.



Look at the examples in the chart below. The examples are statements which might be used to structure a group of visitors so they will perform particular activities.

Desired Behavior of Group	Interpreter's Verbal Structure
1. To observe the environment for ways people have disturbed, intruded into, or altered the ecosystem.	<i>"What I'd like you to do is to follow me down this trail and as we are walking, look for evidence that man has been here before. When we get to the bottom of the trail, I'll ask you to share your observations and tell what you saw that indicated man's presence here."</i>
2. To listen to a presentation on the geological forces that have created the unusual formations in this park.	<i>"Now, if you'll all be seated, I'd like to tell you about how some of the formations you've seen have been created."</i>
3. To ask questions of the interpreter to clarify or extend meaning.	<i>"If there are any questions, I'd be happy to remain after to discuss them with you."</i>

Use the blank chart on the next page to describe several activities or behaviors that you want your visitor group to perform. Write the verbal structures you will use to invite or cause them to perform those activities.

Desired Behavior of Group

Interpreter's Verbal Structure

WORKSHOP B: Non-Verbal And Written Structuring

The purpose of this workshop is to introduce you to two more types of structuring. The workshop consists of two pages in this syllabus and will take about 15 minutes to study.

Sometimes the interpreter finds it necessary to communicate certain directions to a group of visitors. Pointing to direct the visitors' eyes, a hand to the mouth to indicate silence, or beckoning to invite their attendance are all examples of non-verbal structuring.



Nancy beckons with a gesture to call her visitors back into a group for a discussion of what they observed.



An interpreter points to direct the visitors' attention.



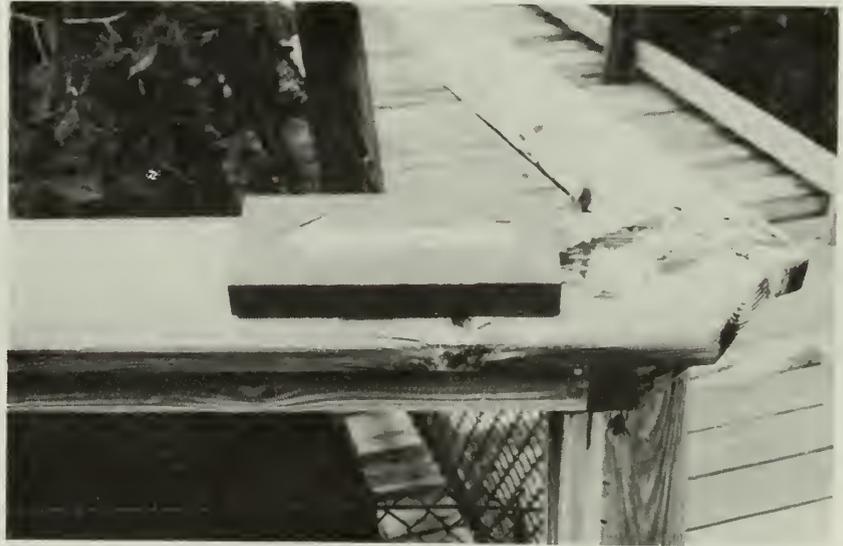
The interpreter's hand, held out to the visitor, invites him to touch the snake.

Throughout your park there are probably signs that direct the visitor to certain points of interest or that identify procedures. Sometimes signs delimit areas where the visitor must stay. Each of these is an example of written structuring. Here are two more taken from a brochure given to each visitor upon entering a park. The brochure states:

"Your first stop should be the visitor center near the park entrance."

"Do not feed or disturb the animals. Do not damage, remove, or disturb the plants in any way."

After looking at the photos below, think of some examples of written structuring in your park environment.



CAMP 7

YOSEMITE NATIONAL PARK

DOGS & CATS ALLOWED IN CAMP ONLY.
NO NAILS OR WIRES ON TREES.
DRIVE CAUTIOUSLY-WATCH FOR CHILDREN.
QUIET BETWEEN 10 PM AND 6 AM.
CAMPING LIMIT 7 DAYS-JUNE, JULY, AUG.
INJURING TREES, SHRUBS NOT PERMITTED
FEEDING DEER AND BEAR PROHIBITED.
KEEP CAMPSITE CLEAN.
IN EMERGENCY SEE RANGER OR CALL ^{FR-2} 4466

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

WORKSHOP C: Logistical Structuring

The purpose of this workshop is to introduce the fourth type of structuring. The workshop consists of 20 pages in the syllabus and a Video-tape. It will take about 2 hours of study.

In this section we shall present seven possible ways that an interpreter can organize visitors to maximize the possibility for their deriving meaning from the park environment. The seven patterns can serve as guidelines for you as to how it is possible to increase the range of ways that you can arrange visitors, provide for interaction, utilize materials, conduct tasks, and check on progress of those tasks. The use of any of these patterns depends upon what meaning you want your group to derive and upon what activities you will want to conduct.

Different purposes necessitate different patterns of organization. Hopefully, the more ways that an interpreter is able to organize a group, the greater is the possibility that meaning will be obtained.

Study each of the seven patterns on the following pages.

1. Individual Task Structure

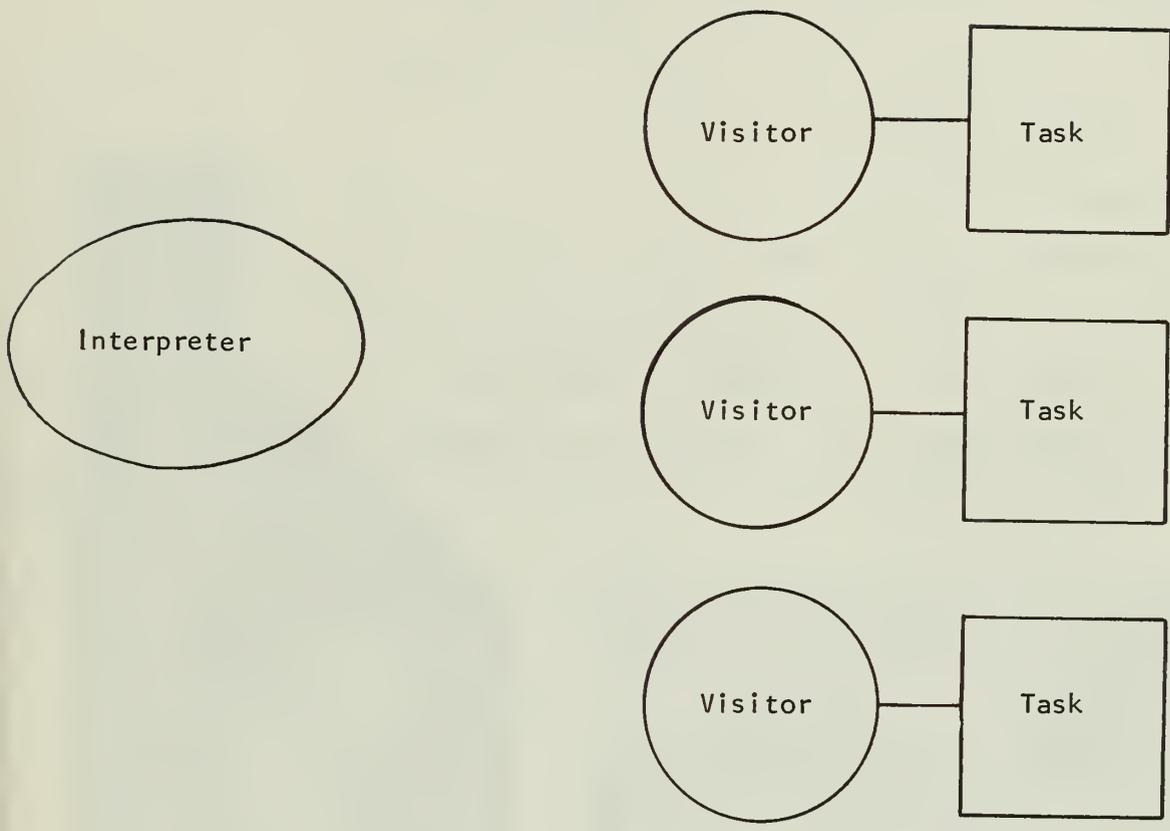
This pattern of structuring is useful when assigning a task to an individual. It is most often observed when an interpreter wants each person to make his or her own observations, perform a unique role, or complete an exercise. Each individual can be engaged in a different task, or all can be assigned a similar task.

This pattern allows the interpreter to move from person to person, diagnosing, providing information, and assisting.



A typical verbal direction that might accompany or initiate an individual task structure might be:

"I would like each of you to use your senses to observe. If you see an unusual bird, call it to the attention of the rest of the group."

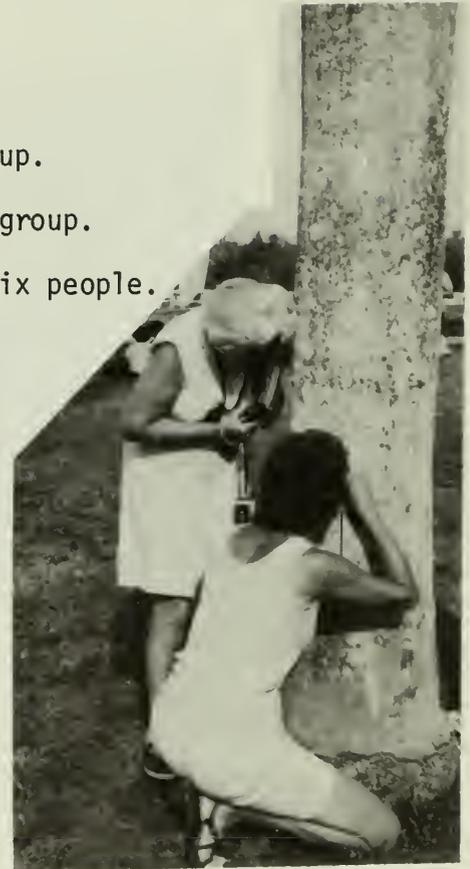


List ways in which you can use this type of structure in your park environment. _____

2. Small Group Task Structure

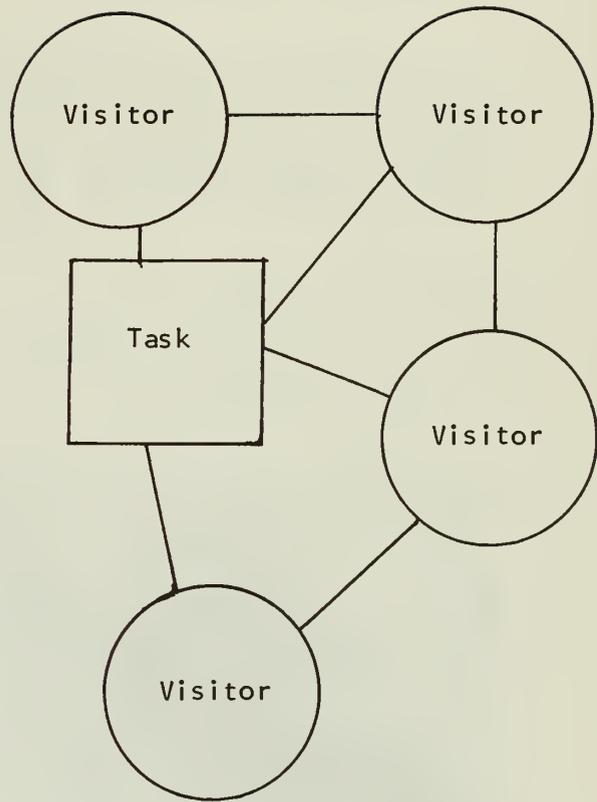
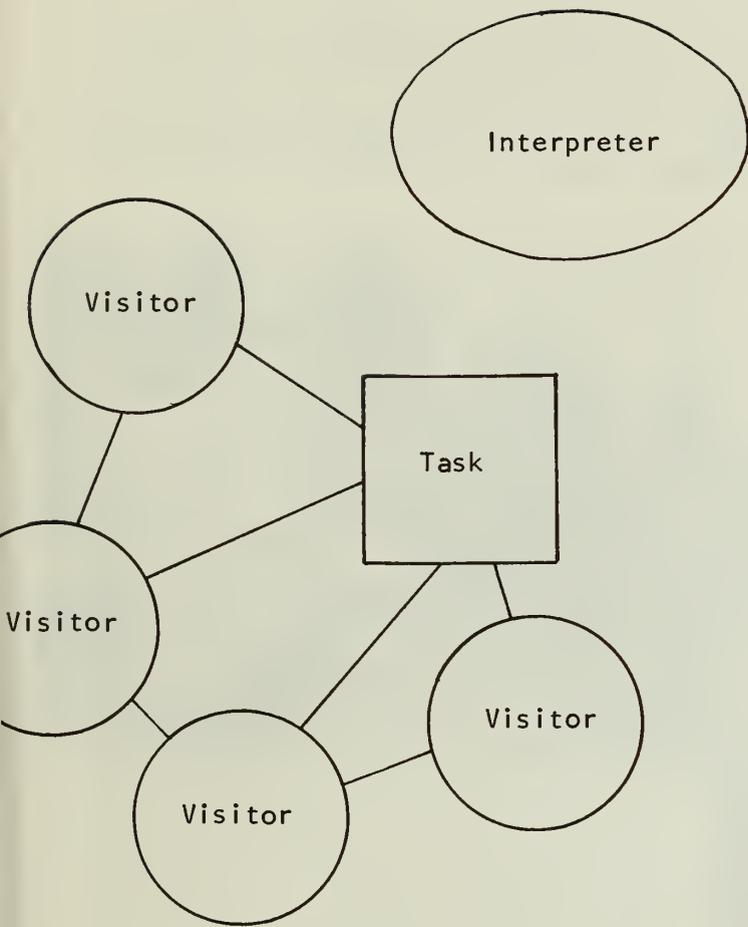
The small group task structure can be an effective way to involve visitors in many types of experiences. It allows each member a chance to participate in making some contribution. A few suggestions will insure the success of small groups:

1. Be sure the task is clearly defined and understood.
2. Provide the necessary resources.
3. Check on the progress of the groups.
4. Hold to a realistic time schedule.
5. Provide for feedback to the larger group.
6. Delineate roles of individuals in the group.
7. Keep each group small, not more than six people.
8. Evaluate the group's functioning.



The typical verbal directions that might initiate or accompany this type of structuring are:

"I would like you to count off from one to four. All the fours form a group and gather around this tree. Your job will be to make observations of the life on that tree. Here is a 3 x 5 card to record your observations. I'd like someone to act as a recorder for the group."



List ways in which you can use this type of structure in your park environment. _____

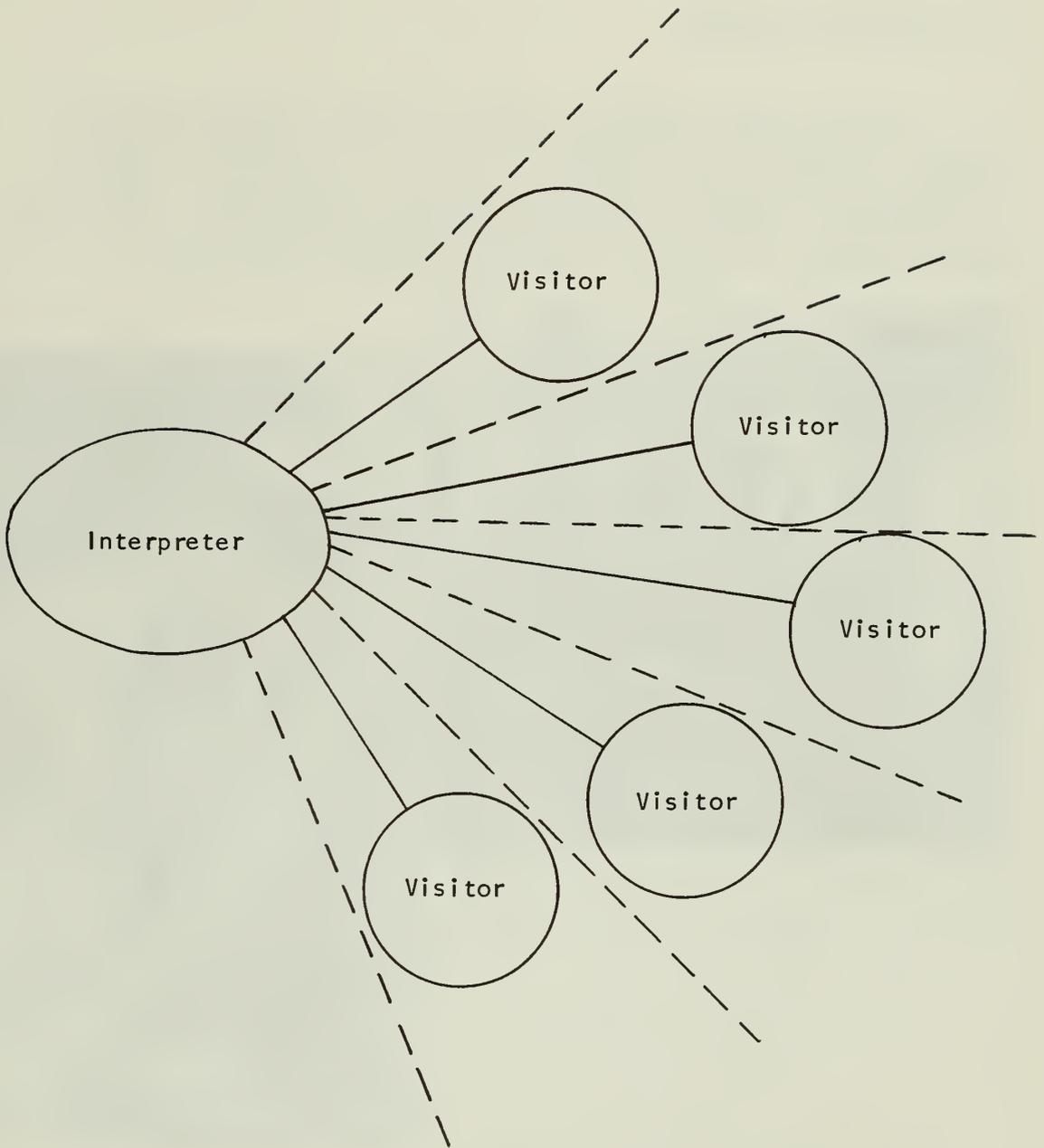
3. Tutorial Structure

The tutorial structure allows the interpreter a greater chance to listen and to help individuals. The purpose of the tutorial structure is to check the progress of the group's or the individual's interpretation or task. The interpreter can use the tutorial structure to deal, in turn, with individual members of the group. While the interpreter is working with one group, he can still be aware of other groups of individuals at work.



A typical verbal structure that would initiate or accompany the tutorial pattern would be:

"Let me see how you are coming along so that I can help you with any difficulties you might have."



List ways in which you can use this type of structure in your park environment. _____

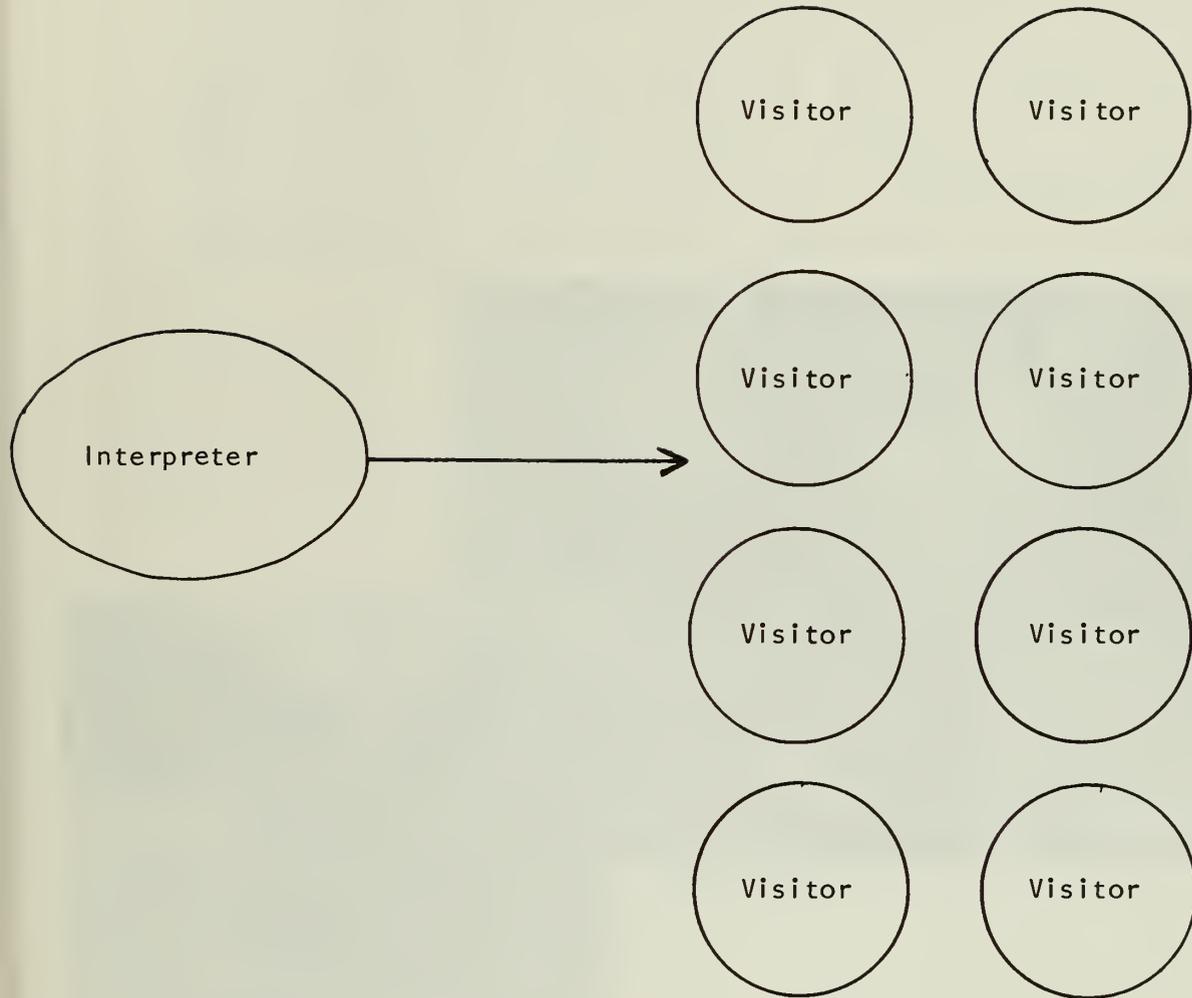
4. Didactic Structure

In this type of grouping, the interpreter presents material with the purpose of sharing or informing. It is generally used to review, to clarify, to instruct, or to give directions. Didactic structuring is commonly recognized as public speaking or lecturing. A television, film, or other audio-visual presentation to which the group listens or attends is a form of didactic structuring.



A typical verbal structure that would accompany or initiate this type of pattern might be:

"Today, on this tour, I'll be talking to you about..."



List ways in which you can use this type of structure in your park environment. _____

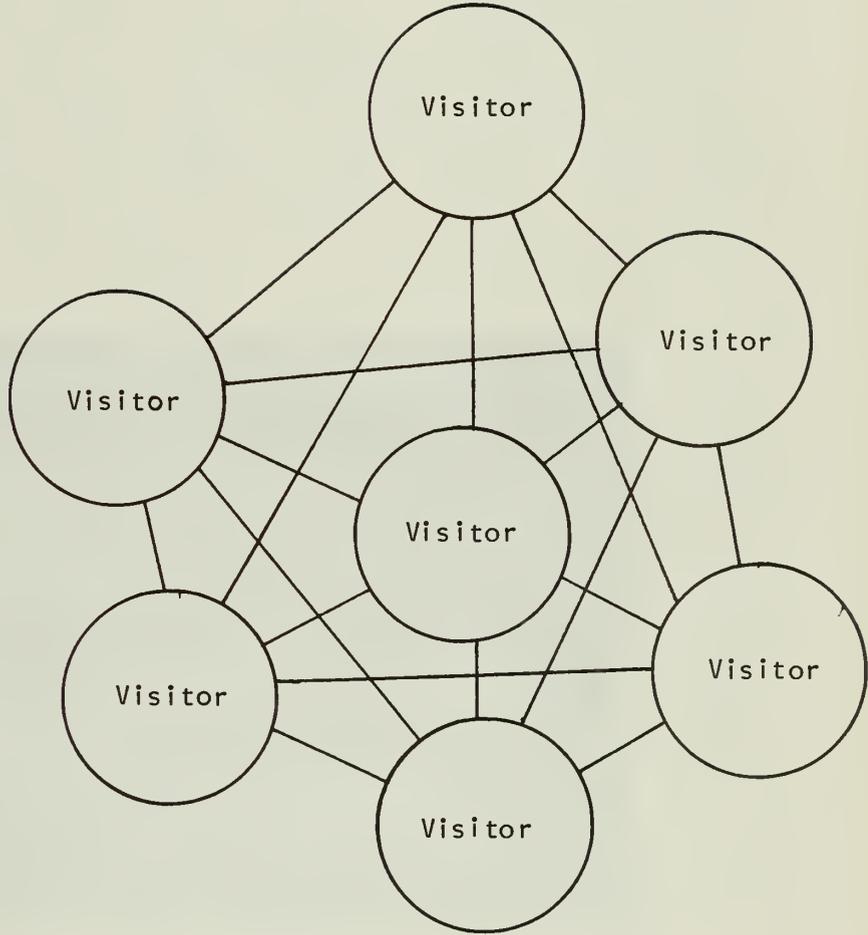
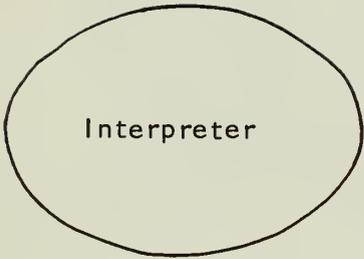
5. Conference Structure

The conference structure allows a free, uninhibited discussion by visitors among themselves on a topic of importance to them. It can make a very valid contribution to any tour when the subject is of significant concern to the visitors themselves. No advance preparation is possible, other than to be alert to interests and problems and to allow the visitors to consider and discuss on their own. All the interpreter can do is to stay out of the way. He lays aside his planned objectives to give visitors an opportunity to discuss something of interest to them. The interpreter should listen to the visitor's opinion, notice who is taking part, watch for group reactions, and be ready to answer questions.



A typical verbal structure that might accompany the conference structure could be:

"Let's take about 5 minutes at this point on the trail for you to just browse or talk among yourselves."



List ways in which you can use this type of structure in your park environment. _____

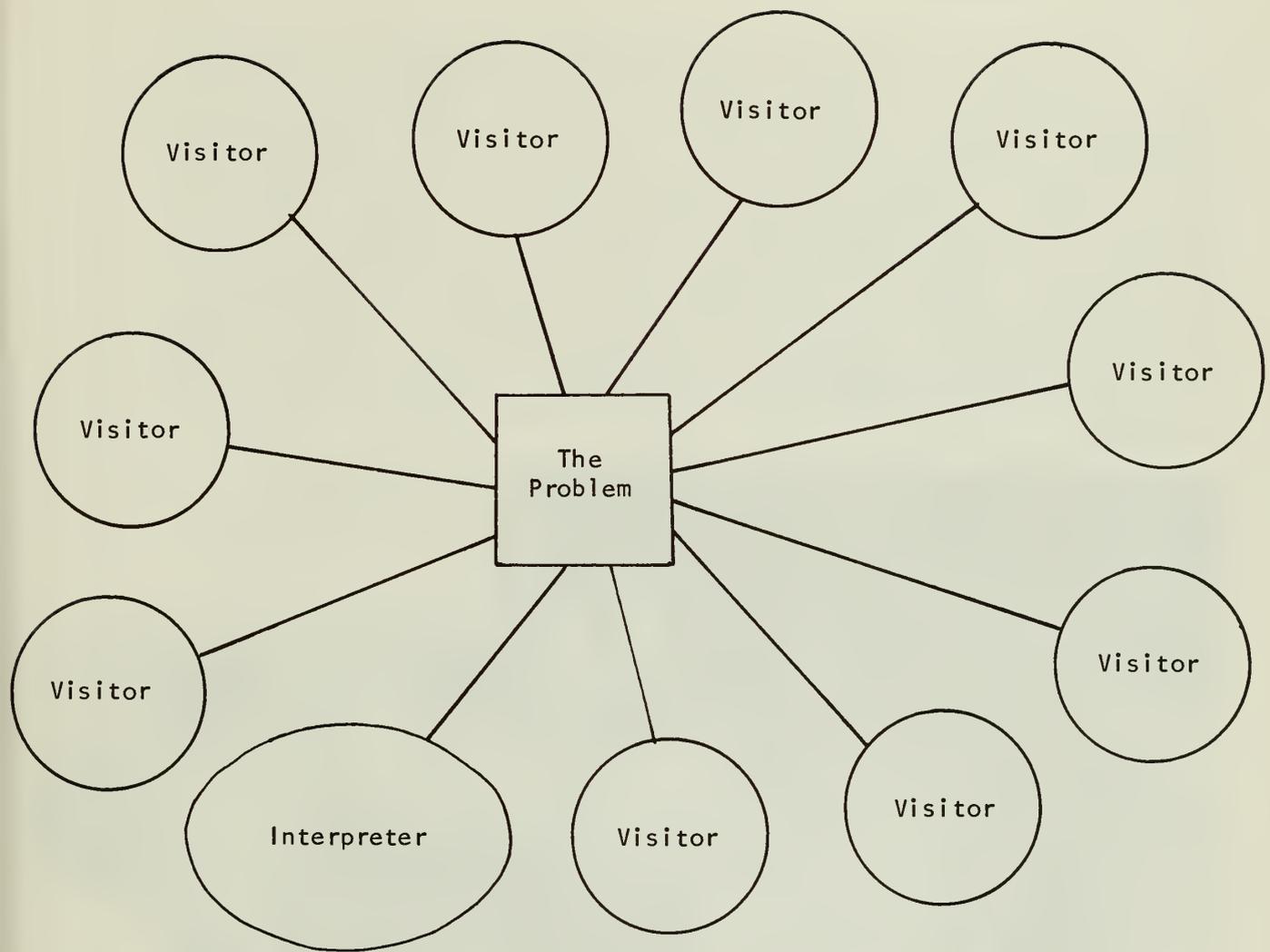
6. Group Meeting Structure

The main difference between the conference structure and the group meeting is that in the group meeting the interpreter enters the discussion and can initiate a problem for group consideration. The group meeting might be referred to as a "brainstorming" session that is free and uninhibited. It tends to be problem or solution centered. The interpreter's role is to present or raise a problem for the entire group to consider, but the interpreter does not offer solutions himself. He listens, clarifies, and remains non-judgmental, willing to go along with the group's decision. He enters the discussion as a participant rather than a leader. This provides a true, open-ended discussion since the interpreter does not direct but rather listens and clarifies.



A typical verbal structure that might accompany this type of organization is:

"We're having a problem with the sewage facilities from the number of motels and living units being built in the park. We are beginning to pollute the rivers flowing through the park. I'd like to offer you a little time to suggest how we might solve this problem."



List the ways in which you can use this type of structure in your park environment. _____

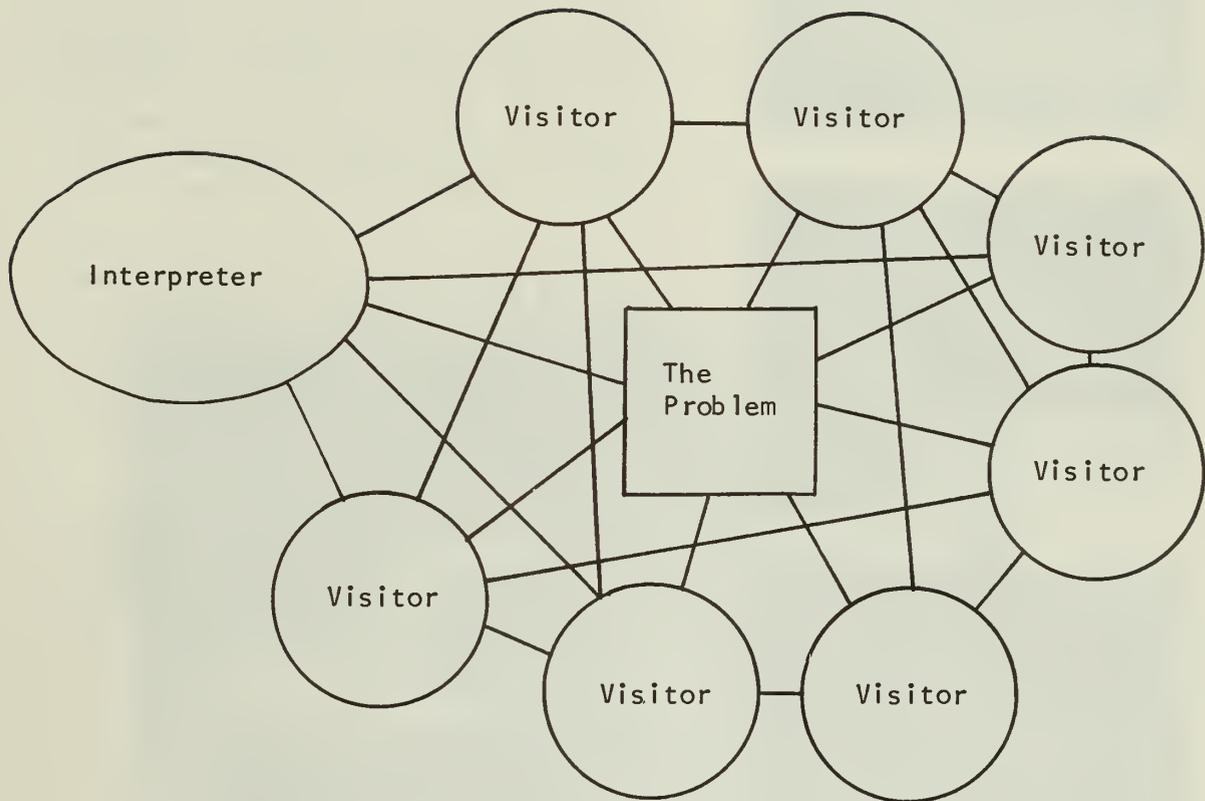
7. Socratic Structure

In this type of structure, the interpreter becomes the questioner and the responder. He has some definite meanings in mind which he desires the group to acquire. He often begins by posing a problem or question for the group to resolve or answer orally. The questions are ones that can best be answered through the open exchange of ideas, through comparisons or perceptions, and through dialogue by sharing each person's meanings. The questions elicit higher levels of thought. After having posed the questions, the interpreter continues throughout the discussion to listen, to clarify, to diagnose thinking levels, and to cause individuals to justify their ideas. The interpreter refocuses, adds data for which the visitor must account, and probes for ideas and feelings. A good socratic structure requires a highly skilled leader who is conscious of the levels of thinking. It is probably the most taxing and demanding of all the structures.



A typical verbal dialogue that accompanies this type of structure is:

"Look at the palm fronds on those two trees. How do they compare? How do you explain why one looks stiff and green while the other is drooping and brown? What do you think might have happened had these trees not been cared for by the park service?"



List ways in which you can use this type of structure in your park environment. _____



Each park environment has a variety of possibilities for structuring interpretive talks and tours. At some sites, visitors might stay an average of twenty minutes or so; at others they may stay several days. Some parks might be arranged so that visitors must walk in single file down a narrow path; other parks might have a vast auditorium and audio-visual facility. Some sites might only be reached by boat, and the visitor has a limited stay before he must catch the next ferry home.



Such constraints can inhibit or enhance your use of any of the seven logistical structures. A didactic presentation might be adequately covered in 20 minutes; a Socratic discussion might go on and on depending upon visitor interest.



Perhaps it is just not feasible for you to use all seven structures. We invite you to examine your park environment and search out the structures that are possible.



Viewing the Video-tape .

In this 20-minute tape, each of the types of logistical structures are identified. Five of the seven types are accompanied by examples from the field.

After viewing the tape, go on to the next page.



After Viewing

Using one or more of the seven logistical structures described in this module, select those that you think would best contribute to the visitor's performance of the following activities.

LOGISTICAL STRUCTURES

Read each activity, write in the structure that best accomplishes the activity, then check your choices with those given on page 88.

- | | |
|-----------------|---------------|
| Individual Task | Small Group |
| Conference | Group Meeting |
| Tutorial | Socratic |
| Didactic | |

1. The group of visitors will watch a slide presentation on the formation of Lake Tealhue.

_____ Structure

2. While walking down the trail to Lake Tealhue, each visitor will be asked to look for at least two forms of wildlife inhabiting the environment.

_____ Structure

3. Given collecting jars and hand lenses, groups of 5 to 6 visitors will collect samples of pond life at the water's edge.

_____ Structure

4. While the groups of visitors are collecting, the interpreter will move from group to group checking on progress and assisting in their observations and collections.

_____ Structure

5. After the interpreter orally poses these questions to the group,

"What evidences of pollution of the lake did you see?"

"What do you think causes that pollution?"

and

"What differences might there be in the lake today if there were no building restrictions or regional planning for the area surrounding the lake?"

the visitors will:

- ...recall indications of pollution that they observed
- ...state cause and effect relationships
- ...speculate on differences in the lake under controlled conditions.

_____ Structure

6. The reporter from each small group will tell the rest of the total group what his group observed and collected.

_____ Structure

7. The interpreter poses the problem to the group of what should be done and what actions might be taken to stop further pollution of Lake Tealhue.

_____ Structure

8. After the hike to the lake and the talk was over, I stayed around to discuss ideas and answer questions. Some visitors wandered together to the lake shore, others congregated in groups to talk together. Although I had requested them to return the samples of waterlife back to the lake, one little boy dumped his out on the dirt. This upset the rest of his group, and I overheard them discussing why he should have returned his sample to the water.

_____ Structure

Compare the structuring choices you identified on the previous two pages with those given below.

1. Didactic Structure. The group merely listens to and observes the slide presentation.
2. Individual Task Structure. Each visitor is asked to perform a certain task.
3. Small Group Structure. Visitors are organized into groups of 5 to 6 to accomplish a task.
4. Tutorial Structure. The interpreter checks on the progress and helps the small group.
5. Socratic Structure. The interpreter has some definite questions planned to elicit and enhance visitor understanding.
6. Didactic Structure. In this case the reporter from each group talks while the rest of the group listens.
7. Group Meeting Structure. The interpreter invites visitors to contribute to a problem needing a solution.
8. Conference Structure. The interpreter allows the group time to discuss what they wanted to discuss.

If you missed more than 5 of the examples, you might review this workshop and the video-tape on logistical structuring.

WORKSHOP D: Using Logistical Structures

The purpose of this workshop is to guide you in planning the structures you might use in an interpretive activity. The workshop consists of two pages and will take about 1 hour to complete.

List some activities for an interpretive activity or tour you'd like to do. List them in some detail on the chart on the next page. Select the logistical structure that will facilitate the visitor's performance for each of the activities. As an overall goal, plan to incorporate at least three different structures during your activity.

The example below shows one way in which planning can be done using the chart as a guide.

Activity	Logistical Structure
1. The visitors will listen to the directions for the tour activities.	Didactic
2. Given various seeds and other materials including balloons, tape, cotton, cardboard, tongue depressors, scissors, rubber bands, etc., visitors will create examples of seeds that can float on water, float at least 3 feet distance through the air, travel by hooking on to an animal or man, be carried by an animal, be mechanically catapulted a distance of at least 2 feet.	Individual Task
3. Each visitor will describe his altered seed to the rest of the group.	Didactic
4. Working in groups of 3 to 4, each group will try to locate seeds from the environment that function in the manner described above.	Small Group
5. When the questions are posed, " <i>What relationships do you see between a seed's structure and the function that that structure serves? Why do you think this horse chestnut seed is constructed as it is,</i> "? visitors will make inferences and give explanations of the seeds' structure and what function that structure serves.	Socratic

PLANNING CHART

Activity	Logistical Structure

After trying your plan with some visitors, think about how you would respond to each of the following questions.

1. What effect did the variety of structures have on the groups' functioning?
2. What other structures could I have used?
3. What visitor reactions did I receive from the activity?
4. What constraints of time, space, or resources does my park impose on the types of structures I could use?

The following statements and questions will guide you further in using logistical structures in your park environment. Jot down responses in the spaces provided.

Describe the major characteristics of your park environment.

What facilities do you have? (rooms, audio-visual equipment, shelter area, open space, etc.)

How do these facilities contribute to or place constraints on your structuring?

Can any of these constraints be changed or altered to better meet your structuring needs?

How long does the average visitor stay at your site?

How many visitors come on a tour per day? per hour? Does the number change on weekdays, holidays, weekends?

How much time is taken per tour? Who decides the time limit? What is the possibility of changing that limit?

Talk about structuring possibilities with your fellow interpreters. What variety of structures do they use? What interesting organizational patterns of visitors might be tried? Discuss your ideas with your supervisor. Explain to him what you mean by structuring and how it affects visitors.

Responding Strategies

Module Four

RESPONDING STRATEGIES

The purpose of this module is to provide you with knowledge and practice in the third of several effective interpretive strategies. Upon completion of this module on responding you should be able to:

- 1. Identify from written examples four types of responsive behaviors: accepting, using silence, clarifying, and facilitating data.*
- 2. Create in written form samples of these behaviors.*
- 3. Plan an interpretive activity, conduct the activity, tape record it, and analyze the tape for the use of these behaviors.*

This module consists of four workshops in the syllabus and one video tape. The total module will take about 6 hours of work.

While questioning and structuring strategies are used extensively by interpreters to elicit or cause desired behavior in visitors, another group of behaviors are less frequently thought about. These behaviors are taken after having asked a question or elicited a behavior in visitors and are referred to as responding strategies.

It has been found that the manner in which the interpreter responds to the visitors' ideas has a great influence on maintaining the level of thinking in the visitor, his attitude toward the subject, and his rapport with the interpreter. The manner in which the interpreter responds to the visitor has a direct influence on the meaning which the visitor derives from the park environment.

In this module you will examine four behaviors that the interpreter can use to respond to the visitor. They are: ACCEPTING, USING SILENCE, CLARIFYING, and FACILITATING DATA. Each of the four basic types of responses are described with examples on the following pages. Study pages 91 to 99 and then view the 30-minute video-tape which discusses and demonstrates each of the responsive behaviors.

Accepting

If one truly wants visitors to leave the park with their own interpretation, then the visitors must be free to try out ideas on each other and with the interpreter without fear of making mistakes. An interpreter who is accepting is one who is non-evaluative and non-judgmental. If one wants to maximize the involvement of visitors answering questions, offering ideas, asking questions, and voicing opinions, then each visitor must feel psychologically safe. Each must not be afraid to take risks.

The interpreter creates a psychologically safe climate by remaining non-judgmental. He gives no clues through posture, gesture, or word as to whether a visitor's idea is good or bad, right or wrong, better or worse. Even though these ideas may differ from those of the interpreter, the interpreter can still accept them because he knows that it is up to the visitor to modify his own thinking, to derive his own meaning, to perform his own interpretations.

Allowing the visitor to feel that his idea or answer to a question was in any way unsuitable, unwarranted, inferior, or "stupid," will cause the visitor to have feelings of failure, alienation, or rejection. The visitor will probably make no further contributions to the discussion, and will develop poor feelings toward the park and the interpreter. These feelings would cloud his interpretation and detract from any meanings he might derive from the environment.

Conversely, heaping praise, lauding a visitor's idea or answer, or calling attention to a visitor's superior contributions also can detract from the group's understanding and functioning. Interpreter's responses such as "*correct*," "*that's right*," "*good for you*" cause conformity, convergence, and inhibited thinking. This is particularly true when the interpreter wishes to maintain visitor thinking at the process and application levels. At these levels of thinking there are usually a variety of interpretations, multiple meanings, and diverse viewpoints. There is more than one answer. Therefore, when the interpreter heaps praise, tells the visitor that his answer is correct or agrees with the visitor's idea, it tends to stop discussion, inhibit further exploration and discourage alternative viewpoints. It brings conclusion to thinking. An illustration of this follows.

The interpreter poses an application question:

"What do you think would have happened to this old home if it had not been designated as a National Historic Landmark?"

A visitor responds by saying:

"There'd probably be a freeway through here now."

The interpreter responds to the visitor's idea by saying:

"Yes, that's correct. There probably would be."

With the interpreter's response, the others in the group would tend to extinguish their ideas or probably not volunteer an idea because the conclusion given was labeled as the correct one. Diversity of thinking would be discouraged because the interpreter converged the group's thinking on one conclusion.

There are several alternatives to giving the visitor praise or criticism in response to his behavior. Three alternatives are PASSIVE ACCEPTANCE, ACTIVE ACCEPTANCE, and EMPATHIC ACCEPTANCE.

1. Passive Acceptance. This type of acceptance means that the interpreter merely receives what the visitor is saying without value judgment about the quality of the statement. It is a demonstration that the visitor's idea or statement has been heard. Examples of passive acceptance are:

"Um-hmm."

"Okay."

"That's one possibility."

"I understand."

"Could be."

Some non-verbal examples of passive acceptance might be a nod of the head or the writing of the visitor's statement on a chart or chalkboard.

2. Active Acceptance. This type of acceptance means that the interpreter demonstrates his understanding of what the visitor says or does. The interpreter does this by rephrasing, recasting, translating, or summarizing what the visitor or several visitors have said or done. Active acceptance is when the interpreter extends, builds upon, compares, or gives an example based upon what the visitor has said. While the interpreter may use different words than the visitor, the interpreter strives to maintain the intent and meaning of the visitor's idea. Active acceptance is more than passive acceptance because the interpreter demonstrates not only that he has received the visitor's message, but also that he understands it. Examples of active acceptance are:

"What I hear you saying is that if the heat were increased, the molecules would move faster and therefore cause the rock to crack."

"Your idea is that we should all write to our legislators rather than send him one letter from this Audubon Chapter."

"Your question seems similar to Tom's in that you're both wondering how we can predict the volcano's next eruption."

"You think the grass tastes like potatoes while this gentleman suggests it tastes like turnips."

"An example of what you are suggesting might be the changing color of the chameleon, which conceals the lizard from view."

Active acceptance is a reinforcing behavior. The use of active acceptance by the interpreter demonstrates to the visitor that you have listened to him, that you value his idea, and that you understand him. Taking the time to reflect back or paraphrase the visitor's idea conveys to the visitor an interest in him. This establishes a rapport, an affinity, and a warmth between the visitor, the interpreter, the park environment, and the meaning at hand.

3. Empathic Acceptance. This type of acceptance is an acceptance of feelings as well as ideas. The interpreter exhibits empathy when he accepts a visitor's feelings, emotions, or behaviors. Often, the interpreter expresses similar feelings from his own experiences such as:

"I can understand why you'd be confused. Those directions were unclear to me, too."

"Whew! That was a long walk. I can see why you'd be tired."

"I can understand why you'd be upset when you see the beer cans in the river. It makes me angry, too."

"Don't feel embarrassed. Many people get confused as to which are the stalagmites and which are the stalactites."

Using Silence

It has been found that many interpreters wait only one or two seconds after having asked a question before they either call on a visitor, ask another question, or give the answer to the question themselves! Many interpreters feel that unless someone is talking, no one is learning. It has also been found that if, after the interpreter asks a question or after a visitor gives an answer, the inter-

preter waits, there are observable differences in the behaviors of the visitors.

If the interpreter waits only a short time - one or two seconds - then short, one-word type visitor responses will result (as if the visitor is saying, "*Is that what you want?*"). On the other hand, if the interpreter waits for a longer period - three to five seconds - the visitor tends to respond in whole sentences and complete thoughts. There is increased speculativeness in the visitor's thinking, and he tends to justify his answer more fully. It has also been found that there is an increase in the visitor-to-visitor interaction when the interpreter punctuates his talk with periods of silence.

Sometimes periods of silence may seem interminably long. If, however, visitors are to be given an opportunity to do their own thinking, their own reflecting, their own interpretation, the interpreter should learn to be comfortable in allowing these quiet times. Furthermore, when the interpreter remains silent, it indicates to each visitor that the responsibility for deriving meaning is the visitor's - not the interpreter's.

Clarifying

When a visitor uses some terminology, expresses a concept or idea, or asks a question that the interpreter does not understand, the interpreter might want to clarify the visitor's idea. He does this by inviting the visitor to be more specific or by requesting the visitor to elaborate on or rephrase his idea. He may express his lack of understanding of the visitor's idea and seek further explanation of it.

The intent of clarifying is to help the interpreter better understand the visitor's ideas, feelings, and behaviors. Clarifying is not a devious way of changing or redirecting what the visitor is thinking or feeling. It is not a way of directing the group's attention to the "correct answer".

Clarifying is similar to active acceptance and is often confused with it. Both reflect the interpreter's concern in fully understanding what the visitor is attempting to say. Active acceptance demonstrates that the interpreter truly does understand what the visitor is saying. Clarifying demonstrates that the interpreter does not understand, thus more information is needed. By clarifying, the interpreter shows the visitor that his ideas are worthy of exploration and consideration; it is just that he does not understand the visitor.

Acceptance is usually demonstrated by an expository statement. Clarification is usually in the form of a question. For example:

"Could you explain to me what you mean by 'charisma?'"

"What I hear you saying is that you'd rather work by yourself rather than in a group. Is that correct?"

"Are you suggesting that we try the experiment again? Where do you suggest we begin?"

"You'll have to be more specific. Whose armies were you referring to?"

"When you said 'they,' did you mean the British or the Americans?"

Facilitating Data

One of the purposes of interpretation is that the visitor process data or information by comparing, classifying, making inferences, and drawing cause and effect relationships. When the visitor needs or requests it, the interpreter makes it possible for the visitor to acquire the information needed to resolve his question or to assist him in accomplishing his task.

The interpreter must create a climate that is responsive to the visitor's quest for information. He can do this in a variety of ways:

- a. By making it possible for the visitor to experiment with equipment, materials, and ideas.
- b. By serving as a data source himself.
- c. By calling upon members of the group as data sources.
- d. By making sources of information such as almanacs, maps, field guides, charts, graphs, etc. available.
- e. By supplying manipulative materials to extend the visitor's powers of observation and enhance his senses. These might include binoculars, hand lenses, microscopes, etc.

The following are some examples of how data might be facilitated for the visitor.

Visitor: *"What's the name of that bird?"*

Interpreter: *"It's called a purple gallinule."*

Visitor: *"Where are we located right now on this map?"*

Interpreter: *(pointing) "Right here. See, here is the visitor center."*

Visitor: *"Has the number of visitors who come to this park been increasing or decreasing?"*

Interpreter: *"Here's a chart. It shows the visitor count each year for the past 10 years."*

Visitor: *"Do these birds feed at night or during the day?"*

Interpreter: *"At night."*

Visitor: *"When was this fort built?"*

Interpreter: *"During the period 1806 to 1809. It took about 3 years to build."*

Visitor: *"I'd like to know how many people here are from California."*

Interpreter: *"OK. All those of you from California, raise your hands."*

The following pages present some photographs that show examples of ways interpreters can facilitate data to enhance visitor understanding.



A visitor shares his information with the group.

FACILITATING DATA

A visitor searches for an answer to his question from a book.



These visitors gather information directly by observing the palm frond.

Jan picked a coco-plum.
"What does it taste like?" a visitor
asked. "Here, taste it," Jan replied.



A Field Guide to Birds
of the Everglades serves as a
data source.

"Do the coverings on the snake's
eyes come off too when it sheds its skin?"
Here, see for yourself."



WORKSHOP A: Identifying Responsive and Verbal Structuring Behaviors

The purpose of this workshop is to provide you with practice in identifying responsive behaviors and to couple this practice with information you already know about verbal structuring. The workshop consists of three pages in the syllabus and will take about 30 minutes to complete.

In the spaces provided, write in the responsive behaviors for each example. Some verbal structuring is included in this list to serve as a review.

When you are finished doing these two pages, compare your answers with those given on page 102. If possible, discuss your answers with other interpreters.

RESPONSIVE BEHAVIORS

Accepting

Passively
Actively
Empathically

Using Silence

Clarifying

Facilitating Data

-
- | | |
|---|----------|
| 1. <i>"What I hear you saying is that the heat from your hand went through the glass and caused the liquid in the thermometer to expand."</i> | 1. _____ |
| 2. <i>"First we're going to see a film today and afterwards I'll ask you to list what information you have observed."</i> | 2. _____ |
| 3. <i>"I understand your idea."</i> | 3. _____ |
| 4. <i>"Could you explain to me what you mean by 'expansion?'"</i> | 4. _____ |
| 5. Visitor: <i>"What's the name of that thing?"</i>
Interpreter: <i>"It's a 'frow.'"</i> | 5. _____ |

- | | | | |
|-----|---|-----|-------|
| 6. | <i>"That's one possible outcome."</i> | 6. | _____ |
| 7. | <i>Interpreter: "What other uses could
you make of this rock?"</i> | 7. | _____ |
| | <i>Then: " _____ "</i> | | |
| 8. | <i>"Let's write down your idea along with
the others."</i> | 8. | _____ |
| 9. | <i>"I can understand how you feel. It's
really hot today. I'm sweltering, and
you've had a long drive to get here."</i> | 9. | _____ |
| 10. | <i>"Here is a map. It will show you where
the campgrounds are located."</i> | 10. | _____ |
| 11. | <i>"Um-hmm."</i> | 11. | _____ |
| 12. | <i>"The difference is that the alliga-
tor has a broad head while the croco-
dile's head tapers to the snout."</i> | 12. | _____ |
| 13. | <i>"Are you suggesting we add more color
to the painting? Which colors do you
mean?"</i> | 13. | _____ |
| 14. | <i>"Let me see if I understand you. You're
saying the boss said it was all right to
to come to work late each day?"</i> | 14. | _____ |
| 15. | <i>"Water boils at 212° Fahrenheit at
sea level."</i> | 15. | _____ |
| 16. | <i>"Your idea is that we should admit into
the park only those people who sign an
agreement to use it correctly."</i> | 16. | _____ |

Now turn to the next page and check your answers.

Compare the response strategies you identified on the previous two pages with those given below.

1. Accepting Actively
2. Structuring
3. Accepting Passively
4. Clarifying
5. Facilitating Data
6. Accepting Passively
7. Using Silence
8. Verbal Structuring. NOTE: This behavior can also be classified as an accepting behavior since the interpreter merely accepts the idea along with others while making no value judgment. Also, if the interpreter's purpose is to survey the opinions of the visitors and want to record them so all the group can examine them, then it could be classified as Facilitating Data.
9. Accepting Empathically
10. Facilitating Data
11. Accepting Passively
12. Facilitating Data
13. Clarifying
14. Clarifying
15. Facilitating Data
16. Accepting Actively

If you missed more than 5 examples, you might review the text or video-tape on Responsive Strategies.

WORKSHOP B: Creating Responsive Behaviors

The purpose of this workshop is to provide you with a chance to practice thinking through the various responsive behaviors you have learned. The workshop consists of one page in this syllabus and will take about 20 minutes to complete.

In the spaces provided, write in the response you would make in the dialogue. When finished, discuss the appropriateness of your responses with other interpreters.

Interpreter: *"When did Columbus first come to the Western Hemisphere?"*

Visitor: *"1492."*

Interpreter: *(Accept Passively)* _____

Interpreter: *"Who discovered the island of Jamaica?"*

Visitor: *"Columbus."*

Interpreter: *(Accept Passively)* _____

Interpreter: *"What do you think Columbus must have brought with him in order to make that voyage in 1492?"*

Visitor: *"Food, water, clothes, men, weapons, navigation equipment."*

Interpreter: *(Clarify the meaning of 'navigation equipment')*

Interpreter: *"Why do you think Columbus believed he discovered a new land when the Viking explorers and Amerigo Vespucci came before him?"*

Visitor: *"Because communication was not as good in those days."*

Interpreter: *(Clarify 'communication')* _____

Visitor: *"In what year did the Vikings come?"*

Interpreter: *(Facilitate Data)* _____

Interpreter: *"How do you think our country would be different today if the early explorers arrived on our West Coast rather than our East Coast?"*

Visitor: *"I think most of our big cities and most of our population would be on the West Coast."*

Interpreter: *(Accept Actively)* _____

Visitor: *"Our national capital might be on the West Coast."*

Interpreter: *(Accept Passively)* _____

Interpreter: *"How would you like to live in a big city like our capital?"*

Visitor: *"I don't think I'd like to live in a big city: too much traffic and noise and cars and smog."*

Interpreter: *(Accept Empathically)* _____

WORKSHOP C: Using Questions and Responsive Behaviors

The purpose of this workshop is to let you use the responsive behaviors in conjunction with other behaviors you have learned. The workshop consists of two pages and requires your working with a small group of colleagues. It will take about 45 minutes to complete.

If you have the opportunity to meet with others who are participating in this training module, get together with them to practice the behaviors you have learned so far.

In a group of three, four, or more people select a SENDER, one or more RECEIVERS, a JUDGE, and a RECORDER.

The SENDER's job is to pose recall, processing, and/or application questions to the RECEIVER(s) on a topic of your choice. After the RECEIVER(s) responds to the question, use the behaviors of passive, active, or empathic acceptance, clarifying, silence, and/or facilitating data.

The RECEIVER(s) should respond to the questions of the SENDER.

The JUDGE's task is to identify the level of question used by the SENDER after the SENDER has asked the question. When the SENDER responds to the RECEIVER(s) statement or idea, identify the type of responsive behavior used by the SENDER.

The RECORDER tallies the number of each kind of question and response made by the SENDER and identified by the JUDGE. A chart on the next page will help you record your tallies.

Each member of the group should function in each role for about five minutes. Then switch roles so that each member of the group has an opportunity to serve in each role.

After each five minute segment, discuss any problems encountered and resolve any confusion that might exist.

CHART FOR CHECKING INTERPRETER BEHAVIORS

					SENDER'S NAME	
						BEHAVIOR
						VERBAL STRUCTURING
						QUESTIONING RECALL
						QUESTIONING PROCESS
						QUESTIONING APPLICATION
						SILENCE
						ACCEPTING PASSIVELY
						ACCEPTING ACTIVELY
						ACCEPTING EMPATHICALLY
						CLARIFYING
						FACILITATING DATA
						OTHER
						COMMENTS/PROBLEMS LOGISTICAL STRUCTURES

WORKSHOP D: Using Responsive Behaviors in Interpretive Activities

The purpose of this workshop is to guide you in planning for the use of responsive behaviors in an activity and for helping you examine your use of these behaviors. The workshop consists of one page. It will take about one hour to complete.

Now that you have studied, created, and experienced responsive behaviors, plan an interpretive activity. Plan to use structuring and responsive behaviors. Conduct your activity and tape record it. When you are finished, analyze the tape recording by completing the chart below. This is done by tallying the number of times you used each of the responsive behaviors and verbal structuring.

Responsive Behaviors	Tallies	Total
Accepting Passively		
Accepting Actively		
Accepting Empathically		
Clarifying		
Facilitating Data		
Verbal Structuring		
Behaviors Not Identified		

Now respond to the following:

1. What do I observe happening to my group when I use these behaviors?
2. In what ways are individuals in the group becoming more involved?
3. What is visitor reaction after my activity?
4. Who is doing the interpreting, me or the visitor?
5. How am I better meeting the criteria of a good interpreter as described in Module 1?

Putting It All Together

Module Five

PUTTING IT ALL TOGETHER

This module is a potpourri of loose ends designed to pull all the previous ideas together. It will take about 4 hours to complete.

So far you have had a chance to think about three important factors related to interpretation: THE VISITOR, THE PARK ENVIRONMENT, and yourself, THE INTERPRETER. In looking at yourself, you have been asked to think about the types of QUESTIONS you use and how you use them, the ways in which you STRUCTURE visitors experiences in order to involve them in understanding your park, and the ways in which you RESPOND to the visitors when they give information or ask questions of you.

In this module all those skills are pulled together into a section called MODELING. Another section, called A SYNTHESIS, will provide guidance in using all those skills. And the final section, SELF-EVALUATION, will show you how to assess yourself and your effectiveness in helping visitors derive meaning from your park environment.

WORKSHOP A: Modeling

Upon completion of this workshop you should be able to: 1) distinguish between behaviors that are consistent and inconsistent with goals; and 2) analyze your own behaviors to determine their consistency with your goals for visitors. The workshop consists of 5 pages in the syllabus. It will take about 30 minutes to complete

Visitors are quick to pick up any inconsistency between what an interpreter verbalizes as desired meaning and the demonstration of that meaning. As Ralph Waldo Emerson so aptly stated, "*What you do speaks so loudly, I can't hear what you say.*" It is basic to interpretation that an interpreter be consistent in words and action. Modeling means that the interpreter behaves in a manner that is consistent with his desired goals for visitors.

An interpreter's enthusiasm for his park will soon infect his park visitor. The interpreter's expression of wonder for phenomena in the park will intrigue the visitor. When the interpreter exhibits emotion for the beauty, awesomeness, pageantry, or grandeur of his park, the visitor will feel free to react with a similar sensitivity.

Conversely, such aspects as apathy, inhibition, passiveness, and disinterest will result when the interpreter models those behaviors as well. Modeling tends to reinforce visitor's perceptions of the values and goals stated by the interpreter or by the park. An interpreter, by exhibiting the kinds of behavior desired in visitors, strongly influences the visitors' behavior patterns.

The next two pages show examples of an interpreter's use of modeling.



Steve's purpose for his "Snakes Alive" activity was to overcome the visitor's fear of snakes.....Modeling his "attachment" to snakes.....

.....helped this visitor overcome her hesitancy. "They're not slimy after all!"





Nancy's interest in the small things...

....caused this group to search more closely for wildlife they might normally overlook.



To help you identify the consistency between goals and practices, look at the listing of some typical interpreter behaviors.

Circle the C if you believe the practice is consistent with the purposes. Circle the I if you think the practice is inconsistent.

1. In a park stressing protection of natural flora and fauna, an interpreter picks wildflowers in order to decorate the visitor center. C I
 2. A park, the main purpose of which is to create mutual understanding among many peoples, plans to present interpretive activities in a variety of languages. C I
 3. An interpreter stops momentarily during an activity to pick up a candy wrapper from the trail. C I
 4. An interpreter shouts in a loud voice at a group of third grade school visitors, "STOP YELLING!" C I
 5. The main purpose of the park is human history. Thus, in order to get the most ideas across to the most number of visitors, a 20-minute tape recording of a lecture covering the period 1776 to 1865 is prepared for the visitors to listen to in the auditorium. C I
 6. The interpreter is late so he drives his car through the EXIT driveway into the parking lot to get to the visitor center faster. C I
 7. The main purpose of another park is human history so the park interpreters experiment with a "living portrayal" program of various historical leaders during critical events of that era of our nation's history. C I
 8. A planning group has a small grove of redwoods removed to provide space for a visitors center in a location that is more convenient to the visitors. C I
 9. Every evening a lecture on stars is presented using slides in an auditorium. C I
-

Discuss your answers with colleagues. If a statement seems to indicate an inconsistent practice, decide what you would do to make it consistent.

By jotting down responses to the statements below, you will find yourself more able to recognize consistent practices in yourself and your park.

1. Identify at least three goals or purposes for your park. Describe your own modeling behavior that you believe is consistent with these goals.

a. _____

b. _____

c. _____

2. Describe some activity that is permitted or suggested in your park that you think is not consistent with the goals of your park.

3. Describe a personal behavior that you see in yourself that might be inconsistent with the goals and purposes of your park environment.

4. Describe an activity or some ways in which your park's interpretive program might be made more consistent with its goals and purposes.

WORKSHOP B: A Synthesis

In this workshop you will see on videotape an interpreter demonstrate with a group of visitors all the behaviors that have been presented in this training package. As the videotape begins, you will see the interpreter describing her purposes for an activity. You will then see her conducting the activity with a group of visitors. The tape lasts about 30 minutes.

You might study this section in several ways: by just viewing the videotape in its entirety; by stopping occasionally to closely examine a particular behavior; by selecting one behavior and looking specifically for it throughout the tape. If you are working with a group of other interpreters, you might stop the tape from time to time to discuss and analyze particular behaviors. Or you might watch for the visitor's behavior and compare it with the criteria of good interpretation you listed at the beginning of the package.

Use these materials in any way that seems profitable to you.

Upon completion of this workshop you should be able to: 1) describe some goals or purposes for an interpretive activity; 2) plan and conduct the activity incorporating the use of the interpreter behaviors described in this program and appropriate to the achievement of those goals; 3) record and analyze your own interpretive behaviors to determine their use and appropriateness to achieving desired goals; 4) evaluate your own interpretive activities and make suggestions for your own use of alternative behaviors to better achieve your purposes. The workshop consists of five pages in this syllabus and will take about 2 hours of study and practice.

At the beginning of this syllabus, we identified three main purposes for this training package: to enable you, the interpreter, to (1) become aware of certain interpreter skills that help the park visitor interpret and understand the park environment for himself; (2) plan and conduct interpretive activities that include the use of these skills and behaviors; and (3) evaluate yourself and your activities to determine their greatest effectiveness in terms of helping the visitor derive meaning from your park.

Throughout the training program we have attempted to help you learn, analyze, and utilize those behaviors that seem to enhance the visitor's acquisition of meaning from your park environment. We built upon the assumption that there are three components of interpretation: THE PARK and the meanings that are there; THE VISITOR for whom all efforts are directed; and THE INTERPRETER who is the vital link between the park and the visitor. Our focus has been on the interpreter and his performance of the act of interpretation. Our main question was, "*How do you know you are a good interpreter?*"

This question might best be answered by assessing the degree to which you assist visitors to inquire into the meaning of your park. Your effectiveness as an interpreter can only be determined by you. You are the one who can best observe the visitor's behavior. You are the only one who can evaluate yourself. You are the only one who can improve yourself.

We've attempted to provide some behavioral tools with which to work at the mechanics of interpretation. STRUCTURING: to organize the visitor's attention and interaction; QUESTIONING: to involve the visitor intellectually and emotionally; ACCEPTING: to allow him freedom to test ideas; USING SILENCE: to encourage reflection on his thoughts and feelings; CLARIFYING: to probe his concepts and ideas; FACILITATING DATA: to provide a responsive environment to his inquiry; MODELING: to practice what you preach.

Listen to yourself! Do you fill the visitor with a myriad of facts that are soon forgotten? Or do you question the visitor to engage his intellectual powers? Are those questions composed with care so that the visitor thinks analytically and creatively? Do you structure, giving directions with clarity so the visitor knows the parameters, expectations, and limits? Do you organize your group to maximize personal involvement and group interaction?

Do you find yourself listening to the visitor's ideas, clarifying them when there is a possibility of misunderstanding? Do you respond to the visitor's inquiries with the best, most honest information you have or direct him to readily available sources of information?

Listen to yourself. We encourage you to make maximum use of the tape recorder. Carry it around in the "on" position when you lead an activity. Then in your own privacy, listen to yourself. If you don't like what you hear, you can always erase the tape and no one will know.

But merely listening to yourself is not the sum-total of the process of evaluation. There is more to it than that.

Some Steps in Self-evaluation

There are some precise steps in an effective evaluation process. The steps are much the same as we have suggested throughout this module. It is hoped you will be able to perform them with increasing ease as you work with the interpretive behaviors. For self-evaluation, here are some tasks to consider.

Before Your Activity

1. Describe the main goals or purposes for your activity.
2. Describe the behaviors you might see visitors perform if they are attaining these goals. Be as specific as possible.
3. Identify those initiating and responding techniques you will use to cause the visitor to perform the desired behaviors.

During Your Activity

1. Use the behaviors you planned for yourself.
2. Observe visitor reaction. Seek their reaction.
3. Record yourself--either on video- or audio-tape or just mentally.

After Your Activity

1. Compare what visitors actually did with what you hoped they would do.
2. Compare what you actually did with what you planned to do.
3. Analyze why you think visitors did or did not do what you hoped.
4. Prescribe what improvement, changes, or alternatives you'll try next time to better achieve your goals.

Interpreter Checklist

On the next page is a checklist for you to use to record your use of the behaviors described in this program. By listening to yourself and tallying each of the behaviors you use, you can get a picture of yourself in the act of interpretation. You can determine how many questions you ask and at what level of thinking you ask them. You can determine how often you use each of the responding behaviors.

When you first attempt this process you will no doubt find it cumbersome and awkward. To ease into this process, you might observe just one type of behavior, such as your structuring or your questioning. Don't try to observe every behavior you perform. You might tally only parts of your activity: tally during the first few minutes when you get a group started; identify more behaviors during the middle; tally more at the end. This will give you a representative sample of your levels of questions, your pacing, and your sequencing.

We realize these behaviors are not easily incorporated into your own style in a short period of time. It might take years of experimentation and trial to determine what fits you, your park, and your visitors. We can only invite you to try them out, see what happens, and try some more.

Remember, only you know if you are a good interpreter!

NOTES

