

COMMUNICATING WITH RECREATIONISTS

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ABSTRACT. Recreationists are free to ignore many of a land manager's communication efforts. Greatest effectiveness can be expected for presentations that are dynamic and are tailored to the interests and other characteristics of selected visitor groups, that permit participation and reward learning, and that provide both an idea of what is coming and a framework to give it coherence.

MOST OF THE ORGANIZATIONS responsible for forests and related resources find that recreationists are their major public contact, making communication with recreationists a matter of vital importance.

Reasons for communicating can vary. Communication may be designed to serve the organization, perhaps by improving its public image or by gaining understanding for its policies. Or communication may be designed primarily to serve recreationists or other publics by enhancing their experiences. Still other communication efforts—such as those to inform people about rules and regulations—may serve the needs of both the organization and the recreationists.

The research in my own project is now concerned primarily with the effectiveness of efforts to interpret the environment to people. In this, emphasis is on communications that benefit recreationists and others, either directly by enhancing their on-site experiences, or more indirectly by helping them know enough about the environment for responsible citizenship, thereby contributing to thoughtful public actions that help maintain the flow of benefits from our

natural resources. This is a new direction for us. However, research and experience from a number of fields bear on the effectiveness of the communications involved in environmental interpretation.

Perhaps the first principle in these communications, especially those with recreationists, is to remember that we are dealing with non-captives who can stay or leave as they wish. Although the professionals in recreation generally think of it as being constructive, having serious purpose, and being "good for you," the recreationists themselves typically seek diversion, enjoyment, even amusement. They are not likely to tolerate our communications solely out of some great thirst for self-improvement.

The general extent to which visitors can be reached by interpretation is indicated by a study made in Yellowstone National Park (McDonald 1969). Of the people who visited the park, 56 percent attended visitor centers, 11 percent attended campfire programs, and 9 percent used nature trails. Approximately 10 percent of the visitors stopped at wayside exhibits, and less than half of these people read the signs. A large proportion of the visitors simply were not

reached by any of the interpretation provided.

MOTIVATION & INTEREST

If the number of people reached is to be increased, both motivation and interest are of central importance.

By choosing to seek recreation, visitors already demonstrate some motivation; but this may have a Jekyll-and-Hyde character about it. On one hand, the recreationist normally comes looking for enjoyment and is predisposed to defining the experiences he encounters as enjoyable. On the other hand, he may wish to escape anything that appears to be "heavy going." If what we offer is not truly interesting and a source of the delight the visitor came seeking, he may simply drift away in spite of his initial predisposition toward enjoying whatever he finds.

As a means of communication that motivates visitors, the ideal is to have a gifted interpreter or guide for each visitor or small group of visitors. In addition to being dynamic and conveying the personal enthusiasm of the interpreter, personal presentations can be designed so they permit participation and response by the visitor, providing feedback to the interpreter and his organization.

This feedback is the key to flexibility; it permits presentations to be adjusted to the interests, knowledge, misconceptions, attention spans, and other characteristics of the audience. If presentations cannot be tailored to the audience, many people may simply lose interest.

What the visitor defines as interesting will be conditioned strongly by his everyday world. As Tilden (1967) expressed it: "Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile." We must start with what the visitor already knows and feels.

Finding this starting point is often difficult for land managers whose professional training and years of experience with rural resources make many things seem self-evident. But what seems self-evident to the land manager may lie mostly outside the

experience, knowledge, and feelings of the urban people who comprise a growing majority of our visitors.

Resource managers are also affected by the standards set by other communicators. For example, the yellowing sheet of campground regulations posted on the weather-beaten bulletin board just may be overlooked by the visitor who is saturated with TV advertisements that have living color and the best attention-getting techniques that money and the FCC permit.

RESEARCH FINDINGS

Some of our recent research in the Pacific Northwest shows just how important the means of presenting information can be. For interpretive exhibits, our interviews with people at five visitor centers showed that interest depends greatly on the extent to which exhibits are dynamic in some way rather than inert. Exhibits with motion, recorded music or speech, shifting lighting, or three-dimensional effects were rated as interesting much more than average. Conversely, those using mounted photos and printed texts were selected as interesting much less than average. This is sobering when you realize how much resource managers have relied on mounted photos and printed labels to communicate with recreationists.

The same study also showed that people would much prefer to hear information than to read it. In addition to taking less energy than reading, listening permits the visitor to concentrate his attention on the scene or object of central interest. Mahaffey (1969) found similar results at a historic site in Texas.

A number of organizations seem to have come to the same conclusion. Many museums, visitor centers, and zoos now have message repeaters at selected exhibits. And some museums rent headphones that pick up messages from inductance loops at selected exhibits.

Portable tape-players can also be used in many situations, and several companies now offer guided walking or auto tours recorded on cassette tape. These are available for many of the major cities of the world, for several National Park Service areas, for

Niagara Falls, and other attractions. In the Pacific Northwest, we are studying ways to adapt and enhance the effectiveness of cassette tape-players for interpretation in National Forest settings. In addition to determining how well visitors like recorded tape presentations for nature trails and auto tours, we are also investigating how the structure of the presentation affects learning.

If we want visitors to learn specific facts or concepts, then two branches of learning theory are pertinent. One, espoused by Piaget (1970), maintains that participation is essential for learning. For a child this may be highly direct—as by touching a newly discovered object or putting it in his mouth. Later, participation may be increasingly abstract; but, according to Piaget, it must still take place if learning is to occur. As an illustration of this concept, many educators now use the “discovery method” of teaching some subjects. In this, they use a series of questions to lead the student into discovering facts or relationships for himself rather than being told directly. How much involvement and participation are permitted in communications by land managers?

EMPHASIZE PARTICIPATION

A second and equally pertinent branch of learning theory comes from the work of B. F. Skinner (1968) and other behavioral psychologists. They note that people persist in doing the things they find rewarding.

Piaget's emphasis on participation is not at all incompatible with Skinner's emphasis on reward. This was nicely demonstrated by our experience with a question-and-answer device we call the recording quizboard. When we installed this in a National Park visitor center, children began playing it within seconds, and it continued as their favorite exhibit until we removed it. This came as a surprise, since our quizboard included only written questions and answers about the other exhibits, and these other exhibits were extremely well done. However, the quizboard was the only exhibit in the building that permitted participation.

By their enthusiasm, children and, to a lesser extent, adults demonstrated that par-

ticipation was highly rewarding and created sufficient motivation to hold their attention, even though they were a non-captive audience. There remains, however, the matter of harnessing this motivation to convey a message. Pinball machines, for example, permit participation but do not convey much information.

One approach lies in making the reward contingent upon learning. If interacting with exhibits is fun or rewarding, simply set exhibits up so that participation can continue only after the player correctly answers a question demonstrating that he has learned a portion of what we want him to know. The portions conveyed in this manner can be arranged to convey complex concepts. This, of course, is the basis of teaching machines and programmed learning.

Even after the novelty of interesting equipment has worn off, being shown that the last answer was correct is reward enough to maintain interest and enhance learning. In fact, on the basis of this, coin-operated question-and-answer machines are now located in many public places as a commercial venture.

PROGRAMMED INSTRUCTION

Although reinforcement by identifying correct answers has been used in displays designed to identify birds or other objects, it has seldom been used to convey more complex concepts to non-captive audiences like those found in recreation settings. An exception is the work of C. G. Screven (1969), a behavioral psychologist. In studies at the Milwaukee Public Museum he has used programmed instruction techniques to greatly increase what visitors learn from a rather detailed anthropology exhibit.

Some visitors were given a portable tape-player connected to an answer board. When started, the tape-player told the visitor what to look for, explained a point to him, asked a question about it, and then stopped. When the visitor selected the correct answer on the answer board, the player started again, rewarding the visitor by telling him his answer was correct, and then continuing with additional directions, explanations, questions, and identification of correct

answers. Visitors who received this guidance averaged about 75 percent correct on an examination to test their knowledge of the exhibit, compared with an average of about 25 percent for visitors who saw the exhibit without this guidance.

Based in part on Screven's work, we developed and tested programmed signs for a nature trail in the Pacific Northwest. For the sixth-, seventh-, and eighth-grade students who used the trail, signs with branching programming resulted in 20-percent higher test scores than unprogrammed signs that included the same information. In the branching program, selected signs explained a point and at the bottom included a question with three answers. According to the answer selected, the trail user was directed to one of three signs on down the trail. Signs corresponding to wrong answers provided supplementary information and then directed the user to the sign to which a correct answer would have directed him.

In addition to showing the effectiveness of programmed presentations, Screven's work in Milwaukee provided two other results. Using a short examination to measure knowledge about exhibit content, he tested some visitors only after they saw the exhibit, others only before they saw the exhibit, and others both before and after they saw it. Surprisingly, visitors who had no guidance through the exhibit scored no higher than those who had not even seen it. This suggests that many efforts to communicate through exhibits are totally ineffective. In addition, with no other guidance through the exhibit, visitors who had received a pre-test scored noticeably better on a post-test than those not given a pre-test. By supplying ideas about what to look for, the pre-test apparently "preprogrammed" visitors and provided them with a framework on which to build.

This matter of preprogramming may have wide application in our communication efforts. It is used extremely effectively at Colonial Williamsburg, where the visitor is urged to see the orientation movie "The Making of a Patriot" before he visits the restored buildings. Photographed right in the restored part of Williamsburg, this portrays such figures as George Washington and Thomas Jefferson in the history-

making events leading to the American Revolution. Then, as the visitor goes through the restored town, he already has vivid mental imagery of the events that took place at the powder magazine, the Raleigh Tavern, the Capitol, etc. The movie provides a framework that helps the visitor organize, comprehend, and retain the information he is given.

OTHER WAYS

Frameworks can be provided in other ways. At the Pacific Science Center in Seattle, cartoon story lines are often used in conveying the concepts of science to young visitors. Jerry Dotson, program director says (*personal communication 1970*) these stories help maintain interest and tie ideas together until the young visitors begin to understand the concepts involved.

In these stories, a "projective" technique is also used to permit a young visitor to volunteer his opinion without much risk of being wrong. In the story line, a cartoon character such as Snoopy is often introduced and shown to make a few mistakes of his own. Then, instead of being asked "What would *you* do in this problem situation?", children are asked "What do you think *Snoopy* would do?" For an inappropriate answer, the instructor can say, "He might. Let's see what would happen if Snoopy did that." If it turns out badly, it is Snoopy's problem, not that of the child who volunteered.

Adults may be even more concerned than children about being wrong or looking ridiculous. This may explain why they often examine a quizboard or other participation device without touching it. This leads to my final point concerning communication with recreationists.

Different people will respond differently to the same stimuli, making averages somewhat misleading. Tilden (1967), for example, has emphasized that interpretation for children "should not be a dilution of the presentation to adults, but should follow a fundamentally different approach." He noted that children often have an "eagerness for pure information" whereas adults have a "slight aversion to it." For

reaching a variety of people, a variety of communication techniques will be needed.

SUMMARY & CONCLUSION

Because recreationists are free to ignore most of the communications directed toward them by land managers, the effectiveness of conveying this information often depends on how much motivation and interest can be generated. The ideal situation is to have a personal interpreter or guide who can tailor presentations to the people at hand. However, the effectiveness of unmanned presentations can be increased if

they include some of the attributes of a live interpreter. These include dynamic rather than inert presentations, flexibility and feedback that permit diagnosis of the visitor's knowledge and interests, and tailoring of presentations to the characteristics of different groups of visitors.

Effectiveness of communications can also be increased by providing for participation and by making it rewarding for the visitor to learn what has been communicated.

Finally, retention of information can be improved by providing the visitor with an initial framework that alerts him to what is coming and then gives it coherence.

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