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THE UNIVERSITY OF ALBERTA

Recreation Information Resources Management

by



Claramae Lois Dodds

A THESIS

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DEDICATION

To God be the glory!



ABSTRACT

Having quick and easy access to information is of vital importance to Alberta recreation practitioners. This exploratory study was undertaken as a first step toward improving information access for recreation practitioners in Alberta.

Focussing on the practitioner, as the user of information, a survey of 161 full time recreation practitioners was conducted, using a mailed out questionnaire. Analysis was carried out on the 72 questionnaires returned, or 45% of the total sample.

It was hypothesized that there is a need for Alberta recreation practitioners to gain access to a variety of information resources; that barriers to gaining that access exist; and that the perceptions of need to gain access to information resources and barriers to gaining that access vary in relation to selected characteristics of the recreation practitioner and the community in which he or she works.

It became evident through the study that Alberta recreation practitioners use a wide variety of information resources; however, forty percent of the respondents stated that they do not have adequate access to needed information. Two major barriers to gaining that access were identified. They were lack of time to locate information and difficulty in locating available information. Apparently obvious factors such as education, experience, position responsibilities, length of work week, size of community, and distance from regional recreation offices do not seem to influence the practitioner's perception of adequate access to

information. There were indications that other factors may be more influential in this respect. These might include the role of the Alberta Recreation and Parks field services' consultants.

It is recommended that further research be conducted with a view to improving information access for recreation practitioners in Alberta, giving practitioners quick and easy access to the professional recreation information they need for efficiency and effectiveness in their communities.

PREFACE

2001! A date which arouses the imagination of those with vision; a new era in which space age access to information may be the key to success!

The need for a study in the area of recreation information resources management emerged from discussions with consultants in Alberta Recreation and Parks.

This exploratory study is just a beginning. It was designed to focus attention on the importance of information in the field and to emphasize the need for cooperative information resources management for recreation and leisure services in Alberta.

ACKNOWLEDGMENT

There were many individuals who lent support through the ups and downs of the thesis process, however, one person was of inestimable value. Through the perceptive eyes and understanding of Dr. Leslie Bella this study became a reality. Her understanding was coupled with a unique ability to nudge a student without exerting undue pressure while giving confidence to complete a worthwhile project.

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CHAPTER 1

STATEMENT OF THE PROBLEM

Those with access to information will be the haves, and those without access to information will be the have-nots (Bette Stephenson, M.D., Ontario Minister of Education, 1982:2).

Introduction

Information! Current knowledge! The need to know! As time inexorably moves us toward the 21st century the importance of gaining access to current, professional information is increasing, taking on the very status of life itself (Whitehead 1981:151-56). Niles (1981:9) speaks of the ability to gain access to information and to use it as being critical to professional survival and success. This was also Alan Bundy's comment (1981:5) when speaking to an Australian national seminar on information for sport and recreation:

. . . those people who have access to information in their own areas of specialisation have a personal advantage over those people that do not. More importantly, you will also know that access to information provides you with a better opportunity to apply your particular skills for the benefit of society as a whole.

Recreation, by nature, is multidisciplinary (Hamilton-Smith 1981:24), thus useful and necessary information is to be found in a vast array of human and material resources. Many information resources are available in Alberta, including the following: the Alberta Culture Library, Edmonton; the Alberta Recreation and Parks Library, Edmonton; the twelve provincial government departments represented on the Alberta

Government recreation committee; the Alberta Recreation and Parks Association, St. Albert; the Environment Council of Alberta Library, Edmonton; non-profit organizations such as the Canadian Red Cross society; businesses such as Shell Canada; data banks like SIRLS, an information retrieval system for the Sociology of Leisure and Sport, University of Waterloo; as well as both public and private consultants, colleagues, and municipal and university personnel and libraries. This set of examples is evidence of an array of information resources available in the province, yet there are indications that recreation practitioners do not have easy access to the human and material information available to them (Copoc 1982; Weller 1982).

If information resources for recreation and leisure services are available in Alberta, do practitioners know about them? Do recreation practitioners have access to them? Do recreation practitioners perceive a need to gain access to these information resources? To answer these questions this study was designed around the recreation and leisure services practitioner in Alberta.

Research Hypotheses

It is hypothesized: 1. that there is a need for Alberta recreation practitioners to gain access to a variety of information resources; 2. that barriers to gaining that access exist; 3. and that the perceptions of need to gain access to information resources and the barriers to gaining that access vary in relation to selected characteristics of the recreation practitioner and the community in which he or she works.

1. Need for Access to Information

Due to the multidisciplinary nature of recreation, information applicable to the field is located in a wide variety of resources.

2. Barriers

Barriers may include: (a) nonavailability of information, (b) organizational barriers, (c) proliferation of information, (d) lack of perceived useful information, (e) perceived lack of time, (f) perceptions of one's own role, and (g) mechanical barriers (lack of hardware, equipment, or machine assisted tools or skills involved in the use of electronic access to information). Other barriers were expected to emerge from the study.

- a. Nonavailability of information may involve: perceived lack of personal information resources, perceived lack of local and regional information resources, and perceived lack of provincial information resources.
- b. Organizational barriers may include: perceptions of management's attitudes toward information behavior, perceptions of management's attitudes toward time and cost of gaining access to information resources, and perceptions of the user's right to gain access to information from or through a related organization, e.g., as when an organization states, 'As your professional Association, we are committed to being your "one stop" resource center' (Weller 1983:5). The organization, having taken on the task, may have barriers inherent in its services.

- c. Proliferation of information may involve: perceptions of information overload. Information overload may cause recreation practitioners not to attempt looking beyond their own job and its physical boundaries for more material and/or knowledge. Workloads in themselves may not allow the time, either physical or psychological, to do more than the day to day requirements, thus precluding the possibility of searching for information which would enable them to work more efficiently and effectively.
- d. Lack of perceived useful information may include: perception of lack of knowledge and skills necessary to gain access to information resources, and perceived time needed to obtain, select and assimilate information. With the great proliferation of information being produced there appears to be no coordination of information services for the field of recreation and leisure, nor does there appear to be one central agency which either disseminates information or gives direction to information resources. Lack of knowledge, on the part of recreation practitioners, could foster the misconception that they should be self-sufficient. It may also mean that they don't know where, or of whom, to ask for help. Increasing importance is being placed on research skills. Lack of these skills may be a barrier to information resources access. Knowing how to find information includes a range of skills from simple manual library search skills to more complex skills

needed to use electronic means, such as computer, for locating the information.

- e. Perceived lack of time may involve: perceptions of personal time required, over and above that available during working hours, to read and assimilate information which has been obtained, as well as perceptions of time priorities.
- f. The role recreation practitioners perceive themselves as filling may be a barrier to information resources access. There may be other barriers for those who perceive themselves to be organizers of programs than for those who perceive themselves to be facilitators of the recreation experience. The latter perception possibly implying a need for greater diversity of knowledge and a broader range of professional interests. Pride may also have a bearing on one's perception of need. Formal training, resulting in a university degree, may give a sense of all-encompassing knowledge and preparation for the field of practice. If recreation practitioners believe that they should have, or that they do have, the necessary knowledge, this belief may be a barrier to information resources access causing resistance to the thought of asking for help.

The multiple requirements of a community may involve the unspoken expectation that recreation practitioners should be all things to all people. This expectation may also cause a type of overload for the individuals involved in that they may

tend to withdraw from reaching out beyond their own perception of their own role.

3. Characteristics of the Recreation Practitioner and the Community

Characteristics of the recreation practitioner and the community in which he or she works, as selected from the literature, include: education, experience, position responsibilities, length of work week, size of community, and distance from regional recreation offices.

Purpose of The Study

Information is of vital importance to the Alberta practitioner involved in the broad field of recreation and leisure services. A large number of information resources in Alberta make available a variety of information. However, it was believed that these resources are not always known to the recreation practitioners, nor do they always know how to gain access to them.

The purpose of this study was to survey a sample of Alberta recreation practitioners to determine their perceptions of the need to gain access to human and material information resources, and of the perceived barriers to gaining that access.

It was expected that the need for gaining access to information resources by Alberta recreation practitioners would be more clearly defined, and that more specific knowledge of perceived barriers to gaining access to those resources would be acquired. Other expected findings would include: that those practitioners with more formal education would perceive a greater need for a wide variety of information and would have greater skills for finding that information; that their

experience as a practitioner, would be reflected in differences in their knowledge of information resources, and that their workloads and their perceptions of their own roles would influence the time they have to search for, select, read and assimilate the available information. Also, the distance between the community and major information resources was expected to influence the perceived accessibility of those resources.

Determining the need for recreation practitioners to gain access to information resources and isolating the barriers to gaining that access are of vital importance to any individual or group desiring to consolidate recreation information resources in Alberta, or those who might be looking for a more effective way to help recreation practitioners locate specific needed information available in the province. This is a step toward the goal of designing a comprehensive information system around our users in Alberta.

Delimitations and Limitations

The population sample surveyed comprised all the District Recreation Coordinators for the City of Edmonton and the Area Recreation Superintendents for the City of Calgary, with all the other practitioners listed under Alberta Recreation and Parks Field Services Branches and generally designated as recreation directors. These directors were involved in a variety of administrative, financial, programming, and other roles. However, overall only 1.5% of their time was involved with direct program leadership. Therefore, their functions could be termed administrative rather than direct service.

The study was designed to address full time municipal recreation directors working within communities through a variety of general programs. Therefore, recreation and leisure services personnel excluded from this study were those in the following organizations: Canadian Forces bases, nursing homes, auxiliary hospitals, hospitals, Indian reserves, Metis colonies, colleges, universities, charitable organizations and industries.

Testing was not conducted for suggested relationships beyond those pertaining directly to the three major hypotheses. Precluded also was any testing for the influence, or lack of influence, of mechanical barriers (availability of hardware, equipment, or machine assisted tools or skills involved in the use of electronic access to information).

The study was not designed as an inventory of recreation information resources in Alberta although several information resources were noted as examples.

As recreation information resources are located in a wide variety of settings, due to the multidisciplinary nature of the field, a recall, rather than recognition, approach was used as appropriate in this survey. Use of a recall, rather than a recognition, approach to ascertain sources of information fails to determine the scope of each practitioner's knowledge of existing resources. Thus the possibility of isolating barriers such as lack of knowledge of resources as well as lack of knowledge of need was precluded from this study.

The perception of adequacy of access to information was interpreted by each individual respondent. No attempt was made to quantify the

effort of each individual to seek information, or the amount of information processed.

Definitions

Defining information in Farradane's (1979:13) terms, "Any physical form of representation, or surrogate, of knowledge, or a particular thought, used for communication," is both conceptual in nature and broad in interpretation. The operational definitions of information and information resources, as used in this study and the accompanying survey instrument, are specific to professional information related to recreation.

Information--any fact(s), datum (data), or statistic(s), relating to: personnel management, facility management, fiscal policies, budgeting, sources of grants, public relations, marketing, master planning, program planning, facility planning, open space planning, special populations, and leadership training.

Information resource--any person, place, or group which provides either needed information or a lead to that information.

The following terms were used to describe administrative functions in the field of recreation and leisure services.

Administrating--managing an office and supervising personnel.

Activity leading--working directly with activity groups.

Facilitating--working directly with the public advising and assisting individuals and groups to achieve a leisure experience.

Facility managing--carrying out duties directly related to a facility, its use and maintenance.

Planning--planning of policies, facilities, or open space.

Programming--arranging for and scheduling activities.

Practitioner--a person who is designated in a community as the full time recreation director, working with the people of the community through a variety of general programs. He or she may at times perform the functions of administrating, activity leading, facilitating, facility managing, planning, programming, or public relations.

CHAPTER 2

LITERATURE REVIEW

One of human-kind's greatest resources is information, and one of our unique assets is the ability to assimilate and use information (King 1981:69).

Introduction

Information resources management, as approached in this study, embodies three major facets, beginning with the need for and the value of information. The second facet involves the setting in which we presently look at the proliferation of available information and technology in the management of such information. The final facet concerns the information user and his or her perceptions of the need to gain access to information and of barriers to gaining that access.

The Need for and The Value of Information

What is information? Hollnagel (1980:183-4) parallels information science and psychology as young sciences with problems such as defining terminology. He believes we do not have to be quite as precise in defining information science terms as for natural science terms because we are dealing with ". . . the use of information by humans." This involves something we humans know about, see, and use, as contrasted to terms developed for particles we cannot observe such as the quark in physics. While others, like Ford (1980:100), continue to define terms more concisely this study will use Farradane's (1979:13) definition of

information, ". . . any physical form of representation, or surrogate, of knowledge, or a particular thought, used for communication," however, restricting the concept to recreation and leisure services in Alberta.

Who needs information? Whitehead (1981:147) states simply, "The answer, of course, is everybody." Stephenson (1982:22), from the field of education, says "Those with access to information will be the haves, and those without access to information will be the have-nots." Jack Niles (1981:9), a computer scientist who directs an inter-disciplinary program, adds, "The ability to obtain and use information--especially a talent for obtaining and using computerized data--is rapidly becoming a critical determinant of academic and professional survival and success. . . ." Implications concerning the need for information are found in a vast array of literature that deals with the reactive process involving theory, research, and development of information management systems for storage and retrieval of information.

Ahituv (1980:62), discussing the value of information, speaks of three major questions which are of concern: whose value, what type of value, and who is to do the evaluation. This study focuses on the individual recreation practitioner and his or her perceptions of the need to gain access to information and of barriers to gaining access to needed and valued information. "The perceived value is available only if experiments and interviews are undertaken . . ." (Ahituv 1980:63).

Goodale (1979:53), in A Decade of Difficult Tasks: Municipal Recreation in the 80's, suggests that "comprehensive information services" be set up by local recreation departments. Although Whitehead (1981:151-56), asserts that, "the first source of any information must

always be yourself," he also reminds us of the physical impossibility of keeping "up-to-date with progress today." He believes that information workers and librarians are a "cost-justifiable resource" and that, "The information service should be LAST to go," for, "INFORMATION IS LIFE."

The Proliferation of Information, and Technology

"New technologies for information handling and dissemination are proliferating in today's research laboratories. These mechanisms enable both the explosion of our information resources and their exploration in research and decisionmaking" (Feingold 1979:9). Stephenson (1982:22) adds, "Those with knowledge of the new technologies will be powerful, and those without knowledge will be powerless." Ford (1980:105-6) notes two important effects of "the exponentially increasing volume of knowledge" and the "voluminous output of print." The first is a need for students (recreation practitioners?) to become adept at updating and revising their existing knowledge. Secondly, the volume of information causes problems of access to information!

Mick et al. (1979:4) suggest that the "problem of excess information" has been with us for many years but that acknowledging this, "does not negate the importance of discovering new and better methods of dealing with the enormous amounts of information which most of the members of our society (including scientists) face." They speak of this acknowledgement of the problem as the "normal development" view rather than a "crisis view" in that we face "an old problem of which we know a great deal and whose solution (or at least the methods for generating the solution) is already at hand."

The Information User's Perceptions of Need for Information Resources
Access and His or Her Perceptions of Barriers to Gaining That Access

All too often the user's perceptions of need for information are neglected when studies are undertaken concerning information needs. Wilson (1981:5-6) notes such problems as "inadequate methodology and the failure to do research that is 'cumulative'," definition of information needs and satisfaction/non-satisfaction, and the complexity of a user's "contact with a variety of 'information systems'." Line (1981:80) explains that, although "information providers" ignore users "... to give users what they want it is sometimes necessary to ignore what they say. . . ." He suggests also that, "It is useful first to distinguish between needs, wants, demands and uses." Most user studies have concentrated on descriptive use of services and information-seeking behavior (Line 1981; Mick et al., 1979; King 1981; Cronin 1981). Mick et al., (1979:vi-viii) speak of a thirty year tradition of information need and behavior research, most of which was directed toward "description and/or behavior." They then speak of the "next generation of user studies" which Applied Communication Research began working on in 1976. Their first project was, "to identify organizational barriers to the flow of scientific and technical information." They also designed a conceptual framework or individual behavior model and based on that framework a detailed questionnaire was developed. The questionnaire focused on five areas:

. . . a detailed description of the individual, an assessment of the individual's attitudes concerning information, an assessment of the individual's perception of management

attitudes towards information behavior, an assessment of information behaviors, and practices, and attitudes towards specific attributes of information products and services (Mick et al. 1979:vii-viii).

This study involved 560 scientists and engineers; the findings were said to be "most usefully applied" specifically to this group within the target corporation. In part, it was concluded that:

Information travels through diffuse, complex paths. Individual information behaviors are the product of complex interactions involving personal attitudes, background, role, function, specific task situation, environment, etc. . . . We need to develop information programs and services that support a broad spectrum of information needs and behaviors (Mick et al. 1979:v).

Information and the User

Studies about information concepts and definitions of information were found mainly in the fields of Information Science and Library Science. Technological advancements were chronicled under Management Information Services and Information Systems. User studies, mainly information-seeking behavior, in Library Science date back to 1948 (Wilson 1981:5), however, research in the area of information, its need, value, or its accessibility, as perceived by users, is sadly lacking.

Dolzeal's et al., (1977) study was undertaken to determine the information needs of municipal departments; this being a first step in designing a comprehensive centralized information system in the recently unified municipality of Anchorage, Alaska. The Department of Cultural and Recreational Services was one of ten departments studied, all providing a service to the public. Information needs involved data and information each department needed to carry out services or meet consumer demands. The intention was to identify ". . . information the

departments are already collecting, how much they are obtaining from other sources, and how much they are unable to obtain." Need was apparent and barriers were not studied separately (Dolzeal et al. 1977:i).

Donovan-Neale's (1982) study, Information Use Among Municipal Recreation Practitioners in Ontario, stands alone in the field of recreation and leisure. This study looks at many aspects of information use by directors of municipal recreation in Ontario and singles out two major barriers to information use: time to read and availability of information. These two studies, along with Mick's et al., (1979) study of information needs of engineers and scientists, do show parallels of user study research needed in the field of recreation and leisure services in Alberta.

The dearth of information user studies seems most unfortunate in 1984 when, in 1961, Melvin Voigt in, Scientists' Approaches to Information, pointed out the same lack of focus on the user and his needs. Voigt (1961:iii) showed that there had been much interest in designing new and improved systems of information storage and retrieval. However, he noted,

Unfortunately, many of those who have worked on the development of new mechanical controls have paid little or no attention to the actual information practices and requirements of the scientists who were to be served by these devices.

In addressing this need Voigt's (1961:iii) study was, "... made to provide some of the fundamentals essential to practical organization of scientific information and its bibliographical aids."

Through interviews with scientists in the biological sciences, chemistry, physics, and electrical engineering, Voigt determined the sources and methods they used to obtain information for each of three approaches to information. These approaches referred to the purpose for which the information was needed. He noted (1961:20) that, "Not only the source of the information itself, but also the method used to find it, is related to that purpose." He showed (1961:21) that, "A scientist's use of information, whether from print or from other sources, arises from three identifiable needs." These needs are: to keep up to date on current progress--thus the "current approach;" information needed in daily work--the "everyday approach;" and broad coverage of a specific subject--the "exhaustive approach."

From his data Voigt found patterns of information approaches which related to the purposes for which scientists sought the information. He was able to formulate a theory of approaches to information by investigating this relationship. He indicated that, although his study covered areas of science, there was no reason that similar conclusions would not be reached in the social sciences.

Three authors, Gagnon and Pascot (1982) and Cheng (1982), suggest a need for computerized information systems in recreation and leisure services but show no requirement to research the needs of individual recreation practitioners. Goodale (1980:20) speaks of "having more information than ever before" yet he says that information is not "readily accessible." In his assessment of Minshall's eleven categories of problems in recreation he concludes, "From this it is evident that the information and research needs do not involve understanding recreation or

leisure so much as public or business administration, personnel and other domains within management, marketing, and the like." This appears to be a rather bold assumption when information resources research is almost non-existent in this field. Minshall (1980:66) adds weight to this assumption by stating,

The problems facing municipal recreation departments in Canadian cities are identified. Most are adequately defined. No further study is needed. No examination by experts or consultants is necessary. Responsibility for their resolution rests with the recreation profession.

Contrary to these statements, many items in the Survey of Recreation Problems (Minshall:1980) imply needs related to information and information resources management.

Elery Hamilton-Smith's (1981:24-29) six propositions, used in planning an information service for a Department of Leisure Studies in Australia, help to summarize the problems and the need for research in the area of information resources management for recreation and leisure services in Alberta. These problems are as follow:

1. The leisure and recreation domain encompasses an immense diversity of human behaviour and associated resources.
2. Accordingly, those involved in the leisure and recreation field must tap an equally diverse range of information.
3. Given that one is able to track down relevant information sources, the problem is often one of too much information rather than too little.
4. Accordingly, much of the information requires evaluation in terms of its relevance to Australian problems, and may require some advice on interpretation.
5. Special problems arise in respect to the indexing and retrieval of Australian information.

6. An effective information system for practitioners will not merely service requests, but will provide a variety of information outputs which will alert practitioners to the capability of the system.

To understand information resources management in recreation and leisure services in Alberta, much more proactive research is needed. Belkin (1978:58), in "Information Concepts for Information Science," suggests that the literature implies at least a set of five concerns for information science:

1. with information in human, cognitive communication systems;
2. with the relationship between information and generator;
3. with the relationship between information and user;
4. with the idea of desired information;
5. with the effectiveness of information and the effectiveness of information transfer.

These concerns all centre around the user. The user is the most important element and the very reason for managing information resources, therefore, studies should be, "designed round users" (Line 1981:84).

Conclusion

Everyone needs information and available resources are increasing in all fields today with the increasing volume of knowledge. Studies have been carried out concerning the use of information. However, often, and sometimes legitimately, studies are not done with the user's perception of need as the focus. This lack of user centered research is most noticeable in the field of recreation and leisure services in Alberta.

To round out the information studies, especially for use in Alberta, it is necessary to do further research which centres on the user: asking with Ahituv (1980:62), "whose value" and "what type of value" is really

of concern. This also would involve the idea of "desired information" as noted by Belkin (1978:58).

Other research which might prove helpful is with the following areas of importance in information resources management:

1. the availability of information, including the generators of such information;
2. the relationship between information and the generators of information, as well as the information and the user, considering both needed and desired information;
3. the effectiveness of information;
4. the effectiveness of information transmission and exchange; and
5. the collective responsibility for the collection, storage, preparation, and dissemination of information among the principle agents in recreation and leisure services.

As there is much work to be done to enhance the use of information for recreation practitioners in Alberta, an initial exploratory study was in order.

CHAPTER 3

METHODS AND PROCEDURES

Introduction

Data for this study were obtained by means of a mailed out questionnaire. Personal interviews would have been most desirable. However, due to time and budget constraints, the mail survey was chosen.

The Sample

The target population under study was full time municipal recreation practitioners in Alberta. All of the recreation directors listed under Alberta Recreation and Parks 18 field offices outside Edmonton and Calgary (112), Edmonton Parks and Recreation District Recreation Coordinators (31), and Calgary Parks and Recreation Area Recreation Superintendents (18) were used as the survey sample. A total of 161 survey questionnaires was sent out.

The Survey Instrument

A printed questionnaire, designed as a small, convenient booklet, was used for the survey instrument. This questionnaire (Appendix A in reduced, text form) consisted of five sections. Through a recall, rather than recognition approach, personal information resources, along with questions relating to the adequacy of information access, were addressed in the first section. These questions were combined initially to show the wide variety of information resources to which recreation

practitioners need access and the general adequacy of information access as perceived by them. Recognition of some barriers to information access was the focus of one question for those acknowledging inadequate access.

Section two dealt with personal and organizational information resources such as books, journals, and periodicals.

Deriving from specific resources in section three, questions focused on personal and professional allotments of time for reading professionally related information and attending professionally related seminars and conferences. Questions were also directed toward information usefulness and organizational support for information access. This section, as well as section four, concerning demographic information, dealt with selected characteristics of recreation practitioners and the communities in which they work. Characteristics which had already been identified in the literature or which had been mentioned by recreation consultants, as influencing information access, were selected.

Finally, section five was left open for respondents to note any of their suggestions concerning more effective management of information resources for recreation and leisure services in Alberta.

Pilot Testing

Pilot testing involved 25 individuals, working in recreation and leisure services or related organizations, who accept and supervise recreation undergraduate students for their field work placements. All, except one, were located in the greater Edmonton area. A return of 16

questionnaires, or 64%, gave several suggestions for refinement of the survey instrument.

The revised questionnaire was sent with a covering letter explaining the requirement for data and requesting the cooperation of the selected practitioners. A self-addressed envelope was enclosed with the questionnaire and covering letter. Seven weeks after the initial questionnaires were mailed out, a follow-up letter was sent to non-respondents. Eight practitioners telephoned to say they had not received a questionnaire and second copies were mailed.

Data Analysis

The survey instrument (questionnaire) was sent to 161 full time municipal recreation practitioners. Seventy-two practitioners, or 45% of the sample, responded with useable questionnaires.

Frequency counts and contingency tables were used to study the data, providing univariate, bivariate, and multivariate analyses.

Chi square tests were used to ascertain the significance of various relationships in the data.

CHAPTER 4

RESULTS AND DISCUSSION

Results

Data for the analysis of this study were collected from 72 respondents which was 45% of the total number (161) of community recreation practitioners to whom questionnaires were mailed. Twenty-four of the 72 respondents work in two large urban centres. The remaining 48 respondents work outside these centres in predominantly rural settings.

1. Adequacy of Information Resources Access

In Chapter 1 it was hypothesized that there was a need for Alberta recreation practitioners to gain access to a variety of information resources. In addressing this need, respondents were asked about the adequacy of their access to professional information. Forty-nine (68%) of the respondents said "yes," they do have adequate access to professional information. However, 23 practitioners (32%) said "no," they do not have adequate access to the professional information they need to carry out the responsibilities of their positions. This result becomes more accurately reported with 60% "yes" and 40% "no" as six respondents answered "yes" but implied, through further answers, that they too do not have adequate access to needed information.

2. Barriers to Information Resources Access

It was further hypothesized in Chapter 1 that there are barriers to gaining access to needed professional information resources. A list of possible barriers was given to respondents from which they selected those barriers applicable to their situations. This list was partly derived from the literature (Donovan-Neale 1982, Ford 1980, Hamilton-Smith 1981, Line 1981, Mick et al. 1979, and Whitehead 1981), and partly from comments by recreation professionals (Copoc 1982, Weller 1982). An open section was made available for any perceived barriers not mentioned, of which seven respondents took advantage.

Twenty-five (35%) of the respondents indicated the following barriers to information resources accessibility. The list, modified as based on the results, is shown in descending order of frequency.

<u>Barrier</u>	<u>Frequency</u>
a. lack of time to locate information	(15)
b. relevant information exists but is difficult to find	(14)
c. information overload	(8)
d. lack of knowledge of people with needed information	(6)
e. relevant information is not available	(3)
recreation information is too theoretical	(3)
f. individual miscellaneous comments (7)	(1)

- a. Lack of time to locate information. Lack of time to locate information is shown most frequently (15) as the direct reason (barrier) for not having adequate access to needed information. Lack of time to read is also, for some, a barrier to gaining

access to available information, with 18 of 72 respondents (25%) indicating that they could usefully use more time to read each week but they just do not have that time. Lack of time is also shown, indirectly, as a barrier when 55 of 67, or 82%, of the respondents noted that lack of time was second only to cost as a major barrier to using more days per year for attending seminars, workshops, or conferences.

- b. Relevant information exists but is difficult to find. Difficulty in locating needed professional information was noted almost as frequently (14) as lack of time to read, as a direct barrier to gaining access to information.

When respondents listed information resources which they used, no one practitioner used all of the 50 specific resources noted. This may indicate lack of knowledge about the many resources available and being used by colleagues.

- c. Information overload. That there is just too much information was noted as a barrier eight times by the respondents who do not have adequate access to needed professional information. Also, in making suggestions for more effective management of recreation information resources in Alberta, 12 out of 18 respondents, proposed some form of bibliography, listing of available information, or synthesis of material for presentation to recreation practitioners, thus expediting the location of desired information. Others suggested various methods (page 49) which could help overcome the information

overload barrier, and make needed professional information more easily accessible.

- d. Lack of knowledge of people with needed information. Lack of knowledge of people with needed information was given six times as a barrier to gaining adequate access to needed information.

In comments about management of information resources, two respondents suggested that someone make available to practitioners a listing of resource people. (It may be noted that the Alberta Recreation and Parks Association began calling for names and compiling just such a list for Alberta in 1983. Recreation Alberta, Vol. 2, No.1, 1983, p.5.)

The importance of this factor, as a barrier, is borne out in the data which show that fellow recreation professionals were listed second only to government personnel (46% and 27% respectively) as major resources for professional information beyond one's own personal knowledge.

- e.f. Relevant information is not available. Relevant information is too theoretical. The unavailability of information and the fact that relevant information is too theoretical were each noted three times. Other than for a few individual notes (under f.) concerning distance, lack of personal experience, and disjointed information, these two barriers to gaining adequate access to needed information were least frequently mentioned by respondents.

Two other barriers, looked at indirectly, were organizational barriers and perceptions of one's own role. Although 32 of 52 respondents noted cost most frequently as the factor responsible for keeping them from attending more conferences, seminars, or workshops, there were many comments from practitioners concerning the support given them by their organizations for this activity. As well, 40 of the 71 respondents (56.3%) indicated that their organizations had paid 100% of the costs of those conferences, seminars, and workshops which they had attended in the past 12 months. Fourteen respondents (19.7%) had 60% or more paid and seven (10%) had 30-60% of these same costs paid. In comments with responses to a question regarding provisions made by organizations for professional development, three respondents made it clear that professional development is also a personal responsibility.

Fifty-one of 71 respondents (71.8%) said their organizations had budgets for professional books, journals, and periodicals. As shown in Table 1, thirty-one practitioners said these budgets were adequate while only seven considered their organizations' budgets to be "inadequate. Thirty-four respondents either didn't reply or indicated that they did not know if their budgets were adequate. Of those respondents who showed a budget amount and considered that amount adequate 80.6% (25/31) also believe they have adequate access to information.

Table 1.

The Availability and Adequacy of a Budget for
Professional Books, Journals, and Periodicals--
Linked to the Perception of Adequacy of
Access to Information

	Budget Adequate	Budget Inadequate	Don't Know If Budget Is Adequate	Total
Adequate Access	25 (80.6%)	3 (42.9%)	8 (61.5%)	36
Inadequate Access	6 (19.4%)	4 (57.1%)	5 (38.5%)	15
Total	31 (60.8%) (100%)	7 (13.7%) (100%)	13 (25.5%) (100%)	51 (100%)

Of those respondents who showed a budget amount and who have adequate access to information, 13 (50%) had a budget above the mean (\$230 for 12 months) and 13 (50%) had a budget below the mean. Of those who showed a budget amount and have inadequate access to information six (66.7%) had a budget in excess of the mean (\$230 for 12 months) and three (33.3%) had a budget below the mean; therefore, it would appear that the perception of a budget's adequacy rather than its dollar value was of possible importance in determining satisfaction with information access.

Another factor which may influence perceptions of adequate access to information resources, although the budget is perceived to be inadequate (Table 1), may be that of personal commitment to obtaining information. However, perceptions of adequacy do not appear, from this study, to be dependent on personal subscriptions to journals and periodicals or a current personal library. Although use of more personal time for reading professional information tends to be associated with adequate access to information, sample size was insufficient to confirm the significance of this trend.

As shown in Table 2, the majority of respondents 50/72 (69.4%) is satisfied with budget provisions made by their organizations for professional development. Twelve of those (16.6% of the total) find those provisions highly satisfactory.

Table 2

Adequacy of Organizational Provision for Professional Development

Highly Unsatisfactory	Unsatisfactory	Satisfactory	Highly Satisfactory	No Comment
2 (2.8%)	17 (23.6%)	38 (52.8%)	12 (16.6%)	3 (4.2%)

3. Characteristics of Recreation Practitioners

Selected characteristics of recreation practitioners and their communities as identified in Chapter 1, were studied. These included: (a) education, (b) experience, (c) position responsibilities, (d) length of work week, (e) size of community, (f) and distance from regional recreation offices.

- a. Education. The recreation practitioners responding to this survey have formal education levels ranging from upper elementary to master's degrees as indicated in Table 3. The vast majority (53/70 or 75.7%) holds an undergraduate degree (recreation 42.9%; other 32.8%). One third (24/70 or 34.3%) of these respondents received their degrees during or since 1980.

Table 3

Formal Education Levels of Recreation Practitioners

Highest level of Formal Education	Number of Respondents Out of 70	%	%
Elementary Gr. VII	1	1.4%	
Secondary Gr. XII	2	2.9	
	3		4.3
CNA	1	1.4	
Certificate-Recreation	6	8.6	
Diploma-Recreation	4	5.7	
Diploma-Other	3	4.3	
	14		20.0
B.A.-Recreation	24	34.3	
B.A.-Other	6	8.6	
B.Sc.-Recreation	4	5.7	
B.Sc.-Other	4	5.7	
B.P.E.	11	15.7	
B.Ed.	1	1.4	
M.A.-Recreation	2	2.9	
M.Sc.	1	1.4	
	53		75.7

- b. Experience. Years of experience in full time recreation practice, as shown in Table 4, vary with these respondents from less than one year (9/72 or 12.5%) to over 10 years experience (14/72 or 19.44%). The majority (45/72 or 62.5%) has three to ten years full time recreation experience.

Table 4

Years of Full Time Experience in Recreation

Place of Residence	Years of Experience					
	(-1 yr)	(1-2)	(3-5)	(6-10)	(10+)	
Rural	8 (16.7%)	3 (6.3%)	15 (31.2%)	12 (25.0%)	10 (20.8%)	48
Urban	1 (4.2%)	1 (4.2%)	10 (41.6%)	8 (33.3%)	4 (16.7%)	24
Total	9 (12.5%)	4 (5.6%)	25 (34.7%)	20 (27.8%)	14 (19.4%)	72

- c. Position responsibilities. Respondents were asked about the percentage of time they spent performing various functions. They are primarily administrators, spending 35.9% of their time performing that function. The other large percentage of time is spent facilitating the recreation experience. Respondents' time spent performing various functions is shown in Table 5.

Table 5

Percentage of Time Spent By Practitioners
in Performing Various Functions

Function	% of Time	Respondents
a. Administrating	35.9	70
b. Facilitating	24.6	72
c. Planning	14.0	67
d. Programming	13.9	63
e. Facility managing	6.5	32
f. Other (12 minor functions)	3.3	18
g. Activity leading	1.5	19
Total No. of Respondents Answering this Question		72

Table 6 shows the number of people reporting to the practitioners who were surveyed. The majority of the respondents (38 or 52.8%) has three to ten people reporting to them. However, 25% (18) of the respondents have more than ten people reporting to them. It was noted by several respondents that these numbers increased during the summer months.

Table 6

Responsibilities of Practitioner (Employees)

Place of Residence	Number of People Reporting to Practitioner					
	(0 people)	(1-2)	(3-5)	(6-10)	(10+)	
Rural	2 (4.2%)	7 (14.6%)	14 (29.2%)	9 (18.7%)	16 (33.3%)	48
Urban	1 (4.2%)	6 (25.0%)	5 (20.8%)	10 (41.7%)	2 (8.3%)	24
Total	3 (4.2%)	13 (18.0%)	19 (26.4%)	19 (26.4%)	18 (25.0%)	72

- d. Length of work week. Recreation practitioners who responded to this study work an average to a very long week. As indicated in Table 7, the largest number (27/72 or 37.5%) works from 35-39 hours per week; however, 35 practitioners work more than that and three say that, on the average, they work more than 50 hours per week.

Table 7

Average Work Week of Practitioners

Place of Residence	Average Number of Hours Per Week						
	(-20 hr)	(20-34)	(35-39)	(40-44)	(45-50)	(50+)	
Rural	1 (2.1%)	1 (2.1%)	10 (20.8%)	13 (27.1%)	20 (41.7%)	3 (6.2%)	48
Urban	- (-)	5 (20.8%)	17 (70.8%)	1 (4.2%)	1 (4.2%)	- (-)	24
Total	1 (1.4%)	6 (8.3%)	27 (37.5%)	14 (19.4%)	21 (29.2%)	3 (4.2%)	72

- e. Size of Community. Practitioners work with different sizes of communities (Table 8). The largest number of all respondents (27/70) works in communities of 10,001 to 50,000 people. The majority of rural practitioners (34/47 or 72.3%) works in communities with less than 10,000 people, whereas the majority of the urban practitioners (17/23 or 73.9%) works in communities of 10,001 - 50,000 people. (This does not reflect a true community to practitioner ratio as the urban communities have more people in each recreation district, and several practitioners serving each district.)

Table 8

Size of Community

Place of Residence	Size of Community (No. of people)						
	(-2,500)	(2,500-5,000)	(5,001-10,000)	(10,001-50,000)	(50,001-100,000)	(100,000+)	
Rural	7 (14.9%)	13 (27.6%)	14 (29.8%)	10 (21.3%)	3 (6.4%)	-	47
Urban	-	2 (8.7%)	1 (4.3%)	17 (73.9%)	2 (8.7%)	1 (4.4%)	23
Total	7 (10%)	15 (21.4%)	15 (21.4%)	27 (38.6%)	5 (7.2%)	1 (1.4%)	70

- f. Distance from regional recreation office. One question asked about the distances that exist between a practitioner's office and the regional office of the Alberta Recreation and Parks field services' consultant. It is indicated in Table 9 that twenty-eight (41.2%) of all the respondents (68) work more than 40 km from their Alberta Recreation and Parks regional office while 24 (35.3%) work less than 10 km away. For the rural practitioners, 58.3% work more than 40 km from their regional office, while the majority of those in urban areas (70%) is within 10 km of their regional office.

Table 9

Distance from Regional Recreation Office

Place of Residence	Distance from Regional Recreation Office (km)					
	(-10km)	(10-20)	(20-30)	(30-40)	(40+)	
Rural	10 (20.9%)	4 (8.3%)	4 (8.3%)	2 (4.2%)	28 (58.3%)	48
Urban	14 (70%)	5 (25%)	1 (5%)	- (-)	- (-)	20
Total	24 (35.3%)	9 (13.2%)	5 (7.4%)	2 (2.9%)	28 (41.2%)	68

4. Characteristics of the Practitioner and Adequacy of Information

Resources Access

It had been hypothesized that both the perceptions of need to gain access to information resources and also the barriers to gaining that access vary in relation to selected characteristics of the recreation practitioner and the community in which he or she works. Characteristics as described in Section 3 above included: education, experience, position responsibilities, length of work week, size of community, and distance from regional recreation offices.

These selected characteristics, as outlined and discussed in Section 3 above, were cross-tabulated with the question about the adequacy of access to information (see 1 above). None of these cross-tabulations showed any significant correlations when tested at the 5% level of Chi-square. However, distance from a regional recreation office appears to have a tendency toward an inverse relationship to one's perception of adequate access to information, i.e., 47.8% of those with adequate access to information works more than 40 km from their regional office, whereas, 54.6% of those who said they do not have adequate access to information works within 10 km of their regional office. The sample was too small to confirm the significance of this tendency.

One factor which emerged from visual inspection of the data, and of possible importance, was the influence of the Alberta Recreation and Parks regional office and, therefore, the field services' consultant in a region. Table 10 shows the response rate in each region and respondents' perceptions of adequacy of access to information. Of 17 regions (15 rural and two urban) there were seven regions (all rural) in which all

practitioners responding had adequate access to information. Of those regions with two or more practitioners responding (14), five regions showed all practitioners with adequate access to information. One region had seven respondents, all of whom said they had adequate access to needed information.

In only one region did all respondents (2) report inadequate access to information. One other area had an equal number of responses for inadequate access (4) and adequate access (4).

Table 10

Perceptions of Adequate Access to Information Resources
Related to Regional Recreation Offices

Regional Office	No. Sent	Response Rate (%)	Adequate Access	Inadequate Access
Rural				
A	12	8 (66.7%)	4	4
B	5	1 (20%)	1	-
C	11	2 (18.2%)	2	-
D	4	2 (50%)	2	-
E	6	2 (33.3%)	2	-
F	10	5 (50%)	3	2
G	11	4 (36.4%)	3	1
H	4	-	-	-
I	6	4 (66.7%)	3	1
J	15	7 (46.7%)	7	-
K	6	1 (16.7%)	-	1
L	6	3 (50%)	3	-
M	2	2 (100%)	1	1
N	4	1 (25%)	1	-
O	3	2 (66.7%)	1	1
P	1	-	-	-
Q	4	4 (100%)	3	1
R	2	-	-	-
Urban				
S	31	19 (61.3%)	12	7
T	<u>18</u>	<u>5 (27.8%)</u>	1	4
Total	161	72		

5. Information Resources Used

Practitioners were asked where they obtain needed information beyond their own personal knowledge. They listed sources of information relating to the following areas specific to recreation: administration (personnel management, facility management, fiscal policies, budgeting, and sources of grants), public relations, marketing, planning (master planning, program planning, facility planning, and open space planning), special populations, and leadership training. A multitude of information resources was given by those answering this question (55). Those resources were categorized as follow:

- a. Printed material
- b. Meetings (Conferences, seminars, workshops)
- c. Government personnel
- d. Private firms and consultants
- e. Recreation, and other associations
- f. Recreation professionals
- g. Miscellaneous

Within each category there were numerous resources listed from the entries of respondents.

As shown in Table 11, requests for information, in almost all areas, were made by most people (46%) to government department personnel. Civic government offices and Alberta Recreation and Parks received most of those requests (Table 12).

This finding contrasts with that of Donovan-Neale (1982:3) in her study of recreation information centres in Ontario. She found that provincial government resources were used more frequently than municipal government resources. "The Ministry Resource Centre, which includes the Technical Unit and the Information Centre for Special Populations, was

used more frequently by practitioners than were any of the other official recreation related information centres."

Table 11

Specific Recreation Information Resources Used by
Alberta Recreation Practitioners

No. of People Identifying Each Resource

	Totals	1. Printed Material	2. Meetings	3. Government Personnel	4. Private Firms and Consultants	5. Recreation and Other Associations	6. Recreation Professionals	7. Miscellaneous
ADMINISTRATION								
Personnel Management	56	12	10	14	1	5	13	1
Facility Management	63	2	3	36	3	11	8	-
Fiscal Policies	45	1	4	18	-	1	21	-
Budgeting	38	2	3	18	-	-	15	-
Sources of Grants	97	4	-	70	-	2	20	1
PUBLIC RELATIONS								
	27	1	1	8	1	3	11	2
MARKETING								
	38	2	3	8	-	9	16	-
PLANNING								
Master Planning	59	1	-	37	5	1	15	-
Program Planning	57	2	8	21	3	10	13	-
Facility Planning	48	1	-	19	13	4	11	-
Open Space Planning	49	3	1	25	6	2	12	-
SPECIAL POPULATIONS								
	33	3	-	16	-	7	7	-
LEADERSHIP TRAINING								
	53	3	1	13	1	16	19	-
Total	663	37	34	303	33	72	180	4
Percentage of Total Requests	100%	5.5%	5%	46%	4.9%	11%	27%	.6%

Table 12

Frequency of Requests for Information to
Frequently Used Information Resources

Frequently Used Resource	Frequency of Requests				Esti- mated total in the last 12 months
	once in 12 months	once a month	once a week	more than once a week	
Civic Government	51	32	22	2	1787
Alberta Government (primarily Alberta Recreation and Parks)	149	64	5	2	1385
Recreation Professionals	83	28	4	1	731
Recreation Associations	53	6	-	-	125
Federal Government	9	-	-	-	9

The second largest number of requests for information (27%) was made to recreation professionals; most frequently used were colleagues within one's own organization and those in other communities.

The high frequency of requests to recreation professionals was even more marked in Donovan-Neale's study as, "Respondents reported that information from other colleagues and from other departments represented the most frequently used and the most helpful sources of information." Line's (1971) work, "Investigation Into Information Requirements of the Social Sciences," also supports the importance of "informal channels" as he notes, "Very heavy use is made of informal channels and personal contacts, though it is difficult to quantify this use, and respondents may well have underestimated their use of personal contacts." Voigt (1961:81) noted the emphasis throughout his study "Scientists' Approaches to Information," on the "importance of information obtained from colleagues, both local and distant

Recreation and other associations received a lesser number of requests (11.0%). In addition there was almost equal incidence of reported requests for obtaining information through printed material (5.5%), meetings and conferences (5.0%), and private firms and consultants (4.9%).

The largest number of requests for specific information was in the area of sources of grants. This was followed closely by requests for information about master planning.

Table 13

Frequency of Requests for Specific Information

Areas	Requests for Specific Information				Esti- mated total in the last 12 months
	once in 12 months	once a month	once a week	more than once a week	
Sources of Grants	57	26	4	2	868
Master Planning	35	18	7	1	719
Program Planning	27	21	4	1	591
Budgeting	21	10	6	1	557
Personnel Management	40	22	2	1	512
Facility Management	41	16	3	1	493
Open Space Planning	25	16	3	1	477
Facility Planning	23	19	2	-	355
Marketing	24	5	3	1	344
Leadership Training	38	17	1	-	294
Fiscal Policies	34	11	2	-	270
Public Relations	17	6	3	-	245
Special Populations	18	9	-	-	126

The majority of the organizations represented by respondents (39/72) appears to purchase Recreation Canada, with its associated membership in the Canadian Parks and Recreation Association. Recreation Alberta and its associated membership in the Alberta Recreation and Parks Association, is also popular, receiving the highest number of personal subscriptions.

Table 14
Most Used Journals and Periodicals

Title	No. of Subscriptions	
	Organizational	Personal
1. Recreation Canada (Canadian Parks and Recreation Association)	39	12
2. Recreation Alberta (Alberta Recreation and Parks Association)	31	14
3. Recreation News	8	-
4. Parks and Recreation Journal	7	-
5. Municipal Counsellor	6	-
6. A Look At Leisure (Alberta Recreation and Parks)	5	-
7. Heritage	5	-
8. AARFP (Alberta Association of Recreation Facility Personnel)	4	3
9. Canadian Coaching Association	4	-
10. The Recreationist	4	-

In the 12 months preceeding the study, 67 respondents attended 81 seminars, workshops, or conferences, sponsored by 39 different groups. Most respondents (38/68 or 56%) reported obtaining a lot of useful information while 30 (44%) obtained some useful information from these meetings. The Alberta Recreation and Parks Association's seminars, workshops, and conferences (5 of 81) were most frequently attended, with 50 respondents participating. Most of the other meetings were attended by only one to three people.

6. Suggestions for More Effective Management of Recreation Information Resources

Although 43 (60%) of the respondents said they had adequate access to needed information, 12 of those practitioners, along with six who do not have adequate access, made comments concerning positive needs for more effective management of recreation information resources in Alberta. A high priority need, in their collective view, would be for development of ways and means to make needed information more quickly and easily accessible. Suggestions, with frequency of mention, included the following:

- annotated bibliographies of recreation and parks books and magazines (8)
- greater information sharing among governments, universities, recreation associations, and practitioners (4)
- listings of available recreation resource people (2)
- synthesis of information (2)
- more regional professional development clinics specific to stated professional needs (2)

- preparation of an index or classification system for individual professional office and general use (2)
- computerized information access (2)
- decentralization of recreation reference manuals (2)
- dissemination of information from national and international conferences (1)
- yearly schedule of upcoming recreation conferences, workshops and seminars offered by all recreation establishments in Alberta (1)

Discussion

It was hypothesized that there is a need for Alberta recreation practitioners to gain access to a variety of information resources. There are strong indications from this study that there is such a need. Some 50 specific recreation related information resources, given by respondents, were listed under seven major categories: printed material, meetings, government personnel, private firms and consultants, recreation and other associations, recreation professionals, and miscellaneous. From these collective results it is evident that many recreation practitioners in Alberta use a variety of information resources beyond their own personal knowledge. Yet, with all these resources available, 40% of the respondents said they do not have adequate access to information.

It was also hypothesized that there are barriers to gaining access to professional recreation information. It is evident from the study that there are, for some recreation practitioners in Alberta, barriers to gaining that access. The two major barriers that emerged are lack of time to locate information and difficulty in finding relevant

information. These findings corroborate those of Wendy Donovan-Neal (1982) in her study, "Information Use Among Municipal Recreation Practitioners in Ontario." She found that lack of time and availability of information were the greatest barriers to information use.

Other important barriers included information overload and lack of knowledge of people with needed information.

Suggested barriers such as those created by an organization or by perceptions of one's own role do not appear to exist in the perceptions of the respondents to this study. On the contrary, there appears to be rather high organizational support in principle, whereas lack of funds due to economic restraints within the organizations appears, for selected practitioners, to be a possible barrier to gaining desired access to professional information resources. This may not be so for others such as those who see professional development as a personal responsibility. However, this study did not show significant correlation between personal commitment to obtaining information and perceptions of adequate access.

Finally, it was hypothesized that the perceptions of need to gain access to information resources and the barriers to gaining that access vary in relation to selected characteristics of the individual recreation practitioner and the community in which he or she works. No significant correlation was found between those characteristics (education, experience, position responsibilities, length of work week, size of community, and distance from regional recreation office) and the practitioner's perceptions of adequate access to information.

One factor, which may be influential in helping recreation practitioners gain access to information, is the particular office, and

more specifically the field services' consultant, in a region. Although, from visual inspection of the data, there is reason to believe that this may be so, the validity of this finding cannot be established from this study.

Recreation practitioners in Alberta use a wide variety of information resources. There are barriers to gaining access to those resources. However, the perceived adequacy of access to those resources and the perceived barriers to gaining that access appear to have no relationship to selected characteristics of recreation practitioners and the communities in which they work.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The ability of enterprises to integrate and synchronize knowledge resources efficiently and effectively to support bottom-line results is what information resources management (IRM) is all about (Horton 1983:16).

Summary

Horton (1983:14-16) joins Stevenson (1982), Whitehead (1981:147), and Niles (1981:9) in stressing the importance of having information. In his view, "The Information Age is just dawning . . .," and emphasis must be placed on "information literacy"—going beyond "computer literacy"—to raise the individual's level of awareness of the knowledge explosion. Aligning his understanding with the views of other "Information Age experts" such as John Diebold and James Martin, Horton (1983:16) says, ". . . the organizations that survive and flourish in the decade of the eighties and beyond will be those that come to regard information as a valued corporate asset."

The broad field of recreation and leisure services is, by nature, multidisciplinary and as such involves knowledge of and information about a wide variety of interests. Having quick and easy access to such diverse information resources is of paramount importance to practitioners in the field.

If personnel working in recreation and leisure services value information from the knowledge gained by others in the field, and if

having access to that information is necessary for recreation practitioners to perform the work required of them in their communities, then more effort must be expended for recreation information resources management in Alberta. This study was undertaken as a first step toward that goal by exploring the perceptions of Alberta recreation practitioners of their own access to needed professional information and of barriers to that access which might exist.

It was found that recreation practitioners in Alberta use a wide variety of information resources. Barriers to gaining access to information were identified by 40% of the practitioners surveyed. Two most frequently cited barriers were lack of time to read and difficulty in locating available information. Other barriers were also noted. They included problems with information overload and lack of knowledge of people with needed information.

Although it was hypothesized that selected characteristics of the practitioner and the community in which he or she worked would influence perceptions of adequate access to information, no statistical difference was shown that would support the hypothesis.

There are indications from this exploratory study of other factors which need to be addressed. They would include the following topics.

—Coordination For The Purpose Of Information Sharing

Burton (1981:338-339), stressing the need for coordination of public leisure services planning and management, says,

There is growing evidence, however, to suggest that many management and executive staffs of governments, rather than serving as facilitators for the flow of information and

decisions among and between the other actors, have become, instead, guardians of established empires and bastions for the maintenance of the status quo.

It will be necessary, therefore, to develop methods of coordination for facilitating information sharing among the principle agents of recreation including development of ways to make needed information more quickly and easily accessible, as suggested by respondents. Agents in Alberta would include relevant government departments, universities, recreation associations, and practitioners in Alberta.

--Barriers

It will be necessary to develop methods for alleviating the problems of lack of time and information overload which were identified by respondents as barriers to efficient access to information. Bibliographies, indexes, and synthesis of information were suggested by respondents.

None of the respondents reported the use of computer access to information resources. As this will be increasingly important in the future it would be advisable to look at mechanical barriers, such as the availability of hardware or skills involved in the use of electronic access to information, and to develop assistance and training to overcome such barriers. Further research could also determine the extent of financial barriers resulting from computer access.

--Recreation Information Resources Manual or Data Base

As no one practitioner listed all the respondents' resources, it would seem apparent that a more comprehensive compilation of information resources is needed. It will be necessary to identify all information resources relevant to the needs of recreation and leisure services

practitioners in Alberta and to devise a computer compatible manual, or data base for the use of practitioners.

—Frequently Used Information Resources

The most used resources are civic government offices and provincial government departments, particularly Alberta Recreation and Parks. It would seem necessary to devise ways to enhance the effectiveness of these information resources, as defined by respondents.

—Alberta Recreation and Parks Regional Consultants

Indications from the study may suggest some difference in the way consultants from various regions assist practitioners to find information. It would seem necessary, therefore, to look at the effectiveness of the field services' consultants in helping practitioners gain access to professional information. This, in turn, may define ways in which all consultants could improve their information service to practitioners.

Conclusions

Results from this study lead to the conclusions that: recreation practitioners in Alberta use a variety of information resources; that for some practitioners there are barriers to gaining adequate access to needed professional recreation information; and that apparently obvious factors such as education, experience, position responsibilities, length of work week, size of community, and distance from regional recreation offices do not seem to influence the practitioner's perception of adequate access to information resources. Other factors, such as the role of the Alberta Recreation and Parks field services' consultant, may

be more influential in giving practitioners the ease of access to information required for them to carry out their responsibilities efficiently and effectively.

This study was exploratory in nature and the results have led to the conclusion that there is need for both interim action and further research if a system for recreation information resources management is to be developed in Alberta.

Recommendations

The area of information resources management, including the study of the use of information by a specific group of people, presupposes a plan or system for enhancing the availability of information to that group. The prime motivation for this study was the need, as expressed to the author by consultants from Alberta Recreation and Parks, for a method whereby recreation practitioners could be directed to specific information resources. Implications from the literature review indicate the more comprehensive need for a coordinated information resources management system for recreation and leisure services in Alberta. Mick et al. (1979:v) say,

Information travels through diffuse, complex paths. Individual information behaviors are the product of complex interactions involving personal attitudes, background, role, function, specific task situation, environment, etc. . . . We need to develop information programs and services that support a broad spectrum of information needs and behaviors.

Wilson (1981:12), speaking of user needs suggests analysis of the "total range of information services" which may be needed by individuals within an organization. This may necessitate "closer association, to the point

of merger" with others who are associated with the organization and also have an "'information' mission."

It is therefore recommended that further research, as noted below, be conducted. Interim measures should be adopted where possible while a long-range plan is being prepared for a coordinated information resources management system in the province.

Following are recommended areas of research and possible interim measures, as well as a broad brush vision of what an information resources management system for recreation and leisure services in Alberta could look like.

1. It is recommended that there be development and testing of methods for facilitating information sharing among relevant government departments, universities, recreation associations, and practitioners in Alberta.

2. It is recommended that ways be developed and tested to enhance the use of high frequency request information resources. As identified from this study, these resources are civic government offices, provincial government departments, particularly Alberta Recreation and Parks, and colleagues. Methods may include promotion of the services of relevant government departments and encouragement and planned use of informal information channels. These include personnel within one's own organization and community as well as colleagues in other communities and organizations. Canadian Parks and Recreation Association and the Alberta Parks and Recreation Association, planning seminars, workshops or conferences, should be encouraged to schedule ample time for informal information exchange among participants.

3. It is recommended that methods be developed for minimizing the problems of lack of time and information overload. These methods may include the production of bibliographies and indexes, as well as synthesis of information for practitioners.

4. It is recommended that all information resources, relevant to recreation and leisure services practitioners in Alberta, be identified. Also, that a computer compatible manual or data base be devised to compile this list, provision made for continuous update of resources, and access to this list be made available to practitioners in the field.

5. It is recommended that research be conducted to determine the influence of mechanical barriers to information access such as the availability of computer hardware, relevant software, and the level of practitioner skill necessary in the use of electronic access to information. Further to this research it may be necessary to design and develop courses, workshops, and ongoing training for the preparation and encouragement of practitioners using such access to information. **A**

6. It is recommended that research be conducted to clarify the role of the regional recreation field services' consultants and to determine whether some consultants do a better job than others. Directing this specific research at the user of information--the practitioner--may define ways in which consultants can be of more help to practitioners in providing them with better access to needed information. It may, as well, help consultants understand more of the information needs as perceived by practitioners.

Information is of vital importance to the recreation and leisure services practitioner in Alberta. With continued research and cooperation in the areas outlined above, access to needed information will be given high priority as the right arm of the profession in this province.

A Broad Brush Vision of an Alberta Recreation Information Resources Management System

The foundation of a recreation information resources management system in Alberta would be the institution of a cooperative information sharing network (Chiasson 1981:22). This network could take advantage of existing information systems and human expertise including the informal channels developed by practitioners. It could include the following groups:

1. Alberta universities and their faculties (Recreation and Leisure Studies, Forestry, Environmental and Land related departments)
2. Alberta Government
 - Alberta Recreation and Parks
3. The Alberta Recreation and Parks Association
4. The Canadian Recreation and Parks Association

The production of a recreation information resources manual or data base would augment the combined knowledge of practitioners and consultants. If produced in the form of a computer compatible manual, each practitioner could have personal access to information resources for specific areas of interest, whether they had access to a computer or not. Resources could be specific to areas of interest relevant to recreation

such as those addressed in the study. These include: administration, public relations, marketing, planning, special populations, and leadership training as well as information literacy and computer literacy.

To simplify access to needed information it would be necessary to prepare a controlled index or thesaurus for recreation information. This could be accomplished by building on the work done by others and utilizing the knowledge and expertise of people such as Elery Hamilton-Smith (1981:24) from Australia and Gilles Chiasson (1981:15, 38) from Canada.

Based on the highest frequency of requests for information, as recorded in this study, Alberta Recreation and Parks might logically coordinate the cooperative information sharing network.

Sharing of responsibility for input into the network might take a form based on three levels of information need (Voigt 1961), "the current approach" for keeping up to date, "the everyday approach" for the daily needs for information, and "the exhaustive approach" for the in-depth study needs. This form could be used without causing unnecessary duplication by delegating responsibility in a manner such as follows:

Current approach information--Alberta Recreation and Parks

Everyday approach information--Alberta Recreation and Parks Association

Exhaustive approach information--University of Alberta and University of Calgary, adding others if feasible.

Through the cooperative information sharing network it would be possible to greatly improve the knowledge of, and therefore the use of,

existing information systems such as SIRLS, SIRC, LRIS, MAB-NET and many others. Respondents did not report using any of these.

Other areas in which participants in the network could cooperate would be in continuing research of barriers to information access and ways of breaking those barriers to expedite access to information and the use of information. As well, people associated with the network could cooperate on training programs to raise the level of practitioners' awareness of the information age and computer literacy. The Alberta Recreation and Parks Association was most frequently cited in this study as the source of information categorized under meetings, therefore, they might best assume the leading role for this task. They should also be encouraged to continue the task of compiling a list of resource people. This list should become part of the recommended resources manual or data base.

If personnel in recreation and leisure services in Alberta are to gain the most use from information which is available, some system of cooperative information sharing is essential. Expenditure of time, effort and dollars will be required. However, as library science specialist Jack Brown (1978:436) points out,

If, as I have suggested, ready access to information is vital to the social and economic well-being of citizens of a country, then we have a responsibility to see that accessibility is not impeded by such factors as lack of money or complicated retrieval systems.

From this exploratory study it is evident that there is hope for such a system if there are those who will take the leadership and expend the effort, time and funds needed to bring it about.

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APPENDIX A

The Survey Questionnaire

RECREATION INFORMATION RESOURCE MANAGEMENT

SURVEY QUESTIONNAIRE

Dear Recreation Practitioner,

2001! A date which arouses the imagination of those with vision; A new era in which space age access to information may be the key to success!

As a graduate student in Recreation, I am interested in the immediate accessibility of professional information to YOU, a practitioner in the field of Recreation and Leisure Services. Therefore, I have chosen to study your perceptions of need for information and of the obstacles to obtaining that information.

This survey is being undertaken for my M.A. (Recreation) thesis. However, Alberta Recreation and Parks, Planning Support and Community Recreation branches, have also shown an interest in the final results. With your input perhaps this study could improve information services to recreation practitioners.

Respondents all work in municipal recreation in Alberta. Your questionnaire is anonymous, assuring you of the confidentiality of your responses. A brief summary of results will be made available to those who print their name and address on the return envelope.

Throughout the questionnaire, references will be made to information sources. Please think of all sources, including printed form and verbal form, in either informal face to face or telephone settings, where you are in a one to one situation or in groups such as seminars or conferences.

Your cooperation in answering the following questions is truly appreciated. The survey should take no more than thirty minutes to complete. Your answers, along with information from other respondents, will help to identify areas of need and problems pertaining to information resource management in Alberta.

Sincerely,

PLEASE RETURN THIS QUESTIONNAIRE
- within the week - TO:

Miss Lois Dodds
Department of Recreation and Leisure Studies
Faculty of Physical Education and Recreation
E401 University of Alberta
Edmonton, Alberta. T6G 2H9

Lois Dodds, B.Ed.
University of Alberta
Faculty of Graduate Studies

November, 1983

RECREATION
INFORMATION RESOURCE MANAGEMENT

SURVEY QUESTIONNAIRE

SECTION I

In the following questions please circle the appropriate letter(s) for the answer of your choice (eg. a. YES NO c. DON'T KNOW).

1. As a full-time recreation practitioner, do you have adequate access to professional information you need to carry out the responsibilities of your position?
 - a. YES
 - b. NOIf YES, please proceed to question 3.
2. Not having adequate access to professional information may be due to: (Circle one or more letters appropriate to your situation).
 - a. LACK OF TIME TO LOCATE INFORMATION
 - b. RELEVANT INFORMATION IS NOT AVAILABLE
 - c. RELEVANT INFORMATION EXISTS BUT IS DIFFICULT TO FIND
 - d. LACK OF KNOWLEDGE OF PEOPLE WITH NEEDED INFORMATION
 - e. THERE IS TOO MUCH INFORMATION (INFORMATION OVERLOAD)
 - f. RECREATION INFORMATION IS TOO THEORETICAL
 - g. OTHER: _____

3. In the last 12 months, if you consulted information sources beyond your own personal knowledge, please list up to three of those sources for each of the following areas.
4. Please note the organizational affiliation or sponsorship of each source listed in question number three.
5. Indicate how often, in the last 12 months, you used each source listed in question number three. Please use the following numbers for this question:

- (1) AT LEAST ONCE IN THE PAST 12 MONTHS (2) AT LEAST ONCE A MONTH
 (3) AT LEAST ONCE A WEEK (4) MORE THAN ONCE A WEEK

AREAS	3. SOURCE	4. AFFILIATION OR SPONSOR	5. HOW OFTEN?
Personnel Management	_____	_____	_____
Facility Management	_____	_____	_____
Fiscal Policies	_____	_____	_____
Budgeting	_____	_____	_____
Sources of Grants	_____	_____	_____
Public Relations	_____	_____	_____
Marketing	_____	_____	_____
Master Planning	_____	_____	_____
Program Planning	_____	_____	_____
Facility Planning	_____	_____	_____
Open Space Planning	_____	_____	_____
Special Populations	_____	_____	_____
Leadership Training	_____	_____	_____

6. Are you aware of other recreation information sources which you do not use? Please list and give reason for non-use.

SOURCE	REASON FOR NON-USE
_____	_____
_____	_____
_____	_____
_____	_____

SECTION II

In the following questions please circle the appropriate letter for the answer of your choice (e.g. a. 20 BOOKS b. 21-30 **C** 31-40).

7. Does your organization have a budget for books, journals, and periodicals?
- A a. YES b. NO c. DON'T KNOW If NO, proceed to part D.
- B If Yes, how much is allotted for a twelve month period? \$ _____ /12 MONTHS.
- C Is this budget adequate?
- a. YES b. NO c. DON'T KNOW
- D Comment _____
8. Does your organization have its own library collection related to the field of Recreation and Leisure Services?
- A a. YES b. NO c. DON'T KNOW If NO, or DON'T KNOW, proceed to question 9.
- B If Yes, how many books have been added to the organization's library in the past twelve months?
- a. 0 BOOKS b. 1-5 c. 6-10 d. 11-15 e. 16 OR MORE f. DON'T KNOW
9. Do you have your own library collection related to the field of Recreation and Leisure Services?
- A a. YES b. NO If NO, proceed to question 10.
- B If Yes, how many new books have you added in the last twelve months?
- a. 0 BOOKS b. 1-5 c. 6-10 d. 11-15 e. 16 OR MORE
- C How did you find out about these new books?
- _____
- _____
- _____

10. Please indicate the relevant professional journals and periodicals to which you have access.

A YOUR ORGANIZATION'S SUBSCRIPTIONS

B YOUR PERSONAL SUBSCRIPTIONS

C Are you aware of the titles of any other journals or periodicals which would be of use to you? Please list below.

SECTION III

In the following questions please circle the appropriate letter for the answer of your choice (e.g. a. 5 DAYS b. 6-7 c. 8-10).

11. On the average, approximately how much time, each week, in the last 12 months, did you spend reading professionally related information?

A During working hours a. 0 HOURS b. 1-2 c. 3-4 d. 5-6 e. 7 OR MORE

B During personal time a. 0 HOURS b. 1-2 c. 3-4 d. 5-6 e. 7 OR MORE

12. How much time, totally, could you usefully use each week, reading professionally related information?

a. 0 HOURS b. 1-2 c. 3-4 d. 5-6 e. 7 OR MORE

13. With reference to questions 11 and 12, if the average total time you did spend each week is different from the total time which you could usefully use each week, please explain the difference.

14. Is professional development mentioned in your contract?

A a. YES b. NO c. DON'T KNOW

B Does your budget include funding for attending seminars, workshops, and conferences?

a. YES b. NO c. DON'T KNOW

C How adequate are the above provisions for your professional development needs?

a. HIGHLY UNSATISFACTORY b. UNSATISFACTORY c. SATISFACTORY

d. HIGHLY SATISFACTORY e. NO COMMENT

Comment:

15. Approximately how many days during the last twelve months, did you spend attending seminars, workshops, or conferences?

a. 0 DAYS b. 1-2 c. 3-4 d. 5-6 e. 7 OR MORE

16. How many additional days during the last twelve months, would it have been useful to attend seminars, workshops, or conferences?

A a. 0 DAYS b. 1-2 c. 3-4 d. 5-6 e. 7 OR MORE

B If additional days would have been useful why were you unable to take advantage of those opportunities?

17. What percentage of costs, of the seminars, workshops, or conferences you attended (Q15), were paid for by your organization?

- a. 0% b. LESS THAN 30% c. 30-60% d. MORE THAN 60% e. 100%
f. NONE ATTENDED

18. From whom did you find out about the seminars, workshops, or conferences which you attended (Q15)? Please list seminars, etc., with your source of information.

Conference Attended

Information Source

Conference Attended	Information Source
_____	_____
_____	_____
_____	_____

19. Did you obtain any useful information at those seminars, workshops, or conferences?

- a. NONE b. SOME c. A LOT

SECTION IV

In the following questions, please circle the appropriate letter for the answer of your choice (e.g. **a** less than 20 HOURS b. 20-50 c. over 50).

20. Do you know which Alberta Recreation and Parks regional office serves you?

- A a. YES b. NO If NO, proceed to question 21.

B Which one serves you? _____

C How far is that from your office?

- a. LESS THAN 10 km b. 10-20 km c. 20-30 km d. 30-40 km e. MORE THAN 40 km

21. What is the population of the community for which you are responsible?

- a. LESS THAN 2,500 PEOPLE b. 2,500 - 5,000 c. 5,001 - 10,000
d. 10,001 - 50,000 e. 50,001 - 100,000 f. MORE THAN 100,000

22. How many years have you been in full time recreation practice?

- a. LESS THAN 1 YEAR b. 1-2 c. 3-5 d. 6-10 e. MORE THAN 10

23. How many people report to you?

- a. 0 PEOPLE b. 1-2 c. 3-5 d. 6-10 e. MORE THAN 10

24. Approximately what percentage of your time do you spend performing the following functions?

- _____ % ADMINISTRATOR (Office management and supervision of personnel)
- _____ % PLANNER (Planner of policies, facilities, or open space)
- _____ % FACILITATOR (Working directly with the public advising and assisting individuals and groups to achieve a leisure experience)
- _____ % PROGRAMMER (Arranging for and scheduling activities)
- _____ % ACTIVITY LEADER (Working directly with activity groups)
- _____ % FACILITY MANAGER (Carrying out duties directly related to a facility, its use and maintenance)
- _____ % OTHER _____

25. Please state the highest level of formal education you have completed and year attained.

HIGHEST GRADE (PUBLIC SCHOOL) _____ 19____

OR

CERTIFICATE/DEGREE _____ 19____

OR

OTHER _____ 19____

26. On the average, approximately how many hours do you work, each week?

- a. LESS THAN 20 HOURS b. 20-34 c. 35-39
- d. 40-44 e. 45-50 f. MORE THAN 50

SECTION V

Do you have any suggestions concerning more effective management of information resources for Recreation and Leisure Services in Alberta? If so, please elaborate.

Thank you for your contribution to this study. Your cooperation is greatly appreciated. If you would like a summary of the results, please print your name and address on the back of the return envelope (not on this questionnaire). We will see that you receive that information.

APPENDIX B

Journals and Periodicals Used,
Or Recommended By Respondents

JOURNALS AND PERIODICALS USED,
OR RECOMMENDED BY RESPONDENTS

Entries in this list are arranged alphabetically under titles of subscriptions, as written by respondents. Titles subscribed to by organizations form the basic list with asterisks (*) added when entries also show individual subscriptions. A number sign will also be added if those entries were recommended by individual practitioners. Those titles not in the basic list but subscribed to (*) or recommended by (#) practitioners will appear in alphabetical order as indented entries.

- A.A.B.R.D.—Alberta Advisory Board for Recreation for the Disabled
- * # A.A.P.E.H.R.—American Association for Physical Education, Health and Recreation
- * A.A.R.F.P.—Alberta Association of Recreation Practitioner Personnel
- A.A.S.L.H.—American Association State and Local History
- * A.C.A. News—Alberta Camping Association
- ADAC Newsletter
- A.P.W.A. Reporter
- A.W.M.A.
- ACCESS: Alberta
- * Action B.C.
- # Administrative Management
- # Alberta Architecture and Facilities
- * Alberta Baseball Association Newsletter
- Alberta Council On Aging

* Alberta Culture Newsletter

Alberta Historical Resources Foundation

* Alberta Orienteering Association Newsletter

* Alberta Report

Alberta Women

* A Look At Leisure--Alberta Recreation and Parks

Amateur Sport News

American Craft

Aquatic World

* Art Magazine

Arts Activities

* Arts West

Badminton

* Be Fit

* B.C. Outdoors

Better Work Supervision

* Bicycling

Building Maintenance

* Business Week

* C.A.C.

*# CAHPER--Canadian Association for Health, Physical Education and Recreation

* CANSI--Canadian Association of Nordic Ski Instructors

* CIRA

* CNIB

Calgary Recreation Department

Canada Fitness Survey

Canadian Aquatics

* Canadian Camping Association

Canadian Coaching Association

Canadian Museums Association News

* Canadian Runner

* Canadian Orienteering Federation Newsletter

Canoe

Ceramics Monthly

Civic Public Works Magazine

Connoisseur

CTM: The Human Element

Dartwell Corporation Chicago

Design

Edmonton Bullet

Edmonton Federation of Community Leagues

Edmonton Recreation Department

* Environment Views

* Explore

Fibre Arts

Fitness Finder

* Fitness Leader

Fitness News

Focus--Red Deer Regional Planning Committee Newsletter

Foresight

Futures Magazine

Golf Course Management

Grist

Hands

* Harrowsmith--Outdoor Recreation

Hansard

Heritage

Hockey and Arena

Howard Business Review

IAAM

ICMA

IPA

* International Wildlife

Interpretation Canada News

JAPHER

JOPERD--Journal of Physical Education, Recreation
and Dance (American Association for Health,
Physical Education, Recreation and Dance)

Journal of American Institute of Planning

* # Journal of Leisurability

* # Journal of Leisure Research

Journal of Park and Recreation Administration

Leisure

Leisure Today

* Lifeliner (Aquatics)

Linkage

MSAA (Native Newspaper)

Management Psychology

* McLeans

Minor Hockey Association

* Municipal Counsellor

* Muscle and Fitness

* # NRPA—National Recreation and Parks Association

* N.S.P.I.

* Nature Canada

OPD

Office Equipment and Methods

Our Legacy (Alberta)

Outdoor Canada

Owl

PERC

Parks and Recreation Maintenance

Photography

Pool

Physician and Sports Medicine

* RLSSC—Royal Life Saving Society—Canada

* Ranger Rick

* Leader's Digest

* Recreation Alberta—Alberta Recreation and Parks Association

Recreation and Leisure

* # Recreation Canada—Canadian Parks and Recreation Association

* Recreation News

Recreation Reporter

Recreation Research Review

Rec Vision

Red Cross—What's Happening

Region 5 Rec News Issues

Resource News

Saskatchewan Parks and Recreation Newsletter

Senior Sport Association

* Shape

Spokesman

* Sport Script

Sporting Goods Magazine

* Sports Illustrated

Stranco News

Swim Canada

* The Recreationist

* Time

Trends

Visual Arts Newsletter

Word Processing and Information Systems Training and
Hardware