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ABSTRACT

This conference proceedings record contains 17 papers concerning outdoor education, outdoor recreation programs, adventure education, and environmental education. Papers include: "Nature's University" (keynote speech on environmental ethics and outdoor education); "Mission '90" (a workshop on developing a mission statement for outdoor programs); "Managing Turnover of Outdoor Recreation Staff"; "Methods for Determining Student Price Thresholds for Campus Recreational Services"; "Starting an Outdoor Recreation Program for Persons with Disabilities"; "A Review of Adventure Recreation: Concepts, History, Trends, and Issues"; "Enhancing Environmental Education with Adventure Education Concepts"; "Initiating and Maintaining a College-Based Search and Rescue Organization"; "Alaskan Adventures: Programming in the Great Land"; "An Educational, Therapeutic and Social Adventure on Board the Schooner 'Ernestina'"; "Everything You Wanted To Know about Judgement, but Were Afraid To Ask!"; "Review and Analysis of a Five Year Study of a College Level Outdoor Leadership Curriculum"; "Project S.O.A.R." (Shared Outdoor Adventure Recreation--high adventure programs for at-risk youth); "Outdoor Safety Education: A Maine Perspective"; "Survey of Insurance and Liability: Concerns in Outdoor Recreation Programs in the South"; "Fund Raising: The Options Available to Outdoor Programs"; and "University Outdoor Programs: State of the Art, 1990." Also included are a list of conference presentations and events, and profiles of presenters. (SV)

Proceedings 1990 National Conference on Outdoor Recreation

"An Outdoor Renaissance"

Appalachian State University
Boone, N.C.

Proceedings of The 1990 National Conference on Outdoor Recreation Appalachian State University

"An Outdoor Renaissance"

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A special acknowledgement is hereby extended to Dr. Dan Dustin, San Diego State University, for the excellent and inspiring keynote address at the 1991 Conference.

INTRODUCTION

Personal and professional growth occurs through the vigor of acquaintenances, the renewal of old friendships, the sharing of research findings, and the reliving of experiences. This mutual participation is essential not only for the growth and development of the individual, but also for the discipline of outdoor recreation.

The fourth gathering of those interested in promoting growth in the area of outdoor recreation was held at Appalachian State University in November, 1990. In continuance of earlier accomplishments that originated in 1984 at Montana State University, progressed in 1986 at the University of California at Davis, and then to Colorado State University in 1988, outdoor recreation professionals again mutually shared their expertise and insight.

These Proceedings are the consequence of the kindredness of spirit of the many dedicated individuals in attendance at Appalachian State. The collective writings herein reflect insight about the conference's theme, "An Outdoor Renaissance." The Proceedings, therefore, are a "grassroots" product created to offer direction for everyone; the novice, the experienced professional, and for the profession.

Jim Gilbert
Eric Bruner
Rick Harwell

TABLE OF CONTENTS

NATURE'S UNIVERSITY

By

Daniel L. Dustin, Ph.D.
Department of Recreation
San Diego State University

(Keynote speech delivered at the 4th National Conference on Outdoor Recreation, November 8, 1990 Boone, North Carolina)

Deep within the Soviet Union is an exceptionally large lake called Baikal. Shaped like a quarter moon, Baikal is 400 miles long and 18 to 30 miles wide. It is the oldest and deepest lake in the world -- over 5,280 feet deep in some places. Three hundred and thirty-six rivers and streams flow into Baikal and only oneriver, the Angara, flows out. If the water flowing into the lake were stopped today, it would take the Angara 400 years to drain it. The lake contains, after all, one-sixth of the world's fresh water.

Baikal's water is pure, and on a crisp May morning in 1989 I drink my fill before setting out to climb Shelekhov's Ridge, named in honor of the eighteenth-century merchant/explorer Gregori Shelekhov, who established the first Russian settlements in the Aleutian Islands and Alaska. Local villagers assure me that the ridge is the best place to reflect upon their inland sea.

If the essence of education is inspiration, then what I experience as I look out over this vast expanse of water framed by snow-capped mountains is education of the highest order. In my mind's eye, the scene conjures up powerful images, images that can only be blurred by reducing them to words. To view Lake Baikal is to be infused with hope for the future. In its grandeur, in its splendor, I wonder why we humans find it so difficult to express our grandeur, our splendor? Why is it that we have so much trouble making peace with ourselves? Surely in the scene before me is a lesson to be learned. But Baikal, like all great teachers, does not answer my questions for me. It merely reflects them back in a way that motivates me to answer for myself---.

And we professors, as you well now, are fond of pretending to know all the answers. Indeed, perhaps that is why I have been invited here tonight; to answer for you why the work you do is important; to answer for you why you belong n college and university campuses; to answer for you why you should feel good about yourselves. But to be honest with you, if you can't answer these questions for yourself, I'm not sure what I can say to you this evening that will make much of a difference.

Besides, it is high time we move beyond the defensiveness that characterizes so many recreation, park, and leisure studies programs in higher education. The fear that what we devote our lives to is somehow less honorable than other areas of academic inquiry reflects only our own incomplete education. A more thorough understanding of our subject matter reveals that it forms the basis for culture, for the development of civilization, for the progression of what it means to be a human being. So let's begin this 4th National Conference on Outdoor Recreation by putting our fears behind us and focus instead on what each and every one of us can contribute to the continuing education of our fellow citizens in this, the final decade of the 20th century.

SOMETHING HAPPENED

As I flew over the United States yesterday, I marveled once again at the beauty of it all. I'm like a little kid when I fly. I want the window seat. I could see California's Mojave Desert, the Colorado River, the Grand Canyon, the Rocky Mountains, the Great Plains, the Mississippi River, the Tennessee River Valley, and, finally, the beautiful Appalachian Mountains as we settled back down to earth. I've often thought how blessed we are to be nested in this country. And I've thought, too, about our associated responsibilities.

So it seemed right for me to talk to you this evening about the ethics of our relationship with this living, breathing home of ours that is the United States of America. It seemed right to discuss with you why walking over America is better than pedaling over it is better than motoring over it is better than flying over it. And it seemed right to anchor my remarks in what science is telling us about the workings of the world.

But, in the words of author Joseph Heller, "something happened." To begin with, someone whose

opinion I respect admonished me for eating a hamburger at Burger King. Burger King, she said, gets its hamburger raised in or about the tropical rain forests of South America, a habitat in jeopardy as a refuge for many species of endangered plants and animals. Didn't I realize that by patronizing Burger King, I was contributing to the demise of those endangered species? (not to mention the ozone layer!) "For heaven's sake," I wanted to say, "lighten up. It was only a hamburger." But I didn't. And the conversation soon turned to my wasteful driving habits, my re-cycling shortcomings, and I don't know what else. Suffice it to say that by day's end, the size of my ego had been reduced appreciably; so much so, in fact that I could not in good conscience begin putting together a talk about what you ought to embrace as your ethics when my own ethics left so much to be desired. What right did I have to preach what I myself could not seem to practice?

I doubt that anyone likes to have their human frailties brought to light, and I am no exception. But rather than get defensive or try to rationalize my behavior, I decided to face up to it and consider the implications. So what I had intended to be a month of preparation for this talk now turned into a month of introspection, a soul search of sorts. As is my custom, I took apart the conversation of that troubled evening, considering its various aspects in detail, trying to reconstruct the logic of the criticisms leveled against me, trying to determine what to extent I deserved what I got. What I was groping for, you see, what a better understanding of myself. And somewhere in the midst of that inward journey, it occurred to me that to the extent I was like other people, perhaps I could put insights about myself to work in service of my original intent for this talk. (It's funny how a fast-approaching deadline clarifies one's thinking.) You laugh, but what, after all, is a public ethic or lack thereof other than an individual ethic or lack thereof written large? So here for your consideration, ladies and gentlemen, is the stuff I chewed on.

WHAT IT MEANS TO BE HUMAN

Who among us has not suffered through the painful realization that we are never going to be all that we promised ourselves we'd be? Whether out of ignorance, or

vanity, or some act of selfishness, who among us has not or more occasions that we care to remember belied what we stand for through our actions? Who among us, then, has not feet of clay?

By the same token, who among us has not on occasion experienced the joy of accomplishing more than we thought possible? Whether out of wisdom, or perseverance, or some act of unselfishness, who among us has not confirmed what we stand for through our actions? Who among us, then, has not at one time or another entertained thoughts of perfection?

We human beings are a curious mix indeed. We are constantly either disappointing ourselves or surprising ourselves. Grounded in the here and now, struggling with an imperfect world, struggling with our imperfect selves, we soar away from time to time to experience the promise of a more perfect world and a more perfect self. We transcend from what <u>is</u> to what <u>ought</u> to be. We turn what ought to be into what is. It is our ability to pull this off once in a while that gives us hope for the future.

If we insist, however, that the preaching of what ought to be is the domain only of those who never themselves transgress, we are in for either a world of silence or a world of hypocrisy. All I think we have a right to insist on is sincerity. And when, on occasion, someone preaches water and drinks wine, it is not necessarily an act of insincerity. It may simply be that the preacher is human. Imperfect beings that we are, our expectations must be tempered by humility and tolerance. What's really important, I think, is the degree to which we imperfect human beings are sincere about trying to rise above our present state, about becoming more than we thought possible, about working toward perfection. In my mind, aspiring to such a higher state of being is what gives purpose to our human existence.

HOW WOULD I CHARACTERIZE THAT HIGHER STATE OF BEING AND WHAT ON EARTH DOES IT HAVE TO DO WITH ENVIRONMENTAL ETHICS?

When I talk about becoming more than we presently are, I am not talking about becoming more physically fit, more well-heeled in the pocketbook, or any other common interpretation of the term. What I am talking about is a broadening of our awareness, an expansion of our sense of self, ultimately a stretching of our identity to include all living things. From my perspective, the best

measure of our ascendancy as human beings -- the GNP notwithstanding -- is the degree to which we extend ethical consideration outward from ourselves to others, to the land, to other creatures, and ultimately to the Earth in its entirety. I look forward to that day when we exercise restraint in our conduct, when we make sacrifices, not out of altruism that denies oneself for the sake of others but out of the realization that we are, in fact, the other. I look forward to that day when, as E. F. Schumacher described it, we die to ourselves completely. That characterizes the higher state of being to which I aspire.

I, for one, have not often experienced this state. You already know me better than that. But I have had my moments. Let me recount just one of them for you. I was hiking out of the Grand Canyon on the Bright Angel Trail above Indian Gardens on a hot April day in 1982. The sweat was pouring off my back, my heart was pounding, and my feet were sore. A mule train approached and, as is the custom, I moved to the side of the trail to get out of the way. I bent over to shift the weight of my pack and to rest. Then, quite unexpectedly, a stout woman stopped her mule beside me and began to chat. What an incredible place the Grand Canyon was, she mused from her throne atop the animal. What a sight to behold! Wasn't it great that we could get out to explore the Canyon, that we dared to dip down below the rim?

But I wasn't really listening. I was preoccupied. My eyes had somehow fixed on the eyes of her mule, and its on mine. the sweat was rolling off the mule's back, too. My thoughts were weird. Here we were -- two beasts of burden -- each carrying more than we had bargained for on a scorcher of a spring day in northern Arizona. A strange sense of camaraderie began to swell up in me. Is this what Thoreau meant when he talked about the miracle of seeing the world through another's eyes? Was I, for instant, the mule? And was the mule, for an instant, me? Was I actually living life's interconnectedness? Yes, I decided, I was. And that awareness generated a humbling and, at the same time, exalting feeling in me. I was feeling harmony. Then, having rested long enough, the mule and I parted company, each going about our business, each having a bit of the other locked away inside ourselves. And somehow I felt more hope for the world.

Well, given this aspiration, given this direction I wish to pursue in my life, what shall inform me along the way? Science? I think not. Science concerns itself with what is. I am concerned with what ought to be. Philosophy? History? Folklore? Legend? Mythology?

In 1864, the nature writer George Perkins Marsh said "Man has too long forgotten that the Earth was given to him for usufruct alone, not for consumption, still less for profligate waste." For usufruct alone. What a curious word! Where did it come from? The term is rooted in a paradigm, a world view that originated not in scientific discovery, but in the rituals and beliefs of primitive people. The atoll dwellers of the Marshall Islands believe they are part of the natural world, indeed that they are sub-servient to it. They view the world around them as a gift belonging to another which must be used in a way that does not destroy its substance. Theirs is the right of usufruct alone. Unlike our culture, the Marshallese have no concept of private property. How, they wonder, can they own what they are merely a part of?

I find it ironic that the concept of usufruct is more prevalent in primitive cultures than advanced ones because it seems to me to be a more civilized way of thinking about what ought to be the nature of our relationship with others, with the environment, indeed with ourselves. Perhaps the difference in orientations can be explained by the degree to which our culture is anthropocentric in its basic beliefs. In our thinking, human beings are separate from and above nature, and we therefore think we have a right to do with nature as we please. The environment is reduced to a repository of matter that derives value only when extracted for human use. In less developed cultures, on the other hand, where human beings see themselves as part of a larger living organism, the environment tends to be thought of in less exploitive terms.

Now I ask you, "How can we be anything but humbled by the fact that as scientists discover more and more about ecological interrelationships and interdependencies, it becomes increasingly clear that we human beings are indeed part of nature?" Perhaps it is only fitting, then, that we of the Western world now enter into a new relationship with ourselves in our entirety based on the concept of usufruct.

The relevance of usufruct rights to human conduct should be evident. Actually, such rights have been advocated for some time in the form of minimum impact philosophy and other calls for a more caring and compassionate code of human behavior. "Take nothing but photographs, leave nothing but footprints" suggests a responsibility to enjoy the environment in a way that does not destroy its substance. The administrative policies of land managing agencies like the National Park Service, which strives to tend our nation's pristine areas so they will be "unimpaired for future generations" are based on the belief that these resources are gifts bequeathed by the ages. Clearly, the rudiments of a usufruct philosophy are in place.

Recreational usufruct rights are thus wrapped up in the conviction that access to this nation's store of natural resources -- indeed to this world's store of natural resources -- to Lake Baikal, to the Mojave Desert, to the Colorado River, to the Grand Canyon, to the Rocky Mountains, to the Great Plains, to the Mississippi River, to the Tennessee River Valley, and to these very Blue Ridge Mountains in western North Carolina brings with it not only an opportunity to enjoy, but an obligation to protect. The conduct of the holder of usufruct rights is marked by environmental awareness, sensitivity, and responsibility. Such a person understands that nature does not exist solely for our immediate gratification. Such a person understands that nature has a larger purpose, one that is realized only through its service to succeeding generations of humans and non-humans alike. Such a person understands that it is the responsibility of this generation, our generation, <u>yours and mine</u>, to ensure that nature is allowed to fill that larger purpose.

NATURE'S UNIVERSITY

I realize, ladies and gentlemen, that what I'm proposing to you tonight may seem far-fetched; especially in a culture that is drifting farther and farther away from its biological moorings. But that is precisely why an environmental ethic is so badly needed in this country. We are in danger of losing touch with our nature, and most of us are oblivious to it. We suffer from what Brown University philosopher John Ladd calls "struthianism," a term derived from the Latin world for an ostrich. We have our heads in the sand most of the

time, leaving the critical understanding for someone else to worry about. Somehow we all need to be prodded into getting back to nature -- our own nature. This is why I think we should advocate walking over pedaling over motoring over flying. This is why crawling is probably even better. We need to be reminded where our food comes from, where our shelter comes from, where we ourselves come from. We need to be reminded of our earthly essence. But who will take on this responsibility?

Universities are wonderful places. Indeed I have long called them "homes." But they have their limitations. Words predominate. Universities are more of the mind than they are of the body. The existence of physical education departments on college and university campuses is about the only real concession we professors make to the fact that the human is encapsulated in a human body. Universities are, then, in-and-of-themselves, ill-suited for the kind of responsibility I'm talking about.

Nature's university, on the other hand, treats the human mind and body in unison. It specializes in connectedness. Words are less important there. Learning is experiential. The spirit is called on. Nature's university is ideally suited for nurturing the environmental wisdom we must possess if we are to have any hope of a happy and healthy 21st century. And you are ideally suited to be on its faculty. You are, above everything else you do, <u>educators</u>. In your outdoor recreation programs, you have a precious opportunity to change the way people see themselves in relation to everything else. You can reach people in a manner that is nigh on to impossible in the conventional classroom. You, in cooperation with the open air, can cultivate humility in those you serve. You, in cooperation with the stars, can cultivate wonder. You, in cooperation with a fledgling in its nest, can cultivate awe. You -- you are the ones who can shoulder the responsibility.

Therein lies your challenge. And therein lies the promise of this 4th National Conference on Outdoor Recreation. For embedded in your theme, "Outdoor Renaissance," is the faith that outdoor recreation experiences can indeed bring about a new beginning, a rebirth of our sense of connectedness to all that sustains us. You will not get an argument from me. For I, too, believe in the importance of what you do. I wish you well in your work. I expect a great deal from you. But I would not be here tonight if I didn't think you had a great deal to offer. As for me, I leave you with my

humble pledge. As sincerely as I can, I will enjoy the splendors of this Earth in a way that leaves them no worse for the wear. I will be as kind as I can to this Earth, and in so doing be as kind as I can to myself. As much as is humanly possible, I will try to live my life in the light of my oneness with all things. And all the while I will be informed by words like those of the late Russian poet Marina Ivanovna Tsvetayeva:

I know, I know
that earth's enchantment --
this carved
charmed cup --
is nor more ours
than air is ours
than stars
than nests
suspected in the dawn.

MISSION '90

By

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ABSTRACT

MISSION '90 was the theme of a workshop presented at the 4th National Conference on Outdoor Recreation. The primary purpose of the workshop was to encourage directors of campus-based, outdoor programs to examine, re-examine, or initiate a mission statement for their organization.

Secondary purposes of the workshop were to: 1) provide a working session for participants that would facilitate the implementation of new ideas gathered at the conference, and 2) promote a forum for discussion of these ideas and incorporate them into a 1990's mission.

The following topics were utilized to initiate discussion about the future of outdoor programs and to promote transfer of ideas: mission, goals, evaluation, administration, staffing, funding, audiences, program activities, site/facilities, networking, professionalization, and issues and trends.

Workshop Format

Workshop participants were asked to consider each of the topics with reference to their current situation. The authors suggested a detailed review of current status of these areas soon after the conference. Next, participants were asked to make written projections for

the 1990's on their worksheets as each topic was discussed.

Mission

What will be your mission for the 1990's? There is a diversity of campus-based outdoor recreation programs across North America. The primary commonalities are serving the campus communities and venturing into outdoor settings. There is a fascinating array of organizational structures, staffing procedures, audiences served (or not served), program activities, funding, and other administrative nuances that influence their impact.

Mission statements are more than just words and paragraphs. They are the credo by which an organization makes known the role it will play in the community. It is a "we believe" statement that gives meaning and direction to our programs. It offers a written vision of your reason for being.

Where does one begin when writing a mission for 1990? Schedule a time and place away from the office. Consider a staff retreat. Start by reviewing your current mission statement. What are your program's reasons for being? Does it articulate what you are doing? Have you grown beyond it? Are you out of bounds with the vision of your founders? Does your current mission allow for the growth and changing directions you foresee for the 1990's? Brainstorm, write, collect and synthesize. Strive to articulate!

Goals

The importance of goal statements which reflect current outdoor programs' mission statements were discussed. Goals should flow from and be consistent with the mission statement. The use or development of measurable goals and objectives for the entire program as well as for the staff is advocated. Sources of goal statements may come from students, staff, administrators, outdoor specialists, faculty and literature related to outdoor recreation and social needs.

A management by objective (MBO) development strategy has been employ ed effectively by some outdoor program directors. Admittedly, these are often left unanalyzed or evaluated. It was suggested by the group that outdoor

programs administrators need to improve their goal development and goal evaluation skills.

Evaluation

The development of goal statements and measurable objectives provides the director with opportunities to quantify program and staff performance. The fiscal realities of the 1990's will require even greater accountability than was demanded before.

University outdoor programs can no longer justify their existence merely by citing numbers of students or faculty/staff served. Instead hard data concerning the quality of services rendered and the effect services have on the academic mission of the university have to be collected, analyzed, and routinely presented to administrators. These technical reports need to link the services of outdoor programs inextricably with the academic mission of the institution. Remember, outdoor education is very viable and effective method of education.

Outdoor programs will increasingly be viewed as a line function of the institution instead of an expendable staff function. A further discussion of this concept focused on the capability of outdoor programs supporting the research, teaching, and service responsibilities of institution faculty to a much greater extent. An excellent source of evaluation techniques can be found in The Evaluation of Human Service Programs by Theobald.

Administration

The administrative placement of campus-based outdoor programs was thoroughly discussed, and comments reflected the pros and cons of various locations on the organizational charts of the parent institutions. Generally, programs are housed in some branch of intramurals, student activities, or student development divisions of the academic institutions. These placements were seen as both positive and negative in nature. It was concluded that service to academic courses and programs could enhance administrative security.

The authors suggest that directors attempt to have outdoor programs seen as a line function of the university through linkage with the academic mission of the institution. This can be accomplished through academic course support in addition to student development. Recommended resources are Management in

Action: Guidelines for New Managers by W. D. Hitt (1986), and The Leader Manager: Guidelines for Action also by Hitt (1988). Written specifically for the directors and leaders of outdoor adventure programs is the comprehensive Leadership and Administration of Outdoor Pursuits by Phyllis Ford and James Blanchard.

Staffing

Undergraduate and graduate students provide the greatest number of staff to outdoor programs on campus. Staff recruitment, selection, training, and turnover were discussed as repetitive problem areas. Utilizing the expertise of existing faculty or institutional staff was discussed as a beneficial means of enhancing the continuity and quality of outdoor programs staff. In addition, the possibility of contracting services to experienced experts was deliberated. Numerous staffing problems and issues are routinely discussed in Management Strategy and The Journal of Park and Recreation Administration Directors may be consulted, also Staff Training and Development for Park, Recreation and Leisure Service Organizations (1989) by W. R. McKinney and G. A. Lowery.

Funding

Funds to support outdoor programs operations come from a variety of sources. Student fees and revenues provide the lion's share of resources. Great emphasis should be placed on revenue generation and accountability by directors. A variety of revenue generation techniques were discussed. In general, rental programs and fee-based programs provide the greatest opportunities for generating new revenues. The ability to implement fees and charges will vary from institution to institution. It was concluded that most directors will face harsh fiscal realities in the early 1990's. Proactive fiscal planning will help soften the impact of tightening budgets. In this regard, the authors suggest the following references: Doing More With Less: A Book of Case Studies (1989) by J. Crompton and Cutback Management (1985) by G. Turnbull.

Audiences

Discussion of audiences revolved around the publics presently being served by programs represented in the workshop. Directors were challenged to consider new groups in the future. Suggested were academic classes, organized campus groups, faculty, staff, community, faculty outdoor educators and minorities. Considerable discussion centered around populations with disabilities, inviting them to participate and being properly prepared if they do. Participants indicated that they could do more to quantify numbers and types of users they are serving.

Program Activities

There are approximately thirty different kinds of activities offered by campus-based outdoor programs. They range from wilderness settings, to downhill ski resorts, to artificial environments such as ropes courses. Most participants indicated that they will be trying new program ideas in the near future. These included mountain biking, international travel, and climbing walls. The authors suggest that program directors study the "Recreation Opportunity Spectrum" approach of the U.S. Forest Service and check their state's SCORP (Statewide Comprehensive Outdoor Recreation Plan). These may help one conceptualize new ideas and approaches. For current reading see Recreation Programming: Designing Leisure Experiences (1989) by R. J. Rossman, and Special Events: Inside and Out (1990) by R. Jackson and S. W. Schmader.

Site/Facilities

Campus-based outdoor programs are not only housed in a wide range of administrative settings but are found in varied physical locations on the campus. Participants related past and present problems and anecdotes concerning their locations including: campus visibility, office space, rental storage, and other space limitations. It is essential that planning for the next decade include a review of present location and space needs and that projections for the future be made in writing. It will not happen if you do not plan. Check with the campus planning or building committee. Strive to become a priority rather than

an afterthought.

Networking

Critical to survival, the outdoor programs network on the local, regional, and national level was discussed. Of special concern was the lack of communication between offices of outdoor programs in common university systems and the lack of established networks on campus. These problems can only be addressed by individual directors as they market and promote their services. It was concluded that directors need to be more visible and politically astute on campus as well as in the local community. National concerns are being addressed by a number of conferences and workshops. Get involved and become visible, your involvement will lead to both personal and program growth. Directors may wish to consult the text Developing Community Support for Parks and Recreation by Toalson and Heichenberger.

Professionalization

Campus-based outdoor programs must strive to operate in the most professional manner to maintain or gain respectability on the college campus and throughout the local community. A professional operation is likely to be a safe operation. Affiliations with the American Camping Association, Association for Experiential Education, National Intramural Recreation and Sports Association (NIRSA), Student Unions, and the Wilderness Education Association, were mentioned as valuable by participants. Staff credentialing, staying current, modeling, professional growth and development, codes of conduct, and environmental impact were topics brought forth for consideration. Outdoor Adventure Pursuits: Foundations, Models, and Theories (1989), by Alan Ewert contains a provoking chapter on professionalization of the field.

Issues and Trends

Topics that were suggested as issues and trends of which outdoor program specialists should be cognizant included: risk management, internal and external reviews, program accreditation, and leader certification. Access to land and water resources

for programming is a growing concern as are conflicts between user groups, environmental responsibility, and outdoor ethics. Directors should consider their status as outfitter/guide, facilitator, and/or educator and the perceptions of their role by others.

Relationships with federal and state natural resource agencies, the local community, and fellow outdoor leaders must be given in-depth consideration in the 1990's. Service projects, library development, built environments versus natural ones, and the role of risk in recreation were mentioned. Rapid growth of the paddle sports, the impacts of technology, professional image, public relations, and finally the role of rock climbing competitions were offered as trends and issues to be aware of. The authors suggest an on-going review of the plethora of current journals and magazines that are available to keep abreast. Trilogy: The Magazine for Outdoor Enthusiasts is suggested as one magazine that presents current and thought-provoking material for the outdoor professional. The Outdoor Network Newsletter (Boulder, Colorado) provides very current information and is highly recommended. Risk Management for Park, Recreation and Leisure Services (1987), by J. A. Peterson is also a useful reference for a director. In addition, the history and future of the field are discussed in Adventure Education (1990) by J. C. Miles and S. Priest.

Challenge

In conclusion, the authors challenge campus-based outdoor programs to continue to reflect the individuality and professionalism that makes each a unique and valued resource to the university and outdoor communities. Strive to be prepared for the coming decade. Develop a mission and move on it. Reach a little higher, push a little harder, serve a bit more. Commit your energies and carry the spirit of this conference to your constituents in the 1990's and your mission will be successful.

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MANAGING TURNOVER OF OUTDOOR RECREATION STAFF

By

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ABSTRACT

This study investigated turnover and retention of outdoor adventure staff at five organizations. The best predictors of turnover (in order of importance) were: (1) behavior intentions, (2) primary income source with the organization, (3) job security from illness or injury, (4) education level, (5) extent organization facilitates a sense of community, (6) extent employee felt included in community, (7) satisfaction with benefits, (8) occupation in education, (9) influence and control, (10) no primary occupation, (11) and student status. Many of the predictors are partially or completely controlled or controllable by an organization. Using this information program mangers can take action to identify and correct problems thereby influencing the turnover rate within their organization.

Introduction

Keeping valued employees is a concern of many outdoor adventure recreation programs. Although there are reasons for turnover among staff that are not controllable by the organization, a number of work and non-work related factors are either partially or completely controlled by management. Turnover has both positive and negative impacts on an organization and the turnover rate in an organization is a number that needs to be managed just as an administrator needs to manage budgets or inventory. When turnover rates at an organization are above 25%, many administrators feel that turnover is too high (Birmingham, 1989).

One recent study (Birmingham, 1989) investigated turnover and retention of outdoor adventure staff employed during the summer of 1988 at five organizations (Nantahala Outdoor Center, Wildwater Limited, Pacific Crest Outward Bound, North Carolina Outward Bound, and Outward Bound Western Canada).
There were 644 subjects (the entire staff at these identified organizations) with an overall return rate of 76.24% for the questionnaire. Likert's Survey of Organizations-2000 (a measure of organizational climate) and a researcher-developed survey were used. Discriminant analysis was employed to analyze the data. A number of

variables were found to correlate with turnover and together a subset of these factors proved to be the best predictors of turnover. There were significant differences in scores on these factors between organizations and these differences significantly correlated with the different turnover rates at the organizations.

Statistically Significant Results

The management style and work place atmosphere at an organization can be inferred by organizational climate index items. Four organizational climate domain index items were found to have turnover correlates. These were: (1) overall satisfaction, (2) influence and control, (3) communication and (4) decision making.

The overall level of satisfaction that an employee had with "his/her work group, supervisor, job, organization, pay advancement, advancement history, and advancement prospects" (Bowers, 1980, p. 1) was a turnover correlate. The less satisfied employees were the more likely they were to leave.

The influence and control an individual felt he/she had in a given organization is important. This variable is the "total fund of predictability built into the system by interpersonal control." The conditions it taps are that of "Say or influence by middle managers, first-line supervisors, and non supervisory employees" (Bowers, 1989, p.1). The less control staff felt they had over their job, responsibilities and decisions that affected them the more likely they were to leave.

Organizations with dysfunctional communication paths had higher turnover rates indicating a need for communication up and down the hierarchy as well as between work groups and departments.

The hierarchial level where decision making occurred is very important. Ideally, the people most affected by only decision need to have input into that decision. Organizations that delegate decisions to the lowest level of the hierarchy possible, appropriate to the particular decision or issue, had lower turnover rates. Several studies have demonstrated that as a group, outdoor adventure staff are very independent and value autonomy (Riggins, 1983; Hendy, 1975), Borstelman, no date). Thus, it is reasonable to state that these individuals would prefer control over their lives and decisions which affect them.

The study included a number of work related turnover

correlates. These were: (1) organizational commitment, (2) role clarity, (3) satisfaction with benefits (health insurance, retirement policies, etc.), and (4) job security if illness or injury occurred.

(1) Organizational commitment: Defined as being the degree to which an individual identifies with and values an association with a particular organization. It may be the single best (although overall is weak) predictor of turnover. The less committed a staff member feels the more likely that person is to leave. Building loyalty into an organization is a complicated issue. Facilitating a sense of community and belonging, through organizational demonstrations via newsletters, common recreation time, and shared belief systems all enhance organizational commitment, and recognition of the employee's valued contributions.
It is important for groups that need to coordinate efforts to be effective. In organizations where this did not happen, the turnover frustration rate was higher. Attention needs to be given to factors that effect the ability of groups to work together for trip planning and execution, such as intergroup communication, schedules, and facilities location.

(2) Role Clarity: Refers to how well individuals know exactly what their specific job responsibilities are and how their particular contributions fit into the overall scheme in

the organization. Many administrators may be tempted to say, "An instructor is hired to instruct. That should be clear." If what an individual actually does and what that person was hired to do differ, or, if both primary and secondary responsibilities of a position are not clearly identified and understood by a staff member there can be confusion. This, too, leads to turnover.

(3) Benefits: Outdoor adventure education only recently has begun to offer standard job benefits such as health insurance, retirement funds, sick days, and vacation days. The demographic information obtained from this study's respondents indicate that the average age and tenure in outdoor programs is increasing. As more people are making a career in outdoor adventure education and committing a significant portion of their working life to this field they are becoming more concerned about the availability of job benefits. Obviously satisfaction with employments benefits (health insurance, retirement, etc.) is directly related to turnover. Therefore, staff need to be made aware of benefit plans. At several of the organizations studied, some individuals were unaware of benefits available to them.

(4) Job Security: Staff concerns for injury or illness while employed with the organization. In organizations where there was little, if any, job security, turnover was higher. The study revealed that within organizations there was a perception that some people had more job security than others. There were also differences noted between organizations. Some of the organizations were able to keep injured or ill employees on the payroll while others were not. Employees who felt they had, or actually had, less job security were more likely to sever employment ties.

Non-Work Related Correlates

Staff members felt it was important that their supervisors were approachable and were willing to listen to not only work related problems, but also to personal problems. This may relate to non-work related turnover correlates having to do with the emotional support system an employee already has in place. It was found that approximately one-third of the staff had no immediate, local, emotional support system. It would seem likely that these people were attempting to rely on their supervisors to fulfill this need. Where staff perceived supervisors as less approachable or less willing to listen turnover was higher.

Non-job responsibility and non-work related turnover correlates were: (1) the extent to which an organization facilitated a sense of community; (2) the extent to which an individual felt included in the community; (3) relationship issues (ability to maintain long-term relationships; (4) significant other' issues; (5) extent of local supportive relationships; (6) fulfilled needs; and (7) perceived fairness of the system to obtain housing.

As many outdoor adventure programs are located in isolated areas, the sense of community that existed within the organization was important. Data revealed that turnover was lower at organizations where: (a) it was felt that the organization tried to foster a sense of community among all staff, and (b) when people felt included in that community. This sense of community was related to staff member's network of friends and their emotional support system. Organizations with high community orientation better facilitated the creation and maintenance of friendships as well as increased feelings of inclusion. Although long-distance friendships and "significant others" were very important, having a local emotional support system was very significant. Because of isolated locations of base camps where staff are typically housed, and the nature of outdoor adventure jobs few staff have the opportunity to make or to maintain close, supportive friendships with local non-employees.

Staff members were less likely to leave if: (1) their "significant other" was also an employee; (2) if this person lived locally; (3) if this person did not live locally; and (4) if they did not have a significant other, but wanted one. Those who terminated employment felt that it was less possible to maintain long-term

relationships with "significant others" or have a family while working in outdoor adventure. Individuals who were married, or in long-term relationships with a "significant other", were more likely to depart when that "significant other" did not live locally. Those who did not have supportive relationships and those who did not have a "significant other", but wanted one, were more likely to leave.

Staffing schedules were found to impact on friendships and the maintenance of relationships. Some ways various organizations could build community include: (a) schedule common recreation times; (b) adopt a schedule where friends have common days and/or evenings off; (c) plan social events; (d) have a formal recognition system that publicly recognizes employees for jobs well done; (3) have a shared decision making process; (f) make sure administrators know everyone's name and something about each person; (g) have demonstrations which the organization recognizes; (h) attempts to meet the needs of individuals; (i) celebrate birthdays; (j) recognize that the staff are a group and as a group they go through the stages of group development and facilitate that process; (k) treat all staff members and participants equally; and (l) have open communication. While each community will be different, these are common elements of healthy organizational communities.

Regardless of the system utilized, it was found to be important to staff that housing be fairly assigned. Some staff commented that their housing was not just a place to sleep, but their home and the staff village was their neighborhood. They frequently stated that continuity in where they live was important.

Additional Turnover Correlates

Organizations have control over several demographic turnover correlates. Demographic turnover correlates are identified by the following components: (1) primary source of income; (2) education level; (3) primary occupation; and (4) tenure with the organization.

The length of time associated with the organization in length of years (although it may only be a seasonal course) was linked to turnover. Those who left generally were with the organization a short length of time. The highest turnover was between years two and three in summer season jobs, and between the third and sixth month in year-a-round jobs.

A staff member's primary source of income was important (sources were: the current organization, another organization, no primary source, student status, other). Staff were more likely to remain if a primary source of income was the organization (even if only under a seasonal contract), or if they had no primary source of income. Many seasonal staff said their primary source of income. Many seasonal staff said their primary source of income was the organization, even though they only had part-year employment. It would appear worthwhile for organizations to try to implement methods to improve a staff member's primary source of income through longer contracts, higher pay, or other means.

Pay was not a correlate, per se, when looking at the linkage between dissatisfaction and turnover. While most people were very dissatisfied with pay scales, the level of dissatisfaction did not correlate with turnover. It would appear that people are working in outdoor programs regardless dissatisfaction with pay, which is consistent with similar research in other fields. It has been demonstrated that people in social services and education list intrinsic rewards of a job as more important than pay (Cotton and Tuttle, 1986). Comments by staff indicated that pay is an ultimate, but not an immediate, factor in a decision to leave.

The research did not ask the questions:

(1) "To what extent are you thinking of leaving because of the pay levels?"

(2) "To what extent can you continue to work for the organization at the current pay levels?"

(3) "To what extent can you continue to work for the organization if the current pay levels are significantly increased? significantly decreased?"

(4) "How much should a staff person at your level earn in an average month? an average year?"

Primary occupation and student status was linked to turnover rank order: outdoor adventure, education, social or health services, other professional, trades, miscellaneous, and student). People whose career choice was outdoor adventure or outdoor education were more likely to stay. Students were mostly likely to leave.

Most outdoor staff members had at least four years of college, 38% had attained education beyond a

bachelor's degree. The more highly education the more likely that person was to leave because more employment options were available to him or her.

Conclusion

The best predictors of turnover in order of importance were: (1) behavior intentions; (2) primary income source; (3) job security if ill or injured; (4) education level; (5) extent to which the organization facilitates sense of community; (6) extent to which an employee felt included in community; (7) satisfaction with benefits; (8) occupation; and (9) influence and control within an organization. All were significant at $p \leq .0001$, Chi-Squared 159.99 (10 degrees freedom). These eleven variables accounted for 48.51% of the variability (canonical correlation = 0.6965). Using these variables together, the researcher was able to correctly classify (into the turnover or retention groups) 88% of the respondents.

Three-quarters of all respondents added comments about topics related to organizational, personal, extrinsic and intrinsic issues/concerns which supported the statistical conclusions.

There were minimal differences in the ability to predict correctly turnover or retention of group membership regardless of organization: size, location, or type (profit/nonprofit, rafting/personal growth, USA/Canadian, East/West); and return rates (49% to 86%).

While it is not possible or even desirable to prevent total turnover, if a manager decided that the turnover rate at his/her organization was too high, a self-study may be needed to determine staff evaluation of the organization on critical turnover correlates. Some administrators may be in touch with the needs of their field staff, but this study indicated that two-thirds of the time the administrative staff were unable to predict the average field staff's answer to particular questions.

Work-related problems regarding communication and decision-making within the organization, benefits and job security, perceived approachability of supervisors, coordination of tasks, and role clarity all need examination. The issue of community - i.e., the creation of a sense of community and making sure people are included is paramount.

While not all factors affecting turnover at an outdoor adventure organization are controllable by an administrator, some variables are under administrative

control. It should be possible to reduce turnover by identifying and remedying the organizational shortcomings and problems that influence staff turnover.

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METHODS FOR DETERMINING STUDENT PRICE THRESHOLDS FOR CAMPUS RECREATION SERVICES

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ABSTRACT

An enduring debate in the parks and recreation literature centers on how best to determine what fee increases users of recreation services are willing to pay. Employed in this study were two alternative methods that estimated the price threshold levels of users of one campus recreation service. Both methods produced similar findings across two independently drawn samples. The willingness of student users to pay higher prices for services before showing measurable signs of significant resistance to price increases appeared identical. Implication for managers are discussed.

Introduction

Users fees for student services is an established trend in higher education. Generating income from student patrons is an accepted way of supplementing budget allocations thereby offsetting the cost of service deliveries.

The price of a service may be the single most important determinant of demand (Madrigal, 1989). Traditional economic theory suggests that the higher the price, the less the demand. Therefore, finding the price the student users of campus services are willing to pay should not be left to intuition or chance. This study is an attempt to demonstrate means of systematically determining the amount student users are willing to pay before expressing measurable resistance to price

increases. Offered are two methods for determining users willingness to pay. The first involves determining consumers price tolerance levels, the second involves perceived-value pricing. Both are grounded in the principle that student consumers determine what levels of fees represent a fair price.

Not all categories of student services are appropriate for user fees. The underlying rationale upon which service fees should be applied are both philosophic and practical. Student services which are generally made available to all students regardless of their abilities to pay are medical, counseling and career guidance services. In still other cases user fees are not assessed because there are no physical ways of excluding people from participating. Parks and intramural playing fields by design do no provide practical means of regulating users.

The diversity of student populations and campus recreational services suggests that some students will use certain services more so than others. The numbers of patrons of concerts, video arcades and extramural sports programs suggest that there will always be more non-users of recreational services than users. Campus recreational services thereby offer examples of services in which fees can be applied since some students through their leisure preferences will benefit from certain services more than others. According to Madrigal (1989), user fees where applied may increase the economic efficiency of programs by forcing them to react to the expressed needs of students for selected services.

STUDY ONE

Determining Student Users Price Tolerance Ranges

Howard and Selin (1987) in a study of participants of a municipal park and recreation agency found that recreation consumers are willing to pay user fees if they fall within acceptable ranges. Prices that fall beyond those ranges are considered objectionable and consumers therefore are less likely to make a purchase. Assimilation-contrast theory (Monroe 1971, Sherif 1963) implies that consumers contrast the observed price with their acceptable range for the given service or product. People refrain from purchases not only when the price is perceived as too high, but also when it is conceived as being too low. This may explain why many students will pay higher health club membership fees rather than use a

free campus facility.

Study one is an attempt to establish the acceptable price range student users have for a campus recreational service. Such a price tolerance zone is defined as the "Extent to which participants are willing to pay fee increases without expressing measurable resistance" (Howard and Selin 1987, p. 49). The result is one means of determining pricing thresholds of student services.

Methodology

One component of a campus recreational service was selected for the purpose of both the pricing studies. The service involved an inventory of camping and backpacking equipment made available to students at modest rental rates. The equipment is purchased and maintained through a budget composed of user fees and university allocations from student activity fees.

Users of this service during the months of September and October, 1989 were selected for study one's determination of student price tolerance ranges. These users were delimited to non-duplicated students who rented the equipment for free and independent purposes (in other words, they were not members of academic classes who were using the equipment as a part of a required university function). Yielded was a sample size of 131.

Following Howard and Selin's (1987) methodology, the first step in conducting the price tolerance survey was to estimate as accurately as possible the costs associated with delivering the service. The costs could be generally broken down into two categories: fixed and variable costs. The fixed costs are represented by the original purchase cost of the rental item plus the salaries of student workers to administer the rental program. Variable costs vary with the amount of rental use such as laundering and cleaning costs.

The next step was to design three questionnaires. The information in the questionnaires was identical, with the exception of the price of the rental items to which students were asked react. The existing price of the service yielded 30 percent of the estimated cost of delivering the service. The low price alternative questionnaire proposed a doubling of the rental fee to cover 60 percent of the costs. The medium price represented the "break-even" point in which rental fees would cover all costs associated with the service. The high price alternative represented a modest profit

associated with the rental program delivery.

Once the questionnaires were developed, all potential subjects were systematically divided into three groups. Each group was then assigned to a specific price option, and the final third only the high price option. This approach attempts to control for the tendency of people to artificially deflate their willingness to pay higher fees, by opting to manipulate price among the sample instead of allowing all subjects to see all three price alternatives and comment upon the acceptableness of each.

The survey included a letter which described the purpose of the study and asked if they would be willing to pay the new increased rental prices. Participating subjects "Yes/No" responses were retrieved by telephone during the next seven day period. The response rate was 99 percent.

Results

Figure 1 (Follows Study 2) shows that student resistance to the low option price increase was negligible. However resistance became more apparent at the moderate or break-even rate. This implies that student users are willing to pay more for the existing service but not to the point that total price recovery can be achieved. Given the amount of resistance that surfaced between the two lower price options, it appears that the true price threshold lies somewhere between the two intervals. Nevertheless the consumer of this information would be ill advised to make such an estimate. The lower price option should be the one incorporated into the new pricing scheme.

STUDY TWO

Determining Price Thresholds Through the Perceived-Value Method

Crompton (1989) suggested that human nature may tend to deflate the true range of price tolerances users have for recreational services. If user's realize that their responses to a questionnaire may result in higher fees, human nature may tend to mask their true threshold. To control for this tendency, Crompton proposed using a hoax in which participants are asked after a purchase the amount of money it would take for them to return the

item unused. Such an approach may invariably inflate the price threshold because it captures subjects responses during a high involvement setting. Nevertheless, it captures the perceived value users have for a good or service by motivating them through a inducement (e.g. money) to consider substituting the existing decision with another.

Methodology

Sixty seven (67) students were approached by an interviewer immediately after renting equipment from the service during the month of November, 1989. The purpose was to buy-back the item(s) unused from the respondent. Most students were startled and all agreed to be detained for the time necessary for resolution. The hoax was enhanced by the purposiveness of the interviewer and his resolve only to suggest a higher buy-back rate that increased fifty cent intervals to a maximum of $4 over the original price. When a price buy-back option was reached (or the predetermined price ceiling was reached), the interviewer explained unduly stressed by the experience and left the premise satisfied by the interviewer's explanation.

The student's responses on average show that their perceived value of this service was much higher than study one in terms of their willingness to pay. On average these student users shared a willingness to return the items unused at 3.5 times the rate they just paid. Of greater importance than this mathematical mean was its standard deviation of .82. To find the threshold where five percent of the lower perceived value responses lie in the distribution, the original values were converted to standard z scores. Yielded from the formula was an indication of how many standard deviations this lower five percent of the population was from the mean. A z score of 1.83 suggests that five percent of the subjects perceive the value of the service to be equal to or less than the low price option of study one (e.g. $2). Approached from another perspective, 95 percent of the sample perceived the value of the service equal to or greater than $2.

Discussion

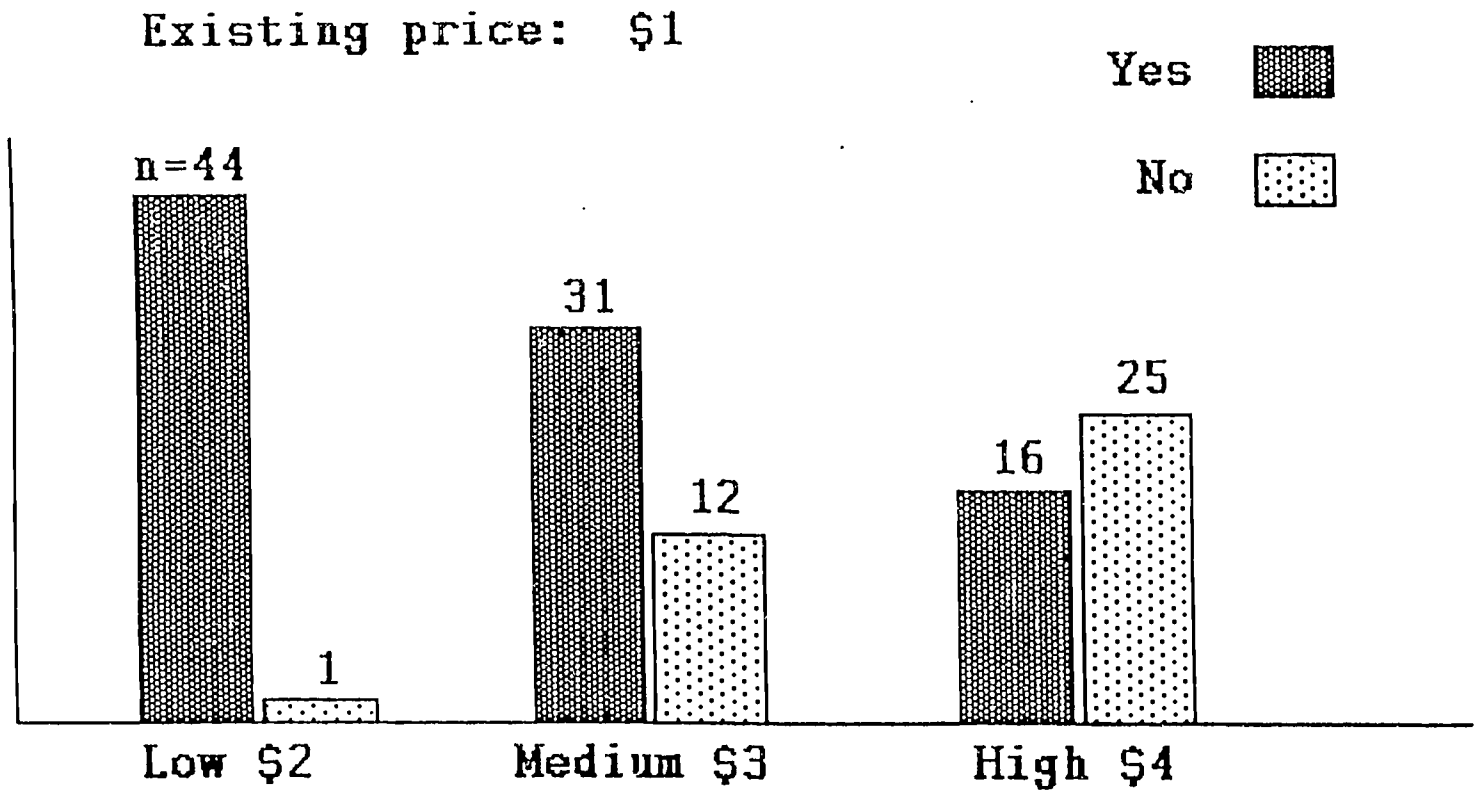
Though study one and two's results do not allow for statistical comparisons, they nevertheless arrive at similar conclusions. The willingness of these student

users to pay higher prices for services before showing signs of significant resistance appears identical. In study one, the low price option appears the most prudent level to affix the new pricing scheme since user resistance appears negligible. Study two substantiates this finding by indicating that 95 percent of the subjects perceive the value of the service equal to or greater than this low price option. Therefore prices could be increased to this low price option without significantly effecting demand.

Studies one and two are effective means of determining student price thresholds. However, study one's methodology is suggested over study two's because of one clear by-product. Study one establishes good will among the student users and the service provider by asking students' input. On the other hand, study two's methodology may create unaccounted for resentment among students because of the hoax imposed on users.

Findings of this nature suggest that clear price thresholds do exist, but they may vary substantially from one activity to another (Howard and Selin 1987). By determining the level at which users are willing to pay, the campus recreation services manager can extend budget allocations by optimizing revenues without decreasing student demand at an appropriate level.

Figure 1: Acceptance of Price by Student Users at Three Levels



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STARTING AN OUTDOOR RECREATION PROGRAM FOR PERSONS WITH DISABILITIES

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ABSTRACT

Starting an outdoor program for individuals with disabilities or assimilating disabled individuals into existing programs can be accomplished with adequate planning, some equipment modification, good communication skills, and a little ingenuity. This paper describes an approach to implementing an outdoor recreation program for persons with disabilities, based on the Alternate Mobility Adventure Seekers project at Boise State University. Issues such as accessibility, outreach, development of an advisory board, tapping into community resources, adaptive equipment, acquisition of donations, volunteer recruitment, in-service training, recordkeeping, and budget development are discussed. A list of helpful publications and programs serving disabled individuals is also presented.

Introduction

There are roughly 37,280,000 Americans that have a disability which limits activity. The U.S. National Council on the Handicapped determined in 1988 that only 36% of the disabled population in the United States participate in community recreation, as contrasted with

60% of the non-disabled (Nesbitt, 1989). Clearly, this population is under-served with respect to recreation opportunities. Literature focusing specifically on outdoor adventure programming for disabled individuals suggest that these programs have the same intrigue, stimulates the same level of interest, and are inherently beneficial as they are for the general or non-disabled public. Development of initiative, trust, cooperation, self-confidence, and independence have also been cited as major benefits (Robb and Ewert, 1987).

The university community has been identified as a logical extension of a physically-challenged individuals therapeutic environment. In 1985, the Boise State University Outdoor Adventure Program in Boise, Idaho expanded to include programs for the physically-challenged and today serves over 600 disabled individuals in southwest Idaho. The Alternate Mobility Adventure Seekers,, or AMAS, offers activities ranging from rafting and scuba diving to hunting and hot air ballooning.

Ideally, an outdoor program should hire a Recreation Therapist or someone with experience in adapted recreation to be in charge of programming for disabled participants. However, budgetary constraints may require that existing personnel take on this job. Such was the case with AMAS - our personnel had education and training in recreation and physical education, but virtually none with regards to adaptive or therapeutic recreation. However, we did not let this stop us from creating what is now a very successful program.

AMAS was fortunate to have the Cooperative Wilderness Handicapped Outdoor Group, or C.W. HOG, in southeastern Idaho to serve as a model for our efforts. Their director, Tom Whittaker, provided us with helpful suggestions concerning activity planning, recordkeeping, volunteer recruitment, and funding sources. Most of what we learned, however, was through trial and error. The purpose of this paper is to offer an un-scientific approach to starting a recreation program for individuals with disabilities based on our experiences with AMAS.

Approach

The following steps should be considered when starting an adaptive recreation program:

1. Terminology - Handicapped, disabled, crippled, mobility impaired, physically challenged, handi-capable, differently abled...no one agrees as to which term is best. "Crippled" is insulting to most, "handicapped" is outdated, unless you're talking about parking spaces or bowling scores, and many find "handi-capable" demeaning. If you must come up with a label, discuss it with your participants. We've settled on "physically challenged", although a few AMAS members hate that term. Other suggestions for interacting with disabled individuals can be found under "Disability Etiquette" in Appendix A.

2. Accessibility - Before starting an adaptive recreation program, review accessibility of your office, meeting rooms, swimming pool, and other areas where activities will take place. Watch for heavy doors, plush carpeting, lack of elevators, obstructed access, narrow aisles, poorly dapted bathrooms, and slick ramps. If you must make accessibility improvements, be sure they meet federal standards. Don't build a ramp that turns out to be too steep, or add hand grips to a shower stall that are too high off the ground. Avoid having meetings above the first floor if there is only one elevator in the building.

3. Schedule a planning meeting to evaluate interest levels and to get input from the disabled community. Inform other agencies that serve disabled clients about the meeting, including Vocational Rehabilitation, independent living centers, hospitals, disabled veterans'

centers, and the disabled student services office on your campus. Paste up fliers at medical supply stores, and send out a press release the week before the meeting. Remember, the key to the success of your program will depend on valuable input from your participants. The more individuals you can get at this initial meeting, the better.

Hand out a questionnaire requesting basic information such as the person's name, phone number, address, and disability or limitation. Include a list of activities so a person can indicate which ones interest them most. Elect officers at this meeting and determine the amount you want to charge for dues, if at all. We use our annual membership fees ($15) to fund the cost of producing a monthly newsletter and brochure, which have been our best outreach tools.

4. Develop an advisory board - Include seven disabled individuals, a doctor and/or therapist, lawyer, marketing specialist, and other people that you feel will benefit your programming efforts. Define your philosophy (Gilbert, 1988), establish goals based on input from the participants and officers, and put your policies in writing.

5. Review your resources. Inventory your existing recreation equipment -- many outdoor programs and colleges already have canoes, rafts, scuba equipment, cross-country skies, and camping gear available through their rental programs. Some equipment may require modification, and your program may need to purchase some specialized equipment (see #6).

   Review facilities and public recreation sites in the surrounding area, such as campgrounds, fishing areas, and bowling alleys. Agencies such as the Forest Service and Bureau of Land Management often publish a list of services and

facilities that are accessible on the lands they manage. In many states, the Department of Fish and Game provides free hunting and fishing licenses to persons with disabilities. If so, keep some applications for licenses on file to hand to participants. Often times disabled individuals are unaware of benefits such as free licenses and reduced campground fees.

Look around the community for other resources, such as outfitters, businesses that provide horseback riding lessons, and places that rent outdoor equipment. AMAS has received numerous discounts on jet boat trips, snowmobile rentals, equipment purchases, and jet ski rentals. Most importantly, contact recreation programs and clubs that are already in operation. Most likely you will find that the community will be very supportive of your efforts. AMAS has enjoyed rides with hot air balloon clubs, boating events with sailing and yachting clubs, trail rides with snowmobile clubs, hay rides with draft horse associations, and free airplane rides into Idaho's back country with a local aviation club. Usually the club provides a picnic along with their services, at absolutely no cost to our program. We have also found several land owners in central Idaho that allow our group access to their property to thin out deer or elk herds during the hunting season.

6. Equipment - Some recreation equipment, such as scuba gear and inflatable kayaks, usually requires no modification for use by disabled individuals. Some activities, however, will require equipment adaptations or outright purchase of new gear, depending on the type of disability. Some creative people may come up with their own modifications, such as a leg prosthesis modified to accommodate a fin (Robinson and Fox, 1987). Some modifications are simple, such as adding hand grips to saddles, constructing a

mounting ramp for horseback riding (Joyce, 1983), or modifying a canoe or kayak seat (Weber and Zeller, 1990). If your program wants to provide comfortable whitewater rafting opportunities to persons with spinal cord injuries, an adapted frame is a valuable and necessary piece of equipment. Various programs around the country have created a variety of adaptive raft frames, and you'll want to tailor yours to the type of disabilities you serve. We have two frame models - one for quadriplegics and one for lower-level spinal cord injuries that allows the individual more freedom to paddle. The former was constructed by welding old wheelchairs (minus the wheels) to a frame, the latter involved adding simple plastic chair seats and padded arm rests to an existing frame. When making or modifying equipment, always get input from several disabled participants. They will be your best source of ideas, and this way you will avoid having to redo a modification. If you are not disabled, never try to guess what will work best for someone who is.

Don't hesitate to approach the community for donations of equipment. We have had eight horses, numerous wheelchairs, fishing gear, motorcycle helmets, snowmobiles, winter clothing, and three vehicles donated to AMAS. Lack of transportation is a major barrier for many disabled individuals, so acquiring a van and installing a wheelchair lift can be a tremendous asset to your program. Utility companies can be very generous with vehicles they want to retire. Wheelchair lifts are expensive (at least $1,500), so you may also want to ask a contributor for some funds to make the van accessible. City transportation programs may also have funds to pay for a lift, and some outdoor programs have even received brand new vans already equipped with a left from local car dealers. Make "you never know until you ask" your motto when it comes to requesting donations.

There is a lot of adaptive equipment on the market, ranging from electric fishing reels and guide rails to assist blind individuals when bowling, to special ski toboggans, and mono skis (Nesbitt, 1986). This equipment can be purchased through catalogs or directly from the manufacturer and is often quite expensive. Two items that we have found to be extremely valuable include a Hoyer pool lift, which cost us $900, and an evacuation chair that was donated by a medical supply store. Both allow our staff and volunteers to lift and transport heavier participants with ease.

7. Develop liability release and medical information forms. Prior to an activity, go over medical information and expectations with each participant. Don't be afraid to admit that you are unfamiliar with a certain disabling condition or the management of its symptoms. The importance of communication between the staff, volunteers, and participant cannot be stressed enough. It will put everyone more at ease and will help prevent embarrassing situations from occurring. When developing a release form or forms, consult a lawyer or your university risk management program.

8. Develop a library. There are numerous books and journals related to recreation for physically-challenged individuals, including instruction manuals and adaptive equipment catalogs. A list of books and magazines can be found in Appendix B, and we highly recommend that your program establish a small library. Network with other programs that provide activities for the disabled so you don't "reinvent the wheel." A list (by no means complete) of other adaptive recreation programs can be found in Appendix C.

9. Recruit volunteers. Utilize the media to announce your need for volunteers by sending out a press release to all the local television stations, newspapers, and radio stations. Contact paddling clubs, students,

corporate volunteer directors, ski clubs, rodeo and horseback riding clubs, and other recreation organizations in your area. Spouses of disabled participants and other family members are often our best source of volunteers, so don't overlook this resource.

10. Hold an in-service training workshop for your staff. Physical and recreation therapists from local hospitals are often quite willing to provide training concerning medical issues, how to transfer people from wheelchairs, and other pertinent issues. If you have the funds, you can bring in instructors from the Handicapped Scuba Association, or send staff to National Handicapped Sports (NHS) downhill skiing or North American Handicapped Riding Association instructor clinics. Your program may want to consider affiliation with such organizations as NHS, will provide you with automatic qualification as a non-profit, tax-exempt organization (often a requirement to receive any kind of contribution from a corporation or foundation), eligibility for low-cost personal injury and property damage liability coverage, low-cost brochures, and availability of ski instruction and fitness clinics. Hold in-service training workshops on a regular basis, and include volunteers when appropriate.

11. Offer an activity - Make sure your first activity doesn't require extensive equipment modifications or a large fee, such as a fishing outing, wheelchair basketball, or a day of sailing. Encourage people to bring a friend or their family. Our first activity was a scuba diving class, as the interest level for it was high and we already had the equipment, instructors and volunteers. Certified divers helped with our scuba class, and all participants were required to turn in a medical release from a doctor prior to the first pool session. Scuba diving is not an appropriate activity for everyone, especially very high level quadriplegics and persons who

have seizures, but you may be able to teach snorkeling skills to those who cannot take part in scuba activities. We certified nine divers in our first class, including one quadriplegic, three paraplegics, three amputees, one hearing-impaired individual, and a lady with rheumatoid arthritis. The class also served as a way to "get the ball rolling" for AMAS. The students were excited about the program and ready to take an active role in the planning and organization of other activities. Many outdoor program activities are based on a "common adventure" theme, where everyone helps with all aspects of a trip or activity, and we encourage you to make your adaptive program a "common adventure." The more involved the participants are, the more they will get out of the experience.

Hold a meeting prior to any outings to explain clothing and equipment needs, what is expected of everyone on the trip, and potential dangers. We have had individuals show up wearing a wool dress coat and knitted mittens for an afternoon of snowmobiling in 15° weather, so you may want to have participants bring their gear and clothing to the pre-trip meeting. Inexpensive sets of parkas and snow pants can be purchased from the local army surplus store for those participants who don't have proper cold-weather gear.

Some individuals require an assistant or "attendant" to help them with personal care needs during an outing. In such cases, we require that the attendant accompany the person and come to the required pre-trip meetings. For some of our activities, we hold mandatory pre-trip workshops in areas such as snowmobiling safety, hunter education, and rafting safety. For example, prior to our raft trips we require everyone to take part in a pool session where we let them float in a lifejacket, then flip them over in a raft.

Be selective when scheduling overnight activities, such as camping or multi-day raft trips, when your program is just getting started. Some individuals may not have spent a night away from their home since their accident, and may need a period of becoming comfortable with your program before they are ready for that step. Most people with spinal cord injuries must administer a bowel care program every other day, and usually prefer to do this in their own home. Most of our raft trips, therefore, are only two days long. For more information about the medical aspects of disability, see Maddox (1987).

Always stress the responsibility of the participant to make their own decision whether or not they want to take part in an activity or whether they think it is too risky. They are also responsible for informing you of medical concerns, if and how they need to be carried, etc. Avoid being overprotective or overstructuring activities -- you want to encourage independence among your participants.

Also encourage participation by the disabled individual's family and friends and other able-bodied participants. Remember, one of the goals of outdoor programs is to teach a lifetime skill so tne student can go out in the community and enjoy that sport on their own. You don't want someone to be dependent on your program for all their recreation needs.

By involving family and friends, you will teach the able-bodied people how to enjoy a recreation activity with their disabled buddy or spouse. Schedule frequent social activities, such as barbecues and picnics, to make the atmosphere of your program more "user friendly." Bring in guest speakers to your meetings to make them interesting. We've had everything from stress management seminars to a wildlife biologist with a bear cub come to AMAS meetings.

12. Keep Records -- No doubt you will be writing grants or asking for other financial support once your program is established. To justify the need for funds, you must be able to document that your program is beneficial. Keep records concerning the number of disabled individuals and volunteers that take part in every meeting and activity offer. This can be stored on a computer data base, and the Outdoor Programming Handbook (Watters, 1986) described an excellent method for recording participant statistics and assigning values to each activity. Participation numbers can go a long way when requesting funds or trying to justify a proposed budget to your administration.

Other important measurable "results" that can be gathered include pre- and post-fitness evaluations, psychometric tests, or even a simple participant satisfaction survey. Have the psychology department on your campus help you design a survey that is valid, and administer it to the participants after the program has been going for at least six months. Also encourage your participants to write letters of support if they feel they are benefitting from your program in any way. These letters will make a nice appendix in your grant requests.

We would also recommend that you take numerous slides and videos during your activities. We've put together two multi-projector slide shows that are valuable tools for recruiting members and raising funds. Once you have developed a show, it will be easier to sell your program. Contact local post-polio, multiple sclerosis, muscular dystrophy and head injury support groups about making a presentation to recruit participants. Local service clubs, such as Rotary, Lions', and Kiwanis clubs are always looking for guest speakers for their meetings, and you may just come away with a donation for your efforts.

13. Develop a budget - Include everything from personnel costs to equipment purchases. If you plan to approach corporations for funding, they will ask for a copy of your budget. Make sure you include the value of in-kind services provided by your college or existing program, such as clerical help, office supplies, or free use of facilities. Your library or development office should have books on how to write successful grant applications, which will include tips on organizing a budget.

We have found that corporations like to support projects like AMAS, especially if they have employees involved in the program. Contact corporations in your area for contribution guidelines, and if possible, schedule a meeting with their contributions manager to introduce them to your program. The Handicapped Funding Directory (in Appendix B) also lists foundations, by state, that fund recreation projects. If you have a grant writer on staff or a development office on campus, take advantage of them. One important consideration: your chances of getting any kind of donation are much better after you have established a track record. Requesting large donations when you are just starting your program probably won't result in a contribution, so try to operate for a year before you approach corporations for monetary support. By taking advantage of existing personnel, volunteers, equipment, and community resources, AMAS operated for one and a half years with no funds other than membership dues and small fees we charged for our activities and trips. We are currently funded by a three-year grant from the U.S. Department of Education, and receive additional support from local foundations and corporations. We do not receive any funding from Boise State University, but the college provides us with free office space and utilities, use of recreation facilities

and equipment, and liability insurance. Other programs, such as Challenge Alaska in Anchorage, have become United Way recipients and receive state and county funds.

Final Notes

We started AMAS to provide equal recreation opportunity for our disabled citizens. Little did we know that our participants would reap tremendous physical, mental, and emotional rewards as a result of taking part in our activities. As necessary, the progress of disabled individuals in AMAS has been charted, quantified, evaluated, and judged a statistical success. But perhaps the real success of the program can best be deduced by talking with the participants and realizing the enthusiasm and determination they project. They will tell you that because of AMAS their lives are better, that they are no longer limited to sitting inside looking out. Now they are outside -- and looking up.

APPENDIX A

DISABILITY ETIQUETTE

1. Don't hang or lean on someone's wheelchair. Consider a wheelchair a personal extension of that person, and you wouldn't want someone leaning or hanging on you.

2. For extended conversations with someone in a wheelchair, sit down or squat at that level.

3. Don't assume that everyone with a disability needs assistance. Most people will ask for help when they need it. Offer it if you wish, but accept a decline politely.

4. Don't go crazy trying to avoid the words "look" and "see" in everyday language when speaking with someone with a vision impairment.

5. When offering assistance to a person with a visual impairment, allow the person to take your arm. This will enable you to guide rather than propel or lead the person.

6. Don't raise your voice when speaking. Don't exaggerate lip movements or volume when speaking with someone that can lip read.

7. Throw out old definitions that quadriplegics "can't move from their heads down" and that paraplegics "can't move from the waist down". Paraplegia and quadriplegia refer to the level of spinal cord injury, and the amount of movement and paralysis varies depending on the severity of the injury. There are paraplegics and quadriplegics who can walk.

8. Don't pat anyone in a wheelchair on the head. It's a gesture that they report getting all the time, and its very demeaning.

from Fensterman-Normansell 1986

APPENDIX B

RESOURCE GUIDE
SPORTS & RECREATION FOR THE PHYSICALLY-CHALLENGED

MAGAZINES & CATALOGS:

Access to Recreation: Adaptive Recreation Equipment for the Physically Challenged
2509 East Thousand Oaks Blvd., Suite 430
Thousand Oaks, CA 91362

Disabled Outdoors
5223 South Lorel Avenue
Chicago, IL 60638

Handicapped Sport Report
National Handicapped Sports
1145 19th Street, N.W., Suite 717
Washington, D.C. 20036

IDEA (Innovator of Disability Equipment & Adaptations, Inc.)
1393 Meadowcreek Drive #2
Pewaukee, WI 53072

Outdoors Forever
P.O. Box 4811
West Lansing, MI 48826

Palaestra: The Forum of Sport, Physical Education, and Recreation for the Disabled
P.O. Box 508
Macomb, IL 61455

Products to Assist the Disabled Sportsman
33012 Lighthouse Court
San Juan Capistrano, CA 92675

Special Recreation Digest
362 Koser Avenue
Iowa City, IA 52246-3038

Sports 'n Spokes: The Magazine for Wheelchair Sports and Recreation
5201 N. 19th Avenue, Suite 111
Phoenix, AZ 85015

Therapeutic Recreation Journal
National Recreation & Park Association
3101 Park Center Dr.
Alexandria, VA 22302

BOOKS:

Access America: An Atlas and Guide to the National Parks for Visitors with Disabilities
Northern Cartographic
Attention: Access America Editor
P.O. Box 133
Burlington, VT 05402

Aquatics for Special Populations/YMCA
YMCA Program Store
Box 5077
Champaign, IL 61820

Boating for the Handicapped
Human Resources Center
Albertson, NY 11507

Bold Tracks: Skiing for the Disabled
Cordillera Press
P.O. Box 3699
Evergreen, CO 80439

Canoeing and Kayaking Instruction Manual for Persons with Physical Disabilities
American Canoe Association
P.O. Box 1900
Newington, VA 22122-1190

Fitness Assessment Manual
Rick Hansen Centre
W1-67 Van Vliet Complex
University of Alberta
Edmonton, Alberta Canada T6G 2H9

Fitness Courses with Adaptations for Persons with Disabilities
Vinland National Center
3675 Ihduhapi Road
P.O. Box 308
Loretto, MN 553567

Focus on Abilities: A Guide to Including Persons with Disabilities in Community Recreation Programs
Toledo Society for the Handicapped
5605 Monroe Street
Sylvania, OH 43560

Go For It!
Harcourt Brace Jovanovich
Orlando, FL 32887

A Guide to Designing Accessible Recreation Facilities
Special Programs and Populations
National Park Service
Washington, D.C. 20240

The Guide to Recreation, Leisure and Travel for the Handicapped, Volume 1: Recreation & Sports
Resource Directories
3103 Executive Parkway
Toledo, OH 43606

Guidelines for Community-Based Recreation Programs for Special Populations
National Recreation and Park Association
3101 Park Center Drive
Alexandria, VA 22302

Handicapped Funding Directory
Research Grant Guides
P.O. Box 4970
Margate, FL 33063

Horseback Riding for Persons with Disabilities
Vinland National Center
3675 Ihduhapi Road
P.O. Box 308
Loretto, MN 55357

Interpretation for Disabled Visitors in the National Park System
Special Programs and Populations Branch
National Park Service
U.S. Department of the Interior
P.O. Box 371127
Washington, D.C. 20013-7127

The International Directory of Recreation-Oriented Assistive Device Sources
Lifeboat Press
P.O. Box 11782
Marina Del Ray, CA 90295

Journal of Rehabilitation Research and Development - Clinical Supplement No. 1 - Physical Fitness - Sports and Recreation for those with Lower Limb Amputation or Impairment
Office of Technology Transfer (153D)
VA Medical Center
50 Irving Street, N.W.
Washington, D.C. 20422

Network Resource Guide for Disabled Recreation in the Rocky Mountain Region: Part II
C.W. HOG - Idaho State University
Box 8118
Pocatello, ID 83209

The Outdoor Programming Handbook
Idaho State University Press
Box 8118
Pocatello, ID 83209

Physical Fitness Testing of the Disabled: Project UNIQUE
Human Kinetics Publishers
Box 5076
Champaign, IL 61820

Playing and Coaching Wheelchair Basketball
University of Illinois Press
54 E. Gregory Drive
Champaign, IL 61820

Reach For Fitness: A Special Book of Exercises for the Physically Challenged
Warner Books, Inc.
666 Fifth Avenue
New York, NY 10103

A Resource Manual on Canoeing for Disabled People
The Canadian Recreational Canoeing Association
P.O. Box 500
Hyde Park, Ontario Canada N0M 1Z0

Scuba Diving with Disabilities
Leisure Press
Box 5076
Champaign, IL 61820

Special Recreation: Opportunities for Persons with Disabilities
Saunders College Publishing
383 Madison Avenue
New York, NY 10017

Sport and Disabled Athletes: The 1984 Olympic Scientific Congress Proceedings
Human Kinetics Publishers
Box 5076
Champaign, IL 61820

Sports and Recreation for the Disabled: A Resource Manual
Benchmark Press, Inc.
8435 Ketsone Crossing
Suite 175
Indianapolis, IN 46240

Training Guide for Field and Combined Events
Training Guide for Physically Disabled Swimming
Training Guide for Wheelchair Racing
Training Guide for Wheelchair Table Tennis
PVA Sports
801 - 18th Street, N.W.
Washington, D.C. 20006

Travel for the Disabled
Twin Peaks Press
P.O. Box 8097
Portland, OR 97207

Wheelchair Basketball
PVA Sports
801 - 18th Street, N.W.
Washington, D.C. 20006

APPENDIX C

ADAPTIVE RECREATION PROGRAM DIRECTORY

Access Oregon Inc.
Ms. Shelia Cox
503-230-1225
2600 South East Belmont Suite A
Portland OR 97202

H.O.R.S.E.S.
503-873-3890
P.O. Box 5
Scotts Mills OR 97375

Access to Recreation
Mr. Don Krebs
805-498-7535
P.O. Box 5072-430
Thousand Oaks CA 91362

Accessible Journeys
215-747-0171
412 S. 45th Street
Philadelphia PA 19104

American Athletic Association of the Deaf, Inc.
1313 Tanforan Drive
Lexington KY 40502

American Water Ski Association
Mr. Phil Martin
681 Bailey Woods Road
Dacula GA 30211

American Wheelchair Bowling Association
Mr. Daryl Pfister
414-781-6876
N54 W15858 Larkspur Lane
Menomonce Falls WI 53051

Bay Area Outreach and Recreation Program Inc.
415-849-4663
605 Eshleman Hall
Berkeley CA 94720

Recreation Unlimited
Mr. Doug Sato
208-336-3293
2664 E. Hancock Ct.
Boise ID 83706

Access Alaska
907-479 -7940
3550 Airport Way #3
Fairbanks AK 99709

Access Tours
307-733-6664
P.O. Box 2985
Jackson WY 83001

Alternate Mobility Adventure Seekers
Ms. Nancy Ertter
208-385-3030
B.S.U., 1910 University Drive
Boise ID 83725

American Canoe Association Committee for Disabled Paddlers
703-550-7459
8580 Cinderbed Rd, Ste 1900, P.O. Box
Newington VA 22122-1190

Archery Development Program, Courage Center
612-588-0811
3915 Golden Valley Road
Golden Valley MN 55422

Aspen BOLD (Blind Outdoor Leisure Development)
533 E. Main St.
Aspen CO 81611

Bradford Woods
Mr. Gary Robb
812-335-0227
5040 State Road 67 North
Martinsville IN 46151

Blue Spruce Lodge
406-827-4762
451 Marten Creek Road
Trout Creek MT 59874

Canadian Wheelchair Sports Association
613-748-5685
333 River Road
Ottowa Onta KIL 8H9

Cheff Center for the Handicapped
616-731-4471
P.O. Box 171
Augusta MI 49012

Courage Center
612-542-9255
3915 Golden Valley Road
Golden Valley MN 55422

Cooperative Wilderness Handicapped Outdoor Group (C.W.
Mr. Jim Wise
208-236-3912
I.S.U., Box 8118, Student Union
Pocatello ID 83209

Eagle Mount
Ms. Cindy Fonda
406-586-1781
6901 Gloden Stein Lane
Bozeman MT 59715

Handicapped Scuba Association
Mr. Jim Gatacre
714-498-6128
116 W. El Portal, Ste 104
San Clemente CA 92672

Magic In Motion
800-342-1579
20604 84th Ave So.
Kent WA 98032

Breckenridge Outdoor Education Center
303-453-6422
P.O. Box 721
Breckenridge CO 80424

Challenge Alaska
Mr. Pat Reinhart
907-563-2658
P.O. Box 110065
Anchorage AL 99511-0065

Courage Alpine Skiers
612-520-0495
3915 Golden Valley Road
Golden Valley MN 55422

Craig Hospital
303-789-8225
3425 South Clarkson
Englewood CO 80110

Nat. Park Service, Dept of the Interior Special Programs and
P.O. Box 37127
Washington D.C. 20013-7127

Environmental Traveling Companions (ETC)
415-474-6772
Fort Mason Center, Bldg C Rm 360
San Francisco CA 94123

International Foundation for Wheelchair Tennis
Mr. Peter Burwash
713-363-4707
2203 Timberloch Place, Suite 126
The Woodlands TX 77380

Mission Bay Aquatic Center
Mr. Tom Fischer
619-488-1036
1001 Santa Clara Point
San Diego CA 92109

Moray Wheels Adaptive Scuba Association
617-451-3616
P.O. Box 1660 GMF
Boston MA 02205

National Amputee Golf Association (NAGA)
800-633-6242
P.O. Box 1228
Amherst NH 03031

Maine-Niles Association of Special Recreation
312-966-5522
7640 Main St.
Niles IL 60648

National Handicap Motorcyclist Associatlon
Mr. Bob Nevola
718-565-1243
35-34 84th Street, #F8
Jackson Heights NY 11372

Natlonal Ocean Access Project
301-280-0464
410 Severn Avenue, Ste 306
Annapolis MD 21403

National Wheelchair Athletic Association (NWAA)
719-635-9300
1604 E. Pikes Peak Avenue
Colorado Springs CO 80909

National Wheelchair Shooting Federation
Mr. Darryl Willette
203-741-3961
54 Hazard Avenue, Ste 319
Enfield CT 06082

National American Riding for the Handicapped Association, Inc.
303-452-1212
P.O. Box 33150
Denver CO 80233

Nantahala Outdoor Center, Inc.
704-488-2175
U.S. 19 West, Box 41
Bryson City N.C. 78713

National Association of Handicapped Outdoor Sportsmen,
618-532-4565
R.R. 6, Box 25
Centralia IL 62801

National Handicapped Sports (NHS)
Mr. Kirk Bauer
301-652-7505
4405 East-West Highway #603
Bethesda MD 20814

National Recreation and Park Association, Therapeutic
3101 Park Center Drive
Alexandria VA 22302

National Sports Center for the Disabled
Mr. Hal O'Leary
303-726-5514 Ext.179
P.O. Box 36
Winter Park CO 80482

National Wheelchair Basketball Association
606-257-1623
Univ. of Kentucky, 110 Seaton Building
Lexington KY 40506

National Wheelchair Softball Association
Mr. Jon Speake
612-437-1792
1616 Todd Court
Hastings MN 55033

Paul Hill Adaptive Sports Association
801-943-7069
1181 E. 7450 So.
Sandy UT 84093

Park City Handicapped Sports Association
Ms. Meechie White
801-649-3391
P.O. Box 680286
Park City UT 84068

POINT (Paraplegics On Independent Nature Trips)
Mr. Shorty Powers
817-481-0119
3200 Mustang Drive
Grapevine TX 76051

Recreational Challenges for the Disadvantaged
Mr. Jim McManus
208-464-2118
Box 442
Pierce ID 83546

Sequoya Challenge/Outdoor Access for All
Mr. John Olmsted
916-432-3185
Box 1026
Nevada City CA 95959

Shake-A-Leg
Mr. Harry Horgan
401-849-8898
P.O. Box 1002
Newport RI 02840

Sports n' Spokes
602-246-9426
5201 N.19th Avenue Suite 111
Phoenix AZ 85015

S'PLORE (Special Populations Learning Outdoor Rec. & Educ.)
801-363-7130
699 E. South Temple, Ste 120
Salt Lake City UT 84102

U.S. Association of Disabled Sailors
Mr. Mike Watson
714-534-5717
P.O. Box 15245
Newport Beach CA 92659

Physically Challenged Access to the Woods (PAW)
303-328-6582
1810 Quail - Unit C
Lakewood CO 80216

Physically Challenged Swimmers of America
Ms. Joan Karpuk
203-548-4500
22 William St, #225
South Glastonbury CT 06073

Univ. of Alberta, Rick Hanson Centre
WI-67 Van Vliet Complex
Edmonton, Alberta Cana T6H IG7

Rowcycle
800-227-6607
3188 N. Marks #107
Fresno CA 93722

Ski for Light, Inc.
Mr. Jeff Pagels
414-494-5572
1400 Carole Lane
Green Bay WI 54313

S.O.A.R. (Share Outdoor Recreation Program)
Ms. Julie Wilson
503-238-1613
P.O. Box 14583
Portland OR 97214

Total Access Camping
213-864-6896
10835 Ringwood Ave.
Santa Fe Springs CA 90670

U.S. Quad Rugby Association
Mr. Brad Mikkelsen
701-772-1961
2418 West Fallcreek Court
Grand Forks ND 58201

United States Rowing Association

Mr. Richard Tobin
603-778-0315
11 Hall Place
Exeter NH 03833

Vinland National Center

612-479-3555
P.O. Box 308
Loretto MN 55357

Wilderness Inquiry

Mr. Greg Lais
612-379-3858
1313 5th Street S.E., Ste 327 A
Minneapolis MN 55414

U.S. Cerebral Palsy Athletic Association, Inc.

Mr. Grant Peacock
313-425-8961
34518 Warren Road, Ste 264
Westland MI 48185

American Wheelchair Table Tennis Association

Ms. Jennifer Johnson
203-629-6283
23 Parker Street
Port Chester NY 10573

U.S. Wheelchair Racquet Sports Association

Mr. Chip Parmelly
714-861-7312
1941 Viento Verano Drive
Diamond Bar CA 93102

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A REVIEW OF ADVENTURE RECREATION: CONCEPTS, HISTORY, TRENDS AND ISSUES

By

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ABSTRACT

Adventure recreation includes those recreational activities that contain elements of physical risk and danger. This paper explores the concept of adventure recreation from the perspectives of distinguishing characteristics, history, and developing trends. Concluding this paper is a discussion of the different issues and concerns facing resource managers as they seek to provide adventure recreation opportunities to the visiting public.

Introduction

Consistent with much of the literature concerning outdoor recreation has been the wide variety of activities that fall under the rubric of outdoor recreation. One relatively recent addition to that list have been those activities that involved the deliberate seeking out of risk and danger in an outdoor recreational setting. Common examples of these types of activities include mountain-climbing, white-water rafting and wilderness hiking. To date, millions of Americans have participated in some form of adventure recreation with a number of studies suggesting that this form of outdoor recreation will continue to grow in popularity and acceptance (Darst and Armstrong, 1980; McLellan, 1986; PCAO, 1986). A number of terms have emerged to categorize and define these types of activities including natural challenge activities, risk recreation and high-adventure outdoor pursuits. These terms are subsumed under the heading adventure recreation and is defined as:

> A broad spectrum of outdoor recreational activities, usually non-consumptive and

involving an interaction with the natural environment; containing elements of risk and danger in which the outcome, while uncertain, is influenced by the participant and circumstance (Ewert, 1980:6).

Distinguishing Characteristics of Adventure Recreation

While traditionally thought by many as activities for the daredevil or foolhardy, adventure recreational activities are increasingly accepted as legitimate outlets for leisure pursuits. Outdoor recreation and adventure recreation are similar in several aspects. As illustrated in Figure 1 both types of recreational endeavors are typically a combination of participants, opportunities, and expected rewards. What distinguishes the adventure recreation activity from the more traditional outdoor recreation experience is a deliberate seeking out of risk and uncertainty of outcome often referred to as adventure. Both forms of recreation involved elements of skill and knowledge, but only in adventure recreation is there a deliberate inclusion of activities or settings that contain threats to a participant's health or welfare.

An example of this is a comparison between white water canoeing and fly-fishing. Both involve using a water-based resource and necessitate certain types and degrees of skills. The most obvious difference being that if poor judgement, bad luck, or incompetent skills strike both participants, one does not catch any fish while the other gets wet, hurt, or worse.

Currently, there are over twenty different adventure recreational activities. Adventure recreation includes a broad spectrum of activities that can be done alone, in groups, within structured classes or learned experientially.

While often similar, outdoor recreation and adventure recreation often serve different participants with different needs and expectations. A number of recreation researchers report that motivations to participate in outdoor recreation are based on a desire to achieve certain outcomes (Driver and Toucher, 1970; Knopf, 1983; Manning, 1986). For the adventure recreationist, these outcomes can be linked to the expectancy-value theories proposed by a number of social-psychologists (Feather, 1981; Kelly, 1986). In brief, these outcomes can be divided into three components. These components include outcomes that are expected to be

avoided during the adventure experience, outcomes that are assumed to precede or naturally come with the experience or activity and specific benefits that are expected to be accrued from the activity. As shown in Figure 2, below, the outdoor recreationist expects a number of things to occur and some not to occur.

Figure 2
ESPECTANCY COMPONENTS OF
OUTDOOR RECREATION

Avoidances	Antecedents	Benefits
Getting Hurt	Value/Money's Worth	Enjoyment
Demeaning Treatment	Safety	Personal Growth
Unnecessary Risks	Appropriate Activities	Physical Fitness
Exhausting Work	Professional Staff	Personal Reflection
Failure	Learning Opportunities	Socializing
Confrontation	Quality Equipment	Achievement
Illness	Souvenirs	Excitement

Given these expectations, it becomes more clear that the recreationist seeking adventure through the deliberate inclusion of risk either through the activity or the setting, does so for a number of specifically chosen reasons. In addition, these activities are engaged in for the excitement and personal testing and not simply to take a risk or "beat the odds." Moreover, research now suggests that as the participant gains in experience and skill the social and physical settings as well as their motivations for participation also change (Schreyer and Roggenbuck, 1978; Ewert, 1985; Hollenhorst and Ewert, 1987; Ewert and Hollenhorst, 1989). These changes are illustrated in Figure 3.

As suggested by Driver and Brown (1984), people with different motives and expectations for recreation

participation will prefer different environmental settings. Following this line of reasoning, the desired social setting for the adventure recreationist will also vary. As suggested by the preceding model, the inexperienced or threshold level participant will seek adventure experiences primarily through classes or structured events. As this individual grows in experience, he or she will more often choose experiences with other similarly skilled adventurers or by themselves.

In sum, adventure recreation is closely aligned with the broader field of outdoor recreation. The primary difference between the two concepts being in the relative importance placed on risk and adventure. It follows that managing natural resources along strictly outdoor recreation lines (e.g. fishing and hunting) invites a displacement and eventual inequity of the allocation of the available resources and opportunities for the adventure recreationist (Knopf and Schreyer, 1985). Any attempts to reduce or interfere with the challenge and risk-taking potential of an area or activity may severely inhibit the potential for satisfaction of the adventure recreationist. Sax (1980) suggests that this "erosion" of risk and spontaneity in the outdoor resources will ultimately lead to an attraction of users seeking a risk-free environment.

Management of Risk

From a management perspective, quality in outdoor recreation involves the degree in which outdoor recreation opportunities satisfy the participant (Manning, 1986). Moreover, as previously discussed, the experience will be less satisfying for the adventure recreationist if the area is over-developed and made more "safe" (Ewert, 1987). To create opportunities that are congruent with the expectations of the user the following questions would be useful in determining the extent providing adventure recreation experiences.

- Identify the essence of the activity; is it a search for adventure and risk-taking or are these factors peripheral to the experience?

- Will the recreation experience be facilitated or diminished through development of the resource? Site

modification and development may allow more participants but severely impact the adventure potential of the experience.

- What is the typical level of skill and experience of the users? Individuals with more skill and greater experience will often demand a more self-determined, less leader-led type of experience.

A Current Overview of Adventure Recreation

Outdoor adventuring has always had a special place in the American mind. Historically, forms of outdoor adventure recreation as organized activities first appeared in Sparta around the 6th century (Hackensmith, 1966). Activities such as mountain-hiking were considered an important part of a Spartan child's up-bringing and strengthening.

Since that time, adventure recreation has continued to be an important component in the lives of many citizens of our society. A substantial amount of literature suggests that participation in adventure recreation activities will continue to grow (Wilson, 1977; Siedentop, 1980; Brown, 1985; Ewert, 1985a, 1987). This growth has been in overall numbers and in some activities, such as cross-country skiing and SCUBA, in rates of growth. Recent studies, conducted by the National Sporting Goods Association in 1985 and the President's Commission on Americans Outdoors (1986) have indicated that a substantial portion of the American public is interested in outdoor recreation.

As shown in Table 2, six of the eleven types of activities listed have potential aspects of adventure recreation. These activities include backpacking, canoeing, nordic skiing, mountain/rock climbing and board sailing. Together, these activities account for 29.8 million participants out of a total reported number of 281.8 million participants (10.5%).

Of these six activities, four reported a relatively substantial percentage of high use participation. These four included sailing/windsurfing, backpacking, canoeing/kayaking and cross-country skiing (nordic). High use participation for this data analysis was considered participating in the activity three or more times per month (Table 3).

A different viewpoint is gained from Table 4, in which the fastest growing sports listed (adventure sports

are shaded with diagonal lines). The activities growing fastest in popularity, according to this data, are boardsailing and boardsurfing followed by mountain/rock climbing, horseback riding and sailing.

The message in these recent studies is clear. Adventure recreation activities and their participants cannot be overlooked by the recreation programmer or resource manager. As shown in Table 5, outdoor recreation activities comprise an important share of the American recreation scene and adventure recreation activities make up a substantial portion of that share.

Emerging Trends in Adventure Recreation

A number of trends have emerged in adventure recreation that will impact the areas of resource management and public regulation (Ewert, 1987; McClellan, 1986). Chief among these trends and most relevant to this discussion include the following:

- Participant fees are expected to increase.
- Overall numbers of participants are expected to increase.
- There is an expected increased on restrictions on the land and water resources for programming and activity. These restrictions, however, will be met with a growing activism from adventure recreation groups (Ewert, 1990).
- The number of organizations and programs offering adventure recreation is expected to increase.
- There will be an increase in the demand for adventure recreation activities close to urban sites. Many of these demands will take the form of requests for ropes course sites, rock climbing areas and underwater parks.
- Adventure recreational participants will become more sophisticated in their expectations concerning the adventure recreation experience. These expectations are moving toward more variety in the opportunities available and in the "type" of experience. For example, some white-water enthusiasts prefer a luxury river rafting trip while others choose to engage in a solo trip with a minimum of conveniences.

In essence, the majority of these emerging trends

will necessitate a greater level of attention by the resource manager toward the adventure recreationist. Moreover, if the indicators have been accurately interpreted, the resource manager will need to allocate more resources and attention to the adventure recreation phenomenon. In more specific terms, this greater allocation may take the form of less development of recreational sites particularly with respect to making the sites "more safe." In addition, the resource manager will come under increasing pressure from the adventure travel promoter and the adventure course programmer. Both types of uses are expected to increase and add more pressure to often already over-used resources.

Important Issues in Adventure Recreation

Concurrent with the growing popularity and emerging trends are a number of issues surrounding adventure recreation. These issues include the need for qualified personnel, dissemination of information, user conflicts, and legal issues. As adventure recreation activities become more widely practiced in and offered by more organizations, the field will solidify into a para-professional standing with its own body of specialized knowledge, organizations, and code of professional conduct. Currently, there exists a number of organizations supporting the professional area of adventure recreation including Outward Bound, the National Outdoor Leadership School, the Wilderness Education Association, Scouting USA, the American Mountain Guides Association and the American Alpine Club to name but a few. Common to many of these and other organizations is the constant search for qualified personnel to instruct and lead programs in a safe and environmentally-sound fashion.

Part of this sophistication has evolved into the beginnings of a systematic collection of data on a topic often related to the legal concern, namely, the number and type of injuries occurring in adventure recreation activities. Past studies have indicated that injury rates in adventure recreation are well below those of automobile driving, football or basketball (Ewert and Boone, 1987; Hale, 1986: Meyer, 1979). The injuries that have occurred most often involved river rafting and ropes courses. (See Figure 6)

Despite the overt attention shown to the "dangers" of adventure recreation, the data do not support an overly high level of concern. Nevertheless, there is an "attitude" held by the public concerning adventure activities. According to Ewert and Boone (1987), this public attitude concerning the risks in adventure recreation activities varies along a continuum from activities that are considered relatively safe and predictable to activities that are thought to be unpredictable and "dangerous." Juxtaposed to this concept of safety are the additional concerns of litigation and the causes of injuries (i.e., circumstance or negligence on the part of the agency). This attitude also carries over into the management and regulation of recreational areas. In an earlier work, Dunn and Gulbis (1976) reported that agencies such as municipal park and recreation departments have been fairly responsive to the provision of adventure recreation activities. Since that work, it is less clear as to how administrators and managers feel about providing opportunities for adventure recreation. What is clear, however, is that the demand for these types of recreational endeavors will continue to grow and the resource manager or programmer can expect increased pressure from this constituency.

Conclusion

Adventure recreation has been discussed from a variety of perspectives: conceptualizations and definitions, history, emerging trends, and salient issues. A recurring theme has emerged of dedicating a sufficient level of attention to this more recent permutation of outdoor recreation. Just as outdoor recreation is composed of numerous user groups, each with their own set of aspirations and expectations, so too does the adventure recreation user group have different subgroups of users. Kayakers certainly have different needs than do mountain-climbers. In a similar fashion, the spelunker requires a different set of opportunities than does the backcountry skier out for a three day expedition. What does bind these groups together is the search for adventure in their recreational endeavors. For management to safeguard against any and all risk or danger erodes the sense of adventure and ultimately destroys the very reason for engaging in that type of activity. In addition, adventure recreation activities are often used in an educational and therapeutic context

(Dattilo and Murphy, 1987; Robb and Ewert, 1987; Wright, 1987). Literally hundreds of programs exist that use adventure recreation activities to enhance the lives of troubled youth, adults in transition, people with disabilities, corporate executives and families. Moreover, it is now an increasingly common sight to see a family out for an afternoon rock-climb rather than the traditional picnic. While certainly not in the majority, this picture does represent a view of a more active and ultimately demanding public that desires more excitement and challenge in their recreational endeavors. Could less be expected as America enters the next decade facing a future that will demand active, creative involvement?

With these viewpoints in mind, the following questions and statements have been developed to provide a framework for future discussions concerning the place adventure recreation will have in the recreational scene for an America of the 1990's.

- Many of the data bases currently available do not distinguish between outdoor recreation and adventure recreation activities. For example, mountaineering and caving are seldom included in the data bases. Similarly, rafting and white-water canoeing are often subsumed under the general term water sports. It is recommended that researchers attempt to form more finely-tuned, discriminatory participation surveys.

- To what extent do resource managers have a responsibility to provide recreational opportunities that contain elements of dangers and risk?

- As the United States becomes increasingly urbanized, the demand for adventure recreation sites close to urban sites will continue to grow. From a structural standpoint, are land management agencies such as the Forest Service or Bureau of Land Management adequately prepared for adventure recreation close to large urban populations?

- User conflicts are likely to increase, particularly since traditional outdoor

recreation activities such as snowmobiling, or sight-seeing can often be in direct conflict with adventure recreation activities such as backcountry skiing or rock-climbing (Bremer, 1990). Moreover, adventure recreation activities often require a sense of "aloneness" with the presence of many other people severely impacting those experiences. How will land management agencies deal with these conflicts?

There are a number of indicators that now suggest that adventure recreation is maturing into a legitimate and widely acknowledged form of outdoor recreation. What remains to be seen is how our society will continue to embrace these types of activities. If used to their full potential, adventure recreation activities will not only provide exciting and restorative experiences, but could be used to ameliorate some of the ills currently plaguing society such as juvenile delinquency and ineffective management training. Whatever the outcome, adventure recreation will continue to play an important part for society in the foreseeable future.

FIGURE 1

THE OUTDOOR RECREATION MIX

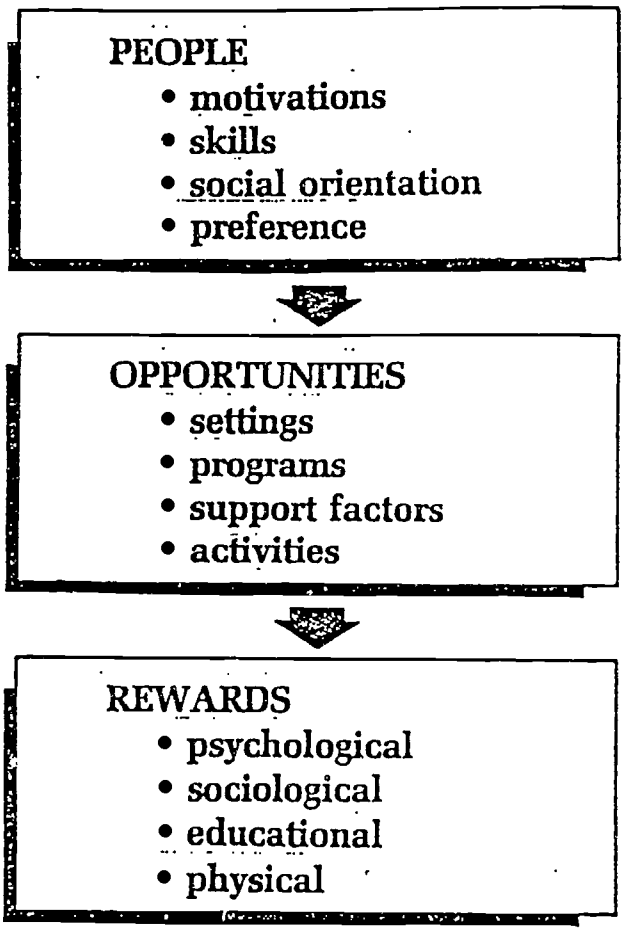
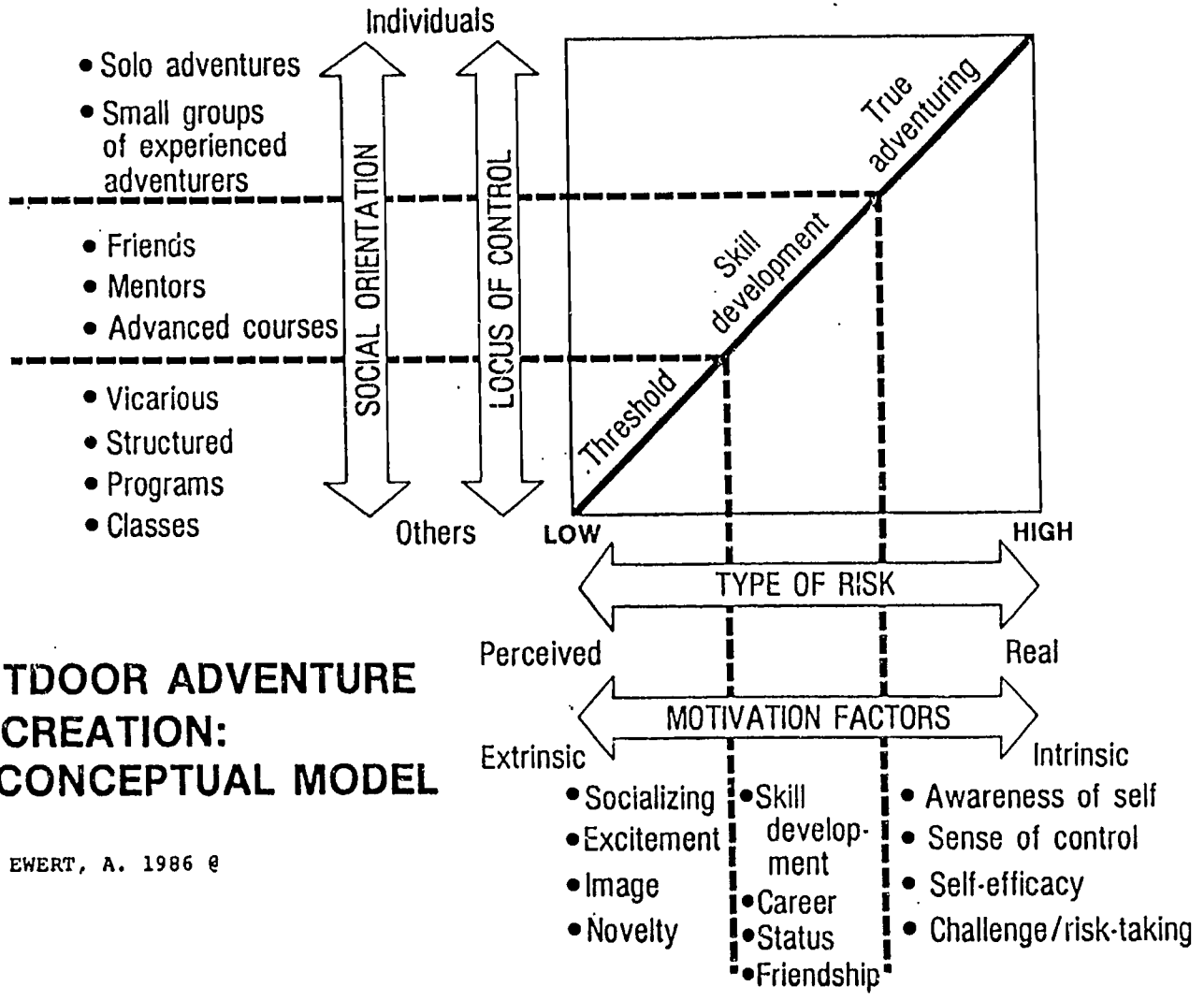


FIGURE 3

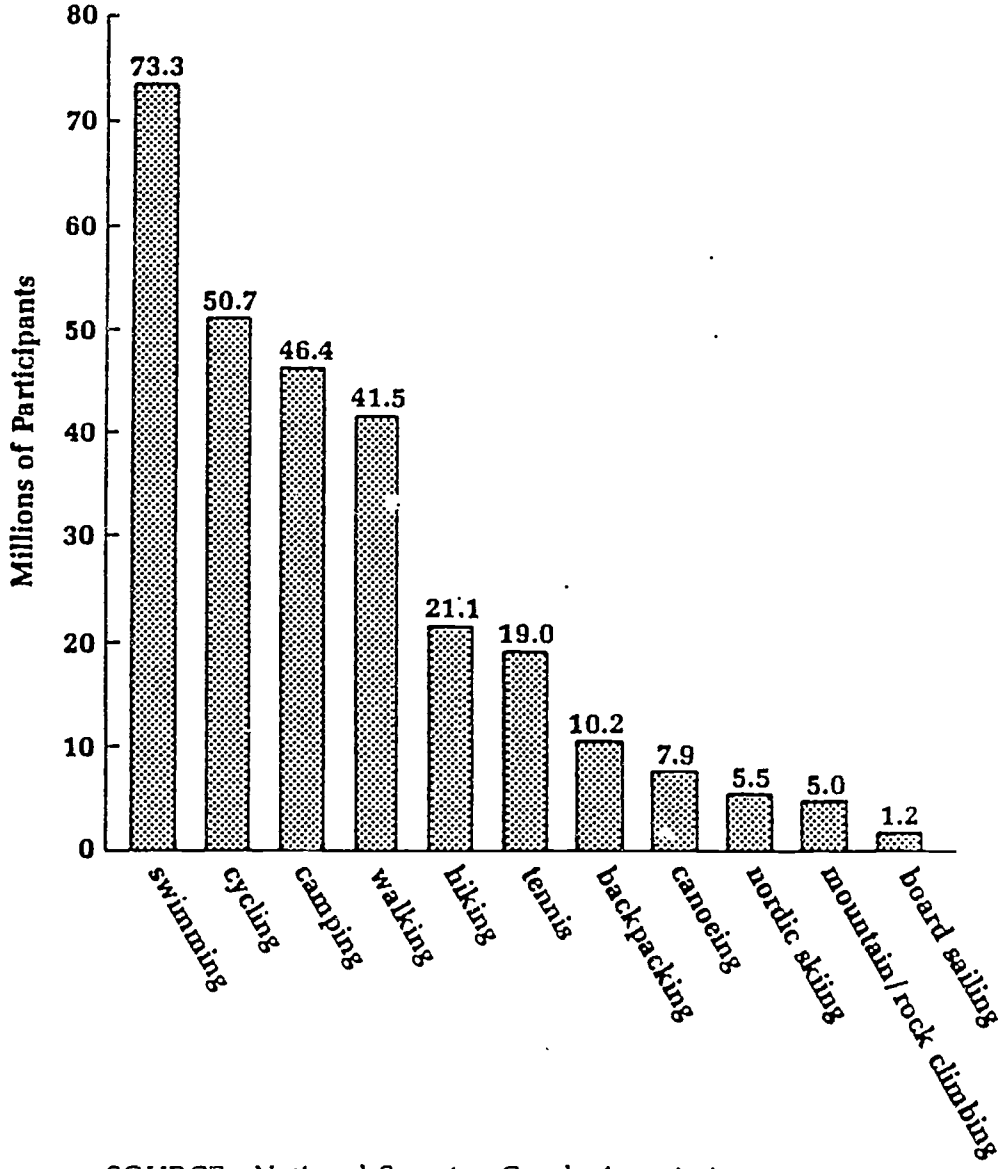


OUTDOOR ADVENTURE RECREATION: A CONCEPTUAL MODEL

EWERT, A. 1986 @

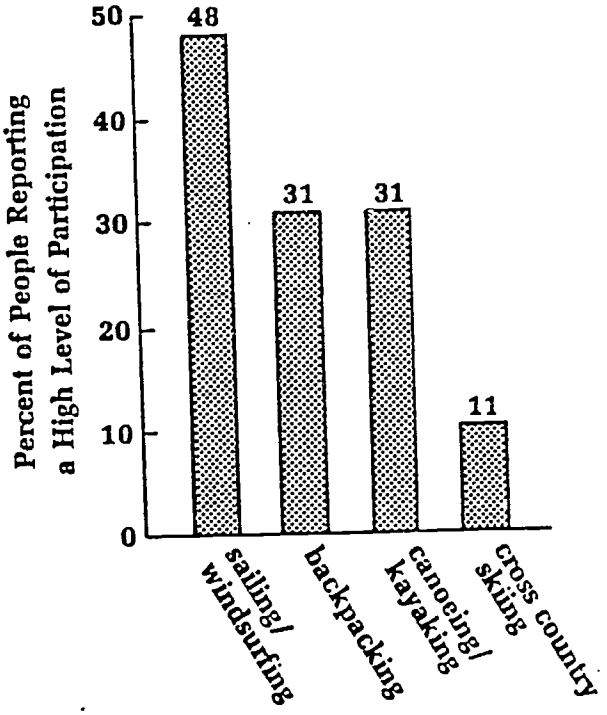
Table 2

OUTDOOR ACTIVITY PARTICIPATION



SOURCE: National Sporting Goods Association, 1985

Table 3
HIGH USE PARTICIPATION RATES OF SELECTED ACTIVITIES

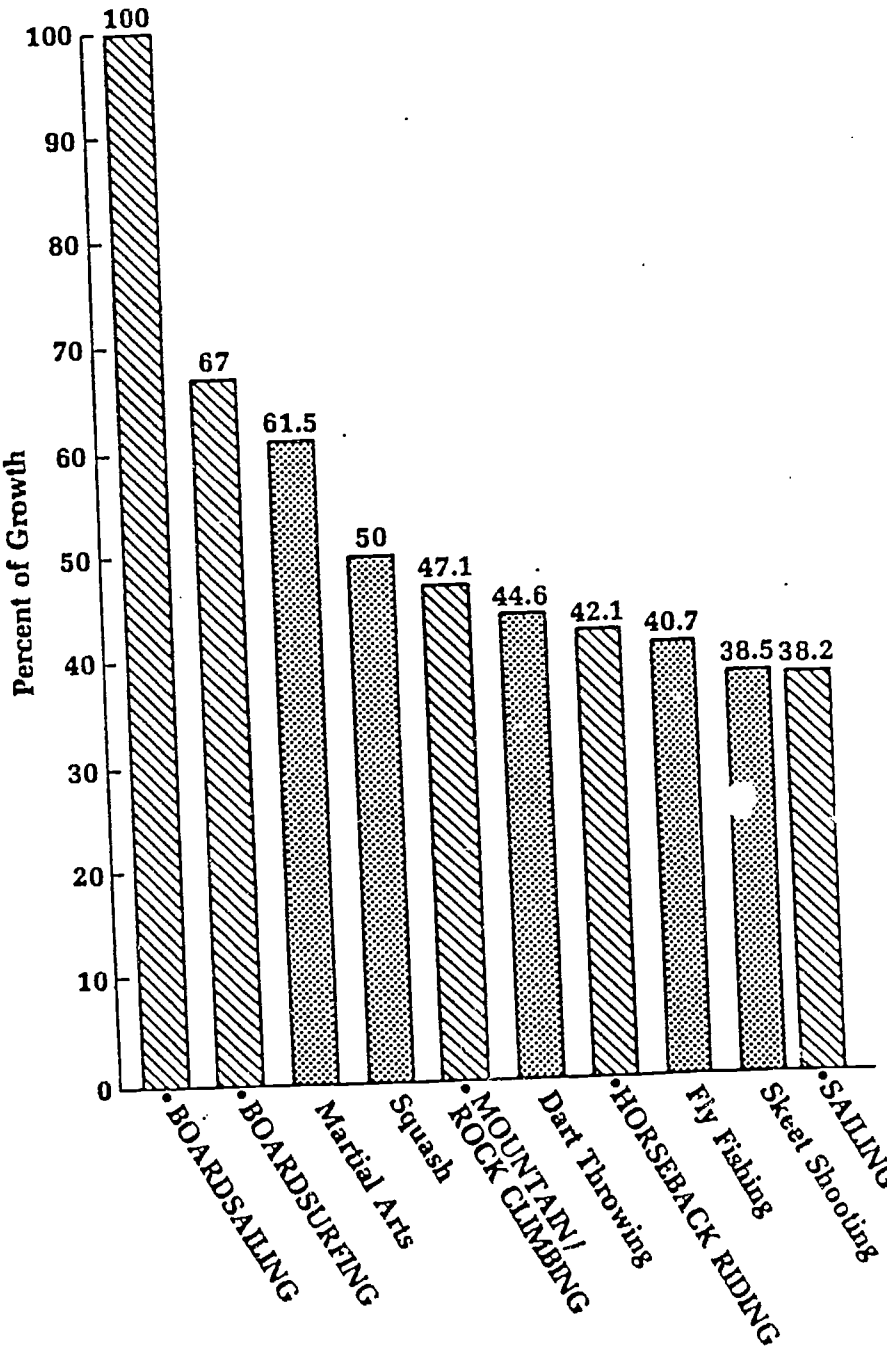


SOURCE: Study by Market Opinion Research for the President's Commission on Americans Outdoors, 1986

Table 4

FASTEST GROWING SPORTS

(In percentage gain - 1985 vs. 1984)



SOURCE: National Sporting Goods Association, Mount Prospect, Illinois, 1985

TABLE 5

TABLE 1 -- SPORTS PARTICIPATION

Swimming -- 73.3 million participants
• CYCLING -- 50.7 million
• CAMPING -- 46.4 million
FRESH WATER FISHING -- 43.4 million
Exercise walking -- 41.5 million
Bowling -- 35.7 million
Exercising with equipment -- 32.1 million
MOTOR BOATING -- 26.6 million
Running/Jogging -- 26.3 million
Softball -- 26.3 million

Calisthenics -- 26. 1 million
Aerobic exercising -- 23.9 million
Billiards/pool -- 23.0 million
HUNTING/SHOOTING -- 22.0 million
• HIKING -- 21.1 million
Volleyball -- 20.1 million
Basketball -- 19.5 million
Tennis -- 19.0 million
Golf -- 18.5 million
Roller Skating -- 18.1 million

WATER SKIING -- 12.9 million
Baseball -- 12.8 million
SALT WATER FISHING -- 12.7 million
Football -- 12.5 million
Badminton -- 11.4 million
• BACKPACKING -- 10.2 million
• ALPINE SKIING -- 9.4 million
Dart throwing -- 9.4 million
Soccer -- 8.6 million
HORSEBACK RIDING -- 8.1 million

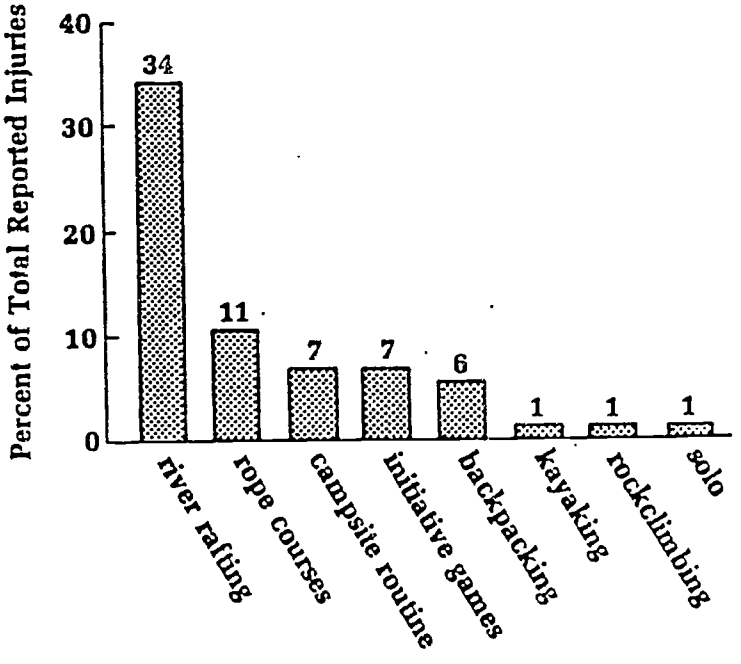
• CANOEING -- 7.9 million
Racquetball -- 7.9 million
FLY FISHING -- 7.6 million
• NORDIC SKIING -- 5.5 million
• MOUNTAIN/ROCK CLIMBING -- 5.0 million
• SAILING -- 4.7 million
Archery -- 4.6 million
SNOWMOBILING -- 3.5 million
Martial arts -- 2.1 million
Skeet shooting -- 1.8 million

• BOARDSAILING -- 1.2 million
• BOARDSURFING -- 1.0 million
Ice Hockey -- 1.0 million
Squash -- 0.3 million

Source: National Sporting Goods Association, Mount Prospect, Illino!

FIGURE 6

Table 2
INJURIES BY ACTIVITY



SOURCE: National Safety Network Annual Review, 1984

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ENHANCING ENVIRONMENTAL EDUCATION WITH ADVENTURE EDUCATION CONCEPTS

By

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ABSTRACT

While Adventure Education (AE) and Environmental Education (EE) are key elements in many outdoor programs, they are often conducted in a parallel fashion. Through group process, AE participants work toward the ultimate goal of an improved and expanded self image. Associated experiences include planning, problem-solving, communication, compromise, and many other dynamics of group involvement. Typically, participants will "leave" the AE sequence at various points to participate in EE activities, then return later to the AE tract. The approach suggested herein involves a total merging of the two programs, recognizing that each strengths which may enhance the other's effectiveness.

Introduction

The AE sequence assists in breaking down certain common barriers to learning. Adventure Education also provides the experiential processing element which can help participants better understand EE concepts in the context of viewing themselves as living organisms, subject to similar forces and parameters as other organisms. Examples are provided as to how objectives of both programs can be met through participation in and processing of selected activities (The charts are designed to be placed side by side and read from left to right, serve four functions):

1. They identify the sequential components of AE process and the associated objectives. Note that components four through six are consolidated as to objectives, in recognition of the semantic difficulty of clear differentiation and in the interest of simplicity.

2. Sample activities are provided which are commonly programmed to meet objectives. Each of these activities is described following the charts. Activities appropriate to AE objectives easily number in the several hundred. Project Adventure offers over 25 publications detailing activities and facilitation skills at all levels of the AE process (except adventure tripping). A list of publications can be obtained through:

   Project Adventure, Inc.
   P. O. Box 100
   Hamilton, MA 01936
   (508) 468-7981

3. Sample Environmental Education concepts are provided as examples of how environmental analogies may be drawn from the group activities.

4. Processing questions could then focus on two areas: the inter- and intrapersonal dynamics that occur, and the participants as living organisms. Provided are examples of the latter, addressing how the EE concepts apply to participants, to enhance understanding of both themselves and the concepts.

Adventure Education involves several key elements which, thoughtfully programmed, can enhance the effectiveness of Environmental Education:

1. Significant progress can be made in the reduction of many barriers to learning. These may include fear, lack of self-confidence as a learner, a perception of learning as dry and regimented, undeveloped communication skills, preconceived notions about the subject matter, a non-stimulating environment, and many others.

2. Both safety and quality require that activities occur in a more or less prescribed order. For example, skills developed at one level, such as spotting or effective planning, may be necessary for physical safety or successful completion at the next.

3. Choice is important in that participants are encouraged throughout to identify their own challenges. Completion of a task under duress, or accomplishing someone else's goals, may impair personal growth.

4. Non-directive facilitation, often called shadow leadership, is dominant through much of the AE process. This technique involves allowing the group to function independently after the task (activity) is presented, stepping in only during certain events, such as unsafe practices or for "rule" clarification.

5. Processing involves a questioning sequence directed toward helping participants recognize what happened during an activity (WHAT?), why it happened (SO WHAT?), and how the conclusions might be applied to "real life" (NOW WHAT?). Processing commonly takes place at the conclusion of an activity, but may be appropriate as an interruption in the activity, or may even occur at some later time. Processing becomes an excellent opportunity to relate EE concepts to participants, allowing them to see themselves as living organisms, subject to similar forces and parameters as the other organisms with whom we share the planet.

ENHANCING ENVIRONMENT EDUCATION. . .

		AE Objective(s)	Sample Objective(s)
1.	Goal Setting	Participant ownership. Goals must be challenging yet realistic.	After general description of program, small group identification of goals and related skills.
2.	Awareness	Increased comfort with both social setting and environment.	Name Circle
3.	Trust	Begin to develop trust of others, environment and self.	Trust Circle
			Modified Blindfold Walk
4.	Cooperation		Line Up Progressively more
5.	Problem Solving	difficult tasks requiring initiative, ingenuity, communication and teamwork. Completion is secondary to process.	All Aboard
6.	Group Challenge		Artesian Beams
7.	High Adventure	Utilize previous building blocks to deal with stress in risk-taking (both real and perceived) activities.	The Association of Experiential Education identifies 25 in Accepted Peer Practices! that "Adventure" is a relative term.

. . . with ADVENTURE EDUCATION CONCEPTS

Sample EE Concept(s)	Sample Processing Questions
1. Use this as an opportunity to discuss the terms:	
ENVIRONMENT	What do you consider your environment? Is there anything you would like to change?
2. Understanding terminology	What do you most want to learn about your environment? (Remember some of these to relate back to at other points in your program!)
Food Chain	Where are you in the food chain? Why? Is everyone you know in the same place?
3. Action/Reaction	What do you do in a day that affects something/ someone else? How far can you trace your actions?
Symbiotic Relationship	What relationships are important to you? Why are they important?
4. Ecological Niche	What is your niche? What will your niche be in ten years?
5. Carrying Capacity	What things limit the number of people in your town? On earth? What limiting factors are most important to you?

6. DAM Law

When have you adapted to a change in your environment? When have you moved instead?

7. Depends on activity. Choose the activity as an opportunity to travel afield for some hands-on experience with the concepts discussed.

Descriptions of Sample Activities

Name Circle

Object - Participants are sitting in a circle. The leader tosses an object to the first person. Bob states his name, states what the object is, and passes it on. The next person states "Bob tells me this is a pine cone, and my name is Julie." and passes it on. Third person states "Julie tells me that Bob tells her that this is a pine cone, and my name is Cindy." And so forth around the circle.

Variation - Mix up the order after the first time around. Add last names or let each person choose a descriptor to go along with her/his name - animal, adjective, etc.

Modified Toss-A-Name Game

Object - Participants standing in a circle, not too close. The leader tosses a ball to the first person, who then identifies someone else in the circle (not next to him) and lofts the ball to her. She then identified someone else by name and tosses it to him. This continues until everyone has had the ball once and it returns to the first person. The group has been asked to remember who tossed them the ball and also who they tossed it to. Next, all group members are given a card to wear with the name of an organism in the food chain. The lowest organism in the chain is given the ball and asked to toss it to another organism which would eat him, identifying her by name and organism. This continues until the ball returns to the first person.

Participants then repeat the same pattern and are timed, and are then given repeated opportunities to beat their times (their choice).

Trust Circle

Object - Participant are standing in a tight circle of 5-7, with one in the middle. The middle person pivoting on her feet allows herself to fall (stiff but relaxed?!) to the waiting hands of the group, who then pass her around or across the circle. An excellent way to teach spotting for later activities.

Safety

1. The faller says "catchers ready?", who loudly in unison say "catchers ready." The faller states "falling!" and then proceeds.

2. Catchers have feet staggered for support, maintain hands at torso level with palms out at all times, and are instructed to catch as if they are the only one there.

3. The faller is gently passed, not shoved, by supporting his/her upper torso. Have fallers cross arms in front and hold opposite shoulders to protect chest area.

4. Be prepared to stop the activity if dangerous situations develop (shoving, catchers hands down, loss of focus, etc.).

5. Remove eyeglasses of the faller.

Variations

1. Fallers may have eyes open or closed.

2. Catchers whisper the faller's name each time she is touched.

Modified Blindfold Walk

Object - Participants divide into teams of two. One partner is blindfolded. Neither partner can talk, but the partners can touch each other. The leader then walks through an area and the sighted partner must lead the blind partner safely through the same path. Next the partners switch roles, but this time both can talk but cannot touch, and follow a similar path.

Safety

1. Leader should be prepared to spot as teams pass through some obstacles.

2. Use discretion with routes chosen - anticipate horseplay with some ages.

Line-Up

Object - Participants cannot talk or write and are asked to line up in order of birthday's (month and day).

Variations

1. Participants are blindfolded and are asked to line up by height.

2. Participants are asked to stand on a narrow beam. Once on the beam they are asked to rearrange themselves by height or birthday (blindfolded or otherwise) without stepping off the beam.

Safety

1. Beam should not be far off the ground, especially if blindfolded.

2. Be careful of fingers in eyes if blindfolded - ask participants to move carefully.

All Aboard

Object - Get all participants onto a platform, rock, or marked area, with no part of anyone touching outside the area.

Variations

1. Time is limited to get everyone one.

2. Once on, group must hold position for a given time period, such as 30 seconds.

Safety

1. Platforms or rock not too high.

2. Do not allow stacking on shoulders. A good rule of thumb is no one's hips can be as high as anyone else's shoulders.

Artesian Beams

Object - The entire group must traverse the beams and posts. Only the third beam fits in the last space.

Rules

1. No one can touch the ground past the first post. If anyone or any beam touches, the group must begin again.

2. Everyone must be on posts or beams before the third beam is in place.

Safety

1. Beams cannot be thrown.

2. Anticipate falls, especially in direction of posts.

3. Step down off the last post.

Variations

1. All beams must be with them at the end.

2. Do the activity in silence.

Picture of activity follows on next page.

The merging of Adventure Education and Environmental Education is flexible. The facilitator can weigh the emphasis on one or the other. The focus on EE can be as broad or specific as time, group, facilitator skills and program goals allow. Each situation is different, and each activity can be modified to fit the situation.

Conclusion

There are three misconceptions concerning Adventure Education which bear clarification:

1. "Adventure Education must take place outdoors," Clearly, most of the early stages of the process can be easily modified for indoor use.

2. "Adventure Education involves danger." Dangerous and difficult are very different concepts. The stress from the latter stages of AE is a result of often physically demanding activities and situations of largely perceived risk. A crucial element of risk management lies in the skill and judgement of the facilitator. Quality training cannot be overstated as a prerequisite to AE facilitation. This includes the earlier stages as well, as statistics consistently demonstrate that "close-to-the-ground" activities, largely due to the above mentioned perceptions, have the highest injury rates.

3. "Adventure Education is designed to scare people." Fear is a normal response to the unknown, the forces of nature, and many elements of AE. The latter may range from fear of meeting new people, close

contact, or failure, to fear of heights. Any one may be mild or debilitating. Through participant goal setting and a series of skill-building activities, participants make the choice to engage in stressful activities. Increased self-confidence, competent leadership and team support encourage participants to step outside of their personal safety zones and face fears successfully.

INITIATING AND MAINTAINING A COLLEGE-BASED SEARCH AND RESCUE ORGANIZATION

By

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Watson Hill Farm
Freedom, NH

ABSTRACT

In this paper, I outlined and discussed five points that are necessary in creating and maintaining a college-based search and rescue organization. These components are: 1) initiation; 2) training and development; 3) funding; 4) community involvement; and 5) national and local certification/accreditation.

Initiation Phase

It took Western State College in Gunnison, Colorado fifteen years of dedication and commitment to achieve a strong and competent search and rescue team. Several critical factors evolved over this time span which would be helpful to any college or university interested in starting their own search and rescue team.

1) When the decision has been reached to establish a team, contact your area organization currently handling search and rescue practices. They will be helpful in offering advice to avoid start-up pitfalls.

2) Establish a specialty. There are many different aspects to search and rescue. Your group could chose from or include: whitewater, high angle, underwater, or urban rescue focuses from the many types available. With a dependence on student involvement, specialty is almost a must. Turnover and training dictate a choice. A good rule is to focus on the principle needs of your geographic area.

3) Inquire as to the requirements fo organization at your college or university.

Administration and campus sanctioning of your program is essential.

4) Examine your university's and states liability laws. This will offer guidance into legal and insurance needs for the group.

5) Consistency in membership is critical because of student turnover. Our approach to minimize this problem was to enlist a small number of community personnel and also to solicit faculty membership.

Training Phase

Phase two in developing a search and rescue organization is to create a thorough training program. Training in a college-based search and rescue, or any group, is crucial. At Western State, the team is organized with four levels of certification and appropriate training curricula for each category.

Certification Levels

The first level is a Contributing Member. This is a member who comes to weekly meetings and has paid his or her dues. This grouping is the basic categorization of members acquiring foundational skills.

The second level of certification is a Field Member. This level is considered the entry level into search and rescue field participation. At this level, the person is capable of being self-sufficient for a minimum of three days in the backcountry.

The next level is a Support Member. The Support Member is looking to become fully rescue certified. This position is really the integral part of the team. This person is skilled in four season outdoor skills and has a good grasp of backcountry travel and navigation. They are also expected to be a team leader and supervise basic management operations at the base camp. It takes approximately three years for a student to reach this skill level.

The highest position one can reach on the team is that of Full Rescue Certification. This person is capable of completely running and handling a full scale search operation and has working knowledge of all aspects

of search and rescue. Many students will not reach this level in a basic four year program unless they stay and train with the team during their summer breaks or take five years to complete their academic program.

At Western State, the program leaders feel that by having this simple ranking system participants are offered incentive to advance and learn. In addition, a management strata of skills and abilities has also been created.

Training Programs

Training for the team is divided into three parts, technical (hard skills, high risk, high angle and backcountry skills), non-technical (soft skills; communication and etiquette), and group building, problem solving and leadership training.

The hard skills would include basic rock climbing and rescue techniques. As one progresses through the levels of certification, this training becomes more complex. For instance, at or below the Field Member level, the training program would consist of learning basic rock climbing, rappelling techniques, use of climbing equipment, and other equipment utilized by the organization. At the Support Level, members begin to learn the different aspects of rock rescue from a one-on-one rescue to a full vertical litter evacuation. At the Full Rescue Level, the training program begins to deal with the understanding of more complex rescues. This curriculum component includes understanding the ability to deal with estimation loads on systems and managing the details of the physics and dynamics of ropes and systems. Training also includes organization and management of search operations.

Non-technical training usually takes place in the classroom. This aspect of the training program is offered at all levels of certification and includes discussion, mission analysis, and a sharing of professional information. Members are also encouraged to enroll in the "Management of the Search Function" courses offered at the college and to attend avalanche seminars held throughout the state.

The third component of the training program, group development, problem solving, and leadership training is critical to our team. This aspect helps to build cooperation and effective leadership skills among our members. We have found it helpful to use a ropes course close to campus, and with an overnight trip have found

this to be an effective training element and also a wonderful social activity for the team.

Funding Phase

Funding for any type of rescue organization is imperative. The cost of running a search and rescue team depends on the size of the team. Some search and rescue teams in the state of Colorado have budgets over $30,000 per year. Western State operates on a budget of $3,000 to $5,000 annually. This is a bare-bones operation which expects members to donate their vehicles, gas, lodging and meals.

There are several types of funding sources available, but two general categories exist:

1) Internal: where funding comes from within the organization or from the college or university.

2) External: from sources outside the organization or school.

Internal funding would come from membership dues and/or your school administration or student activities budgeting. Other internal sources might include college alumni, the college or university foundations, or endowments.

External funding sources could develop from:

1) Community Donations: Service Clubs, donation jar, and other community sources can be important funding sources.

2) Grants: Foundations, corporations, and other charitable groups sometimes have funds available for search and rescue teams.

3) Equipment Donations: Manufacturer's and retailers are sources for equipment gifts. Equipment donations really enhance a group's effectiveness. A word of caution is needed, however. Used equipment should be carefully examined for any damage. All that a program needs is "another" accident from faulty equipment.

4) Victim's Contributions: Not actively solicited, but sometimes offers are made. Don't ignore this funding source. Families or rescued victims often want to reward a job well-done!

In planning a search and rescue program, adequate funding is an essential component to continued and successful operation.

Community Involvement

Community involvement has been consistently mentioned throughout this paper as a critical aspect of search and rescue team development. Membership and funding importance have already been discussed, but other community involvement requirements exist.

1) Alignment with the local Emergency Medical System. This linkage creates a strong working relationship with both professionals and hospitals.

2) The search and rescue team must enhance community and campus involvement through events sponsorship and public search and rescue awareness programs.

3) The development of a professional reputation both in the community and on the campus through conduct, behavior, and responsibility is essential to the growth and acceptance of any rescue organization.

This facet of developing a search and rescue team is often overlooked. This would be a grievous error on the part of any organization. Successful community involvement is imperative to any search and rescue group.

Certification

Certification and accreditation among search and rescue groups, as with any other outdoor program or activity, is a difficult problem to resolve. Questions a group must consider before pursuing certification and accreditation are:

1) Who to certify with?

2) When to certify?

3) Why should you certify?

There are no easy answers to these questions as each group's purpose and programs are different. At the conclusion of this article, several agencies and professional contacts offering certification information are detailed. Your group should inquire with these organizations if interested in certifying the organization.

Individual certification in Advanced First Aid or as an Emergency Medical Technician or strongly recommended by the program. First aid is an integral component of almost any rescue situation. At Western State, we feel that this type of certification is essential to effective team development.

With our ranking system and first aid skills, team members are solicited for missions based on a thorough background rating system. This, we think, creates a solid nucleus for a search and rescue team and, offers professional rescuers for any necessary situation.

Conclusion

A college-based search and rescue team organization takes time and dedication to operate and manage effectively. However, the rewards created by the individual's participation and educational development greatly exceed the amount of time placed into the program.

For More Information Contact:

Western State College Mountain Rescue Team
Western State College
College Union
Gunnison, CO 81231

Mountain Rescue Association
P.O. Box 2513
Yakima, WA 98907-2513

Rocky Mountain Region MRA
c/o Tim Cochrane
P.O. Box 115
Vail, CO 81658

ALASKAN ADVENTURES: PROGRAMMING IN THE GREATLAND

By

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ABSTRACT

This article provides an idiosyncratic overview of trip programming in Alaska. It assumes the reader is an experienced outdoorsperson who wishes to lead an Alaskan wilderness adventure at a relatively low cost. The emphasis is on Southcentral Alaska where the author lives and has the most experience. The article covers where to go, logistical considerations, and sources for further information.

Introduction

Alaska is a land of superlatives. It has a million acres for every day of the year. Its over half million square miles, about a fifth the size of the "Lower 48," are populated by barely more than a half million people. Thousands of glaciers, an estimated 100,000 to be more exact, cover about 30,000 square miles, an area approximately equal to South Carolina. There are ten peaks over 15,000 feet. Minnesota may be known as the land of Ten Thousand Lakes - Alaska has 3 million! Over 34,000 miles of coast is more than the rest of the United States combined. Roaming Alaska's wilderness are the United States' largest numbers of wolves, grizzly bears, wolverines, lynx, moose, caribou, mountain goats, plus numerous species unique to the state - including the polar bear, musk oxen, and dall sheep. Swimming in her waters are 15 kinds of whales, walrus, numerous species of seals and sea lions, and incredible populations of salmon, halibut, trout and invertebrates. Three thousand rivers drain Alaska including five over 500 miles long; one creek is over 300 miles long! Forests cover 200,000 square miles, an area bigger than the state of California. And almost 100 national parks, refuges, and forests help protect this natural wonder.

Concerns

I very much love Alaska and its largely unspoiled, uncrowded wilderness. It was with some trepidation that I chose to speak at the 4th National Conference on Outdoor Recreation and to write for this volume - the last thing I want to do is promote overuse of my own backyard. However, I firmly believe that; 1) most of the readers will simply fantasize about a trip to Alaska (and in doing so will become advocates of a wild Alaska), and 2) the ones that do venture north, if blessed with an understanding, awe, and respect for the "Greatland," will travel lightly and, in experiencing Alaska, will be additional strong advocates for its protection. It is the purpose of this article to encourage such attitudes.

Low-impact recreational use is no doubt second nature to the participants of the National Conference on Outdoor Recreation, so I will try not to belabor the point. As you know, the sub-Arctic/Arctic environment is particularly fragile, as well as being very slow to recover from damage. In addition, while there is plenty of wilderness, put-ins, trails, roadheads, and sometimes campsites are relatively rare and so receive potentially heavy pressures. Group size, activities, timing, and techniques should be appropriate for this unique irreplaceable treasure.

Another concern is of course safety. Alaska is a harsh and unforgiving land, with emergency assistance often days away. Severe weather, cold water, rough seas, unstable snow, long distances, and few signs of civilization are all potential ingredients for trouble. Train well, plan well, and above all, use good judgement - Alaska provides few second chances.

A final concern is that Alaska be appreciated in all its splendor -environmentally, recreationally, culturally, historically, and spiritually. I am saddened when I see groups led by individuals who only seem to focus on the more obvious adventure opportunities. If you are inexperienced before bringing a group to Alaska, one way to appreciate and be able to share all the treasures of the "Great-land" is to work with a local guide or outdoor educator with a strong record of Alaskan experience. Such individuals may be found advertising in the back of outdoor magazines such as Backpacker, Outside, or Alaska, or you may contact A.W.S. at University of Alaska-Anchorage for recommendations. Outdoor leaders who live, study and play year-round in

Alaska can add immeasurably to both your experience and peace of mind.

General Thoughts

Due to the distance from the rest of the country and the cost of getting there, two weeks is the minimum I would recommend spending in Alaska. The Alaska Highway is a long two to three day drive, rough on a vehicle, and in my opinion, a bore scenery-wise. If you wish to bring your own vehicle I would definitely recommend the Alaska Ferry System. It is a gorgeous introduction to the state and a great way to meet new people and relax. Cost and time can be saved by driving to Prince Rupert, British Columbia, and boarding the ferry there. From there it is a two day ferry trip with an additional day of driving to get to Anchorage or Fairbanks. Even if you fly to and from Alaska, you can count on a day on each end of your trip for air travel.

Certainly the most popular time to visit the state is July and August, with June almost as busy. For a first trip, you will probably want to utilize these summer months. For a personal trip, however, I would heartily recommend that you consider one of the shoulder months, particularly the spring when we have lots of daylight, great snow, little precipitation, and few mosquitos, tourists, or bears!

If you plan on coming in the summer make sure you have reservations. Vans, ferry spaces (for vehicles), lodging, and sometimes airline seats are often booked solid in July and August and to almost the same extent in June.

Costs

Some costs, such as lodging, rentals, and some fresh foods are quite a bit more expensive than the rest of the country. Other costs, such as gas, outdoor equipment, camping, and food staples are right in line with much of the country. I have listed some prices to give you a very rough idea of costs, please keep in mind these are approximate prices, as of 1990.

Relatively inexpensive lodging can be found at hostels ($15 per person per night) throughout the state and, in the summer, at the University of Alaska dorms ($25) in Juneau, Anchorage, and Fairbanks. In the summer expect to pay about $80-100 for a double room at a hotel and at least $35 for a bed and breakfast. Again, reserve

early for groups if you are coming in the summer.

There are several dozen public use cabins in the Tsongass and Chugach National Forests (Southeast, Kenai Peninsula, and Prince William Sound areas). Other cabins are available through the Alaska State Park System, Mountaineering Club of Alaska, Alaska Alpine Club, and various other individuals and organizations. The U.S. Forest Service and Alaska State Park cabins should be reserved as early as possible. Costs are generally reasonable, starting at $10/night.

Vehicle rentals shold also be reserved early if your travels will be in June, July, or August. Costs for a car vary from $30 to $100 a day and from $50 to $150 for a van. The cheaper prices can be found by going with the "Rent-a-Wreck" type outfits.

Public transportation includes the Alaska Railroad (Seward, Anchorage, Talkeetna, Denali National Park, and Fairbanks), buses which go to just about every city and town on the road system, airlines, and the Alaska Marine Highway System (otherwise known as the Alaska ferries, which connect all the towns in Southeast Alaska and Whittier, Valdez, Seward, Cordova, Homer, Seldovia, Kodiak, and Dutch Harbor in Southcentral). Several charter bus services can help you to customize a trip as well. Float, wheeled, and ski planes are available to charter in most of the larger and some of the smaller towns ($125-$300/hour for 1 to 5 people). In coastal communities boats can also be chartered for kayak or hiking trips ($5-10/mile for 6 to 12+ people). As always, if traveling with a group in the summer, make reservations early.

Where To Go

I am assuming that you are traveling all the way to Alaska to find wilderness adventures. For that reason I would generally recommend against taking groups to the most popular backcountry destinations, Denali and Glacier Bay. While they have the "magic" name, plenty of other locations are blessed with similar scenery and wildlife while avoiding c owds, permit systems, and adding to the crowded areas' problems. I am also assuming that you want to keep costs down. For these reasons, I will recommend trips that can be accomplished utilizing the road system.

Several areas that particularly stand out for their offerings of wilderness, inexpensive access, and multiple adventure activities should be mentioned. Chugach State

Park, within the municipality of Anchorage, offers first class wilderness and rich wildlife viewing all just a short drive from the state's largest city. Wrangell-St. Elias National Park has ghost towns, huge glaciers, excellent river running, and superb mountain biking. Chugach National Forest has great hiking trails, unmatched sea kayaking, cabins, and easy access from the road system. Just sixty miles north of Anchorage is the Hatcher Pass area with great skiing, rock climbing, and alpine hiking.

Below I have listed a number of specific trips that meet the wilderness and inexpensive criteria. Described is general trip length, highlights, and land management. The listed time does not include side trips which could add multiple days to any of the trips. **Happy trails!**

- Backpacking/Ski Touring (trails and sometimes cabins)

  Southern half of the Resurrection Trail: 2-3 days. Cabins, fishing, wildlife, mostly forested walking along river and lake valleys. Chugach National Forest on the Kenai Peninsula.

  Crow Pass-Eagle River Traverse: 2 days. Walk right next to a glacier! Mining history, forested and alpine scenery, and wildlife. One of the more popular trips in Alaska. 2,000 feet elevation gain and one, sometimes nasty, stream crossing Chugach State Park.

  Hicks Creek-Chitna Pass: 4-5 days. Trails for some of the way. Alpine tundra, wildlife, and good rock hounding. 100 miles northeast of Anchorage, BLM and the State. Some environmental damage from mining and mechanized hunting/recreation.

  Lost Lake: 2 days. Forest, meadow, and tundra hiking. A spectacular turquoise lake and distant ocean views. Chugach National Forest on the Kenai Peninsula.

  Trekking/Ski Touring (off trail and generally for more experienced groups)

  Anderson Pass and southern side of the Alaska Range: 5-8 days. The only trek I can recommend in Denali National Park. Some

glacial travel and numerous, sometimes serious, stream crossings. Wildlife, alpine, tundra, and isolation. Permits required.

Peters Hills: 1-4 days. Easy walking on alpine tundra with incredible views of Denali. Denali State Park.

Crow Pass-South Fork of Eagle River or Arctic Valley: 3-4 days. Several high and rugged mountain passes, meadowed valleys, alpine tundra, stream crossings, and wildlife. Chugach State Park.

- Mountain Biking (both backroads and trails)

Denali Highway: (Cantwell to Paxson) 135 gravel miles. Beautiful views of the central Alaska Range. Busy starting in late August due to the hunting season, otherwise generally quiet.

McCarthy Road: (Chitina to McCarthy) 60 gravel miles. Beautiful views of the Wrangell and Chugach Mountains. Side trips down the Copper River and on numerous old mining roads. The road is somewhat busy on weekends.

Johnson Pass: 21 trail miles. Alpine and forested trail in the heart of the Kenai Mountains. Best later in August - September. Chugach National Forest.

Seldovia-Rocky Bay: 30 miles. Coastal and coastal forest biking on a gravel road that quickly deteriorates into a washed out trail. Major stream crossings. Native and State lands.

Eklutna Lake Road: 15 miles one way. Forest, meadow, and lake side pedaling on an old gravel road. Views of glaciers, rugged peaks, and wildlife. Chugach State Park.

- Climbing/Alpine Ski Touring

Eklutna Glacier Traverse: 4-6 days. The classic Alaskan glacial traverse. Alpine snow and ice climbing. Some huts. Chugach State Park.

Mint Glacier System: 3-6 days. Snow and rock climbing on decent granite in a Bugaboo like setting. Some huts. Hatcher Pass area, 65 miles north of Anchorage. State of Alaska.

Archangel Valley: Day climbing on granite with some easy alpine ascents available as well. Hatcher Pass area, 65 miles north of Anchorage. Private and State of Alaska.

Ruth Glacier Area: 3-10 days. Snow, rock, and ice climbing in a Pleistocene Yosemite. Crowded May-June and inaccessible by mid-July. One hut. Denali National Park. (fly-in)

Cassher-Canwell Glacier System: 3-10 days. Alpine snow climbing in the heart of the eastern Alaska range. Some huts. Off the Richardson Highway, 150 miles south of Fairbanks. BLM.

- River Running/Flatwater Touring

Copper River: (Chitina-Cordova) 4-7 days. Class I-III. Necessitates a flight or ferry from Cordova back to the road system.

Wildlife, glaciers, forests. Native land, Wrangell-St. Elias National Park & Preserve.

Stikine River: (Telegraph Creek, B.C.-Wrangell) 4-7 days. Class I-III. Wildlife, hot spring, and coastal rain forest. Tsongass National Forest.

Chulitna River: 1-3 days. Class I-III. Wildlife and Denali views. Denali State Park.

Tangle Lakes-Delta River: 2-3 days. Lake and Class I-II (with one falls to portage). Wildlife, excellent fishing, and tundra. BLM.

Swan Lake System: 2-4 days. Lake paddling with numerous portages. Wildlife and excellent fishing. Kenai National Wildlife Refuge.

Wood-Tikchik Lake System: 4-10 days. Turquoise fjord-like lakes carved into granite mountains. Wildlife and world-class fishing. Wood-Tikchik State Park. (fly-in)

- Sea Kayaking

Blackstone Bay: 2-5 days. Tidewater glacier relatively close to a town (Whittier). Chugach National Forest.

Culross Passage: 3-6 days. Relatively quiet waters inviting a host of explorations. Wildlife, coastal forest, and mountains. Cabins. Chugach National Forest.

Aialik Bay: 2-6 days. Numerous tidewater glaciers and wildlife. Cabin. Kenai Fjords National Park (fly-in only practical access for beginning-intermediate paddlers).

Halibut Cove Area: 1-4 days. Great intertidal life in Kachemak Bay, one of the richest bodies of water in the world. Hiking trails, lodges, glaciers, wildlife. Relatively busy place for Alaska. Kachemak Bay State Park.

Permits for backcountry travel are necessary for Denali and Glacier Bay National Parks. Other units of the public land system generally ask that recreationists merely register - always a good idea both to allow them to keep a count of visitation and in case you have trouble. For guided/educational trips in which money is being paid directly to you by clients/students, other restrictions may apply; inquire directly with the appropriate land management agency.

One-ninth of Alaska is privately owned by Native Corporations. Permission should be obtained before traveling on these lands, and in some cases fees are charged for land use activities. For further information contact the Alaska Division of Tourism.

When traveling in "bush" Alaska, consider yourself a visitor in someone else's land. Many Alaskans, both native and white, treasure their privacy; an unobtrusive respect of their lifestyle will be appreciated. Remember that most land around cabins and villages will be privately owned. As in any travel, courtesy, patience, and a smile will be your best bets.

Trip Planning

Because of the lack of amenities, uncompromising conditions, and vast distances, planning is essential for a safe and enjoyable trip. The following organizations have particularly helpful information for planning your Alaskan adventure:

Organization	Kind of Information
Alaska Public Lands Information Center 605 W. 4th, Suite 105 Anchorage, AK 99501 907/271-2737	Alaska State Parks, BLM land, National Forests, National Parks, National Wildlife Refuges
Alaska Division of Tourism, Dept. E-508 P. O. Box 196710 Anchorage, AK 99519	General Statewide Tourist Information As for the curent "Alaska Trip Planner"
Anchorage Convention & Visitors Bureau 1600 A St., Suite 200 Anchorage, AK 99501	General Tourist Information regarding Anchorage and Southcentral

	Alaska; Ask for the current "Anchorage Visitor's Guide"
Alaska Wilderness Studies University Alaska Planning Anchorage, 3211 Providence Dr. Anchorage, AK 99508 907/786-1468	Alaska Bibliography, Alaska Wilderness Organization List, Current Trip Information
US Geological Survey 701 C St. Anchorage, AK 99501	Topographic maps statewide

There are a large number of books about Alaska, a full bibliography is available from AWS. Listed below are a few of the most useful and generic books on Alaska trip planning:

Books	Subject
Alaska's Parklands Seattle: The Mountaineers	Statewide guide to over 100 state and national parks, forests and refuges
Floating Alaska's Rivers Aladdin Pub., P. O. Box 364, Palmer, AK 99645	Statewide guide to river running
55 Ways to the Wilderness in Southcentral Alaska Seattle: The Mountaineers	Hiking, scrambling, skiing and canoeing in Southcentral Alaska
The Milepost Anchorage: Alaska Northwest Books	Annual guide to all of Alaska's and the Yukon's roads plus the

	Alaska and Cassiar Highways
Southeast Alaska by Pack and Paddle Seattle: The Mountaineers	Hiking, scrambling, and canoeing Alaska's Panhandle
The Wilderness Milepost Anchorage: Alaska Northwest Publishing	Guide to the off-road portions of Alaska generally known as the bush, plus parks, refuges and forests. Published annually.

I hope this brief introduction to Alaska trip planning has been helpful. It can give you at least a brief idea of what to expect. However, only experiencing Alaska's wonders will truly let you come to know the "Greatland." I encourage you to travel north, and share the beauty, adventure, and respect for the "Last Frontier."

AN EDUCATIONAL, THERAPEUTIC AND SOCIAL ADVENTURE ON BOARD THE SCHOONER "ERNESTINA"

By

George M. Olshin, Ed.D.
Professor of Special Education
Southern Connecticut State University

ABSTRACT

The focus of this article is the value of adventure or experiential learning for the staff and students of a school for clients with emotional and social problems. The participants will see that formal schooling is not the only way one can obtain knowledge; how living and learning on the famous sailing schooner "Ernestina" can enhance their personal well-being. Participants will have an educational, social, and therapeutic experience.

Introduction

I would like to share my involvement in an exciting living/learning adventure on board the historic schooner "Ernestina." Also, how I developed, implemented, and evaluated an experiential education program for a residential treatment program for emotionally and socially handicapped children and youth. Abell (1983) states:

> The term "adventure" is relative to each individual...A state of mind that begins with feelings of uncertainty about the outcome of a journey and always ends with feelings of enjoyment, satisfaction, or elation about the successful completion of that journey...Adventure is fun, adventure is for everyone!" (p. 20)

Adventure is important to us because, through the activity, participants become emotionally, physically, and cognitively involved. In a short period of time, very intense feelings emerge which have lasting results.

About Falling in Love With a Ship

It all started in the winter of 1988. Joe Cardoza, a graduate student of mine, invited me to visit him after he assumed a new position as Program Director of the historic schooner, "Ernestina." I visited Joe in New Bedford, Massachusetts, the home port of the "Ernestina." He took me over to see the schooner at its birth in the harbor. Being winter, the ship was coated with a preservative to protect it from the New England weather. Even under such conditions, it was love at first sight. There was a heightened feeling of joy at being on board. My mind started to race as it had so many times in the past when I was moved to plan and develop a means to get involved with another experiential educational project. It was the beginning of a new personal/professional adventure.

The Schooner Ernestina

The schooner "Ernestina" has a history which cannot be matched by any other educational sailing ship. Formally known as the "Effie M. Morrissey," she was launched in 1894 as a year-round fishing schooner sailing around the Grand Banks of Newfoundland. In 1926, the ship changed careers. She was refitted for a series of arctic explorations, and was captained by world famous explorer and navigator. Then, during World War II, she was a United States Navy supply/survey ship. In 1948, she was sold to a captain in the Cape Verde Islands off the coast of Africa. He renamed his schooner "Ernestina" and sailed her as a packet ship carrying passengers and goods back and forth across the Atlantic. In her current career as a sailing school, this two-masted schooner has been authentically restored, fitted and rigged.

She was built with three-inch oak planks on heavy oak frames with ceiling planking making her hull over a foot thick. She has a graceful sheer from her clipper bow to her heart-shaped stern. Her length of 106' on deck and beam of 24.5' makes for a comfortable vessel at sea. The sail area is 8,323 square feet, tonnage is 120 gross tons; engine is a 295 Cummins Engineer Diesel; a crew of nine with berths for twenty-four.

There is some fascinating literature about the adventures of the schooner "Ernestina/Morrissey" and its crew. It is extensive and exciting.

The School Target Population

The subjects of this article are the students and staff of the Grove School (Madison, Connecticut), a residential school for boys who are having emotional/social problems which make it impossible for them to receive their education while living at home. All the boys are between the ages of 12-18 and receive 2 hours of individual counseling/therapy each week in addition to their regular schooling. The staff all live with the residents and are teacher/counselors. They are involved with the total life space care of their charges. This includes recreational activities.

During the summers of 1988 and 1989, the Grove School participated in three programs conducted on the schooner "Ernestina." One trip lasted three days, and the other two lasted five days. The trips were not planned as a mere recreational activity, but rather as an Alternative Site Therapeutic Experience. It has been proven that valuable learning can take place away from a school or agency if it is planned and properly implemented.

Alternative Site Therapeutic Experience (A.S.T.E.)*

The design and implementation of the activity was guided by the following precepts:

1. That personal and social growth is greatly enhanced when individuals participate in an exciting living/learning challenge. Participants will experience improvement in self-esteem, self-control, and self-concept; physical ability; social interaction, group dynamics; leadership; decision making; group goals and communication within the group; team building; coehsion; and trust.

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*The concept was introduced to me by W. R. Cozens, Ph.D., M.B.A., Executive Director, The Salvation Army Residential Treatment Facilities for Children and Youth, Honolulu.

2. That much academic knowledge can be obtained while on an adventure, e.g., history, geography, science, math, social studies.

3. That living and learning on a schooner can be a therapeutic experience. There is a growing body of literature showing that adventure/experiential education has great healing value. Such activity can restore one's mental and physical well-being.

Preparation For The Program

I have been a consultant to the Grove School for many years and know their mission and program well. I also know most of the staff and some of the boys. I have also been a consultant to the Schooner Ernestina Commission, so I know about their mission and program.

My initial preparation included inviting the Executive Associate Directors of the School to a day sail on the Schooner "Ernestina" so that they might see the potential for an A.S.T.E. experience. I felt it necessary for them to see the ship and to participate in some of the experiences the boys and staff would have. I also wanted them to see the facilities available for sleeping and eating; and to determine the adequacy of the safety features.

Dates for each program were set and a copy of the Schooner Handbook was sent to the agency. The handbook contains all the basic information that clients will need to prepare for a voyage; to include:

1. Schooner Ernestina Mission Statement, Staff and Ship's Statistics.

2. History of the Schooner, ERNESTINA ex EFFIE M. MORRISSEY.

3. The Vessel, a walk around on board.

4. What to bring.

5. Watches and ship's complement

6. Tips for shipmates

7. Rules and regulations

8. Safety drills and orientations

9. Suggested reading

Finally, a staff member from the "Ernestina" visited Grove School and showed a video and a film about sailing on the "Ernestina." He then answered all questions about what to expect and what to bring.

We were then ready for the experience to begin.

The Experience

A good sailing experience is aptly described by Captain Alan Villiers of the Master Training Ship Joseph Conrad:

> It is remarkable to see an apprentice come aboard his ship for the first time and to see that boy or girl after a voyage. The sailing ship life is a glorious healthy life...The young apprentice may have come aboard with his head filled with queer ideas about sailing ships and the sea, principal among which is a fixed notion that all he has to do is to look on while old sailors explain things to him, and then later on to give the captain advice about sailing the ship. His first month at sea may be a distressing experience, shattering illusions right and left until he sees only the bare bones of real life remain. He expected romance, and found work; he expected a "great life," and found himself principally called upon to

> perform feats of almost superhuman endurance -- feats which everybody did daily and nobody ever notices. Then, after a while and he settled into things, he finds that there really can be romance in those bare bones of life, if one knows how to go about looking for it; and he sings while he works aloft, and feels the thrill of the sea in his veins as he hangs on to the wheel, and laughs when he is wet through for the twentieth time in succession, and turns out quickly when the call is for all hands on deck, though he made the acquaintance of his bunk only half an hour ago and his watch is always catching it, and fights the mad canvas aloft with the men..." (Schooner Ernestina Handbook, p. 2)

Under the supervision of the professional crew everyone joins in the work of sailing the ship. The Grove students and staff were all involved with standing regular watches, steering, handling sail, cleaning the ship, assisting the cook, and standing look out. In general, doing the continuous work required for the upkeep of a sailing ship.

Evaluation

To determine the effectiveness of the program, I asked all the students and staff to complete a critical incidence evaluation after each sail. I gave them three questions, each on a separate sheet of paper.

They were asked not to sign the sheets, and to give at least one response to each question. Most respondents gave many answers.

What follows is a listing of the questions and a sampling of the responses.

1. What were the strengths of the program?

Staff

- A unique experience to be treasured forever.
- A ground is laid for many other activities and concepts to be built around cooperation and the need for rules and order.
- Because the ship's Captain and crew are the experts and regulators of structure, students learn values when they tend to oppose when presented by other authority figures.
- The excellent instructions given by the crew members.
- Great use of physical and emotional resource, when are often untapped by the kid's inertia, laziness, and poor self-image, which feeds into their lack of motivation to experience life, work, and the feeling of accomplishment and purpose that arises from this unique experience.
- Being away from all that is common and familiar enables growth and creativity.
- The physical and educational challenge is so enriching there is no depression, no overt psychosis.
- Behavior problems are greatly diminished and life energy is replenished.
- An alien environment where past knowledge is not necessarily useful other than by inference.
- Can see a person's self quickly and readily.
- The sea, the boat, the people who man her.
- Assessment of ability to tolerate pressure of a new kind.

- Working as a team.

- Working under all conditions which showed that we can be flexible and creative and succeed in more than one way, accomplishing one goal.

- Learning to be self-sufficient.

- Seeing and using results as soon as you finish a job.

- The positive peer pressure of not letting the group down which comes from watches, galley duty, etc.

- Everyone worked in an equal footing. I think the kids appreciated the staff more for it.

- It was great having the crew in charge instead of us, so we could enjoy the experience more.

Students

- Good food, nice people, safety, courtesy.

- It helped promote teamwork.

- The teachers really tried to get us to learn about the sails, lines, knots, etc.

- The experience of being on a boat like this is unique. You learn about sailing history, living in a confined area, and about people.

- Works on self controls, makes me push myself, works on the whole you.

- Hard work and close quarters bond people together and it makes you see how your part relates to the whole.

- Learning to do new and unusual activities; knot tying, going out on dorries, and getting along with what you have.

- Learning how to sail.

- Everybody working together.

2. What activities should be improved?

Staff

- I would have liked more opportunity to learn the rigging. I was also hoping to learn how to use the sextant.

- Learning how to navigate.

- Some structured down time with more story telling experiences about the sea, schooners, et al.

- Possible additions of marine biology and use of time for "classroom" learning which obviously can only be done on a longer sail. Otherwise, I cannot think of any improvements for this incredible activity and experience.

- A little fishing would be nice.

- A ceremony of entrance and departure - a certificate or an attractive award button for completion of the course.

- The marlin spike instruction was not too well taught and seemed to have little purpose. Also the dorrie rowing had no set purpose. When we pulled together to beat another dorrie back to the boat, we had a purpose; the team work increased greatly and we enjoyed it.

Students

- More free time - too much work.

- Dinner with the crew as a whole instead of by watch and before sleeping, activities could be improved.

- Cleaning should be done with more updated tools.

- I don't think it's feasible to improve on-board activities as they are directly related to ship performance and assigned as necessary. As for recreation related activities, perhaps more lectures on ship handling and theory would be educational.

- Electricity and running shows and soda.

- I think a diagram of the ship pointing out all that will be used would give the people a better chance of doing well. If procedures were explained on paper before the trip, the group would then know better what was going on.

- The current activities I doubt could be improved, but some activities I'd like to see are deep sea fishing where you can eat what you catch, and shellfish gathering and eating it some other day. Possibly living off of the sea for a while. Also, going on the same course of several historic schooner trips or expeditions.

3. Did you learn anything new about yourself as a result of the experience on the Schooner "Ernestina"? If so, please give details.

Staff

- Yes. I learned that I enjoy sailing. I love raising the sails, downhauling, and lifting the anchor. I also learned that although sailing involves a lot of hard work and sometimes tedious work, it's worth it.

- I learned that I have a great stamina in working in such a fast vessel.

- I can only stand so many days without a shower.

- I remembered how much I like to be included in adventurous activities.

- I was humbled by the limitations of one person against nature. I learned to depend on others. Being seasick and incapacitated felt so powerless. I learned the needs of some of our students for attention and nurturance and presence.

- The ability for both staff and students to see each other in a different perspective, due to the fact both groups are learning something new. Both are learning and experiencing as one group.

- I learned that when students are empowered and given responsibility they often perform in an exemplary manner.

Students

- I learned about the boat and getting along with people -- didn't have to rely on old skills -- everything was new.

- I know wind direction and wind speed and to drive the ship and to pull out the sails.

- I found that I could find peace and serenity with myself.

- That I can get along with people I don't like and at the same time get along with people I do like without having to worry about stressing the relationship by expressing my feelings because we're all in the same boat.

- I did see myself from different ways about the way I relate to others and how I become somewhat subordinate towards others while taking a leadership position.

- It's like learning to live once again -- just unbelievable -- to unlock one's true potential you must first find the key to exhaustion.

- No.

- Yes, but I would prefer to keep that to myself.

- You learn how to cooperate with each other, responsibility for yourself and others.

- I learned that just by using your head and following rules you can make everything a whole lot easier. It is a satisfying feeling to know you've done something right.
  I feel great.

Conclusion/Implications

After reading the evaluation, I felt that my goals of the A.S.T.E. were more than met. I visited Grove School on many occasions after the schooner experiences and found that the students and staff who participated still speak very highly of it, and what they gained from it. I also spoke to the clinical staff and received very positive feedback as to how what was learned became translated into new skills and attitudes. In a short intensive experience much was gained by all the parties involved.

The implications are obvious, namely, that the Schooner "Ernestina" experience is so positive it should be made available to many other populations.

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EVERYTHING YOU ALWAYS WANTED TO KNOW ABOUT JUDGEMENT, BUT WERE AFRAID TO ASK!

By

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ABSTRACT

This presentation began with a discussion on rules versus judgement and then asked and answered the following questions about judgement:

1) What is it?

2) When/where is it needed?

3) Why is it important?

4) How does it work?

5) How does judgment relate to problem solving and decision making?

6) What influences it?

7) Can it be taught/developed?

8) How can staff be encouraged to enhance their judgement?

The presentation was accompanied by brief handouts from the author's book: Safety Practices in Adventure Programming published by the Association for Experiential Education. Portions of the book are reproduced here with permission.

Staff Qualifications

A program is only as good as the practitioners who design, deliver, and debrief it! This segment examines qualifications for service-level staff (those who work in the field, adventuring along with participants).

Qualifications are arranged into three categories: hard skills, soft skills, and meta skills. Hard skills are those that are easily trained and easily assessed, such as technical activity, safety, and environmental skills. Soft skills are more difficult to train and assess than hard skills and are more related to working with people in the field, including activity or trip organization, instruction, and facilitation skills. Meta skills are the catalysts which connect and integrate the hard and soft skills, making the outdoor leader effective at exhibiting all skills. Meta skills encompass communication, flexible leadership style, problem solving and decision making, judgement, and ethical thinking.

As Diagram 1 portrays, if hard and soft skills can be thought of as building bricks, then the meta skills would be the cement which "glues" them together and makes them strong. Soft skills are stacked on top of hard skills for a reason: before staff can work well with people in adventure programming, they need a good solid foundation for performing technical activities in a safe and non-impactive manner.

A program faced with preparing new staff might benefit from thinking about this order of skill development and realizing that staff ought to have a balanced complement of all three types of skills. In days gone by programs used to hire staff for their hard skills. Nowadays, programs are recognizing the importance of soft and meta skills, preferring to hire staff for their possession of these, and then train and assess them in the easier hard skills.

The sections which follow provide some worthy points about hard, soft, and meta skills for adventure programming staff. The required qualifications can be thought of as a bare minimum, while the recommended qualifications may be a desired level, and the suggested qualifications might be an ideal level.

Sound Judgement

Since this document is built upon a strong foundation of practitioners' sound judgments, this portion of the presentation examined the concept in more detail. To frame the relative importance of judgement and place it within the perspective of this safety document. Jasper Hunt's timely article on the topic is reprinted here in its entirety.

OPINION

THE DANGERS OF SUBSTITUTING RULES FOR INSTRUCTOR JUDGEMENT IN ADVENTURE PROGRAMS

By Jasper S. Hunt, Jr. (reprinted from The Journal of Experiential Education, Fall 1984, vol. 7, no.3, pp. 20-21, special issue on Safety and Risk Management).

It is appropriate in this issue of the Journal to deal with and issue that is intimately connected with the overall problem of safety and risk management in outdoor pursuits. The issue is the conflict between rules and instructor judgement as the means to achieve safe adventure courses.

My assumption here is that reasonable people are united in agreeing that activities which will result in injury or death to students or staff are not acceptable. This is not a particularly controversial proposition. However, even reasonable people are not in agreement about the best means of achieving the goal of eliminating recklessness on adventure courses.

A standard approach to safety and risk management in many adventure-based programs is simply to devise a system of rules that minimize risk by taking decision making out of the instructor's hands. This is a deductive approach to the problem. The instructor, when confronted with a potentially dangerous situation, simply picks the appropriate rule or policy which covers that situation and implements it. The function of the instructor is to be able to apply the rule to the case and then deduce what to do. This is the way of the legalist.

The other approach to safety and risk management is the situational approach, which reasons that every situation is unique, and that a system of rules can only rarely adequately guide an instructor in what to do. This is the inductive approach to safety. The role of the instructor here is to gather as much relevant data as possible, then use his or here own judgement as to what ought to be done. Rules become subordinate to the demands of the situation as judged by the instructor.

The way of the legalist is a tempting one for adventure programs, especially for the administrators. The establishment of fixed rules ensures executive control over the decisions of the staff in the field.

Rules largely eliminate instructor judgement and the possibility of a bad decision being made. Freedom takes a back seat to certainty in this model.

The way of the situationist is discomforting for many, especially administrators. For and administrator to insist that instructors use their own judgement implies relinquishing control over the situation. Certainty of result takes a back seat to the uncertainties of freedom.

Case in point: reasonable instructors are agreed that cut feet are not a good thing for students and staff to experience on courses. The rule based legalist, therefore, establishes a rule that all stream crossings will be made wearing boots or sneakers. A group of students in the field approach a slow-moving, clear, sandy-bottom, shallow stream. They want to have dry sneakers for the next day's marathon, and they want to finish the hike in dry boots. The rule-based, legalist instructor simply implies the rule to the case and deduces that the students must wear either boots or sneakers. The situational instructor might access this particular stream crossing and induce that in this situation foot gear need not be worn. Both instructors are in agreement that cut feet are not desirable. They are not in agreement upon the best means to achieve this goal. The legalist has the advantage of absolute certainty. The situational instructor could be wrong about his or her assessment of the situation.

Frankly, I am afraid that the rule-based model for making decisions in gaining the upper hand in adventure-based programs in the United States today. Fear of law suits and bad publicity are compelling many program administrators to minimize the amount of freedom provided to their field instructors in order to maximize the certainty of the results of specific situations.

There is something very strange and incongruent about an educational movement that espouses the values of personal responsibility, initiative, and freedom, and then turns around and does everything it can to minimize the presence of these very values in the means by which they teach. This conflict of values is the root of my concern. My assumption is that the instructor judgement, situational approach to decision making is more in line with the fundamental values of a total than is the legalistic, rule-based approach. The danger lies in sort of conceptual schizophrenia between the values we put out in the literature and what actually occurs during a course in the field.

Another assumption of my argument is that instructors in the field in fact have good judgement. The whole argument collapses if it can be showed that instructors' judgments are not to be trusted because the staff has bad judgement. My only retort is that instructors with poor judgement should not be in positions of responsibility in the first place. If instructors do have good judgement, then I will argue that it is usually better to trust their decisions than to substitute rules for independent decision making. Of course, a corollary issue here is how does an administrator ascertain whether an instructor has good judgement? The specific answer to that question is beyond the scope of this editorial. However, I do think such an assessment can and must be made in the personal selection process.

Finally, I am not arguing for the complete absence of rules and administrative policies for adventure-based programs. That position would reduce my argument to an absurdity. Every institution must define what it is about educationally and these definitions often need to be manifested in rules. However, the critical point is that the rules should be seen as a means to an end, and they should rarely be allowed to stand alone as ends in themselves. Rules generally reflect the wisdom gained through past experiences. As such, they can be very useful to an instructor in the field. However, a rule, because of its roots in the past, is often inadequate to deal with novel situations in the future. Intelligent interpretation of rules is what links their past efficacy to the novel future. The instructor on the spot must make these interpretations.

The subordination of rules and administrative policies to instructor judgement in specific situations implies a greater degree of freedom in how courses are run in the field. The ultimate burden of freedom is that it may be misused and mistakes may happen on occasion. My challenge is that we not react to the "burden" of freedom by severely restricting it; rather, we should demand even higher degrees of judgement and professionalism on the part of those who actually teach courses.

A Model of Judgement

In adventure programming, staff are called upon to make sound judgments under stress. This document does not intend to change that; in fact, the proper application of the practices outlined within demands that staff continued to exercise their judgement. Here is a model that provides one way to view sound judgement in relation to what it is, when it is needed, and how it works.

Judgement is a series of procedures undertaken by the human brain in an effort to fill in for information that is uncertain, but none the less important to the problem-solving or decision-making process. In the course of solving a problem or making a decision, critical information may be missing, vague, or unknown. In this case, judgement is a useful tool which helps to substitute for these uncertainties and permits the problem-solving or decision-making processes to continue. When information is needed, but cannot easily be obtained, judgement becomes an indispensable tool to estimate the uncertainty, substitute for the missing, guess about the vague, and predicted place of the unknown.

The series of procedures known as judgment can be thought of like a computer (Diagram 2). A computer is responsible for data input, processing, storage or retrieval, and output. With regard to judgment, the human brain operates in much the same way, which is not surprising since computers were designed to mimic the human brain. Here's how it works. Judgement is an experience-based application of the human brain's ability to reason. The numbers on the above diagram refer to the following steps:

1) Specific experiences (firsthand, observed, or vicarious) are collected and input to the brain through the senses.

2) These specific experiences are subjected to processing by inductive reflection (from the specific to the general) and general concepts are formed.

3) These general concepts are then stored away in memory (either long- or short-

term) as a map constructed from related concepts. This map is the base of experience upon which future judgments are made. When faced with a query (i.e., uncertain information needed for problem solving or decision making), the memory maps are searched by the brain for relevant concepts. These general concepts, and those related to them, are retrieved for further processing, depending on how they represent current situations.

4) These recalled general concepts are then subjected to processing by deductive reflection (from the general to the specific) any specific judgement results.

5) This judgement is then output (as a prediction, guess, estimation, or even speculation) to fill in for the uncertain information, thereby permitting the problem solving or decision making to continue.

6) The final step in judgement is often neglected; evaluating the accuracy of the judgement. Information about whether the specific judgement fit and was either a success or a failure in problem solving or decision making is valuable to refining one's overall ability to judge. This is the essence of experiential learning: learning from one's rights and wrongs. Through evaluative reflection, the utility of the specific judgement can be applied back to the model as a new experience which aids in redefining the general concepts and their memory maps.

How to Enhance Judgement and Staff

Most judgments observed during training and assessment of staff are labeled as good or bad, but little is done to share the reasoning pathway used to arrive at the judgement. If staff understand how judgments are reached, then they are likely to know the strengths and weaknesses of their own judgments and thus

may be able to improve on them. Staff must learn from both success and failure by determining why they were right or why they were wrong. Simply put, they need to evaluate their judgement, analyze the soundness of the judgement, and use the analysis as a new specific experience to redefine their future judgement. As the Farmer's Almanac suggests: "good judgement comes from experience- usually experience which was the result of poor judgment."

Sound judgment is a lot like memory capacity. It cannot be taught, but can be developed, improve, or enhanced in staff to the optimal level possible. People have absolute levels of judgmental capacity, just as they have maximum limits to their memory capacities. The trick is to exercise the brain as often as possible and to evaluate judgments using a foundation of intensive and extensive experiences. However, there is more to judgment than mere experience. Reflection needs to take place at all stages of exercise. Inductive reflection is necessary to formulate general concepts; deductive reflection is necessary to formulate specific judgments; and most importantly (but least practiced), evaluative reflection is necessary for determining the soundness of the judgment and fine tuning the process for the next time. These procedures should take place under the tutelage of an experienced mentor who has already demonstrated sound judgment. The role of mentor is to guide staff through the procedure and to encourage them to evaluate their progress as per the previous model.

Ten Strategies for Sounder or Better Judgements

1) Staff can be lectured, told horror stories, or hammered at with rules and frequent exceptions.

2) They can recall their own near misses, thus determining where errors might have occurred and hopefully avoiding repeat performances.

3) They can read historical case studies about incidents and accidents that have plagued others, and can openly discuss any short-comings which may have led to a particular incident or accident.

4) They can react(verbally or by written word) to individual or group problems posed by a mentor.

5) Staff can observe their mentors engaged in solving problems and making decisions, and they can then ask why certain choices were made.

6) They can undergo simulation training where they enact their parts in a scenario designed to teach innovation and improvisation.

7) New staff (with appropriate supervision) can lead a group of peers through field trip exercises, and, while receiving feedback from their peers, can act to solve apparent problems as they arrive.

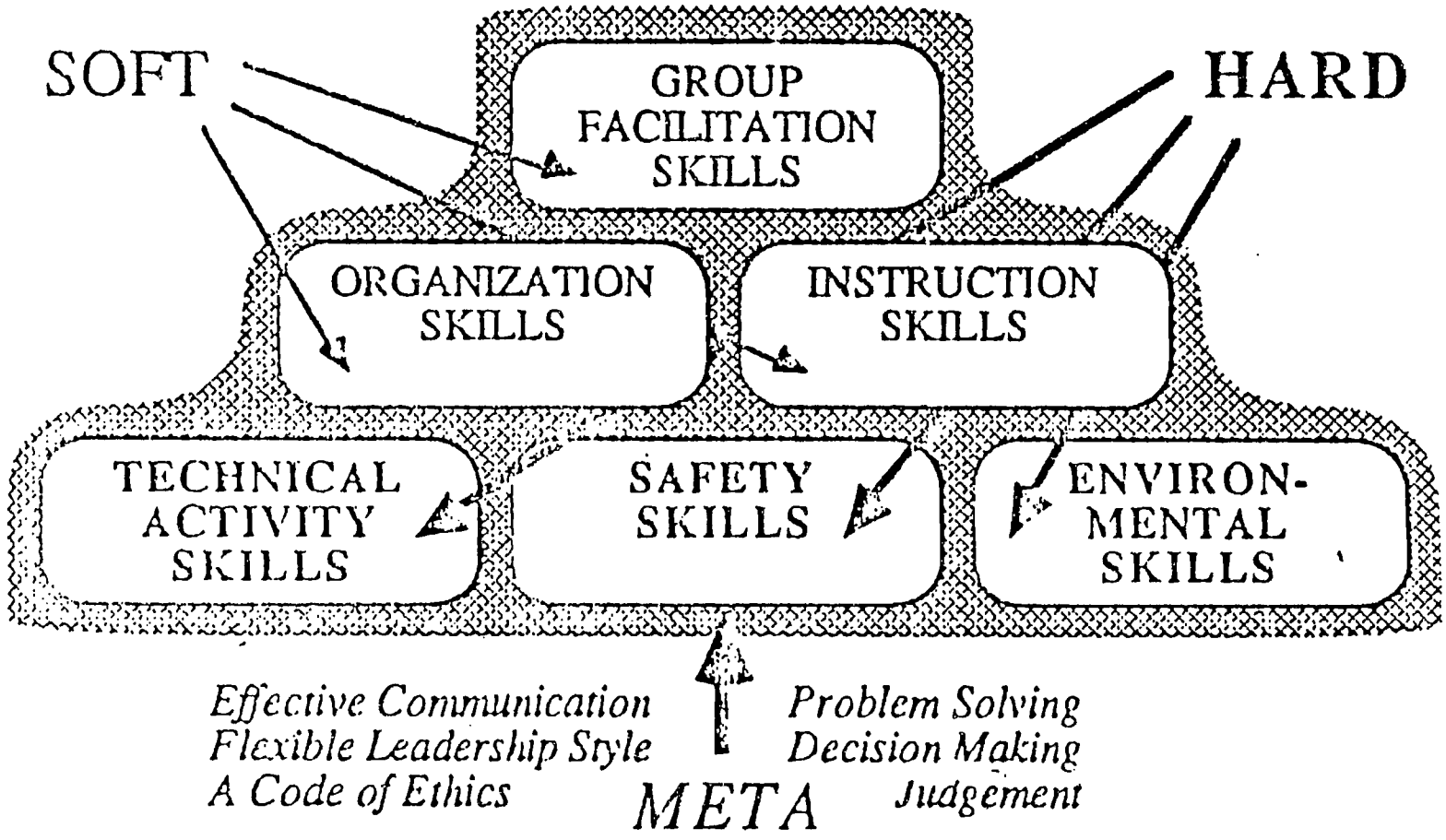
3) They can undertake apprenticed practica, where (under the guidance of their mentor) they proact to avoid or deal with real problems, and where their reflection on a response guided by the mentor and other observers.

9) They can keep log books recording their experiences gained during their preparation, including a list of courses taken, trips participated in, and trips led, with the particulars of dates, weather, routes, and general occurrences. A log book provides evidence of experience, but does not prove judgmental competence on the part of the staff member.

10) They can keep a judgement journal, which is more than a record of experience; it is detailed analysis of day to day choices which dissects all pertinent problems solved, decisions made, and judgments applied by following the earlier model. Such a journal provides one with the means to reflect on, and thus learn from, personal experiences.

Judgement is the fulcrum on which balances the competence of staff members. Staff can be the most technically competent, safe, and environmentally careful

people in the world, but without judgement they will not be able to take care of themselves, others, or the outdoors. Gaining greater experience might help them to gain sounder judgement, but simple possession of experience in no way assures good judgement. All experience must be processed or reflected upon, tested and affirmed. Staff must have the chance to make mistakes and to learn from those mistakes under the tutelage of experienced mentors, just as participants, in their turn, will learn from the staff.


SOFT
HARD
GROUP FACILITATION SKILLS
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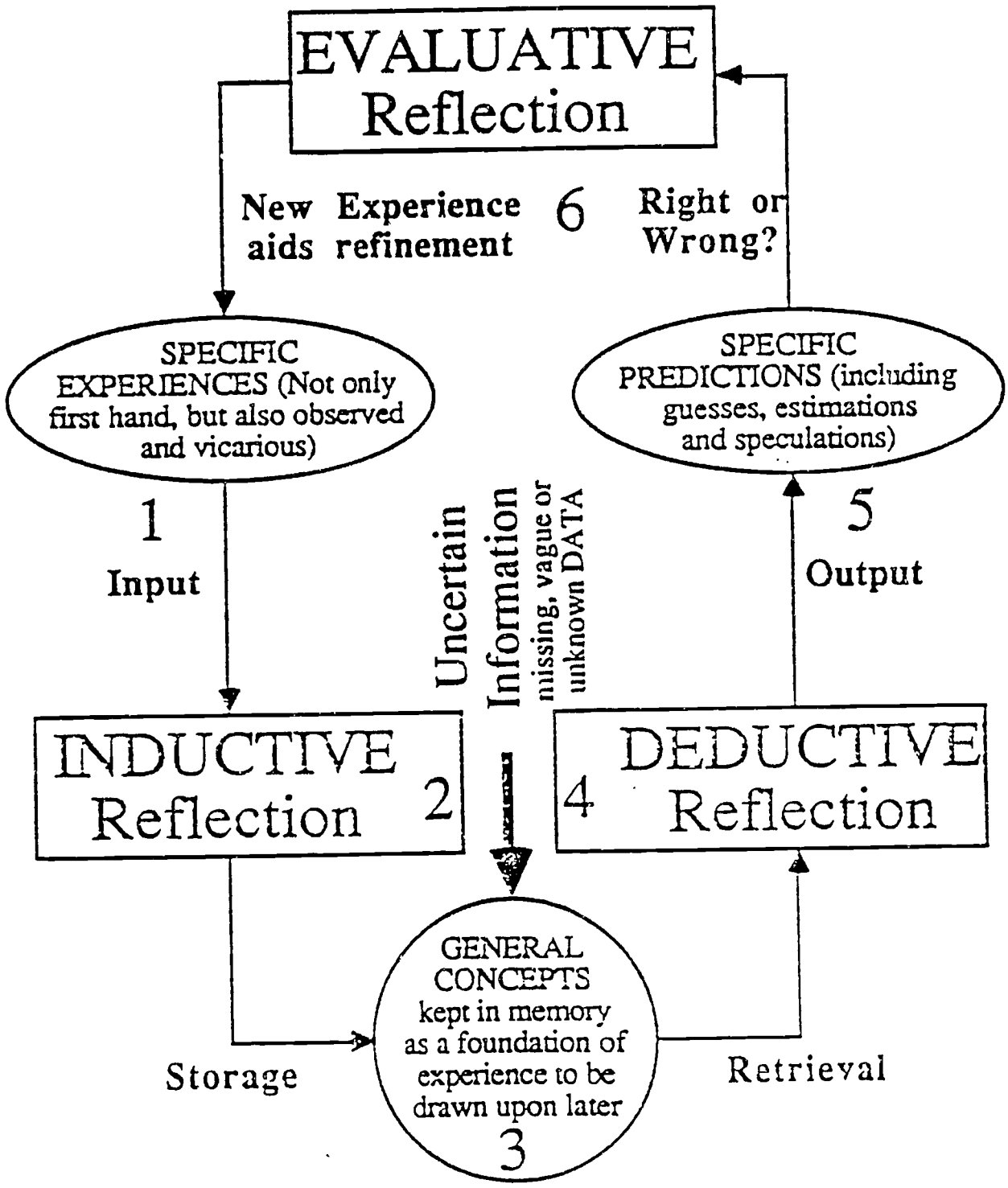
INSTRUCTION SKILLS
TECHNICAL ACTIVITY SKILLS
SAFETY SKILLS
ENVIRON-MENTAL SKILLS
Effective Communication
Flexible Leadership Style
A Code of Ethics
Problem Solving
Decision Making
Judgement
META


EVALUATIVE Reflection
New Experience aids refinement
6
Right or Wrong?
SPECIFIC EXPERIENCES (Not only first hand, but also observed and vicarious)
SPECIFIC PREDICTIONS (including guesses, estimations and speculations)
1
Input
Uncertain Information
missing, vague or unknown DATA
5
Output
INDUCTIVE Reflection
2
4
DEDUCTIVE Reflection
GENERAL CONCEPTS
kept in memory as a foundation of experience to be drawn upon later
3
Storage
Retrieval

REVIEW AND ANALYSIS OF A FIVE YEAR STUDY OF A COLLEGE LEVEL OUTDOOR LEADERSHIP CURRICULUM

By

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ABSTRACT

This study used an interdisciplinary approach to establish, test and evaluate a curriculum for outdoor leadership education that was not specific in geographic suitability and is applicable to land- or water-based programs. A panel of five experts and a group of seven students rated a list of thirty objectives for their importance in guiding such a curriculum. Whenever an objective received a rating of 80 percent or above, the objective was judged to be fundamental. In addition the Mann-Whitney U-Test was used to determine if there were significant differences in the distribution of scores between panel members and the students on the set of objectives. The elements for both experts and students were: Leadership Style, Judgment/Subjective - Objective Trip Planning, Environmental Issues, Instructional Principles, Navigation, Group Dynamics, and Nutrition.

An initial pilot test and evaluation of the curriculum was conducted (1985-1986), to determine to what extent the educational objectives were actually achieved by the program of instruction. Ongoing testing and evaluation (1986-1989), was conducted utilizing the same evaluation tools.

Analysis of data from a pre- and post-course, competency-based questionnaire, Maine State Trip Leaders Examination, the Unity College Faculty and Course Evaluation form, and investigator observations showed that students had increased their levels of skill, competence and knowledge related to the curriculum objectives after the completion of the course of instruction.

Introduction

The education and training of sensitive outdoor leaders/educators have some important social and political implications for the use of and general attitudes toward the natural environment. Competent, well-educated outdoor professionals can help change the public's attitudes and behavior toward the environment and thus decrease environmental degradation through use. Highly skilled and aware outdoor leaders are a major resource for the re-education of the increasing numbers of people who are discovering the outdoors. By creating outdoor experiences that embody values of preservation/conservation of nature, and promoting through role-modeling a non-abusive relationship with one's environment, an outdoor leader has a unique opportunity to shape the practices and attitudes of the public.

If the quality of leadership in the outdoors is to continue to improve, our profession must work to develop theories and practices that are appropriate to such a goal. With this purpose in mind, this study proceeded to use an interdisciplinary approach to establish, test and evaluate a curriculum for outdoor leadership that is non-specific in its geographic suitability and is flexible enough to apply to water-based or land-based programs. Respondents in the study included not only experts with both higher education and field experience in outdoor pursuits, but also students who were leaders-in-training.

Development of the Curriculum/Methodology

In the development of this interdisciplinary curriculum for outdoor leadership, Dr. Ralph W. Tyler's (1949) curriculum rationale was used as a guide. To develop goals and objectives, Tyler recommends seeking information from three primary sources: The Learner, The Subject Matter, and The Milieu. Tyler states:

> No single source of information is adequate to provide a basis for wise and comprehensive decisions about the objectives of the school. Each of these sources has certain values to commend it. Each source should be given some consideration in

planning any comprehensive curriculum program (p. 3).

While the subject matter inevitably shapes and defines the educational objectives for any curriculum, when we only consider the content, we lose valuable perspectives. Including the learners in our process of developing objectives enables us to draw upon their strengths, as well as to address directly their perceived needs. Educational objectives that are also influenced by the milieu, or the "real world" of those persons actively and currently involved in the subject matter, avoid the risk of reiterating outdated concepts.

A panel of five experts and a group of seven students were selected to participate in the development of the curriculum. Criteria for the selection of the panel members were that they had five or more years experience in a position of recognized responsibility in outdoor education or recreation, were actually engaged in the above fields, representative of large and small organizations, and represented both female and male perspectives. The criteria for the students were that they be currently enrolled at Unity College and be majoring in outdoor recreation. They had completed a standard first aid and CPR course and had completed two introductory outdoor recreation skill courses.

In order to elicit a set of goals and objectives for an outdoor leadership curriculum a list of thirty objectives were compiled from the reviewed literature and placed in a questionnaire format. A pilot study was conducted to test the clarity of the instrument, and appropriate modifications were made.

The questionnaire was submitted to the panel of five experts who were asked to rate the importance of each objective in a course for outdoor leadership education. In accordance with Tyler's model, which stressed the importance of seeking information from the learner, the same questionnaire was submitted to the students who were enrolled in the pilot test of the curriculum.

Data obtained from experts and students was evaluated. Whenever an objective received a combined panel and student rating of 80 percent or above, the objective was considered to be fundamental in guiding the development of the curriculum. In addition, the Mann-Whitney U-Test was used to determine if there were significant differences in the distribution of scores between panel members and the students on the set of objectives. The level of significance was set at $p < .05$.

Based on the responses of panel members and students, and review of literature and limitations set forth in the study, nine elements emerged as preferred content of the curriculum. These elements were: Leadership Styles, Judgment (Objective/Subjective), Trip Planning and Organization, Environmental Issues, Risk Management, Instructional Principles, Navigation, Group Dynamics, and Nutrition.

The outdoor leadership curriculum was divided into three sections: an introductory field experience (7-10 days), the semester course (15 weeks), and selected ongoing field experiences (7-10 days). In designing the curriculum the investigator sought to organize the content to provide continuity, sequence, and integration in order to reinforce each aspect and produce a cumulative learning effect. Certain elements emerged as organizing threads: concepts, including knowledge base, values, and specific skills and abilities related to outdoor leadership. Appendix A gives a list of some common elements that this investigator found in the curriculum.

An initial pilot test and evaluation of curriculum was conducted during 1985-1986 to determine to what extent the educational objectives in the curriculum were actually achieved by the program of instruction. A pre- and post-course, competency based questionnaire was compiled. The purpose of the pre- and post-course student assessment tool (see Appendix B) was to determine the initial status of the students' perceived level of their own knowledge/competence relevant to outdoor leadership. Secondly, it compared this self-assessment before and after their participation in this curriculum to determine if changes occurred after completion of the course of instruction.

Twenty-three objectives were compiled from the review of literature from the nine elements that emerged as preferred content by panel members and students for this curriculum for outdoor leadership education. A pilot study was conducted to test the clarity of this instrument. Unity College outdoor recreation students and several faculty members responded to the pre- and post-course evaluation tool. Results were obtained and appropriate modifications were made. The completed questionnaire was then submitted to each student enrolled in the pilot test of this curriculum. The students were asked to rank their knowledge/competence relating to each of the twenty-three questions, using a scale that consisted of four rankings: Poor, Fair, Average, and

Excellent. At the completion of the pilot test of the curriculum the same assessment tool was again given to the students with instructions to rank their knowledge/competence relating to each of the objectives.

The other evaluation tools were the Unity College Faculty and Course Evaluation form, the Maine State Trip Leader Examination, required by the Department of Inland Fisheries and Wildlife for any person who works for a camp, or program, "in which groups of individuals who are mobile, moving under their own power or by transportation which permits individual guidance of the vehicle or animal (e.g. bicycle, canoe, horse, sail-boat), travel from one site to another for a time period exceeding two days and one night," be required to obtain the camp trip leader permit. The exam is divided into the following categories: general outdoor knowledge, campsite use, fires, map and compass, trip leader's responsibilities, legal obligations, weather and first aid. Exams are graded by the state and students must receive 90%> to pass. And finally investigator observations were utilized.

The ongoing testing and evaluation (1986-1989), utilized the same evaluation tools.

Conclusions

Based on the findings of the study and within the limitations set forth therein, the following conclusions have been drawn:

1. There was no significant difference between the responses of panel members and the students in terms of the ranking of importance of the outdoor leadership curriculum objectives.

2. The panel members and students were in agreement on the 16 most important objectives to be included in a curriculum for outdoor leadership education. (Table 1)

3. Field experiences were considered an essential component of outdoor leadership education by panel members and students. This investigator's observations and the responses to the evaluation tools substantiate the importance of field

experiences as catalysts for growth and development of leadership skills.

4. The analysis of data obtained from the pre- and post-course evaluation tools, student comments, and investigator observations indicated that the students had increased levels of skill, competence, and knowledge related to the curriculum objectives after the completion of the course of instruction. The Friedman Two-Way Analysis of Variance Test was used to determine if there was any change in the students' perceived knowledge/competence relating to the 23 questions contained in the pre- and post-course assessment after they had completed the course of instruction. Analysis of the data indicated that there was a significant difference ($p < .001$) in the students' overall pre- and post-course mean rankings for all 23 questions after the completion of the course of instruction. This change was in the direction of improvement of the students' perceived knowledge/competence relating to outdoor leadership.

   In an effort to further investigate and understand overall changes, the Wilcoxan Signed-Rank Test was utilized to determine significant differences in individual students' perceived knowledge/competence for each of the 23 questions before and after their participation in and completion of this course of instruction for outdoor leadership. The level of significance was set at $p = < .05$.

   The analysis of data from the Wilcoxan Signed-Rank Test indicated that there was a year to year variance in the total number of significant individual student rankings of their perceived knowledge and competence. Table's 2-6 list the pre- and post-course mean scores for the Friedman Two-Way Analysis of Variance as well as the Wilcoxan Signed-Rank scores for all 23 questions. The asterisk (*) in the last

column indicates those questions showing the significant differences ($p < .05$) after participation in the course of instruction.

5. The curriculum objectives that appeared as significant in individual students' perceived knowledge/competence for all five years were related to the topics of Safety and Risk Management. The second most commonly appearing curriculum objectives were related to Trip Planning and Organization, Instructional Practices, Group Dynamics and Judgment.

Recommendations

The content of this curriculum (see Appendix C) warrants consideration in the development of any outdoor leadership education program. Individuals considering the development of a leadership course should especially consider those curriculum elements that were perceived as significant by individual students (see Appendix D). Students coming into this curriculum should not require basic instruction in wilderness skills at the beginner's level. Individuals undertaking any future study or application of this curriculum are encouraged to consider optimal group size. Individuals involved in outdoor leadership education should be aware of the importance of field experience in terms of education and training of outdoor leaders. When considering outdoor leadership development, it is helpful to distinguish between "training" and "education;" such a distinction illuminates the necessary interplay of skill mastery, in the technical sense, and the evolution of a larger context of knowledge with which to practice skills.

TABLE 1

Ranking and Mean Score of Consensus Objectives
of Curriculum for Outdoor Leadership
by Panel Members and Students

Rank	Mean	Objective Number	Topic
1	3.8	4	Experiences leading groups.
2	3.6	7	Knowledge of subjective and objective dangers.
3	3.5	12	Knowledge of judgment/decision making process.
4	3.5	29	Information and theory that relate to the leader's ability to plan, prepare and execute an activity with minimum impact on the environment and without injury to the participants.
5	3.5	11	Participation in an eight to ten-day field component.
6	3.4	13	Knowledge and theory of common hazards in wilderness settings.
7	3.3	17	Knowledge of environmental factors that affect wilderness trips.
8	3.3	27	Legal Liability, Standard of Care, Negligence.
9	3.3	6	Knowledge of program itinerary.
10	3.3	20	Low impact wilderness use practices.
11	3.3	9	Information and knowledge of teaching techniques.
12	3.3	30	Use of map and compass.
13	3.2	3	Knowledge and theory of program planning.
14	3.2	5	Knowledge and theory of risk management.
15	3.2	8	Knowledge and theory of good oral communication.
16	3.2	14	Presentation of techniques for learning specific technical motor competencies, i.e., wilderness first aid, climbing, kayaking.

TABLE 2 - 1985

Friedman ANOVA Table Showing Objectives With Means of Pre and Post Scores and Wilcoxon Signed Rank Scores of the Student Assessment Tool for Outdoor Leadership (N=7)

Objective Number	Mean Pre Score	Mean Post Score	Z Wilcoxon Signed-Rank Score	P Value
1	3.571	3.714	.53	.5943
2	3.000	3.714	2.02	.0408*
3	3.286	3.571	1.34	.1766
4	3.000	3.714	2.02	.0408*
5	2.857	3.429	1.60	.1051
6	2.714	3.000	.91	.3645
7	3.000	3.714	1.48	.1344
8	3.429	4.000	1.83	.0647
9	3.143	3.429	1.34	.1766
10	3.286	3.429	1.00	.3186
11	3.571	3.714	.53	.5943
12	2.429	3.000	1.60	.1051
13	2.714	3.571	2.02	.0408*
14	3.000	3.857	1.83	.0647
15	3.000	3.857	2.02	.0408*
16	2.857	4.000	2.37	.0172*
17	2.714	3.571	2.02	.0408*
18	3.143	3.571	1.10	.2729
19	3.143	3.714	1.47	.1386
20	2.571	3.714	1.94	.0492*
21	2.571	3.714	2.02	.0408*
22	3.286	4.000	1.83	.0647
23	2.857	3.857	2.02	.0408*

* = $p < .05$

Friedman ANOVA X^2 y =23.00. sig. @ $p < .001$

TABLE 3 - 1986

Friedman ANOVA Table Showing Objectives With Means of Pre and Post Scores and Wilcoxon Signed Rank Scores of the Student Assessment Tool for Outdoor Leadership (N=11)

Objective Number	Mean Pre Score	Mean Post Score	Z Wilcoxon Signed-Rank Score	P Value
1	3.090	3.454	1.46	.1422
2	3.000	3.000	0.00	1.00
3	2.909	3.181	0.76	.4469
4	2.818	3.545	2.52	.6117*
5	2.818	3.272	1.40	.1614
6	2.818	3.181	1.34	.1775
7	2.454	3.181	2.52	.0117*
8	3.455	3.364	0.36	.7150
9	3.000	3.272	1.21	.2249
10	3.455	3.545	0.31	.7532
11	3.545	3.636	1.00	.3173
12	3.000	3.454	1.34	.1775
13	2.363	3.181	2.20	.0277*
14	2.636	3.090	1.40	.1614
15	3.000	3.454	2.20	.0431*
16	2.909	3.636	2.36	.0180*
17	2.818	3.182	1.46	.1422
18	3.000	3.272	1.21	.2249
19	3.090	3.181	0.40	.6858
20	2.818	3.272	1.57	.1159
21	2.909	3.272	1.46	.1422
22	3.363	3.636	1.21	.2249
23	2.909	3.090	0.91	.3613

* = $p < .05$

Friedman ANOVA X^2 y =17.39. sig. @ $p < .001$

TABLE 4 - 1987

Friedman ANOVA Table Showing Objectives With Means of Pre and Post Scores and Wilcoxon Signed Rank Scores of the Student Assessment Tool for Outdoor Leadership (N=10)

Objective Number	Mean Pre Score	Mean Post Score	Z Wilcoxon Signed-Rank Score	P Value
1	3.600	3.500	0.53	.5936
2	3.200	3.600	1.46	.1422
3	3.000	3.400	1.82	.0679
4	3.200	3.600	1.82	.0679
5	2.900	3.200	0.94	.3454
6	2.900	3.000	0.53	.5930
7	2.900	3.400	1.57	.1159
8	3.100	3.500	1.34	.1775
9	3.300	3.500	0.67	.5002
10	3.500	3.600	0.40	.6858
11	3.600	3.900	1.60	.1088
12	3.200	3.400	0.36	.7150
13	2.600	3.500	2.10	.0357*
14	2.900	3.400	1.34	.1775
15	3.300	3.400	0.40	.6858
16	3.100	3.400	1.21	.2249
17	3.000	3.400	1.82	.0679
18	3.200	3.400	0.91	.3613
19	2.700	3.300	2.20	.0277*
20	2.800	3.200	1.46	.1422*
21	2.800	3.400	2.20	.0277*
22	3.300	3.600	1.21	.2249
23	2.900	3.400	1.40	.1614

* = $p < .05$

Friedman ANOVA X^2 y =19.17. sig. @ $p < .001$

TABLE 5 - 1988

Friedman ANOVA Table Showing Objectives With Means of Pre and Post Scores and Wilcoxon Signed Rank Scores of the Student Assessment Tool for Outdoor Leadership (N=12)

Objective Number	Mean Pre Score	Mean Post Score	Z Wilcoxon Signed-Rank Score	P Value
1	3.500	3.500	0.00	1.00
2	3.250	3.666	1.48	.1386
3	3.333	3.666	1.46	.1422
4	3.416	3.333	0.29	.7671
5	2.916	3.250	1.46	.1422
6	2.750	3.333	1.40	.1614
7	2.916	3.250	1.26	.2076
8	3.333	3.750	2.02	.0431*
9	3.166	3.500	1.60	.1088
10	3.250	3.583	1.18	.2367
11	3.500	3.916	2.02	.0431*
12	2.916	3.416	2.20	.0277*
13	2.666	3.250	2.36	.0180*
14	2.500	3.583	2.66	.0070*
15	3.333	3.666	1.12	.2622
16	3.333	3.666	1.26	.2076
17	2.750	3.500	2.10	.0357*
18	3.250	3.583	1.26	.2076
19	2.917	3.416	1.59	.1097
20	2.833	3.083	1.09	.2733
21	3.000	3.416	2.02	.0431*
22	3.500	3.833	1.46	.1422
23	3.083	3.750	2.03	.0423*

* = $p < .05$

Friedman ANOVA X^2 y =17.39. sig. @ $p < .001$

TABLE 6 - 1989

Friedman ANOVA Table Showing Objectives With Means of Pre and Post Scores and Wilcoxon Signed Rank Scores of the Student Assessment Tool for Outdoor Leadership (N=11)

Objective Number	Mean Pre Score	Mean Post Score	Z Wilcoxon Signed-Rank Score	P Value
1	3.181	3.454	1.21	.2249
2	2.909	3.636	2.52	.0117*
3	3.181	3.818	1.96	.0500*
4	3.272	4.000	2.36	.0180*
5	2.727	3.363	1.71	.0850
6	2.727	3.454	2.52	.0117*
7	2.454	3.273	2.19	.0284*
8	2.636	3.455	2.52	.0117*
9	3.000	3.455	1.69	.0910
10	3.181	3.636	1.69	.0910
11.	3.181	3.636	1.57	.1159
12	2.636	3.272	1.71	.0858
13	2.272	3.545	2.80	.0051*
14	2.363	3.454	2.66	.0077*
15	3.091	3.727	2.36	.0180*
16	2.909	3.727	2.36	.0180*
17	2.727	3.636	2.66	.0077*
18	3.000	3.727	2.52	.0117*
19	2.545	3.545	2.52	.0117*
20	2.818	3.272	0.88	.2743
21	2.727	3.454	2.03	.0423*
22	3.272	3.727	2.02	.0431*
23	2.909	3.636	2.20	.0277*

* = $p < .05$

Friedman ANOVA X^2 y =23.00. sig. @ $p < .001$

APPENDIX -A

GUIDING ELEMENTS IN OUTDOOR LEADERSHIP EDUCATION CURRICULUM

A. Concepts/Knowledge Base
   1. Regarding Leadership Style
      a. Basic leadership style and theory
      b. Choice of individual leadership style
      c. Subjective vs. objective judgment
      d. Interrelationship of knowledge and judgment process
      e. Leadership as a learned process
   2. Regarding Judgment/Objective-Subjective
      a. Judgment and decision-making
      b. Characteristics of sound judgment in an outdoor leader
   3. Regarding Trip-planning and Organization
      a. Characteristics of successful wilderness trips
      b. Role of planning and evaluation
   4. Regarding Environmental Issues
      a. Philosophy of minimum impact practice
      b. Environmental hazards common to wilderness trips
      c. Influence on programming of climate, geographic features, and natural and human resources
   5. Regarding Risk Management
      a. Knowledge of common risks associated with outdoor programming
      b. Planning for risk management
      c. Issues of standard of care and legal liability for outdoor programming
      d. Emergency policies and procedures
   6. Regarding Instructional Principles for Outdoor Leadership
      a. Learning styles
      b. Environmental opportunities/limitations for instruction
   7. Regarding Navigation
      a. Route planning for group abilities
      b. Use of map and compass activities for program
   8. Regarding Group Dynamics
      a. Individual in the group
      b. Group as an evolving system
      c. Problem-solving in small groups
      d. Specific issues in wilderness settings
   9. Regarding Nutrition
      a. Components of a balanced diet
      b. Practical nutrition for wilderness leaders

B. Values
   1. Attitudes Toward Self
      a. Self respect and care
   2. Attitudes Toward Others
      a. Acceptance and respect for the values of others
   3. Environmental Values
      a. Respect for the natural environment

C. Skills and Abilities
   1. Regarding Judgment
      a. Data-gathering, including appropriate source selection
      b. Relevance - discriminating between important and unimportant information
      c. Observation and listening skills
      d. Ability to forsee consequences of proposed actions
   2. Regarding Trip Planning and Organization
      a. Verbal and written skills relevant to trip planning and organization
      b. Organizing activities
      c. Organizing group members
      d. Organizing site location
      e. Organizing pre- and post-evaluation
   3. Regarding Environmental Issues
      a. Demonstrating and practicing minimum impact wilderness skills
   4. Regarding Risk Management
      a. Demonstration and practice of emergency plans
      b. Recognition and intervention in unsafe situations
   5. Regarding Instructional Principles
      a. Presenting oral and written information
      b. Non-verbal demonstrations
      c. Preparation of charts, graphs, and maps
      d. Teaching techniques appropriate to outdoor environments
   6. Regarding Navigation
      a. Reading charts, maps, and compass
      b. Planning routes appropriate to group
   7. Regarding Group Dynamics
      a. Skill in small group communication and problem solving techniques
      b. Recognizing motives and needs of group members
   8. Regarding Nutrition
      a. Organize, plan and prepare menus for wilderness trips
      b. Food preparation for wilderness trips

APPENDIX B

Pre- and Post-course Evaluation Tool

OUTDOOR LEADERSHIP PRE AND POST COURSE STUDENT ASSESSMENT

Check the box which best represents your response to each item.	Poor	Fair	Average	Excellent
1. Ability to follow instructions				
2. Possess judgement and maturity in working with groups.				
3. Possess ability to anticipate problems and act to prevent situations that may be harmful to participants.				
4. Provide a safe and careful learning environment.				
5. Appropriately employ the proper style of leadership for the group situation.				
6. Ability to lead participants who possess diverse backgrounds and different frames of reference.				
7. Select, organize and evaluate program activities.				
8. Knowledge that modeling is a significant aspect of leadership.				
9. Ability to handle constructive criticism.				
10. Ability to work without immediate supervision.				
11. Ability to learn new skills.				
12. Experiences leading groups.				
13. Knowledge and theory of risk management.				
14. Knowledge of subjective and objective dangers.				
15. Knowledge and theory of common hazards in wilderness settings.				
16. Knowledge of activity and site selection.				
17. Knowledge/components of successful wilderness trips.				
18. Knowledge of environmental factors that effect wilderness trips.				
19. Knowledge of group process.				
20. Knowledge of Legal Liability, Standard of Care, Negligence.				
21. Knowledge of nutrition and menu preparation.				
22. Knowledge of low impact wilderness use practices.				
23. Knowledge of expedition behavior.				

Appendix C

Content of Outdoor Leadership Curriculum

Based on the consensus of objectives, the review of the literature, and the limitations set forth, the following nine elements emerged as preferred content of the outdoor leadership curriculum.

1. Leadership Style

This element of the curriculum identifies topics, information and practices which will enhance the knowledge, skills and abilities of the student to develop his/her own leadership style.

Topics:

a. General knowledge related to leadership styles.
b. Characteristics of the leader.
c. Responsibilities of the wilderness leader.

2. Judgement/Objective-Subjective

This element serves to identify topics, information and practices which will help students to develop their own judgment and decision-making ability for outdoor leadership.

Topics:

a. Characteristics of sound judgment.
b. Potential problems of poor judgment.
c. Process for learning sound judgment.

3. Trip Planning and Organization

This element identifies topics, information, and practices which will help students to enhance their knowledge, skills, and abilities in program planning, organization, and evaluation for outdoor leadership.

Topics:

a. Common elements of program planning.
b. Considerations of activity and site selection.
c. Evaluation tools for outdoor programs.
d. Common elements of successful wilderness programs.

4. Environmental Issues

This element identifies topics, information, and practices which will enhance the student's skills and abilities in minimum impact practice and environmental considerations that affect wilderness programs.

Topics:

a. Philosophy of minimum impact practice.
b. Common problems of overuse.
c. Minimum impact practice and procedures.
d. Common hazards in wilderness trips.
e. Procedures and practice to minimize hazards.

5. Risk Management

This element identifies information and practices which will enable students to become aware of the safety and legal issues associated with outdoor leadership, and to develop emergency plans and procedures.

Topics:

a. Common risks in outdoor programming.
b. Steps in risk management for outdoor programming.
c. Legal Liability and Standard of Care.
d. Release Forms and Acknowledgment of Participation.
e. Emergency policies and procedures.

6. Instructional Principles

This element identifies information and practices which will enhance the knowledge and abilities of students to teach and present material in an outdoor setting.

Topics:

a. Introduction to learning styles.
b. Elements of experiential education.
c. Opportunities and limitations on instruction in an setting.
d. Teaching techniques for wilderness programming.

7. Navigation

This element identifies information and practices which will help students to enhance their knowledge, skills, and abilities in map and compass use for outdoor leadership.

Topics:

a. Topographic map symbols and uses.

b. Compass use.

c. Use of map and compass.

d. Planning routes.

8. Group Dynamics

This element identifies topics, information, and practices which will help students enhance their knowledge, skills, and abilities to work with small groups in outdoor settings.

Topics:

a. Techniques for communication and problem-solving.

b. Common interpersonal issues associated with wilderness programs.

c. Opportunities and limitations of problem-solving with small groups in an outdoor setting.

9. Nutrition

This element identifies information and practices which will help students to enhance their knowledge, skills, and abilities related to menu planning and preparation

for outdoor programming.

Topics:

a. Components of a balanced diet.

b. Practical nutrition for wilderness leaders.

c. Organizing, planning, and preparation of food for outdoor programming.

d. Techniques for food preparation in the field.

APPENDIX D
SIGNIFICANT OBJECTIVES FROM WILCOXON-SIGNED RANK TEST AND CORRESPONDING CURRICULUM OBJECTIVES.

1985	
2,	Judgement, and Leadership.
4, 13, 15, 20	Safety, Risk Management Environmental Issues, and Instructional Principles.
21	Nutrition.
16, 17, 23	Instructional Principles, Trip Planning and Organization, Group Dynamics.
1986	
4, 13, 15	Safety and Risk Management, Environmental Issues.
7	Trip Planning and Organization.
16	Instructional Principles, Trip Planning and Organization.
1987	
13, 20	Safety and Risk Management.
19	Group Dynamics.
21	Nutrition.
1988	
8, 12, 11	Leadership, Judgement.
13, 14	Safety and Risk Mangement.
7, 23	Trip Planning and Organization, Group Dynamics.
21	Nutrition.
1989	
2, 8	Leadership and Judgement.
3,4	Judgement, Environmental Issues, and Risk Management.
13, 14, 15	Safety, Risk Management.
7, 16, 17, 23	Trip Planning and Organization, Group Dynamics.
6, 19	Group Dynamics.
18, 22	Environmental Issues.
21	Nutrition.

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PROJECT S.O.A.R.
(Shared Outdoor Adventure Recreation)

By

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Project S.O.A.R.
Balsam, North Carolina

ABSTRACT

Project SOAR (Shared Outdoor Adventure Recreation) is a private non-profit foundation established in 1974 providing couseling, therapeutic recreation, and education services for at-risk yough. Project SOAR has a special emphasis in the area of learning disabilities and attention-deficit disorders and programs dealing with prevention and early intervention of school drop-outs, juvenile delinquency, and substance abuse.

Project SOAR offers courses for youth ages 8 to 18 years of age and also with courses available for family participation through private contracts. Programs take place in North Carolina, Florida, and Colorado.

The keys to the program's success is a belief in: focus on student strengths rather than weaknesses; knowing the characteristics of a given population and "wrapping" the program around them; recognizing the ability level of each student and program individualization, realizing the power of "modeling"; and insuring that students are successful during their first activity. The goal is transference, and processing is the key to transference.

Background Information

PROJECT SOAR features success-oriented, high adventure programs for learning disabled (LD) and attention-deficit disorder (ADD) teens and preteens. Emphasis is placed on developing self-confidence, social skills, problem solving techniques, a willingness to attempt new challenges and the motivation that comes through successful goal orientation. A multitude of experiential learning activities allow each student many opportunities to discover and develop his or her learning abilities. The result is an indiviudal who is cognizant of personal strengths and more willing to confront areas

of weakness. Each student comes to view life as a series of challenges and opportunities, rather than a series of problems; just as the students come to view themselves as problem solvers, rather than only part of the "problem."

Project SOAR's nationally recognized program has successfully challenged young people since 1975. Operating out of the Balsam Base in Balsam, North Carolina, the staff lead programs throughout the Southeast, Florida Keys, and Rocky Mt. National Park in Colorado. The out-of-doors provides an ideal classroom where relevant learning can occur and life skills can be taught. Adventure activities include wilderness backpacking, rockclimbing, whitewater rafting, mountaineering, snorkling, and sailing. Expeditions are normally two weeks in length and are scheduled in the summer months. Shorter programs, three to seven days, go year-round. For most programs our staff/student ratio is 3:1.

Model Adaptation

Step One: Identify Core Characteristics of Your Population

A. Strengths
B. Areas of Challenge (Weaknesses)
C. Family System
D. Learning Style or Styles's

Step Two: Using the Core Characteristics of Population, Make a Treatment Plan. Be Specific - Address a Specific Behavior

Example: Student Johnny L. Esteem

Reason for Attending SOAR: Attention-Deficit, Low Self-Esteem

Referred: By School Counselor

Behaviors to be Addressed: a.
b.

Desired Behaviors or Goals:

1. Focus
2. Positive Peer Interactions
3. Organization

Aids to Planning - Tools:

A. Make a Resource List

Examples: Rock Climbing
Backpacking
White Water Rafting
Ropes Course (make a list of elements)
Initiatives - list
Other Activities in Your Program
(continue to add to your list)

B. Create Metaphors

Examples: Rock Climbing: focus, individual effort, goals, fear, obstacles, etc.
Backpacking: organization, time management, team work, etc.
Whitewater Rafting: team work, surveying and decision making, etc.

Step Three: Transference - some may happen coincidently but we must be deliberate.

Processing is an indispensable means to achieve transference - our goal is that the things we do can be transferred back home, school, etc. If this is not happening we are wasting our efforts.

Key to SOAR's Approach:

1. Use of student's strengths.

2. Strive to make student's first activity one that they will be successful at. Success is a much more powerful motivator.

3. Know the characteristics of your population and wrap your program around them.

4. Recognize the ability level of each student and individualize programming.

5. Realize the importance of "modeling". More is caught than taught.

6. Transference is what it's all about.

7. Processing is key to transference.

Project SOAR Courses

North Carolina Standard Course - Two week program operating from Balsam Base. Adventures include but not limited to: low ropes and initiatives, rock climbing, backpacking, white water rafting and tubing.

Llama Treks - Same as North Carolina Standard except it is geared toward younger students. The llamas serve as pack animals during the backpacing phase to lighten packs and for the therapeutic value of human/animal relationships.

Colorado Courses - Two week courses based in Rocky Mountain National Park serve as an introduction to summer mountaineering, alpine backpacking, and rockclimbing including an ascent of Long's peak. An advanced course is also offered for alumni students.

Family Adventure - Eight day program designed to renew family relationships and communication. Activities include rock climbing, backpacking and white water rafting.

Academic Challenge Course - This course combines intensive academic training for LD youth and all of the same wilderness experiences as the NC Standard course over a one month period.

Project SOAR is much more than just a summer program. It is involved in a full range of spring, fall, and winter experiential programming. This includes three-day weekend adventures, an Outdoor Classroom

program, contract programs for public and private schools, study skills and esteem-building workshops, spring sailing expeditions to the Dry Tortugas, winter expeditions to the Florida Keys and Project Pursuit, a dropout prevention program. Beginning this fall, Project SOAR will also offer a long-term residential wilderness program for young men ages 13-17.

Weekend Adventures - One or two adventure weekends are planned each month during the spring, fall and winter. These are three-day programs concentrating on a specific values theme which is reinforced by a specific adventure activity. Preserverance, Stewardship, Communication Skills, Test-Taking and Cooperation are themes of past weekends. Students are encouraged to examine their own values' system while being challenged by the excitement of a wilderness adventure.

Spring Diving Spectacular - Dry Tortugas - This six-day adventure combines ocean sailing, snorkeling, deep sea fishing at historical Fort Jefferson.

A Semester on the Appalachian Trail - This fifteen-week expedition journies along the scene Applachian Trail from Maine to North Carolina.

A Christmas Adventure - This is a six-day adventure in the sunny Florida Keys that includes swimming, snorkeling, sailing, and deep sea fishing.

Study Skills and Esteem-Building Workshops - The workshops are sponsored by a group of parents and presented in your hometown. Topics include motivation, concentration, organization, time management, note-taking, SQ3R, and test-taking. These skills are taught in a format that combines discussion sessions and experiential learning activities.

Contract Programs - We design special courses for a wide variety of groups including public and private schools, churches, corporations and social service and volunteer agencies.

Outdoor Classroom Program - It is an interdisciplinary field study of a specific area or environment as coordinated with work that is actually taking place in the academic classroom.

Project PURSUIT - PURSUIT is a dropout prevention program for students "at risk." The program consists of four three-day weekend field studies and study skills counseling in the school setting for four to six weeks.

Conclusion

In summary, Project SOAR seeks to reach youth where they are, to meet their basic needs for acception and challenge in the wilderness setting. The focus is on the needs of youth with learning disabilities, attention deficit disorder, youth at risk, and low self esteem. Our approach is based on a few basic principles we believe are true for all youth:

- Kids want to learn by their very nature.
- Our job is to find a youth's strengths and build on them. When we do this motivation is no longer a problem.
- We aim to uncover subjects rather than cover them.
- Exploration is a way to couple the abstract with hands-on learning.

OUTDOOR SAFETY EDUCATION: A MAINE PERSPECTIVE

By

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Coordinator, Recreation/Leisure Services
University of Maine at Presque isle

ABSTRACT

The article addresses the requirements established by the Maine Department of Inland Fisheries and Wildlife to become a outdoor education instructor, a certified outdoor trip leader and to become a registered Guide in the State of Maine.

Introduction

As we near the year 2000, even the demographics of a rural state such as Maine are changing. People are leaving rural Maine and moving to suburban and urban areas. Some of that outdoor education associated with country living is being lost. Family traditions of sharing outdoor knowledge and expertise is also being lost due to the rise of single parent families. Because of these historical roots and the changing demographics, the State of Maine has created one of the most comprehensive and aggressive outdoor safety education programs in the nation.

Safety Education

Safety Education is coordinated in the State of Maine by Mr. Gary Anderson. Gary holds the title of Safety Officer for the Maine Department of Inland Fisheries and Wildlife. He administers the delivery of six specific safety education programs. These include snowmobile safety, all-terrain vehicle safety, motorboat safety, hunter safety, bow hunting safety, and trapper education. The Maine Department of Inland Fisheries and Wildlife also regulates the licensing of trip leaders and guides. These two areas will be discussed later in this presentation.

These programs serve a variety of functions, but their primary purpose is to ensure safe and responsible participation in outdoor activities. The various courses address such areas as: self-help first aid, survival, proper use of equipment, ethics, land/owner relations, proper resource use and so on.

The actual instruction of these safety education courses is conducted by trained volunteers. There are literally thousands of individuals in Maine who feel this information is important enough to share with others. To become an instructor one must demonstrate expertise in the chosen field, successfully complete a written examination in the area of instruction, attend an instructors workshop and undergo a background check by the Maine State Police for any outstanding violations.

Last spring I instructed 12 of my students at the University of Maine at Presque Isle in each of the six outdoor safety areas. These students represent various geographical areas of Maine and upon graduation may return to their home area to serve as an instructor.

For the most part the cost of these courses is free to the participants. The federal legislation which established the Pittman-Robertson Act and the Dingle-Johnson Act provide much of the funding. These two acts established tax on hunting and fishing supplies which in part goes to funding various outdoor safety programs.

Trip Leader's Program

In addition to the various outdoor safety education programs, the State of Maine has established one of the most comprehensive and rigorous procedures to lead outdoor trips or become a registered guide in the nation. The State Law which regulates the licensing of Guide's reads as follows: "Any person who receives any form of remuneration for his services in accompanying or assisting others while hunting, fishing, trapping, boating, snowmobiling, or camping at a primitive camping area is required to have a guides license."

A person may be licensed to lead outdoor trips such as those provided by summer camps or school groups by obtaining a Trip Leader's Permit rather than a Guide's License. The acquisition of this certification is obtained by successfully completing an approved program of instruction endorsed by the Maine Department of Inland Fisheries and Wildlife. Often time summer camps will

submit a program outline for approval so they may train their staff. Once approved by the Department, the camps may train their own staff in the various safety and tripping areas outlined in the procedures. Some of the areas addressed are as follows: outdoor safety procedures including canoes and boats, tripping and camping skills, weather and it's potential danger, and two practical overnight trips to demonstrate expertise.

At this conference, I was having breakfast and speaking to a group of people I had not met before. It so happened that one of the women at the table had held a Trip Leader's Permit a number of years ago when she worked as a camp councilor in Maine. I asked her what she thought of the requirement and what she remembers most about her training. She said she really did feel it was important and she was proud that she had completed it. She even indicated that she noted her certification as a Maine Trip Leader on her resume. Her response to the most important aspect dealt with the section on weather and its danger. This immediately brought to mind a tragedy that took place last summer in Baxter State Park.

During the summer months I work as a campground ranger in Maine's largest wilderness park. Baxter Park contains more than 200,000 acres with more than 150 miles of hiking trails. The most notable mountain in the park is Mount Katahdin. Hikers travel near and far to climb "The Mountain" and cross the Knife's Edge.

One late summer afternoon the sky grew dark in the west and the wind began to blow. As a park ranger my level of concern began to increase. Lightning and the potential of a fire was one of my greatest concerns. As lightning flashed in the west and the distant thunder grew closer my concern for fire shifted to the two canoes and four fisherman out on Russell Pond. I called to them and asked them to go to shore until the storm passed. They were eager to comply and I felt safety of my campers was assured. The storm approached very rapidly and appeared to encompass the entire park. I went 10-7 on the radio "lightning" and disconnected the radio from the power source and the antenna.

All things seemed to be secure so I stood and watched the rain pelt against the windows of the ranger station, lighting flashed and thunder shook the area.

The storm dissipated almost as rapidly as it appeared, but it left in it's wake an unforgettable example of what weather and specifically lightning can do. There had been a lightning strike on the Knife's

Edge. Four members of a Boy Scout group from New York State had been struck, one fatally. The group had tried to seek shelter, but was caught on the open expanse of the Knife's Edge. This was a weather lesson that many including all Park personnel won't soon forget. This certainly reinforces the need for outdoor leaders to understand weather; it's patterns and consequences.

Registered Maine Guide Certification

Maine's requirements to become a Registered Guide are significantly more demanding than to become a Trip Leader. The state has established five different categories of Guides. The classifications are as follows: Recreational, Fishing, Hunting, Master Guide, and Whitewater Rafting Guide. The requirements for each vary, but there are two common elements; each requires a series of written examinations and a final oral exam.

The Master Guide's written examination requires the applicant to successfully complete nine written exams. The subject areas covered are as follows: (38 questions), first aid (27 questions), canoeing (24 questions), watercraft laws and regulations (21 questions), map and compass (25 questions), hunting (30 questions), fishing (34 questions), firearms (21 questions), and animal observation (20 questions). The individual must score a minimum of seventy percent on each segment.

Upon successful completion of the written portion he/she is then scheduled for the oral examination. This evaluation process may take between one and three hours to complete. The examination board asks the applicant a series of questions regarding each area. Each question and the applicant's response is recorded on audio tape for further review if necessary. I think it is safe to say that less than fifty percent of those perspective guides seeking a Master Guide's License pass the oral exam on the first try. The actual percentage is more like twenty five, but I have no statistical data to support that claim.

Having gone through a number of oral examinations including the defense of my Ph.D. dissertation, I feel qualified to say that this is one of the most comprehensive exams I've taken. One may ask one's self why is this process so rigorous? There are certainly a variety of reasons, but one of the most important is "consumer protection".

The current licensing process is a significant departure from what existed only ten years ago. Historically, the procedure to acquire a Guide's License and the requirements to retain it were rather unconstrained. Today, to meet the criteria established for classifications one must demonstrate expertise. I've been told that the State of New York has recently established ten separate categories of licensed guides. This procedure is administered by the New York State Department of Environmental Conservation. The primary reason given to me for such detail is that of demonstrated expertise.

In Maine one does not only have to follow the procedures outlined previously in this presentation, but the individual must also hold and maintain American Red Cross certification in first aid and CPR. Current certification must be presented for the renewal of one's Guide's License.

The State of Maine has undergone a series of positive moves to ensure that the user's of it's natural resources are better equipped to do it properly. The delivery of safety education has certainly helped to reduce the number of accidents and fatalities occurring in Maine's outdoors. The steps to better regulate those holding a Guide's License and leading outdoor trips is viewed as a very positive one by many.

In the event you have any questions pertaining to this presentation please feel free to contact me at the University of Maine at Presque Isle or the:

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SURVEY OF INSURANCE AND LIABILITY: CONCERNS IN OUTDOOR RECREATION PROGRAMS IN THE SOUTH

By

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ABSTRACT

The purpose of this study was to ascertain the extent of liability and insurance coverage trends in higher education institutions outdoor programs in the South. Data was gathered via a survey devised and mailed to fifty colleges and universities located in 10 southern states of the United States (Appendix A). A return rate of 64 percent (32 responses) was obtained and deemed sufficient to indicate trends in collegiate sponsored outdoor programs which involved risk management procedures. The impetus of the survey was to identify three specific areas in outdoor programming: (1) off-campus outings, (2) outdoor equipment, and (3) outdoor oriented facilities and isolate the major areas of liability and insurance concern in a typical for credit or non-credit college level outdoor recreation program. Each component had subtopics regarding the (1) offering of services, (2) type of service, (3) insurance, (4) accidents, and (5) litigation in case of an accident. One last question asked for specific training or procedures to address liability concerns (Appendix A).

Introduction

An increasing number of colleges, universities and high schools are expanding their offerings into areas of

outdoor recreation, outdoor education, and outdoor adventure pursuits. The fact that people have chosen to involved themselves in these activities should be of no surprise and the expansion in the past twenty years has been dramatic.

America has an historical interest in the outdoors and when this is combined with the growing population, affordable price, time to participate, and affordable transportation to reach outdoor areas, the increase is part of a pattern and continues at a steady pace.

The National Sporting Goods Association stated that growth sports from 1984 to 1985 was in the area of outdoor programming. It should also be noted that the more traditional items such as backpacks and tents showed a healthy one year gain. Table I, below, illustrates the ranking of six of the top ten outdoor sports in the United States.

Table I
INCREASE IN OUTDOOR ACTIVITIES EQUIPMENT SALES

National Rank	Activity	% 1984 to 1985
1	Boardsailing	100
2	Boardsurfing	67
5	Mountain/Rock Climbing	47
7	Horseback Riding	42
8	Fly Fishing	41
10	Sailing	38
	Tents	20
	Backpacking	11

(Ewert, 1989)

This growth has been increasing not only for the population in general, but also institutions of higher learning. In 1975, over 200 colleges and universities offered courses and degrees in outdoor education and recreation with a high concentration in the North,

Midwest, and Western regions of the Untied States (Ewert, 1989). During the last fourteen years, there has been steady growth nationwide with the South being one of the fastest growing areas in terms of outdoor programming expansion (Gilbert & Taylor, 1989). This is particularly true in the area of non-credit programs offered through student unions and campus recreational sport programs. In surveys given in 1986 (Taylor, Chesnutt & Gilbert) and in 1987 (Gilbert & Taylor), it was discovered that non-credit outdoor activities accounted for 70 to 80 percent of the total programs in the South. In a study comparing campus recreational sports growth, Martini (1984) found 165 listings of directors of outdoor recreation programs in the 1983 National Intramural Recreational Sports Association (NIRSA) Directory. Of those contacted, 98 returned surveys indicating 88 percent had active outdoor programs. In the three year period from 1983 to 1986, the original 165 listings of Outdoor Recreation Directors had grown to 257 according to the 1986 RECREATIONAL SPORTS DIRECTORY for a 36 percent increase. Of this number, 80, or almost 31 percent, of the total, were located in the South.

When one reviews the climate, geographic diversity, and abundance of water resources, it is not surprising that there has been a steady and significant increase in outdoor recreation programs in the South. Areas such as the beaches of Florida, ski slopes of North Carolina, white water rivers in Georgia or hiking trails in Tennessee are often mentioned as evidence of opportunities for outdoor recreation. It also noted that tourism ranked second only to the petroleum industry in generating dollars in 1982. A large percentage of 35 million out of state visitors to Texas visited 13 major rivers, 189 major reservoirs, 114 state parks, 13 national parks, or 100+ miles of beaches (Kingston, 1984). Even the smaller state of Alabama had ten collegiate outdoor education programs which utilized 24 navigable rivers, two wilderness areas, 40 miles of beaches, 20 state parks, 5 natural forests, and thousand's of square miles of surface water on the many lakes (Taylor, Burkett, and Olive, 1985).

Regardless of the time, place, or season, there should be a plan to guard against mistakes, error or bad luck. Since a measure of outdoor programming's appeal is directly connected to an element of risk to the physical, emotional and material well being of the participant in the natural environment, the program director should take care to account for the uncontrollable variables to be

encountered. An essential ingredient in such a program would be a risk management plan. Ford lists the factors in such a plan. They are as follows:

1. Participants: limits by number, age, ability, quality, fitness, experience.
2. Activity: location, distance, dates, time, alternate route
3. Transportation: to/from
4. Permission of Authorities: (if needed)
5. Equipment: mandatory/optional
6. Hazards: identifiable
7. Alternate Policies: to manage risk potential from #1 thru #6 (Ford, 1981).

Results

Survey results correlated with general national trends and revealed facts which may deviate from commonly held beliefs. In the following section, the results will be reported on four specific sections with observations and trends.

The first category "OUTING" had four parts as follows:

A. Do you offer credit or non-credit off campus outings? This section is application to both credit and non-credit programs as only four of thirty-two respondents did not offer any off-campus outing experience. All respondents who offered course credit also incorporated the outing format in their curriculum. Several delivery systems for outings were identified as follows in Table II:

Table II: TYPE OF DELIVERY SYSTEM UTILIZED

	Delivery System	Number
a.	Common Adventure	10
b.	University professional leader	20
c.	Outfitter lead	6
d.	Paid local guide	5

*These programs utilized more than one system: Alabama-Birmingham, Davidson, Florida State, Georgia Tech, Mars Hill, Southern Mississippi, Texas-Austin, Texas-El Paso, Western Carolina, Mississippi.

The second question in the OUTING section related to insurance and coverage where it was noted that twenty-seven programs (85%) had some type of insurance coverage as shown in Table III.

Table III: INSURANCE COVERAGE AND COMPANY

UNIVERSITY	COMPANY	COVERAGE
Univ. of Alabama (Birmingham)	UAB (self-insured)	$1 million
Appalachian St. (NC)	St. Paul Fire & Casualty	limited accident/ liability
Ferrum College (VA)	Liberty Mutual	$1 million
Georgia State	State of Georgia	$5 million
Univ. of North Carolina (Charlotte)	NC GS 143-291 et seq.	$100,000 limitation per claimant
Texas A & M	Texas Tort Claims Act	$1 million
Univ. of Texas (Austin)	World Wide Outfitters	$500,000 bodily injury/ $500,000 liability limit

Although a number of respondents indicated several types of coverage such as personal, departmental, or university, the most common form was a blanket university-coverage.

Part Three of the OUTING section dealt with major accidents and seven respondents (21%) indicated an accident had occurred but no resultant litigation (Table IV).

Table IV: MAJOR ACCIDENT-OUTCOMES

University	Accident	Litigation
Appalachian State (NC)	Non-traumatic aneurism	No
Central Piedmont College (NC)	Personal Injury	No
Georgia Tech	Drowning	No
Middle Tennessee State	Near-drowning	No
Univ. of North Carolina (Charlotte)	Broken ankle and foot	No
Univ. of Texas (Austin)	Broken ankle and wrist	No
Western Carolina (NC)	Personal injury	No

A final question in the OUTING portion of the survey asked "Do you require certifications, workshops, or outdoor schools for the leaders? (please specify)". Of the total universities surveyed, 19 institutions (59%) required one or more certifications, workshops, or outdoor school attendance. The 17 different responses to this question are as follows: 11 required CPR (34%), 10 required Red Cross First Aid (31%), and "best training available" with 6 responses (18%).

The second major component "EQUIPMENT," was assumed to be most applicable to non-credit programs which rented outdoor equipment. The four parts of this section identified equipment rental, insurance coverage, accidents, and special equipment procedures. (As the same insurance coverage was applicable for equipment as was available for outdoor trips, these responses were identical.) There was only one serious accident - "whitewater drowning occurred with loaned university raft" - however, with no litigation at the time of the survey.

In response to the question: "Do you offer equipment rental?", the investigator discovered that 22 respondents (60%) rented outdoor equipment and 28 (88%) had equipment for either rental or departmental use. Therefore, the

same number who had outdoor equipment also conducted off-campus outings.

Table V identifies the specific liability procedures, and notes other procedures as follows: "maintenance records," "Rec Cross recommendations," "certification of skills for renters, swim test for raft rental," "equipment demonstration prior to check out," and "do not rent stoves." Several respondents listed more than one procedure.

Table V: PROCEDURES ADDRESSING LIABILITY CONCERNS

Special Procedure	Number	Percent of Total
1. Contract with waiver or release	9	43%
2. Regular check of equipment	7	33%
3. Instructions given with rental	6	29%
4. Inventory Control	4	19%
5. Returning climbing equipment on schedule	3	14%

The final category of the survey titled "FACILITIES" attempted to ascertain the variety of outdoor facilities, insurance coverage, accidents at facilities, and liability procedures for both credit and non-credit programs. (As noted, Facilities insurance coverage applied to other aspects of the program although one university-affiliated water-ski club did have a policy which pertained to boat damage.) Also, there were two accidents. One was a broken nose and ankle on a low ropes course and the other was a drowning on a lake front facility. The universities either paid the medical expenses or settled out of court.

A total of 12 institutions (37%) had some type of special facility other than rental storage, or an

information center. Other facilities mentioned were a camping area and an equestrian center. An indication of the variety of facilities is shown in Table VI.

Table VI: COMMON OUTDOOR PROGRAM FACILITIES

Facility	# of Responses	University
Indoor climbing wall	3	Appalachian State (NC), Baylor (TX), Vanderbilt TN)
Marina/lake-front	6	Baylor (TX), Davidson (NC), Florida State, South Florida, Tennessee, Southern Mississippi
Ropes course	4	Davidson (NC), Ferrum (VA), Georgia State, North Carolina-Charlotte
Cabin	2	Longwood College (VA), Southern Mississippi

The last portion of the facilities section dealt with liability concerns.

Table VII: PROCEDURES TO ADDRESS LIABILITY CONCERNS

Response	Number	Percent of Total
1. Signed waiver of release	7	58%
2. Instructor training	5	42%
3. Risk management policies & procedures	4	33%
4. Equipment regularly inspected	3	25%
5. Warning signs	2	16%

Several facilities did not have procedures, and surprising, those with procedures usually listed two or more precautionary measures.

Summary

In conclusion, the survey sample generally supported some national trends. However, possibly because of the newness of some programs that they would differ from more established programs in other sections of the country. Similarities were found in a high percentage of off-campus outings and ownership for rental or department purposes. Also, there appeared to be a high percentage of institutions with insurance coverage yet had a low accident rate. The research data indicates that no single certification should be required of the outdoor leaders. Another similarity with the national norm was the wide variety of outdoor program facilities.

The responses differed from other areas of the country where the programs have been established longer and where the clientele has a higher outdoor skill-level development. The leadership model on outings tended to be university professional-delivery-system and there were five programs that carried no insurance coverage. Forty percent of the programs indicated that they had no special requirements or certifications required for their

outdoor leaders. Other differences from national trends can be seen in no special procedures for equipment for use or slated risk management policies as noted by Ewert, 1989.

Since many programs in the South are less than ten years old as evidenced in the NIRSA directory listings, it is reasonable to expect an orientation toward skill development courses, off-campus outings, and equipment rental as these often are initial steps to establish a program or curriculum with a minimum amount of funding. The above identified aspects of programs would also allow an institution to "test the water" as they explore both the need and interest of their student body. This procedure would provide sufficient time to develop both long term goals and direction for both non-credit and academic programs. The fact that some programs have established training programs for guides along with special facilities for participants indicates there is an interest and long-term commitment for outdoor programs.

It was surprising that insurance, certifications, liability procedures or risk management procedures would not be required in public institutions. These deviations from most established programs would indicate that some programs are still in the young exploratory stage. The South is in the midst of curriculum and program expansion in the area of outdoor recreation activities for both credit and non-credit programs in institutions of higher education.

APPENDIX A

Respondents to Survey

SCHOOL	CONTACT/CHAIR	DEPT.	LOCATION
Univ. of Alabama-Birmingham	Wayne Taylor	Rec Sports	Birmingham, AL.
Appalachian State	John Crotts	Outdoor Programs	Boone, NC
Univ. of Arkansas	Craig Edmonston	Rec Sports/ HPER	Fayetteville, AR.
Baylor University	Buddy Gilchrest	Dept. of HPE	Waco, TX.
Central Piedmont Community College	David Brown	HPE/Outdoor Rec.	Charlotte, NC.
Davidson College	Gerald Hutchinson	Davidson Union Outdoor Center	Davidson, NC.
Ferrum College	Dempsey Hensley	Rec & Leisure	Ferrum, VA.
Florida Atlantic College	T. Cargill	Campus Rec.	Boca Raton, FL.
Florida State Univ.	Susan Limestall	Outdoor Pursuits Campus Rec.	Tallahassee, FL.
Georgia State Univ.	John Krafka	Rec. Services	Atlanta, GA.
Georgia Tech Univ.	Suzi Beaumont	Rec Sports	Atlanta, GA.
Longwood College	Rena Koesler	Dept. of HPER	Farmville, VA.
Mars Hill	Tom Coates	Rec & Leisure	Mars Hill, NC.

College		Services	
Middle Tennessee State	Glen Handley	Campus Rec.	Murfressboro, TN.

SCHOOL	CONTACT/CHAIR	DEPARTMENT	LOCATION
Univ. of Mississippi	Troy Young	Ole Miss Outdoors	University, MS.
Univ. of Mississippi	Jim Gilbert	Dept. of HPER	University, MS.
Univ. of North Carolina (Charlotte)	Sandy Kohn	Venture Program	Charlotte, NC
Univ. of South Florida	Eric Hunter	Campus Rec.	Tampa, FL.
Univ. of Southern Mississippi	B. J. Powers	IM-REC Sports	Hattiesburg, MS.
Univ. of Tennessee (Chattanooga)	Robert Norred	Dept. of HPER	Chattanooga, TN.
Univ. of Tennessee (Knoxville)	Judy Bryant	Rec Sports	Knoxville, TN.
Texas A & M University	Patsy Greiner	Rec. Sports	College Station, TX.
Texas Christian Univ.	Steve Kintigh	Rec. Sports	Ft. Worth, TX.
Univ. of Texas (Austin)	Pete Schaak	Rec. Sports	Austin, TX.
Texas Tech University	Jeff Stuyt	Dept. of HPER	Lubbock, TX.
Univ. of Texas (El Paso)	Brian Zweber	IM-REC Services	El Paso, TX.

Trinity Univ.	Jim Potter	PE/Athletics/ Rec.	San Antonio, TX.
Vanderbilt University	Linda Potter	Campus Rec.	Nashville, TN.
University of Virginia	Jerry Rupert	IM-Rec. Sports	Charlottes-ville, VA

SCHOOL	CONTACT/CHAIR	DEPT.	LOCATION
Virginia Commonwealth	Greg Elliott	Rec. Sports Outdoor Adventure Program	Richmond, VA.
Western Carolina University	Bill Clark	University Center	Cullowhee, NC.

*Original survey list compiled from 1987 Outdoor Trip Survey and information gathered at the 1988 National Conference on Outdoor Recreation.

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FUND RAISING: THE OPTIONS AVAILABLE TO OUTDOOR PROGRAMS
(Copyright 1991)

By

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Introduction

Fund raising is an aspect of income generation that many in the outdoor recreation field shrugged off. There's a mistaken feeling out there that fund raising just won't work for outdoor activity programs. That couldn't be further from the truth. To wit: Outward Bound Schools generate ten of thousands of dollars for scholarships and programs, the Cornell University Outdoor Education Program received a $160,000 donation to build a climbing wall and another $50,000 to start an equipment outfitting center, and over the past 10 years, the Idaho State University Outdoor Program has brought in nearly one million dollars of outside funds (copyright 1991, Ron Watters).

There is no one set way of fund raising that works for everyone. You'll need to evaluate and dabble with several methods before settling on some that work well in your situation. For the purposes of this paper, I will discuss four broad categories: grants, fund raising events, non-cash donations and cash contributions. Each of these categories covers a lot of ground and there are many options to try within each.

Grants

Federal and private foundation grants are some of the largest potential sources of funds. But it is not without a catch. To obtain federal grants you will need to adapt an outdoor recreation project to the purposes and guidelines of the grant program, and you will need to commit a large block to time to researching and developing the grant proposal. If you are the kind of person that expresses yourself adequately through writing then federal grants is a natural area to look seriously at. However, if you are more comfortable on the hone and

prefer person to person contacts, then private foundations may be the better choice. With private foundations, you still need a good, short written proposal, but mostly you need to make and maintain personal contacts with individuals within the foundation.

Finding Out About Grants

There are several reference books which are useful for locating potential sources of funds. These are:

Taft Foundation Reporter: Comprehensive Profiles and Giving Analyses of America's Major Private Foundations, The Taft Group, Rockville, MD.

Taft Corporate Giving Directory: Comprehensive Profiles of America's Major Corporate Foundations and Corporate Giving Programs, The Taft Group, Rockville, MD.

The Foundation Directory, The Foundation Center, NY.

Annual Register of Grant Support: A Directory of Funding Sources, Macmillan Directory Division, NY.

Federal Grants

I know of no federal grant program that provides funds for ordinary people to do ordinary recreational things in the outdoors. You will need to design a project in which outdoor recreation is used as a special and unique component of the grant which helps to obtain greater goals. For instance, federal monies are available to help improve retention rates of minorities at colleges and universities. You may be able to design a project in which outdoor recreation is the primary medium used to accomplish greater retention rates. Federal funds are also available for handicapped recreation. You may be able to design a project in which outdoor recreation services are provided to disabled members of the student body and community.

If these sorts of adaptations to an existing program don't appeal to you, then federal grants -- and, for the most part, private foundation grants -- are not for you. Both federal and private grant sources are set up to provide benefits to society: to help the handicapped,

increase equality, improve education and living conditions, rehabilitate problem children, etc. With all the needy causes, there just isn't any money left to help run outdoor activities for the general population. That does not mean that there are not other fundraising options -- but the choices are more limited. So if grants are not your bag, skip the next couple of sections and pick up at the "Fund Raising Events" heading.

Once you have located some possible federal grants, you will want to follow several steps. First, check into the due date. Federal grants will have a deadline by which applications must be postmarked. Give yourself plenty of time. It is doubtful that you will be able to put together a grant with a ghost of a chance for funding if you have only two weeks before the deadline.

Write or call the agency responsible for the grant program and request more detailed information and an application packet. When it arrives, read the requirements of the grant and reevaluate whether your idea for the project might work. Feel free to call the contact person at the agency and discuss your proposal with him or her. The representative may be able to give you advice on your proposed project or he or she may suggest that you rethink whether it should be submitted. If after reviewing the material or talking with the grant representative, you decide to give it up, that is fine. You will save yourself a lot of trouble and time. But keep looking for other grant possibilities that you may work a proposal around.

If your project fits the grant guidelines and has potential, ask the contact person to send a couple of grants from last year's winners and a copy of the evaluation form used by the reviewers. Grants are reviewed by panels of reviewers, and they generally use an evaluation form to score the grants. Their score, along with adjustments at the agency, determine who gets funded or not. Thus, the evaluation form along with sample grants are invaluable guides to help you write your own proposal. I cannot re-emphasize how important this step is. It is one of the most important hints that I can pass on about federal grantmanship. A grant writer suggested it to me years ago, and it has made a world of difference.

The next step is to research your project. Do a literature search. If your proposed project is to improve retention rates, then you will need to know what has been done in the past. You may find that someone has tried outdoor recreation in connection with the grant

program. If so, you will need to come up with a different twist. Grant reviewers are looking for new and innovative ways to solving the problem -- not repeats of old methods. Your literature search will give you the background to write with knowledge and authority.

Before doing much writing, sit down with your staff or other people who might be involved. For a retention rate grant, you will want to include representatives from minority groups, the affirmative action office, or the registrar's office. Brain storm ideas. With their collective help you'll likely formulate some new ideas and approaches. After the meeting and while it's still fresh in your mind, make an outline.

Now comes the most demanding part of the process: writing the grant. Find a place away from distractions. Don't worry much about flow or grammar or structure. Using the outline to keep you on track, start putting ideas together one after another on the computer screen. Just keep typing, don't get bogged down on fine points. Refine, structure and grammar corrections can come once you get the course writing down.

Try to give yourself enough time to put the rough draft aside for a couple days. Something you've written always looks different after its been given a rest. Let others review it. Writing is a lonely craft to a point, but once you get the ideas on paper, a second or third person can catch small errors and flow problems that you'll never see because of your closeness to the work.

It's never a perfect process and it's always eventful. Anyone who has written a federal grant knows what the final few days are like. On my last grant we were down to the last day, finishing up a few last minute additions in the appendix. I needed to get it to the post office by the 5:00 p.m. closing in order for it to go out certified mail. At 4:00 p.m. we rushed to the photocopy center to make the required two copies. As we were anxiously waiting, Mel, the good natured photocopy operator got involved in telling us a long fishing story and lost track of what he was doing. The machine started sorting the pages wrong, leaving out some key parts of the grant. We all frantically reshuffled the grant, threw it in a box and rushed off to the post office arriving only two minutes before it closed.

Basic Parts of a Funding Proposal

Grants may be organized in different ways, but almost all will include the classic components of well-

written funding proposal. These components are:

1. Need - There is an overall reason behind every grant proposal, a need that the grant addresses. The need may be the improvement of dismal retention rates of minorities at colleges, or the need may be to provide recreational activities for a segment of the population who lacks opportunity, the disabled. Whatever it is, you'll need some facts. For instance, your need statement may say that nationally only 30% of minorities make it past their freshmen year in college (I'm making up these figures). At All-American University, these figures are even worse with only a 25% retention rate.

2. Objectives - When you have defined and substantiated the need, describe how you will improve upon the existing conditions through objectives. The objectives must be measurable and specific, and it must relate to the need. For instance, one of your objectives may state: to improve retention rates at All-American University from the existing situation of 25% retention rate to a 30% retention rate.

3. Procedure - Describe how you will accomplish your objectives. This is where you lay out what you will actually do in the grant. For instance, part of your procedure may be to hire a project coordinator. He and the staff, then, will organize an orientation day for all incoming minority freshmen. Periodically, throughout the year, minority students will have a chance to participate in outdoor trips which will include a river trip, ski trip and backpack trip, and so on.

4. Evaluation - How you evaluate your project will be based on the original objectives. Did retention rates improve as you said they would in the first objective? Did they improve as much as you projected? In the evaluation portion of the grant, you need to talk about what tools you

will use to collect the information. Have you worked out a system with the university so that this information will be available to you? What kinds of forms will you use to track the progress of participants in the project? You may decide to have participants fill out an evaluation of project so you can improve it the second year, and if so, include a copy.

5. Budget - You will need to prepare a budget, and its best done early in the process. Talk with the appropriate budget people at your institution for information on salary and benefits. You may also need to allow for something called indirect expense. Colleges and universities charge indirect as a way of recouping administrative and overhead expenses. Indirect expense can be substantial, and it is important to know how much it is before you begin work on the grant.

Admittedly, this is a brief description of the parts of a funding proposal. For more details on this and other aspects of grant writing, you may wish to consult the following books:

Grants: How to Find Out About Them and What to do Next, Virginia T. White, Penum Press, NY

Writing Winning Proposals, Judith Mirick Gooch, The Council for the Advancement and Support of Education, Washington, D.C.

Private Foundations

Funding from private foundations requires a different approach from federal grants. Personal contact is the key here. When reviewing the possibilities, your best is to attempt funding from foundations which (1) are located in your city or state; or (2) those that you have contacts with. Whether you know someone or not, do your homework. Obtain information on the foundation. Annual reports are available which list past beneficiaries. All foundations will have an application procedure and a list of guidelines. All have funding priorit.es and projects

to which they will not give. Some foundations will not give to colleges, some will give only to cities in which their plants are located, etc. Knowing that can save you time and embarrassment. If it looks like the foundation might have possibilities, give the foundation office a call and ask them about your project idea. Do they think it has merit? Would they entertain a proposal? If they say yes, then you are off and running. What you should try to do is to talk to their representative at least one more time before submitting the proposal. One way of doing that is to hand carry the proposal to their office. That way a face is now associated with your organization, and you are beginning to establish an all important relationship with the foundation staff.

In development of your foundation proposal, here are a few things to keep in mind:

- Watch the use of acronyms. Make it simple. Private foundation proposals are typically two pages long and the use of acronyms or any convoluted logic complicates the proposal. Foundations are required by the IRS to give only to other tax exempt non-profit organizations.

- If you are a part of a non-profit organization or institution, your organization's administrators will have a letter from the IRS which officially recognizes you as tax exempt. This document is the so called 501(c)(3) letter. Get a copy of the letter and keep it on file. If you deal with private foundations you will need to provide copies of it. You will also need a copy of your current operating budget.

- Finally, when you put your proposal together, make it an attractive package. Leave some white space and let the reader's eye rest. Do not try to cram all the justifications for your program in it. State your case concisely and then close.

One last note for college or university programs. Do not forget about the alumni association. They are a private foundation organized to specifically benefit your college. Get to know them. If you have a project that

needs funding, they may be able to provide invaluable help. Dan Tillemans, who runs the Outdoor Education Program at Cornell is a good example of someone who has effectively raised funds from alumni. We will take a closer look at Cornell's success in the cash donation section.

Fund Raising Events

Another way to bring in revenues is through fund raising events. Examples of fund raisers include fun runs, triathlons, dinners, outdoor equipment sales, etc. As long as you watch expenses, a fund raising event almost always can be expected to bring in income. I try to make sure that during the year, we hold several fund raising events. Sometimes the return from the event is only $100, but combined with other events, it adds up. Realistically, unless you put together an annual event that stimulates a lot of public interest, you cannot expect a large return from fund raisers. They do, however, provide some revenues that have not been there in the past, and they can be incorporated in your regular schedule program activities.

One fund raiser which has good potential for many programs is a used outdoor equipment sale. Students and community members bring in their used equipment and price it. It is then available to purchase on a night which has been well advertised to the public. In our used equipment sale, we collect all the money, taking 20% of each item that is sold for our share and giving the remaining 80% to the seller. Everyone benefits. People are able to pick up equipment for a reasonable price, others are able to sell their old equipment and the outdoor program increases its revenues.

Non-Cash Donations

Programs can be helped by non-cash donations of such things as library books, back issues of magazines, outdoor equipment and other supplies. For instance, the local ski club gives all their unclaimed skis to our handicapped group after their large community used ski equipment sale. A lot of it is junk, of course, which we throw away, but some of it is good and useful in the program. By the way, another source of free ski equipment for programs which work with the disabled or disadvantaged is from the United Ski Industry Association (8377 B Greensboro Drive, McLean, VA 22102). Retailers

with used or unsold ski equipment donate the goods to the USIA which then disperses them to needy groups.

Books and back issues of magazines can be useful for programs with a resource center. Get the word out that you need magazines. Somewhere out there is someone with a set of old back issues of Climbing or Backpacker and they would be delighted to get them out of the house and in the hands of someone who could use them. The most important point is to let people know that you welcome donations. Include a mention on your newsletters and brochures. Every so often suggest specific items that you need - a computer, van, raft. It may not produce anything, but at least it will start people thinking that you do accept equipment donations. If you don't tell them they will never know. Lastly, remind potential donors that you can provide them with a tax deduction for their donation.

Cash Contributions

Thee are different ways to solicit cash contributions for the program. One method is make a donation box available in the office or at special programs. As an example, we run an open climbing session at the nearby city park. Lately, because of the popularity of climbing the program has attracted a good size crowd. Our ropes and equipment were getting trashed, and because of a limited budget, new equipment was out of the question. We did not want to charge for the activity, rather we preferred that people donate. An easel with a large colorful sign was put up, which laid out some ground rules for the activities and encouraged participants to contribute equipment. The sign, along with tactful reminders of the need for donations by helpers and volunteers, has worked wonderfully. Because of the donation program, we have been able to purchase new ropes and other equipment, and we haven't been forced to charge a fee.

The most common method of soliciting cash contributions is to send out a letter. In order to conduct a direct mail campaign, you will need to develop a mailing list. A good way to develop a list is to put out a sheet of paper at various program functions and have people sign up. Especially, keep track of alumni of your program. Those who have done activities with your program will be supportive. If you have evening programs and public events, it won't take too long to get a mailing list underway. Be aware that if you are in a

college program, you cannot expect to receive donations from students. They are pressed for funds and are not in a position to donate. Your best audience are those in the community and program alumni. That is why it is a good idea to make some or all programs open to the community. You cannot expect the community to help if they do not have access to at least part of your program.

Direct mail solicitation is an art and all of us see a multitude of examples nearly every day in the mail. My suggestion is to keep it simple. State in your letter the benefits of the program and your need for funds. Although some direct mail authorities say that it does not help return rates, I like to enclose a self-addressed business reply envelope. It is a nice convenience for our donors and I do not mind the extra expense. Some people enclose a brochure, but it does drive up the expense considerably. I leave it out since our mailing goes to those who know the program, and it is not necessary to go to lengths to sell the idea. Personally, I dislike more than one appeal a year from organizations and I have always sent out our fund raising letter on an annual basis only. You may find that initially the return is small, but keep with it. Fund raising is like building a business. It starts small and with hard work and persistence, it gradually grows.

Another solicitation method that should be mentioned is the use of the telephone. Like most people, I abhor it and do not recommend it. It is simply crass commercialism and does nothing to improve the image of the program.

Of all the methods of soliciting donations, personal contact is by far the best. In a college environment some of the best potential donors are alumni, particularly alumni with an interest in the outdoors. At Cornell, Dan Tillemans developed a climbing wall proposal and then worked with university development personnel to identify potential alumni donors. One alumnus in particular was a climber and had just sold a business. Tillemans and another university representative had dinner with the alumnus and presented the climbing wall plan. Enthusiastic over the idea, the alumnus convinced several others to donate and eventually he came up with the entire $160,000 price tag for the wall. Building upon that success, Tillemans later put together a proposal for an out-fitting center, and once again donations from alumni provided the start-up costs of $50,000 to get the center under way.

Tillemans feels that it is best to approach potential alumni donors with special projects. A request to help support an outdoor program's ongoingbudget is not attractive. Donors want to see something special and meaningful result from their donation.

Handling Raised Funds

Once you start raising funds, the next logical question is where to put them. If the funds are for a special project then all monies will go towards that end. If the funds have no designated purpose, you may initially decide to place them in your budget. However, be careful with putting raised funds in the general budget. If you are a part of a university or a large non-profit organization, revenues can disappear when one fiscal year ends and another starts. As fund raising programs begin to produce more revenues, look carefully at other options. One option is to create a special fund raising account from which disbursements are made for special needs. Another option is the formation of an endowment. Endowment monies are placed in safe investments, and you use the return only from the investments. Because the principle is not touched, funds are available each year. For instance, lets say you have gradually built up an endowment fund of $10,000. The $10,000 is invested and might earn, say $700 this year. You can use the $700, but the $10,000 is not touched. I really recommend starting an endowment. Even if you only can put a couple hundred dollars the first year, it is an important seed which will sprout and grow over the years.

Your organization, whether it is part of a university or a non-profit entity, will have a system of dealing with endowments. If not, it is vital that you draw up an endowment agreement. State what purposes the endowment can be used for and who is responsible for making decisions. If you move onto another job, you will want to make sure that the proceeds from the endowment are not funnelled off to other purposes. An endowment agreement helps assure that it is not. Who makes the decisions on how to use the endowment funds can be the outdoor program director or an advisory board.

An advisory board is a valuable addition to an outdoor program's management structure. In specific, an advisory board is a proper and accepted way of dealing with raised funds. I highly recommend having an attorney and accountant serve on the board since their professional background can be invaluable when dealing

with financial and legal matters.

At some point, you will want to consider the formation of a non-profit entity, such as a "Friends of the Outdoor Program", which gives you grater support and flexibility for fund raising programs. Creating a non-profit foundation involves filing Articles of Incorporation with the Secretary of State and a long form with the IRS. Once a non-profit "friends" foundation is created, you can establish a checking account, which is under the control of the board, but provides more flexibility than university purchasing procedures. Your board of directors serves as an excellent resource and is crucial in making contacts with potential donors.

There are also disadvantages to formation of a "friends" foundation. If you are part of the university, the administration may look at the formation of a foundation with disfavor. You will need to approach it carefully and work slowly within the administrative structure to build support for it. It takes a lot of work to get a non-profit organization started and it takes effort to keep it going. Once you have started, you may have to pay sales tax, and you will have IRS tax forms to fill out. There is a downside, but it is minor compared to the benefits.

UNIVERSITY OUTDOOR PROGRAMS: STATE OF THE ART 1990

By

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ABSTRACT

Outdoor programs of North America are ranked and sorted demographically, financially, and programmatically, providing data for comparisons for program delivery systems, sponsors, and rental, repair, retail, and programmatic services. A broad view of the outdoor programs results from the data groups and comparisons. The outdoor programs of this study are usually not degree-granting programs--they are typically extracurricular in nature. They provide services in the form of equipment rental, equipment repairs, retail sales, outdoor adventure speakers, events, clinics, activities, and trips. These programs are typically sponsored by and housed in Intramural, Union/Student Affairs, Recreation, and Physical Education departments. Experiential in nature, these programs, services, and instruction occur within a wide variety of extracurricular experiences. These experiences are aimed at enhancing curricular education and assisting in the balanced development of the total person, especially in the areas of leisure and moral growth.

Introduction

Some outdoor programmers are like Christopher Columbus. As you know, he

1. didn't know where he came from
2. didn't know where he was going, and
3. was doing it on an institution's money.

This lack of accurate knowledge resulted in mismanaged controls; at least if he was going to reach his goal of sailing to China.

In the directory from which the data in this paper was summarized, you should find demographic, financial, and programmatic information that can help you better understand outdoor programs. Names, addresses, and phone numbers are also available so that you can make direct contact with professionals at a variety of programs, associations, and organizations.

Program Services, Models, Benefits, and Goals

Before we focus on data comparisons, a definition of outdoor programs, and a review of program services, models, benefits, and goals would be helpful.

The outdoor programs of this study are usually not degree-granting programs. They are typically extracurricular in nature. They provide services such as: equipment rental, equipment repairs, retail sales, outdoor adventure speakers, events, clinics, activities, and trips. These programs are typically sponsored and housed in intramural, union/student affairs, recreation, and physical education departments. Experiential in nature, these programs, services, and instruction occur within a wide variety of extracurricular experiences. These experiences are aimed at enhancing curricular education and assisting in the balanced development of the total person, especially in the areas of leisure and moral growth.

Program services are usually one or more of the following:

1. Equipment rental
2. Equipment repair (usually bike and ski)
3. Retail sales of equipment
4. Outdoor programs events and activities.

These services may cost or be free. They may be available only for students, or they may also could be available for university employees and the general public. The financial goal may be one of generating income to supplement the budget supporting the program, to generate income to cover all costs, or to generate income and realize a net income to be used to offset inflation and to provide for program development and growth. Table 1 lists these four services, and the typical services provided in several activities. Some

universities, providing these services for the listed activities, are also indicated.

Organizational models used for service delivery would be the following:

1. Common adventure
2. Club
3. SST (Structure/Safety/Training).
4. PE (Physical Education/Credited) and Guided(contracted).

"Common adventure" programs have no institutional direction and very little support. Institutions provide planning resources, meeting areas, and trip boards, where individuals plan and announce trips. (If the institution provides leadership, training, group equipment, transportation, or other similar supports, the activity is not common adventure, but becomes a "Structure/Safety/Training" style trip.) Common adventure trips are trips untouched by organizations and institutions and are completely trip participant operated and supported.

"Club" organized adventure programs operate according to a club charter with club members making the decisions. The amount of institutional support and direction varies with some clubs receiving significant institutional support and guidance and other clubs receiving no support.

"Structure/Safety/Training" modeled outdoor programs are supported and directed by an institution. The support and direction may be significant or minimal. Some organizational structure and support, guided by an institutional employee, provides a framework for operation. This structure may have a high or low degree of control by program participants. Some safety factors are instituted in the program. Training of some type is provided through the program. A 'co-operative adventure' trip where participants are making many decisions, but where the institution has provided or made arrangements for any training, leadership, safety, guidelines, transportation, lodging, food, or similar services, would be a "Structure/Safety/Training" model style trip.

"Physical education/curricular and "Guided (contracted)" adventure programming usually places total control on organization, service, safety, and training

within a controlled and comparatively inflexible setting. Participants conform to the program provided.

There is not one "best" model; each has strengths and weaknesses. Becoming knowledgeable regarding these models will help you minimize the weaknesses of the model you use, and help you maximize its strengths. Table 2 is a comparison of these four models.

Benefits of outdoor programs to participants would be the following: (Table 3 lists specific details of these potential benefits.)

1. Psychological
2. Sociological
3. Educational
4. Physical

Goals of the outdoor program for the participant would include:

1. Recreation and recreation development
2. Skill development
3. Character development

A typical program uses recreation as a "tool" to encourage skill development. Skill development is then used as a "tool" to encourage character development. These program goals are those that are typically used as justification to receive the university's support. Programs that balance these three goals in a cost-effective manner can usually attain broad university support. Table 4 details some of the associated benefits of this developmental model.

Components Forming an Outdoor Program

Listed are the six controlling components of a successful outdoor program:

1. Users of the program services
2. Politics: Internal and external of the organization and sponsor
3. Personality/Abilities/Interests of the program

director

4. Traditions of the program and sponsor

5. Local and regional geography

6. Financial source and size.

Attempting change in one area will impact and require adjustments in almost all areas. Be prepared and prepare others before initiating changes.

Summary of Data

University outdoor programs were grouped by full-time student enrollment in the following categories:

1. 33% with 5,000 or less full-time students

2. 21% with 5,000-10,000 full-time students

3. 45% with 10,000-30,000 full-time students

Of the 92 largest universities, 29% have outdoor programs. Of the 37 universities with the most National Freshmen Merit Scholars, 43% have outdoor programs.

Existing outdoor programs were established during the following time periods:

1. 2 programs (1%) in the 1910s

2. 2 programs (1%) in the 1930s

3. 2 programs (1%) in the 1950s

4. 9 programs (6%) in the 1960s

5. 47 programs (31%) in 1970-75

6. 34 programs (23%) in 1975-80

7. 36 programs (24%) in 1981-86

8. 63 programs (42%) in 1986-90

- Of these outdoor programs,

    1. 12 programs (8%) report to PE Department

    2. 59 programs (39%) report to Union/Student Affairs departments

    3. 66 programs (44%) report to Intramural/Recreation Sports departments

    4. 14 programs (9%) report to misc. & combinations of departments.

- Of the delivery models for these outdoor programs,

    1. 18 programs (12%) are Common Adventure

    2. 19 programs (12.5%) are Club

    3. 6 programs (4%) are PE

    4. 148 programs (66%) are SST

    5. 8 programs (5%) are other

- Universities with rental services:

    1. 116 programs (77%) have rental services, with the University of Calgary having the largest rental gross income ($311,713.00).

    2. Two other university outdoor programs each collected about $150,000.

    3. 38 programs (32%) collected between $10,000-$70,000.

    ***Gross rental income collected $1,750,993.

- Universities with repair services:

    1. 34 programs (23%) have repair services, with the University of California-Davis and the University of California-Berkeley each collecting $40,000.
    2. 4 programs (12%) collected $20,000-$28,000.

    3. 7 programs (20%) collected $1,000-$11,000.
    4. 20 programs (59%) collected $50-$900.00

***Gross repair income collected $205,487.

- Universities with retail services:

1. 34 programs (23%) have retail services, with the University of California Berkeley, and Brigham Young University, each collecting $120,000-$156,000.

2. 6 programs (18%) collected $12,000-$80,000.

3. 15 programs (44%) collected $1,000-$7,000.

4. 10 programs (30%) collected $50-$800.

***Gross retail income collected $650,490.

- Universities with programmatic services:

1. 116 programs (77%) have programmatic services

2. 3 programs (3%) collected $600,000-$800,000.

3. 29 programs (25%) collected $100,000-$250,000.
4. 20 programs (17%) collected $10,000-$20,000.

5. 44 programs (38%) collected $1,000-$10,000.

6. 7 programs (6%) collected $50-$800.

***Gross programmatic income collected $4,862,084.

- Universities with gifts and donations:

1. 22 programs (14%) collected income from donations, with Idaho State University collecting $142,000.

2. 5 programs (23%) collected $10,000-$50,000.

3. 10 programs (46%) collected $1,000-$6,000.

4. 6 programs (27%) collected $100-$600.

***Gross gift and donation income collected $241,722.

- Total gross income from university outdoor adventure

program related services:

1. Rental income from 116 programs (23%) $1,750,993
2. Repair income from 34 programs (2%) $205,487
3. Retail income from 34 programs (8%) $650,490
4. Program income from 116 programs (63%) $4,862,084

5. Gifts & grants income from 22 programs (4%) $291,722

***Total gross income collected $7,760,776.

- Gross income of programs:

1. 4 programs (2%) collected $500,000-$800,000 gross income.

2. 13 programs (8.5%) collected $100,000-$400,000 gross income.

3. 65 programs (43%) collected $10,000-$100,000 gross income.

4. 48 programs (32%) collected $1,000-$10,000 gross income.

5. 19 programs (12.5%) collected $0-$1,000 gross income.

Financial Data

- Gross expense of programs:

1. 4 programs (3%) realized $500,000-$900,000 in gross expense.

2. 16 programs (11%) realized $100,000-$500,000 in gross expense.

3. 83 programs (55%) realized $10,000-$100,000 in gross expense.
4. 32 programs (21%) realized $1,000-$10,000 in gross expense.

5. 16 programs (10%) realized $0-$1,000 in gross expense.

- Net income/loss of programs:

1. 9 programs (6%) collected $20,000-$80,000.

2. 19 programs (13%) collected $1,000-$12,000.

3. 8 programs (5%) collect d $50-$700.

4. 16 programs (10.5%) broke even at $0.

5. 48 programs (32%) lost $1,000-$10,000.

6. 31 programs (20%) lost 10,900-$50,000.

7. 5 programs (4%) lost $50,200-$75,000.

8. 3 programs (2%) lost $109,000-$156,000.

9. 2 programs (1%) ?.

- Programs % return or % subsidy:

1. 4 programs (3%) had 50-100%.

2. 9 programs (7%) had 20-48%.

3. 8 programs (6%) had 10-18%.

4. 13 programs (9%) had 1-8%.

5. 10 programs (7%) had 0%.

6. 23 programs (17%) had -3% to -9%.

7. 18 programs (13%) had -20% to -47%.

8. 21 programs (15%) had -51% to -95%.

9. 12 programs (8%) had -100% to -200%.

10. 18% programs (13%) had -243% to -864%.

11. 1% program (1%) had -1,116%.

12. 1% program (1%) had -4,700%.

The figures for gross expense, net income/net loss, and percentage return or percentage subsidy can be misleading. Accuracy of data collection and differences

of expense items among the reporting outdoor programs do not permit exact comparison among programs. Some programs did not have expense records for the outdoor program. Other programs admitted to poorly kept expense records for the outdoor program. Some outdoor program expenses at one institution would be paid by the general fund and would not reflect an expense to the outdoor program expense budget, while other programs would be required to keep accurate expense records and pay all expenses (including full- and part-time employees, phone, office, employees benefits, rent to the university for the outdoor program space, administrative overhead to the university for the salary, office, etc., of the directors and deans supervising the outdoor program director). Those programs with accurate expense records, covering more of the expenses related to the outdoor program, report greater expenses, lower net incomes, and lower percent investment returns than similar program that do not have accurate record keeping or full accountability for the real expenses of operating an outdoor program.

Data Comparisons

We cannot make exact comparisons, for example, comparing apples to apples, but we can draw generalized conclusions because we are comparing fruit to fruit.

Those outdoor programs that offer, at most no more than 16 significantly different types of trips:

1. 52 programs (36%) offer 10-16.
2. 71 programs (49%) offer 5-9.
3. 21 programs (15%) offer 1-4.
4. 83 different types of trips offered.

Those trips that were most frequently offered by universities:

1. 130 (92%) Kayak/Canoe
2. 128 (91%) Backpacking
3. 106 (75%) Nordic Skiing
4. 99 (70%) Rock climbing
5. 98 (70%) Bicycling
6. 95 (68%) Rafting
7. 92 (66%) Downhill Skiing
8. 61 (44%) Sailing/Boardsailing
9. 61 (44%) Caving
10. 35 (25%) Orienteering

Those with the most trips that occurred:

1. 1,469 (16%) Kayak/Canoe
2. 1,025 (11%) Rock Climbing
3. 1,023 (11%) Backpacking
4. 852 (9%) Nordic Skiing
5. 728 (8%) Rafting
6. 569 (6%) Bicycling
7. 520 (6%) Caving
8. 438 (5%) Sailing/Boardsailing
9. 354 (4%) Downhill Skiing
10. 243 (3%) Search and Rescue/First Aid.

2,210 (21%) 73 other misc. activities
Total number of trips 9,431.

Those activities with the most participants:

1. 13,560 (11%) Backpacking
2. 13,196 (10%) Rafting
3. 12,785 (10%) Kayaking/Canoeing
4. 12,316 (10%) Cross Country Skiing
5. 10,000 (8%) Ticketmaster
6. 8,343 (7%) Downhill Skiing
7. 7,964 (6%) Rockclimbing
8. 5,906 (5%) Sailing/Boardsailing
9. 4,731 (4%) Caving
10. 4,577 (4%) Bicycling
11. 33,147 (25%) other misc. activities

Total number of participants 126, 500.

Conclusions

There is a significant diversity of goals, benefits, delivery models, services, activities, financial structures, and sizes of outdoor programs. As a result of knowing what outdoor programs are doing, outdoor program professionals will be able to expand their choices and evaluate their performance. The directory and data base that this information was summarized from contains specific demographical, financial, and programmatic data on most of the outdoor programs (160+) presently operating in North America (1991). Names, addresses, and phone numbers, listed alphabetically by professionals, universities, and states can facilitate networking with other professionals. As a result of knowing who operates outdoor programs, how to serve their participants and institutions. Copies of the 1991 Outdoor Recreation Program Directory & Data/Resource Guide can be obtained by contacting BYU Outdoors Unlimited at Brigham Young University.

TABLE 1

A Listing of Four Program Services of Sixteen Recreational Activities Found within the College Outdoor Program Setting

ACTIVITIES	SERVICES			
	RENTAL	REPAIR	RETAIL	PROGRAM
Backpacking/ Camping/ Picnicking	Most programs provide this service	Few programs provide this service	Few programs provide this service -Some assessories	Most programs provide this service
Successful programs	Brigham Young Univ. Univ. of Cal-Irvine Miami Univ.		Brigham Young Univ. Cal. State-Sacramento Ricks College	Univ. of Cal-Berkeley Univ. of Calgary Cornell Univ.
Canoeing/ Kayaking	Many programs provide this service	No	Some programs provide this service -Used equipment	Many programs provide this service
Successful programs	Univ. of Cal-Berkeley Univ. of Wis-Madison Univ. of Washington		Western Washington Univ. Brigham Young Univ.	San Diego Aquatics Cal. State-Sacramento Miami Univ.
Rafting	Many programs provide this service	Few programs provide this service	Some programs provide this service -Used equipment	Many programs provide this service
Successful programs	Brigham Young Univ. Idaho State Univ. Univ. of Utah	Brigham Young Univ.	Brigham Young Univ.	Univ. of Cal-Berkeley Univ. of Cal-Davis Humboldt State Univ.
Sailboarding/ Sailing	Some programs provide this service	No	Few programs provide this service -New/used equipment	Some programs provide this service
Successful programs	Univ. of Cal-Berkeley Univ. of Wis-Madison Cal. State-Sacramento		Brigham Young Univ.	San Diego Aquatics Univ. of Cal-Berkeley Stanford Aquatics
Alpine Skiing	Few programs provide this service	Few programs provide this service	Some programs provide this service -New/used equipment	Some programs provide this service
Successful programs	Univ. of Cal-Berkeley Brigham Young Univ. San Diego State Univ.	Brigham Young Univ. San Diego State Univ. Univ. of Cal-Irvine	Brigham Young Univ. Univ. of Cal-Irvine Cal. State-Sacramento	Univ. of Wis-Madison San Diego State Univ. Univ. of Cal-Berkeley
Nordic Skiing	Many programs provide this service	Few programs provide this service	Some programs provide this service -New/used equipment	Some programs provide this service
Successful programs	Brigham Young Univ. Univ. of Utah Univ. of Cal-Berkeley	Brigham Young Univ. Cal. State-Sacramento Western Wash. Univ.	Brigham Young Univ. Cal. State-Sacramento Univ. of Cal-Irvine	Cornell Univ. Univ. of Wis-Madison Univ. of Calgary

Source: Compiled by David J Webb, BYU Outdoors Unlimited, Brigham Young University (1990).

TABLE 1 (continued)

ACTIVITIES	SERVICES			
	RENTAL	REPAIR	RETAIL	PROGRAM
Rock-climbing	Many programs provide this service (usually not the ropes)	No	Few programs provide this service	Many programs provide this service
Successful programs	Univ of Col-Boulder Univ. of Calgary Univ. of Cal-Berkeley		Brigham Young Univ.	Univ. of Cal-Davis Cal. State-Chico North Carolina State
Winter-climbing	Few programs provide this service	No	Few programs provide this service	Some programs provide this service
Successful programs	Western Wash. Univ. Univ. of Cal-Davis Col. State-Ft. Collins		Cal. State-Sacramento Brigham Young Univ.	Univ. of Washington Western Wash. Univ. Cornell Univ.
Biking	Some programs provide this service	Some programs provide this service	Few programs provide this service -New/Used equipment	Many programs provide this service
Successful programs	Brigham Young Univ. Cal. State-Sacramento	Univ. of Cal-Santa Barb. Univ. of Cal-Davis Western Wash. Univ.	Brigham Young Univ. Univ. of Cal-Irvine Univ. of Cal-Berkeley	Idaho State Univ. Univ. of Cal-Davis Cornell Univ.
Equitation	Few programs provide this service	N/A	Few programs provide this service	Few programs provide this service
Successful programs	Univ. of Wis-Madison			Univ. of Wis-Madison Univ. of Cal-Pomona Ricks College
Hang-gliding	Few programs provide this service	Few programs provide this service	No	Few programs provide this service
Successful programs				Univ. of Wis-Madison
Scuba Diving	Few programs provide this service	Few programs provide this service	Few programs provide this service	Few programs provide this service
Successful programs	Univ. of British Col.	Univ. of British Col.	Univ. of British Col.	Univ. of British Col. Bowling Green State U.

Source: Compiled by David J Webb, BYU Outdoors Unlimited, Brigham Young University (1990).

TABLE 2

Comparison of Four Different Models of Outdoor Recreation Programming Found within the College Setting

ASPECT OF MODEL		MODEL			
		COMMON ADVENTURE	CLUB	SST (Structure/Safety/Training)	PHYSICAL EDUCATION
Primary source of funding		Individual participant	Club support & individual participant	Sponsoring organization (Student Center/Union, Student Athletic Complex, etc.); individual participant	School/College
Nature of funding		Shared trip costs	Dues and shared trip costs	Sponsoring organizational funding and shared trip costs	School funds and shared trip costs
Philosophical foundations		Individual freedom; personal growth through interpersonal interaction; enjoyment of outdoor recreation; enhancement of outdoor skills	Teaching/learning of outdoor skills; competition; enjoyment of outdoor environment	Enhancement of outdoor skills; enjoyment of outdoor environment; safety; enhanced self-confidence/ concept	Teaching/learning of outdoor skills
Administrative support	Type	"Standard" (trip bulletin board, meeting facilities, equipment source, advertising source, printing source; audiovisual equipment, etc.)	"Standard"	"Standard"	Teaching facilities; equipment
	Source	Student Center/Union	College; Student Union	Sponsoring organization (Student Athletic Complex, Student Center/ Union, etc.)	Physical Education Dept.
Organization		Centers on facilities that make outdoor recreation actually happen (bulletin board, meeting rooms, audiovisual equipment, printing facilities, equipment rental, etc.)	Specified in club constitution; officers with specific duties	Student committee as specified in a charter/ constitution & procedure documents	Teacher/student/ classroom
Source of instruction		Individual participants; commercial sources	Skilled individuals within group	Skilled individuals within group	Professional staff within school
Source of equipment		Individual participant; rented from commercial sources	Provided by club; individual participant; rented commercially	Provided by sponsoring organization; rented commercially *	Provided by school; rented commercially
Source of outings		Volunteered	Scheduled/decided by club	Scheduled/decided by student leadership	Scheduled within instructional time frame
Leadership source		Volunteers from among participants	Club members elected/ appointed by membership	Developed within group by training & selection process	School/college personnel
How safety standards maintained		Participant imposed	Club members decide standard, club leadership carries them out	Sponsoring organization and group leadership work up standards; student leadership carries them out	School/college sets standards and enforce them
Main advantages (skill enhancement common to all)	For College	Low liability risk	Minimized supervisory & administrative time	Easy to give direction to programming	Expanded course offerings
	For Student	Maximum flexibility to meet individual needs	Easier access to a particular outdoor recreation; social	Safe	Course credit
Schools using these models in their outdoor programs *		Univ. of Oregon Western Washington Univ. Univ. of Idaho Idaho State Univ.	Dartmouth College Univ. of Wisconsin-Madison Cal. Poly-San Luis Obispo	Univ. of California-Berkley Oregon State Univ. Brigham Young Univ. Univ. of Calgary	Cornell Univ. Prescott College Colgate Univ.

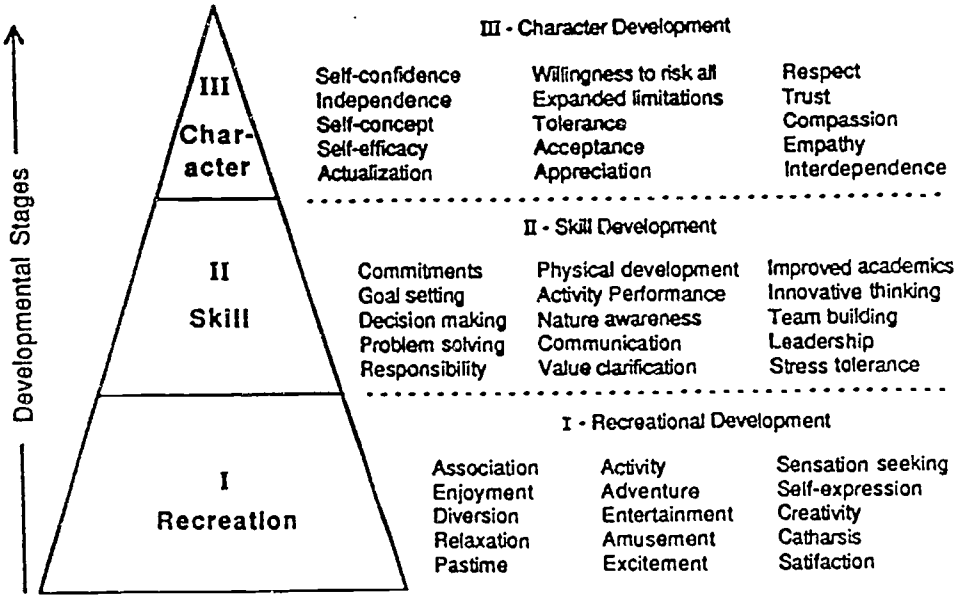
* Added to original ORGT table by David J Webb, BYU Outdoors Unlimited, Brigham Young University (1980).
Source: Compiled by Wm. Miller Templeton, ORGT-Outdoor Recreation at Georgia Tech., Georgia Institute of Technology (1981).

TABLE 3
Potential Benefits of Outdoor Adventure Pursuits

Psychological	Sociological	Educational	Physical
Self-concept	Compassion	Outdoor education	Fitness
Confidence	Group cooperation	Nature awareness	Skills
Self-efficacy	Respect for others	Conservation education	Strength
Sensation seeking	Communication	Problem solving	Coordination
Actualization	Behavior feedback	Value education	Catharsis
Well-being	Friendship	Outdoor education	Exercise
Personal testing	Belonging	Improved academics	Balance

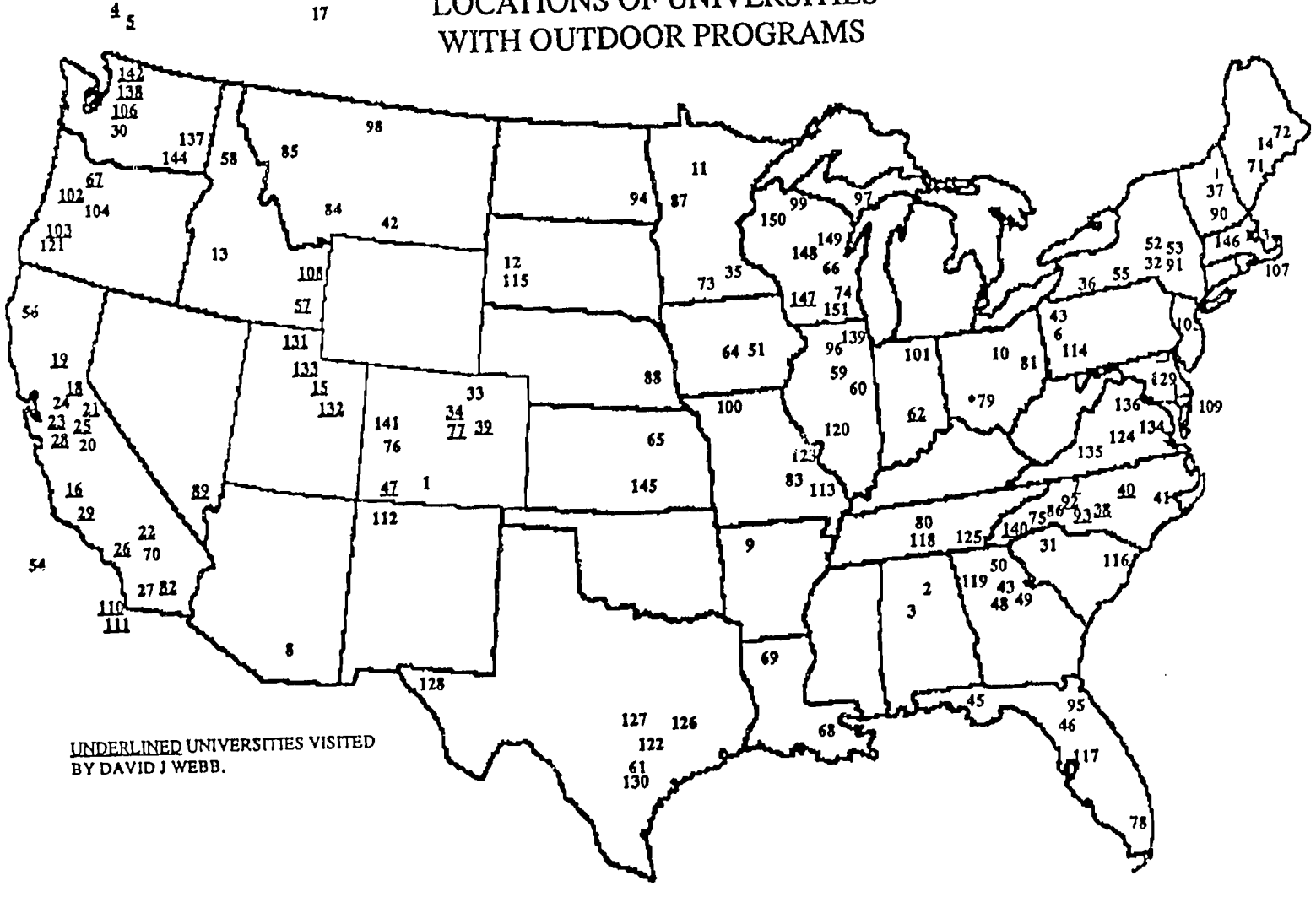
Source: Alan W. Ewert. (1989). Outdoor Adventure Pursuits: Foundations, Models, and Theories. (Table 4.1, p. 49). Columbus, OH: Publishing Horizons.

TABLE 4
Developmental Stages of Recreation, and Associated Benefits



Source: Compiled by David J Webb, BYU Outdoors Unlimited, Brigham Young University (1990).

LOCATIONS OF UNIVERSITIES WITH OUTDOOR PROGRAMS



UNDERLINED UNIVERSITIES VISITED BY DAVID J WEBB.

UNIVERSITIES LISTED ALPHABETICALLY WITH THE YEAR THE UNIVERSITY WAS FOUNDED, CURRENT FULL-TIME STUDENT ENROLLMENT, AND THE NAME OF THE OUTDOOR PROGRAM.

University	University Founded	Enrollment	Program Name
1 Adams State College (Alamosa, CO)	1921	2,300	Outdoor Program
2 Alabama, University of (Birmingham)	1966	15,500	UAB Outdoor Recreation
3 Alabama, University of (Tuscaloosa)	1831	19,000	Alabama Outdoors
4 Alaska, University of (Anchorage)	1970	7,000	Alaska Wilderness Studies
5 Alaska, University of (Southeast)	1971	3,000	Student Activities
6 Allegheny College (Meadville, PA)	1815	1,700	Allegheny Outing Club
7 Appalachian State University (Boone, NC)	1899	11,000	Outdoor Programs
8 Arizona, University of (Tuscon)	1885	35,000	Outdoor Adventures
9 Arkansas, University of (Fayetteville)	1872	13,000	Outdoor Recreation Center
10 Baldwin Wallace College (Berea, OH)	1845	4,500	Outdoor Recreation
11 Bemidji State University (Bemidji, MN)	1919	4,500	Outdoor Program Center
12 Black Hills State University (Spearfish, SD)	1883	2,242	Outing Center
13 Boise State University (Boise, ID)	1953	10,000	Outdoor Adventure
14 Bowdoin College (Brunswick, ME)	1794	1,400	Bowdoin Outing Club
15 Brigham Young University (Provo, UT)	1875	27,500	BYU-Outdoors Unlimited
16 Cal Poly San Luis Obispo (San Luis Obispo, CA)	1901	15,500	ASI Outings/Escape Route
17 Calgary, University of (Alberta, CANADA)	1965	17,000	Outdoor Program Center
18 California State University (Sacramento-AQUATICS)	1950	27,000	CSUS Aquatic Center
19 California State University (Chico)	1887	16,000	Adventure Outings
20 California State University (Fresno)	1907	18,600	Campus Recreational Services
21 California State University (Sacramento)	1947	29,000	Peak Adventures
22 California State University (San Bernardino)	1965	9,000	Escape
23 California, University of (Berkeley)	1884	30,000	Cal Adventures
24 California, University of (Davis)	1906	23,000	Outdoor Adventures
25 California, University of (Davis-BIKE BARN)	1906	23,000	The Bike Barn
26 California, University of (Irvine)	1969	16,000	Cooperative Outdoor
27 California, University of (San Diego)	1963	18,379	Outback Adventures
28 California, University of (San Francisco)	1864	4,000	Outdoors Unlimited
29 California, University of (Santa Barbara)	1944	18,000	Outdoor Recreation
30 Central Washington University (Ellensburg)	1891	6,000	Tent-n-Tube
31 Clemson University (Clemson, SC)	1889	16,000	Outdoor Rec Committee
32 Colgate University (Hamilton, NY)	1819	2,600	Outdoor Recreation
33 Colorado State University (Ft. Collins)	1870	20,000	Experiential Learning Program
34 Colorado, University of (Boulder)	1876	24,000	Outdoor Program/Student Rec
35 Concordia College (St. Paul, MN)	1893	1,200	Student Union Outdoor Program
36 Cornell University (Ithaca, NY)	1868	17,500	Outdoor Education
37 Dartmouth College (Hanover, NH)	1769	5,000	Outdoor Programs
38 Davidson College (Davidson, NC)	1837	1,400	Davidson Outdoors Ctr
39 Denver, University of (Denver, CO)	1890	5,000	Recreation For Life
40 Duke University (Durham, NC)	1839	9,000	Project W.I.L.D.
41 East Carolina University (Greenville, NC)	1907	16,500	Recreational Outdoor Center
42 Eastern Montana College (Billings)	1927	4,300	ASEMC Outdoor Program
43 Edinboro University of Pennsylvania (Edinboro)	1857	8,000	Outdoor Recreation
44 Emory University (Atlanta, GA)	1836	9,600	Outings Club
45 Florida State University (Tallahassee)	1857	28,000	Outdoor Pursuits
46 Florida, University of (Gainesville)	1906	34,000	Gator Outdoor Rec Program
47 Fort Lewis College (Durango, CO)	1911	4,000	Outdoor Pursuits
48 Georgia Institute of Technology (Atlanta)	1888	11,000	Outdoor Recreation Georgia Tech
49 Georgia State University (Atlanta)	1914	23,500	Touch the Earth
50 Georgia, University of (Athens)	1785	28,000	GA Outdoor Rec Program
51 Grinnell College (Grinnell, IA)	1846	1,250	Grinnel Outdoor Rec Program
52 Hamilton College (Clinton, NY)	1812	1,650	Hamilton Outing Club
53 Hartwick College (Oneonta, NY)	1797	1,500	Challenge Programs
54 Hawaii, University of (Manoa)	1907	15,000	Hemenway Leisure Center
55 Houghton College (Houghton, NY)	1883	1,500	Outdoor Club
56 Humboldt State University (Arcata, CA)	1914	7,400	Center Activities
57 Idaho State University (Pocatello)	1901	8,000	ISU Outdoor Program
58 Idaho, University of (Moscow)	1889	10,000	Outdoor Program
59 Illinois State University (Normal)	1857	22,000	Get-Away Outdoor Program
60 Illinois, University of (Champaign)	1867	35,000	Div of Campus Rec/Outdoor Program
61 Incarnate Word College (San Antonio, TX)	1986	2,500	Rec and IM Program
62 Indiana University (Bloomington)	1820	35,000	IMU Outfitters
63 Iowa State University (Ames)	1858	26,000	Outdoor Recreation Program
64 Iowa, University of (Iowa City)	1847	29,000	Touch The Earth
65 Kansas State University (Manhattan)	1890	20,000	Outdoor Equipment Rental
66 Lawrence University (Appleton, WI)	1849	1,200	Outdoor Recreation Club
67 Lewis & Clark College (Portland, OR)	1867	1,900	College Outdoors
68 Louisiana State University (Baton Rouge)	1834	25,000	Leisure Service

University	University Founded	Enrollment	Program Name
69 Louisiana State University (Shreveport)	1968	2,900	Outdoor Experience
70 Loyola Marymount (Los Angeles, CA)	1914	3,500	Direct Route
71 Maine, University of (Augusta)	1965	4,400	Recreation
72 Maine, University of (Orono)	1862	13,000	Maine Bound
73 Mankato State University (Mankato, MN)	1867	16,000	MAVS
74 Marquette University (Milwaukee, WI)	1881	8,500	Outdoor Rec. Center
75 Mars Hill College (Mars Hill, NC)	1856	1,000	Outdoor Center
76 Mesa State College (Grand Junction, CO)	1925	4,300	Mesa College Outing Program
77 Metropolitan State College (Denver, CO)	1965	30,000	Outdoor Adventure at Auraria
78 Miami, University of Florida (Coral Gables)	1925	11,500	Outdoor Recreation Club
79 Miami, University of Ohio (Oxford)	1839	17,000	Outdoor Rec. Program
80 Middle Tennessee State Univ. (Murfreesboro)	1911	14,000	Outdoor Pursuits
81 Minnesota, University of (Duluth)	1851	7,000	Outdoor Program
82 Mission Bay Aquatic Center (San Diego, CA)	1970	--	Mission Bay Aquatic Center
83 Missouri, University of (Rolla)	1870	4,800	On The Loose
84 Montana State University (Bozeman)	1893	10,500	ASMSU Outdoor Recreation
85 Montana, University of (Missoula)	1897	9,000	Campus Recreation O.P.
86 Montreat Anderson College (Montreat, NC)	1912	400	Discovery
87 Moorhead State University (Moorhead, MN)	1889	9,000	Outing Center
88 Nebraska, University of (Lincoln)	1869	24,000	Outdoor Adventures
89 Nevada, University of (Las Vegas)	1959	16,049	Outdoor Recreation
90 New England College (Henniker, NH)	1946	1,050	Mountain Madness Recreation Prog
91 New York, State University of (Oneonta)	1889	6,000	Oneonta Outing Club
92 North Carolina, University of (Asheville)	1969	3,200	Outdoor Programs
93 North Carolina, University of (Charlotte)	1965	12,000	Venture
94 North Dakota State University (Fargo)	1889	9,500	Recreation & Outing Center
95 North Florida, University of (Jacksonville)	1972	2,939	Student Recreational Sports Club
96 Northern Illinois University (DeKalb)	1895	32,409	OCR-Outdoors
97 Northern Michigan University (Marquette)	1899	8,000	Outdoor Recreation Center
98 Northern Montana College (Havre)	1929	1,800	Outdoor Activities & Recreation
99 Northland College (Ashland, WI)	1892	700	Rec Services/The Equipment Shed
100 Northwest Missouri State (Maryville)	1905	5,000	Outdoor Program
101 Notre Dame, University of (Notre Dame, IN)	1842	9,500	Outdoor Recreation
102 Oregon State University (Corvallis)	1971	16,000	Outdoor Recreation Center
103 Oregon, University of (Eugene)	1968	17,000	Outdoor Program
104 Pacific University (Forest Grove, OR)	1853	1,100	Pacific Outback
105 Princeton (Princeton, NJ)	1746	6,000	Outdoor Action Program
106 Puget Sound, University of (Tacoma, WA)	1889	3,000	Personal Growth/Outhaus
107 Rhode Island College (Providence)	1854	5,000	Challenge Program
108 Ricks College (Rexburg, ID)	1888	7,500	Dept. of Recreation Education
109 Salisbury State University (Salisbury, MD)	1925	5,200	Outdoor Resource Center
110 San Diego State University (San Diego, CA)	1897	36,000	The Leisure Connection
111 San Diego, University of (San Diego, CA)	1949	3,800	Outdoor Adventures
112 San Juan College (Farmington, NM)	1956	3,250	Outdoor Program
113 SE Missouri State University (Cape Girardeau)	1873	8,000	Outdoor Equipment Rental
114 Slippery Rock University (Slippery Rock, PA)	1889	7,200	University Union Outfitter
115 So. Dakota School of Mines & Tech. (Rapid City)	1885	2,000	Tech Outing Center
116 South Carolina, University of (Sumter)	1965	1,150	Intramural-Recreational Services
117 South Florida, University of (Tampa)	1956	30,000	USF Outdoor Recreation Division
118 South, University of the (Sewanee, TN)	1863	1,100	Sewanee Outing Club
119 Southern College of Technology (Marietta, GA)	1948	3,950	Rec. Sports
120 Southern Illinois University (Edwardsville)	1975	11,000	Outdoor Adventure
121 Southern Oregon State College (Ashland)	1869	4,500	Outdoor Program
122 Southwest Texas St. Univ. (San Marcos)	1903	20,000	Outdoor Center
123 St Louis Comm. College (Meramec Campus-MO)	1964	15,000	Meramec Outdoors Club
124 Sweet Briar College (Sweet Briar, VA)	1901	600	SWEBOP
125 Tennesee, University of (Chattanooga)	1794	6,500	Recreation/Intramural Dept
126 Texas A & M University (College Station)	1876	40,000	TAMU Outdoors
127 Texas, University of (Austin)	1883	50,000	UT Outdoor Program
128 Texas, University of (El Paso)	1915	16,000	Outdoor Adventure Program
129 Towson State University (Towson, MD)	1866	10,000	Outdoor Adventures Unlimited
130 Trinity University (San Antonio, TX)	1869	2,500	Outdoor Recreation
131 Utah State University (Logan)	1887	14,000	Outdoor Recreation Center
132 Utah Valley Community College (Orem)	1948	7,500	The Outpost
133 Utah, University of (Salt Lake City)	1850	25,000	Outdoor Program
134 Virginia Commonwealth University (Richmond)	1969	21,000	Outdoor Adventure Program
135 Virginia Tech (Blacksburg)	1880	2,400	Rec Sports-Outdoor Adventure
136 Virginia, University of (Charlottesville)	1819	17,000	Outdoor Recreation Program
137 Washington State University (Pullman)	1890	17,000	Outdoor Recreation Center
138 Washington, University of (Seattle)	1861	33,000	Waterfront Activities Center
139 Waubonsee Community College (Sugar Grove, IL)	1966	7,000	Adventures Outdoors

University	University Founded	Enrollment	Program Name
140 Western Carolina University (Cullowhee, NC)	1889	5,500	Last Min Prod-Outdoor Committee
141 Western State College (Gunnison, CO)	1901	2,400	Wilderness Pursuits
142 Western Washington University (Bellingham)	1899	8,600	Outdoor Program
143 Wheaton College (Norton, MA)	1857	1,200	Outdoor Pursuits
144 Whitman College (Walla Walla, WA)	1859	1,175	Whitman College Outdoor Program
145 Wichita State University (Wichita, KS)	1968	17,500	Outdoor Recreation Program
146 Williams College (Williamstown, MA)	1793	2,000	Williams Outing Club
147 Wisconsin, University of (Madison)	1870	44,000	Wisconsin Hoofers
148 Wisconsin, University of (Stevens Point)	1894	7,788	UWSP Recreational Services
149 Wisconsin, University of (Stout-Manomonie)	1891	7,500	Alfresco Club/Rec. Center
150 Wisconsin, University of (Superior)	1893	2,500	IM-REC, Northwoods Ctr.
151 Wisconsin, University of (Whitewater)	1865	11,000	Outdoor Adventure Center

APPENDIX A

1990 NATIONAL CONFERENCE ON OUTDOOR RECREATION
Presentations and Events

SPECIAL PROGRAMS

Sue Giller - Account of the Ascent of the South Ridge of Pumori, Nepal, India

Ellen Babers - "Nantahala '90 - Paddling for Peace"

Geoff Tabin, M.D. - "Seven Summits"

Range of Light Productions - "Moving Over Stone"

WORKSHOP SESSIONS

Tom Alber - "TRAIL: The Air Force Adventure Programs for Teens"

Gary Nussbaum - "The Philosophy and Art of Facilitative Leadership"

Steve Rador - "Outdoor Community Recreation Programs for Persons with Disabilities"

Edward Raiola - "Outdoor Leadership Education: Review and Analysis of a Five-Year Study of a College Level Outdoor Leadership Curriculum"

David Webb - "University Programs: State of the Art, 1990"

Alan Hale - "The National Safety Network: Injury and Close Call Database Program for Adventure Programs"

Heemanshw Bhagat and Richard Harris - "Multiculturalism and Outdoor Recreation Programs"

Richard Low II and John Gamble - "Initiating and Maintaining a College Based Search and Rescue Team"

Maurice Phipps - "Cooperative Learning Techniques": Interactive Practices for Team Building and Effective Learning"

Rick Splitter - "Perspectives on Administration"

John Rogers - "Project S.O.A.R.: A Therapeutic Recreation/Experiential Education Model to Successful Intervention"

George Olshin - "A Sailing Living/Learning Adventure on the Historic Schooner 'Ernestina'"

Jim Ogena - "Business Goes Outdoors"

Mike Ruthenberg and Jim Lustig - "Database Uses in Outdoor Programs: From Idea to Implementation"

Jack C. Sheltmire - "Outdoor Safety Education: A Maine Perspective"

Dan Tillemans and Garth Richards - "Climbing Walls for Higher Education"

John Crotts and Rick Bruner - "Methods for Determining Student Price Thresholds for Campus Recreation Services"

Gerry Jones - "Automating Equipment Center Operations"

Sandy Kohn - "Expanding Your Outdoor Program: Deciding Between a High Ropes Course or a Climbing Wall, Sea Kayaks, Wind Surfers or Mountain Bikes and Then Convincing Your Administration"

David Secunda - "Professionalism Center Stage: A Flowchart for Team-Building"

Ron Watters - "Fund Raising: The Options Available For Outdoor Programs"

Del Bachart and Paul Gaskin - "Campus Outdoor Recreation Programs in the 1990's: How Clear is Our Mission?"

Bob McKeta - "Army Outdoor Recreation Programs"

Randy Miller and Nancy Ertter - "Starting and Outdoor Adventure Program for Persons with Disabilities"

Simon Priest - "Everything You Wanted to Know About Judgement But Were Afraid to Ask"

Wayne Taylor and Jim Gilbert - "Survey of Insurance and Liability Concerns in Outdoor Recreation Programs in the South"

Adrienne Garrison - "Wilderness Inquiry: The Outdoors is for U-2. March Everybody!"

Phil Heeg - "Beyond Bivouac: Outdoor Recreation in the Armed Forces"

Todd Miner - "Alaskan Adventures: Programming in the Greatland"

Tim Lovell - "Enhancing Environmental Education Through Adventure Programming Concepts"

Caroline Birmingham - "Managing Staff Turnover in Residential Outdoor Programs"

Nancy Ertter - "Wilderness Challenges for the Disabled"

Phil Heeg - "High Tech Tools for Hardpressed Managers: A Computerized Tracking Systems"

James Glover - "Tried, Fired, Verified, and Certified: Inside a Wilderness Education Association Course From the Angle of a Student and Teacher"

Gerald Hutchinson, Jr. - "From Chaos to Community: The Meter-Journey of Outdoor Adventure"

Lisa Kimball - "Alternative Education in Maine: A Comparison Between Academic Based and Outdoor Based Programs"

Norman Gilchrest - "The Wonder of it All: A Celebration of Life"

Alan Ewert - "A Review of Adventure Recreation: Concepts, History Trends and Issues"

APPENDIX B
BIOGRAPHIES

KEYNOTE SPEAKER:

Dr. Dan Dustin is a teacher and writer, specializing in the areas of outdoor recreation planning and policy, interpretive techniques and environmental ethics. He is a co-author of Stewards of Access/Custodians of Choice: A Philosophical Foundation for the Park and Recreation Profession. Most recently he was editor of Wilderness in America: Personal Perspectives.

PRESENTERS:

Dr. Del Bachert is an assistant professor in the Department of Health, Leisure and Exercise Science at Appalachian State University. He teaches both core and outdoor recreation management courses for the Leisure Studies program. Dr. Bachert also holds a half-time appointment as faculty development consultant with the Hubbard Center for Faculty and Instructional Development at Appalachian. He is the former director of the North Carolina 4-H Camps and worked as Extension Forest Resources Specialist at NCSU. Currently he is certified instructor for the Wilderness Education Association and was a course leader for the National Outdoor Leadership School in the mid 1970's.

Carolyn Birmingham has worked for a number of outdoor adventure programs, directed several, and is currently an Assistant Professor in Leisure Studies at Christopher Newport College in Newport News, VA. She received her Ph.D. in 1989 from The Ohio State University.

J. Richmond Bruner received a B.A. in Psychology from Virginia Tech in 1983. Since then, he has worked in a year-round therapeutic wilderness camp and more recently, at the Office of Outdoor Programs at Appalachian State University (ASU). Presently Rich resides near Boone, NC, where he is finishing his Master's Degree in Clinical Psychology at ASU.

John C. Crotts was the Director of ASU's Office of Outdoor Programs from 1979-90. Recently he assumed the position of Director of the Center for Tourism Research and Development at the University of Florida. All

correspondence directed at the study's methodology, etc. should be directed to John by contacting the Center for Tourism Research and Development, 229 FLG., University of Florida, Gainesville, FL. 32611-2034 (904) 392-4042.

James R. Cummings received his B.A. degree from Montana State University and his Masters degree in Student Development from Appalachian State University. His work experiences include positions with ASU's Office of Outdoor Programs and several alpine ski resorts in the U.S. and Europe.

Nancy Ertter, an Idaho native, is Project Director for the Alternate Mobility Adventure Seekers at Boise State University. She helped create AMAS in 1985 and has been instrumental in the development of adaptive scuba diving, horseback riding, competitive sport, and summer camp opportunities for disabled people in southwest Idaho. Nancy is currently pursuing a Master's Degree in Biology, and in her spare time enjoys rafting, horseback riding, bird watching, and mountain biking.

Alan Ewert is currently Supervisory Research Social Scientist with the USDA Forest Service. He has been a Chief Instructor with Outward Bound and a Survival Instructor with the United States Air Force. He has authored a recently published text on adventure recreation entitled, Outdoor Adventure Pursuits: Foundations, Models, and Theories and is a member of the Riverside Search and Rescue Unit.

Dr. Paul Gaskill is an associate professor in the Department of Health, Leisure and Exercise Science at Appalachian State University. He serves as Director of the Leisure Studies Program. Dr. Gaskill shares his expertise in recreation liability, and outdoor recreation for the disabled with wide-range audiences. Prior to moving to Appalachian State University, he developed a strong recreation program at Elon College in North Carolina.

Jim Gilbert is the Coordinator of the Recreation Degree Programs and Assistant Chair of the Department of Health, Physical Education and Recreation at the University of Mississippi. He holds a Master's degree from Western Kentucky University and a doctorate in Outdoor Education from the University of Northern Colorado.

Richard Low graduated from Western State College in December of 1990. Richard was involved in search and rescue for four-and-a-half years at Western. During that time he has held the positions of President and Treasurer of the team as well as Secretary for the Rocky Mountain of the Mountain Rescue Association.

W. Randy Miller is the Director of the Outdoor Adventure Program (OAP) at Boise State University. A Florida native, he holds a Master's Degree In Education. Randy spent most of the 70's teaching for the military in Germany, at which time he helped initiate an outdoor program for military personnel and their dependents. In 1979, he moved to Idaho to work for an outfitter, and by 1981 he was on his way to creating the OAP at Boise State. Randy is also the BSU Aquatics Director, a professor of Physical Education, and the Administrator for the Alternate Mobility Adventure Seekers.

John Rogers is affiliated with Project SOAR as an outdoor therapeutic educator and logistics manager in Balsam, North Carolina. He received his Master of Science degree from Middle Tennessee State University in the Department of Health, Physical Education, and Recreation. His background evolved from organized camping with Christian camping, 4-H camps and wilderness camping both in the Southeast and in Colorado. John taught outdoor skills and water safety at Middle Tennessee during his graduate studies along with programming campus recreation. He also has worked as a college minister with discipleship ministries on and off the college campus.

Dr. Jack C. Sheltmire, Ph.D., College of Environmental Science and Forestry at Syracuse, (major: Natural Resource Policy); M.S. Ed., State University of New York at Cortland, (major: Recreation). Professor of HPER at the University of Maine at Presque Isle, former Chair of the Division of Education, Health, Physical Education and Recreation, taught at the university level for 18 years. Presented at numerous local, state, regional, and national conferences. Written a number of articles in this area of outdoor education and outdoor recreation. Registered Master Guide in the state of Maine, Outdoor Education instructor for the Maine Department of Inland Fisheries and Wildlife and Campground Ranger at Baxter State Park.

Wayne Taylor is the Director of Intramural Recreational Sports at the University of Alabama-Birmingham. He holds a Masters degree from Southern Methodist University concentrating in Outdoor Education. His outdoor experiences have included the Directorship of Outdoor Adventure Programs at Texas Tech University and Ole Miss Outdoors at the University of Mississippi.

David Webb serves as the Outdoor Program Coordinator for Outdoors Unlimited at Brigham Young University. He has been employed by the Ricks College Outdoor Program and has taught for the BYU Recreation Department. He holds a B.S. and M.A. degrees in Recreation Administration, Outdoor Education and Community Recreation from BYU.

Ron Watters has been with the Idaho State University Outdoor Program for 20 years. He has been director of the program since 1981. Prior his work at the university, he owned and operated an outdoor equipment manufacturing firm and sporting goods store in Pocatello. He has always been a proponent of the use of outdoor recreation as a therapeutic tool for handicapped individuals, and has been instrumental in developing and funding the Cooperative Wilderness Handicapped Outdoor Group (C.W. HOG). In addition to his professional commitments, he has organized a variety of kayaking, ski and mountaineering adventures and misadventures in such locales as the European Alps, St. Elais Range, Himalayas, Yukon Territory, River of No Return and the Northwest Arctic in winter. Watters has authored four books including, Ski Trails and Old-timer's Tales in Idaho and Montana, Ski Camping, The Whitewater River Book and the Outdoor Programming Handbook. He has just completed a fifth book, a biography of the legendary whitewater kayaker, Walt Blackadar.

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