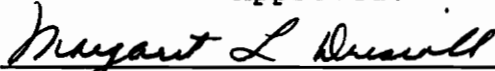


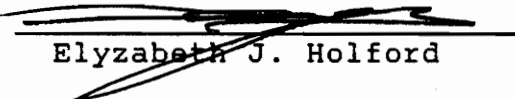
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Recreational Sports Programs for
Special Populations
at Virginia Polytechnic Institute
And State University
by
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Project submitted to the faculty of
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of
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Introduction

Only in recent years has more attention been brought to people with special needs. Recreational opportunities for disabled persons have not been strongly supported by the nation, but volunteer organizations have taken the initiative in such programs (Reynolds, 1986). For example, the YMCA hosts a number of programs for the disabled and the elderly. The Special Olympics competitions are held virtually everywhere (Reynolds, 1986). Currently, however, the only specialized program offered by Virginia Polytechnic Institute and State University (Virginia Tech) Recreational Sports Department is the Aquatics Challenge Program. This program is a swimming program which requires doctors' recommendations for participants and limits enrollment.

The Aquatics Challenge Program does not meet the needs of the special populations for a number of reasons. First, since a large percentage of the members of the program are from the Blacksburg community and not from the university community, this singular activity cannot accommodate those the Recreational Sports Department has designated as its target participants. The program is purely a recreational swim program and is not adaptable

to certain disabilities. And finally, because of its early-morning meeting time, it is not accessible to many of the possible participants. Participants cannot park near the facility without taking the risk of a parking ticket. Many possible participants could have classes or doctor's appointments and, thus, may not be available at the time chosen for this program.

In order to offer programs which can be beneficial to the university community, whether the population is disabled or not, the Recreational Sports Department staff should understand the needs of the populations which are served. Surveys of needs, wants, and performance are distributed and analyzed by the Department on a regular basis. Still, no survey has ever been conducted to determine the recreational needs of the special populations at Virginia Tech.

The benefits of these programs not only affect the special populations, but also the able-bodied participants and employees as well. A disabled swimmer may enjoy the feeling of freedom or movement in the water (Delpesce, 1988). Interviews conducted by Bridge and Hutchinson (1988) revealed that volunteers to special programs described the benefits as a better understanding

of special populations' needs, a possibility of friendship, an improved attitude toward the "labelled" people, and opportunity to meet neighbors (Bridge & Hutchinson, 1988).

The overall mission of the Recreational Sports Department at Virginia Tech is "to provide a comprehensive program of recreational activities and leisure pursuits for students, faculty, and staff" (Virginia Tech Intramural-Recreational Services, 1987, p. 2) through the informal recreation, outdoor adventure, aquatics, extramural sports clubs, and intramural programs. The mission sounds complete, yet this service-oriented department fails to meet the recreational needs of the special populations of the university.

Definitions

The term "**special population**" can be defined in many ways. Some are general qualifiers such as people with handicaps to more specific terms like cardiac patient, or from senior citizens to youths, special people are those "who require special services and assistance in order to succeed" (Sarkees & Scott, 1986, p. 29).

Programming for special populations can be designed as either segregated or integrated. "Segregated programs" are those which limit eligibility for participation to one specific group of people. "Integrated programs" are those programs which try to include as many different populations as is feasible.

Delimitation

This project considered only students with disabilities at Virginia Tech.

Purpose

The purpose of this project was to develop a prioritized listing of the recreational needs of the special populations at Virginia Tech, as well as a schedule for implementation of programming to meet those needs determined to be the top three. Implementation of the recommendations to be made in the schedule should increase participation of special populations in programs of the Recreational Sports Department.

Review of Literature

The review of literature encompasses the following topics: general historical information, segregated

programming, and integrated programming. Additionally, general administrative considerations are addressed.

General Information

Although recreational opportunities for disabled persons have not been strongly supported by communities in general, volunteer organizations have taken the initiative in such recreational programming (Reynolds, 1986). Most of the programs developed by volunteer groups, such as the YMCA, are held in separate, segregated facilities. Part of the reason for this segregation stems from the attitudes found in communities toward people with special needs (Nichols, 1988).

Recreation personnel in volunteer organizations were concerned about the communities' reactions toward handicapped people in their programs. Many of the programs were started to help rehabilitate disabled veterans from World War II, and for the growing population of people over sixty years of age (Nichols, 1988). Little awareness of the problems facing these citizens was in mainstream America. After all, older adults are only portrayed in one to two percent of all advertisements (and they were usually portrayed humorously), and not many veterans were portrayed at all

(Tedrick, 1989). This image problem presents a challenge to recreational sports specialists across the nation: to help create an overriding, positive concept toward people of special populations by linking them to leisure.

The opportunities for leisure for these groups have grown exponentially in recent years. The onset of "masters" athletic leagues, Seniors Golf Tour, Special Olympics, and others mark the growing awareness of special populations' needs for recreational programming. The growth of awareness is also exemplified by the January, 1990, issue of the Adapted Physical Activity Quarterly, in which the entire issue is dedicated to wheelchair sports. Integration of special populations into programs already available is another idea still forming (Tedrick, 1989). "Any activity is adaptable," says Frank Miles, Salem Veterans Administration Rehabilitation Center Recreation Director (Miles, personal communication, August 9, 1990), "but the recreation professional must work with the wants and capabilities of the population which one is serving".

Special Programs

Programming for special populations can be designed as either segregated or integrated. This section

discusses the differences and advantages of each type of programming and then gives conditions to keep in mind when developing programs.

Segregated Programs

Although the current trend is toward the integration of special populations with the able-bodied participants in everyday recreational programming, some of the segregated programs have merit. The cardiac rehabilitation programs need doctors present in order to provide a safe environment for the special participants, which is not necessary for able-bodied participants in similar walking/jogging programs. In these programs it may be beneficial to keep individuals without heart problems away from the special participants so that the cardiac patients do not push themselves beyond their limits.

Integrated Programs

Salisbury (1989) describes a number of benefits to both participants and instructors in integrated programs. Not only is there more understanding between the able-bodied groups and disabled groups, but there is also a chance for friendship and community awareness.

Unfortunately segregated programs still dominate throughout the country and often create barriers to integration by leaving no absolute need for change (Salisbury, 1989).

Three major barriers are described by Salisbury (1989). First, recreational professionals often lack or do not understand the conceptual framework for integration and therefore are unclear as to their role toward successful integration. A second problem is that communities require education and support to see the importance of the integrated experiences for the special populations, and for themselves. Finally, little information is available concerning the problems faced by recreational agencies responsible for delivery of such services to the special populations. This makes it difficult for recreational professionals to learn how to be successful in integrating their programs (Salisbury, 1989).

Beginning to integrate programming requires fundamental steps to have a chance at success. Promotion of public acceptance of the special individuals as peers is a necessity (Reynolds, 1986). Tedrick (1989) suggests using the media to habituate the idea of able-bodied and

disabled participation together. Sending photos of volunteers with the elderly or disabled, news releases of activities or results of competitions, and other written pieces can all be used to gain community acceptance. Integration cannot be achieved without the "[removal of] architectural, transportational, communications, and legal barriers" (Reynolds, 1986, p. 36).

General Administrative Considerations

This section describes the program specifications found in the literature. These specifications should be taken into consideration when developing program curricula.

Goals and objectives. The major goal of special programming is the same as the missions of recreational sports programs. Therefore, one goal may read: "to provide people with disabilities the opportunity to participate in regular recreation programs in their community at a level of participation suitable with their choice and ability at that time" (Hearst, 1989, p.4). Objectives to reach this goal might include (Hearst, 1989, pp. 4-5):

- * to have fun;
- * to encourage friendships;

- * to provide a variety of activities;
- * to provide an opportunity to learn new skills;
- * to encourage self-confidence and independence;
- * to develop a positive awareness of special populations among staff and community members.

Morrison (1988) suggests using major themes in developing program curriculum. One theme is that of lifetime learning and leisure education in which it is important to let the participants know that they are able to learn new activities and concepts pertaining to exercise and leisure throughout life. Self empowerment and community awareness are two important themes which easily comprehended, but which must be reinforced in order to be effective. A fourth suggested theme is that change is healthy (Morrison, 1988).

Staffing. The object in staffing the special programs is to use as many volunteers as is possible. This helps control the cost of administration of the programs. Training volunteer staff and paid staff members in emergency procedures and other areas specific

to that particular program is necessary to maintain a feeling of competency among program staff. Staff members should feel confident in their abilities to "adapt program activities to the needs and abilities of the participants" (Hearst, 1989, p.5). Staff members should also ensure positive interaction between special populations and able-bodied participants (Hearst, 1989).

Budgets. Private clubs often have the architectural accessibility necessary for special population inclusion, but charge entry fees not affordable to such groups. The salaries or retirement income that these people receive sometimes are not enough to pay for household expenses or little is left for leisure activities (Ferrel, 1989). Recreational sports professionals are charged by Morgan (1989) to remember that recreational programs for special populations are a right, not a privilege, and that these services should be available at a reasonable cost to consumers.

Marketing. The recreational programs should be marketed to those prospective participants who may benefit from the program. Often, in the case of cardiac rehabilitation programs the marketing is accomplished by doctors in the area, and therefore maintaining a good

rapport with the doctors can be beneficial to the program (Madsen, 1987). Marketing literature should refer to special populations with terms which are not offensive to possible participants for both increasing attendance at programs as well as for enhancing community attitude change (Word choices..., 1989).

Others. Other considerations necessary to incorporate programs for special populations include liability, architectural accessibility, and time availability of participants. Special insurance policies may be necessary to purchase in order to cover disabled persons or the elderly. Ramps, lifts, and wider doors may be needed to accommodate wheelchairs or other special equipment. People with special problems have very busy schedules. With work, classes, homework, doctors' appointments, and personal time occupying their schedules, some people may find it difficult to find time to recreate. Recreational sports personnel may need to survey the groups to find the best times for the special programming (Delpesce, 1988).

Variety of programming and frequency of activities are also a considerations in special population programming. Espinosa (1991) suggests that "programming

of only 'one time' special events should be avoided and replaced by a series of events thereby providing service at a continuing nature which may be more central to the mission of the intramural-recreational sports programs" (p.24).

Methodology

Design

This project was a theoretical study using existing literature and information from other special population programs. A survey was conducted to determine the needs for special programming at Virginia Tech and then existing literature and information from other special population programs was used to create recommendations for implementation of programming for Virginia Tech Recreational Sports.

Subjects

The subject pool was composed of the handicapped population at Virginia Tech. Permission to survey this population was granted by the Assistant Dean of Students, Special Services, with a stipulation that the envelopes were addressed by the office staff to ensure the respondents' confidentiality. The researcher also

received approval for the research from the human subjects committee within the university (Appendix A).

Instrumentation

An instrument was developed based upon data obtained from existing literature (Appendix B). Results obtained from this instrument served as a measure of perceived need for recreational activities (adapted and non-adapted) desired by the handicapped population at Virginia Tech.

Procedures

The following sections describe how the data were collected and analyzed. This analysis allowed the researcher to select activities for special programming.

Data Collection

Copies of the instrument and envelopes were number coded to allow follow-up requests to nonrespondents. The Assistant Dean of Students, Special Services, assigned a secretary the responsibility for addressing envelopes and mailing the instrument and letter (Appendix C) to the subjects to members of the population. After the response deadline had passed, the researcher provided a list of the nonrespondent number codes to the Dean of

Students Office where a second request for information from the nonrespondents was processed.

Data Analysis

The data were analyzed by calculating percentages of "yes" answers. From these percentages, comparisons of perceived needs for specific recreational activities relating to the handicapped population were made. Results from these comparisons were used to develop a prioritized listing of perceived recreational needs of handicapped students at Virginia Tech. Those activities with the highest percentages of "yes" answers were selected to be included in the three special programs. Existing literature on the activities, as well as policies and procedures from special programs at Michigan State University, Southern Illinois University, and Wright State University, were then be compared to current policies and procedures of Virginia Tech programming. From these comparisons, recommendations for implementation of three programs to include the activities identified as having the greatest interest were developed.

Survey Results

Thirty-five questionnaires were mailed to the handicapped students at Virginia Tech. Twenty-one surveys (sixteen usable) were returned to the researcher for a return rate of sixty percent (forty-six percent usable). The demographic characteristics of this sample are shown in Table 1. Fifty-six percent of the respondents were female. The impairment category most often checked was the visual impairment at thirty-one percent of the sample. Wheelchair users and orthopedic impairments were the next largest groups at nineteen percent each. Additionally, the wheelchair users, orthopedic impaired subjects, and the chronic health impaired subjects (who both listed arthritis as their impairment) were grouped to make comparisons since together they comprised fifty percent of the sample.

In the overall summary of responses (Table 2), the most often selected activity was recreational swimming at eighty-eight percent. Next, at sixty-three percent of the responses, were picnics. The third slot was held by backpacking, fishing, museum, and theatre trips which each were selected by fifty-six percent of the sample. A priority listing by activity can be found in Table 3.

Table 1

Demographics of the Sample

Impairment	Male	%	Female	%	Total	%
Wheelchair user	2	13	1	6	3	19
Orthopedic	0	0	3	19	3	19
Visual	4	25	1	6	5	31
Hearing	0	0	1	6	1	6
Chronic health	0	0	2	13	2	13
Other	1	6	1	6	2	13
Total	7	44	9	56	16	100

Table 2

Overall Response Frequencies

Item	No	%N	Yes	%Y	Missing	%M
Swimming						
can	1	6	15	94	0	0
do	9	56	7	44	0	0
could	0	0	11	69	5	31
would	1	6	9	56	6	38
rec. swim	2	13	14	88	0	0
aq. aerobics	11	69	5	31	0	0
waterpolo	13	81	3	19	0	0
comp. swimming	14	88	1	6	0	0
Individual Sports						
can	4	25	12	75	0	0
do	14	88	2	13	0	0
could	3	19	9	56	4	25
would	3	19	10	63	3	19
bowling	8	50	8	50	0	0
golf	13	81	3	19	0	0
tennis	11	69	5	31	0	0
horseshoes	14	88	2	13	0	0
billiards	8	50	8	50	0	0
badminton	14	88	2	13	0	0
archery	8	50	8	50	0	0
table tennis	10	63	6	38	0	0
shuffleboard	15	94	1	6	0	0
Team Sports						
can	8	50	7	44	1	6
do	15	94	1	6	0	0
could	7	44	7	44	2	13
would	10	63	5	31	1	6
basketball	11	69	5	31	0	0
ultimate frisbee	13	81	3	19	0	0
softball	13	81	3	19	0	0
Outdoor Activities						
can	2	13	12	75	2	13
do	12	75	2	13	2	13
could	2	13	9	56	5	31
would	5	31	8	50	3	19
snow ski	11	69	5	31	0	0
water ski	8	50	8	50	0	0

(Table continues)

Table 2 (continued)

Item	No	%N	Yes	%Y	Missing	%M
rapelling	14	88	2	13	0	0
backpacking	7	44	9	56	0	0
canoeing	9	56	7	44	0	0
fishing	7	44	9	56	0	0
bicycling	13	81	3	19	0	0
Weight Training						
can	2	13	13	81	1	6
do	9	56	7	44	0	0
could	4	25	8	50	4	25
would	8	50	6	38	2	13
Other Activities						
can	2	13	14	88	0	0
do	7	44	7	44	2	13
could	1	6	7	44	2	13
would	3	19	7	44	6	38
picnics	6	38	10	63	0	0
minor league games	12	75	4	25	0	0
horsebackriding	8	50	8	50	0	0
museums	7	44	9	56	0	0
theatres	7	44	9	56	0	0

Table 3

Activity Priority Listing

Activity	Percent "YES"
Recreational swimming	88
Picnics	63
Backpacking	56
Fishing	56
Museum trips	56
Theatre trips	56
Bowling	50
Billiards	50
Archery	50
Water skiing	50
Horsebackriding	50
Canoeing	44
Weight training	38
Table tennis	38
Aquatic aerobics	31
Tennis	31
Basketball	31
Snow skiing	31
Trips to minor leagues	25
Innertube waterpolo	19
Golf	19
Ultimate frisbee	19
Softball	19
Bicycling	19
Horseshoes	13
Badminton	13
Rapelling	13
Competitive swimming	6
Shuffleboard	6

The top six are recreational swimming, picnics, backpacking, fishing, museum trips, and theater trips.

Table 4 shows the interest in program categories by sorting and counting those who can and do participate with those who cannot or do not but would participate if adaptations were made to programs. The strongest interest again lies in aquatic programming which showed eighty-eight percent of those surveyed responding that they either already do or would participate. Sixty-nine percent of the respondents were interested in individual sports programs. Fifty-six percent of the respondents showed interest in each outdoor activities and other activities categories. Preferences of particular activities within each programming category are shown in Table 5. These preferences do not reflect any significant change from the overall priority listing.

Sorting by demographic characteristics (Tables 6-11) does create some differences in interest in programming, but because there is such a low number of subjects in most impairment categories, this information cannot be conclusive. Table 12 shows a sum of the wheelchair users', orthopedic impaired subjects', and chronic health impaired subjects' program interests and

Table 4

Program Interest (Frequencies of "YES" Responses, Sorted)

	Programs					
	Swim	Ind. Sport	Team Sport	Outdr. Act.	Wt. Train.	Other
Can	15	12	7	12	13	14
%	94	75	44	75	81	88
Can & Do	7	2	1	2	7	6
%	44	13	6	13	44	38
Don't & Would	6	8	2	6	1	2
%	38	50	13	38	6	13
Can't & Could	1	2	2	1	0	1
%	6	13	13	6	0	6
Could & Would	1	1	1	1	0	1
%	6	6	6	6	0	6
Do & Would	14	11	4	9	8	9
%	88	69	25	56	50	56

Table 5

**Activity Preferences--Subjects Who Do Participate or
Would Participate**

Item	No	%N	Yes	%Y	Missing	%M
Swimming (n=14)						
rec. swim	1	7	13	93	0	0
aq. aerobics	9	64	5	36	0	0
waterpolo	11	79	3	21	0	0
comp. swimming	13	93	1	7	0	0
Individual Sports (n=11)						
bowling	5	45	6	55	0	0
golf	8	73	3	27	0	0
tennis	7	64	4	36	0	0
horseshoes	9	82	2	18	0	0
billiards	4	36	7	64	0	0
badminton	9	82	2	18	0	0
archery	4	36	7	64	0	0
table tennis	6	55	5	45	0	0
shuffleboard	10	91	1	9	0	0
Team Sports (n=4)						
basketball	0	0	0	0	0	0
ultimate frisbee	0	0	0	0	0	0
softball	0	0	0	0	0	0
Outdoor Activities (n=9)						
snow ski	8	89	1	11	0	0
water ski	3	33	6	67	0	0
rapelling	7	78	2	22	0	0
backpacking	3	33	6	67	0	0
canoeing	4	44	5	56	0	0
fishing	5	56	4	44	0	0
bicycling	6	67	3	33	0	0
Weight Training (n=8)						

(Table continues)

Table 5 (continued)

Item	No	%N	Yes	%Y	Missing	%M
Other Activities (n=9)						
picnics	0	0	9	100	0	0
minor league games	5	56	4	44	0	0
horsebackriding	2	22	7	78	0	0
museums	2	22	7	78	0	0
theatres	3	33	6	67	0	0

Table 6

Response Frequencies--Wheelchair Users

Item	No	%N	Yes	%Y	Missing	%M
Swimming						
can	1	33	2	67	0	0
do	2	67	1	33	0	0
could	0	0	2	67	1	33
would	1	33	1	33	1	33
rec. swim	1	33	2	67	0	0
aq. aerobics	3	100	0	0	0	0
waterpolo	3	100	0	0	0	0
comp. swimming	3	100	0	0	0	0
Individual Sports						
can	2	67	1	33	0	0
do	3	100	0	0	0	0
could	0	0	3	100	0	0
would	1	33	2	67	0	0
bowling	2	67	1	33	0	0
golf	3	100	0	0	0	0
tennis	3	100	0	0	0	0
horseshoes	3	100	0	0	0	0
billiards	1	33	2	67	0	0
badminton	3	100	0	0	0	0
archery	1	33	2	67	0	0
table tennis	1	33	2	67	0	0
shuffleboard	3	100	0	0	0	0
Team Sports						
can	3	100	0	0	0	0
do	3	100	0	0	0	0
could	1	33	2	67	0	0
would	2	67	1	33	0	0
basketball	2	67	1	33	0	0
ultimate frisbee	3	100	0	0	0	0
softball	3	100	0	0	0	0
Outdoor Activities						
can	1	33	2	67	0	0
do	3	100	0	0	0	0
could	0	0	3	100	0	0
would	1	33	2	67	0	0
snow ski	3	100	0	0	0	0

(Table continues)

Table 6 (continued)

Item	No	%N	Yes	%Y	Missing	%M
water ski	3	100	0	0	0	0
rapelling	3	100	0	0	0	0
backpacking	3	100	0	0	0	0
canoeing	3	100	0	0	0	0
fishing	1	33	2	67	0	0
bicycling	3	100	0	0	0	0
Weight Training						
can	1	33	1	33	1	33
do	3	100	0	0	0	0
could	1	33	2	67	0	0
would	2	67	1	33	0	0
Other Activities						
can	1	33	2	67	0	0
do	2	67	0	0	1	33
could	0	0	2	67	1	33
would	1	33	1	33	1	33
picnics	2	67	1	33	0	0
minor league games	2	67	1	33	0	0
horsebackriding	3	100	0	0	0	0
museums	1	33	2	67	0	0
theatres	1	33	2	67	0	0

Note. n = 3.

Table 7

Response Frequencies--Orthopedic Impairment

Item	No	%N	Yes	%Y	Missing	%M
Swimming						
can	0	0	3	100	0	0
do	2	67	1	33	0	0
could	0	0	3	100	0	0
would	0	0	2	67	1	33
rec. swim	0	0	3	100	0	0
aq. aerobics	1	33	2	67	0	0
waterpolo	2	67	1	33	0	0
comp. swimming	2	67	1	33	0	0
Individual Sports						
can	1	33	2	67	0	0
do	3	100	0	0	0	0
could	1	33	1	33	1	33
would	1	33	1	33	1	33
bowling	1	33	2	67	0	0
golf	2	67	1	33	0	0
tennis	1	33	2	67	0	0
horseshoes	3	100	0	0	0	0
billiards	1	33	2	67	0	0
badminton	3	100	0	0	0	0
archery	1	33	2	67	0	0
table tennis	1	33	2	67	0	0
shuffleboard	3	100	0	0	0	0
Team Sports						
can	1	33	1	33	1	33
do	3	100	0	0	0	0
could	1	33	2	67	0	0
would	1	33	2	67	0	0
basketball	1	33	2	67	0	0
ultimate frisbee	2	67	1	33	0	0
softball	2	67	1	33	0	0
Outdoor Activities						
can	0	0	2	67	1	33
do	2	67	0	0	1	33
could	0	0	2	67	1	33
would	0	0	2	67	1	33
snow ski	2	67	1	33	0	0
water ski	1	33	2	67	0	0

(Table continues)

Table 7 (continued)

Item	No	%N	Yes	%Y	Missing	%M
rapelling	3	100	0	0	0	0
backpacking	1	33	2	67	0	0
canoeing	1	33	2	67	0	0
fishing	2	67	1	33	0	0
bicycling	2	67	1	33	0	0
Weight Training						
can	0	0	3	100	0	0
do	1	67	2	67	0	0
could	1	33	2	67	0	0
would	1	33	2	67	0	0
Other Activities						
can	1	33	2	67	0	0
do	0	0	3	100	0	0
could	1	33	1	33	1	33
would	1	33	1	33	1	33
picnics	1	33	2	67	0	0
minor league games	2	67	1	33	0	0
horsebackriding	1	33	2	67	0	0
museums	2	67	1	33	0	0
theatres	1	33	2	67	0	0

Note. n = 3.

Table 8

Response Frequencies--Visual Impairment

Item	No	%N	Yes	%Y	Missing	%M
Swimming						
can	0	0	5	100	0	0
do	3	60	2	40	0	0
could	0	0	3	60	2	40
would	0	0	3	60	2	40
rec. swim	1	20	4	80	0	0
aq. aerobics	4	80	1	20	0	0
waterpolo	5	100	0	0	0	0
comp. swimming	5	100	0	0	0	0
Individual Sports						
can	0	0	5	100	0	0
do	4	80	1	20	0	0
could	0	0	4	80	1	20
would	0	0	4	80	1	20
bowling	3	60	2	40	0	0
golf	4	80	1	20	0	0
tennis	4	80	1	20	0	0
horseshoes	3	60	2	40	0	0
billiards	3	60	2	40	0	0
badminton	4	80	1	20	0	0
archery	1	20	4	80	0	0
table tennis	3	60	2	40	0	0
shuffleboard	4	80	1	20	0	0
Team Sports						
can	2	40	3	60	0	0
do	5	100	0	0	0	0
could	3	60	1	20	1	20
would	4	80	0	0	1	20
basketball	5	100	0	0	0	0
ultimate frisbee	5	100	0	0	0	0
softball	5	100	0	0	0	0
Outdoor Activities						
can	0	0	4	80	1	20
do	3	60	1	20	1	20
could	1	20	2	40	2	40
would	2	40	2	40	1	20
snow ski	1	20	4	80	0	0
water ski	2	40	3	60	0	0

(Table continues)

Table 8 (continued)

Item	No	%N	Yes	%Y	Missing	%M
rapelling	3	60	2	40	0	0
backpacking	1	20	4	80	0	0
canoeing	2	40	3	60	0	0
fishing	0	0	5	100	0	0
bicycling	4	80	1	20	0	0
Weight Training						
can	0	0	5	100	0	0
do	2	40	3	60	0	0
could	1	20	2	40	2	40
would	3	60	1	20	1	20
Other Activities						
can	0	0	5	100	0	0
do	4	80	1	20	0	0
could	0	0	2	40	3	60
would	1	20	2	40	2	40
picnics	2	40	3	60	0	0
minor league games	5	100	0	0	0	0
horsebackriding	3	60	2	40	0	0
museums	2	40	3	60	0	0
theatres	3	60	2	40	0	0

Note. n = 5.

Table 9

Response Frequencies--Hearing Impairment

Item	No	%N	Yes	%Y	Missing	%M
Swimming						
can	0	0	1	100	0	0
do	1	100	0	0	0	0
could	0	0	1	100	0	0
would	0	0	1	100	0	0
rec. swim	0	0	1	100	0	0
aq. aerobics	1	100	0	0	0	0
waterpolo	1	100	0	0	0	0
comp. swimming	1	100	0	0	0	0
Individual Sports						
can	0	0	1	100	0	0
do	1	100	0	0	0	0
could	0	0	1	100	0	0
would	0	0	1	100	0	0
bowling	1	100	0	0	0	0
golf	1	100	0	0	0	0
tennis	1	100	0	0	0	0
horseshoes	1	100	0	0	0	0
billiards	0	0	1	100	0	0
badminton	1	100	0	0	0	0
archery	1	100	0	0	0	0
table tennis	1	100	0	0	0	0
shuffleboard	1	100	0	0	0	0
Team Sports						
can	0	0	1	100	0	0
do	1	100	0	0	0	0
could	0	0	1	100	0	0
would	0	0	1	100	0	0
basketball	0	0	1	100	0	0
ultimate frisbee	0	0	1	100	0	0
softball	0	0	1	100	0	0
Outdoor Activities						
can	0	0	1	100	0	0
do	1	100	0	0	0	0
could	0	0	1	100	0	0
would	0	0	1	100	0	0
snow ski	1	100	0	0	0	0
water ski	0	0	1	100	0	0

(Table continues)

Table 9 (continued)

Item	No	%N	Yes	%Y	Missing	%M
rapelling	1	100	0	0	0	0
backpacking	0	0	1	100	0	0
canoeing	1	100	0	0	0	0
fishing	1	100	0	0	0	0
bicycling	1	100	0	0	0	0
Weight Training						
can	0	0	1	100	0	0
do	1	100	0	0	0	0
could	0	0	1	100	0	0
would	0	0	1	100	0	0
Other Activities						
can	0	0	1	100	0	0
do	1	100	0	0	0	0
could	0	0	1	100	0	0
would	0	0	1	100	0	0
picnics	0	0	1	100	0	0
minor league games	0	0	1	100	0	0
horsebackriding	0	0	1	100	0	0
museums	0	0	1	100	0	0
theatres	0	0	1	100	0	0

Note. n = 1.

Table 10

Response Frequencies--Chronic Health Impairment

Item	No	%N	Yes	%Y	Missing	%M
Swimming						
can	0	0	2	100	0	0
do	0	0	2	100	0	0
could	0	0	2	100	0	0
would	0	0	1	50	1	50
rec. swim	0	0	2	100	0	0
aq. aerobics	0	0	2	100	0	0
waterpolo	1	50	1	50	0	0
comp. swimming	2	100	0	0	0	0
Individual Sports						
can	1	50	1	50	0	0
do	2	100	0	0	0	0
could	2	100	0	0	0	0
would	1	50	1	50	0	0
bowling	1	50	1	50	0	0
golf	2	100	0	0	0	0
tennis	2	100	0	0	0	0
horseshoes	2	100	0	0	0	0
billiards	2	100	0	0	0	0
badminton	2	100	0	0	0	0
archery	2	100	0	0	0	0
table tennis	2	100	0	0	0	0
shuffleboard	2	100	0	0	0	0
Team Sports						
can	2	100	0	0	0	0
do	2	100	0	0	0	0
could	2	100	0	0	0	0
would	2	100	0	0	0	0
basketball	2	100	0	0	0	0
ultimate frisbee	2	100	0	0	0	0
softball	2	100	0	0	0	0
Outdoor Activities						
can	1	50	1	50	0	0
do	2	100	0	0	0	0
could	1	50	1	50	0	0
would	1	50	1	50	0	0
snow ski	2	100	0	0	0	0
water ski	1	50	1	50	0	0

(Table continues)

Table 10 (continued)

Item	No	%N	Yes	%Y	Missing	%M
rapelling	2	100	0	0	0	0
backpacking	1	50	1	50	0	0
canoeing	1	50	1	50	0	0
fishing	2	100	0	0	0	0
bicycling	2	100	0	0	0	0
Weight Training						
can	1	50	1	50	0	0
do	1	50	1	50	0	0
could	1	50	1	50	0	0
would	1	50	1	50	0	0
Other Activities						
can	0	0	2	100	0	0
do	0	0	1	50	1	50
could	0	0	1	50	1	50
would	0	0	1	50	1	50
picnics	1	50	1	50	0	0
minor league games	2	100	0	0	0	0
horsebackriding	0	0	2	100	0	0
museums	1	50	1	50	0	0
theatres	0	0	2	100	0	0

Note. n = 2.

Table 11

Response Frequencies--Other Impairment

Item	No	%N	Yes	%Y	Missing	%M
Swimming						
can	0	0	2	100	0	0
do	1	50	1	50	0	0
could	0	0	0	0	2	100
would	0	0	1	50	1	50
rec. swim	0	0	2	100	0	0
aq. aerobics	2	100	0	0	0	0
waterpolo	1	50	1	50	0	0
comp. swimming	2	100	0	0	0	0
Individual Sports						
can	0	0	2	100	0	0
do	1	50	1	50	0	0
could	0	0	0	0	2	100
would	0	0	1	50	1	50
bowling	0	0	2	100	0	0
golf	1	50	1	50	0	0
tennis	0	0	2	100	0	0
horseshoes	2	100	0	0	0	0
billiards	1	50	1	50	0	0
badminton	1	50	1	50	0	0
archery	1	50	1	50	0	0
table tennis	1	50	1	50	0	0
shuffleboard	2	100	0	0	0	0
Team Sports						
can	0	0	2	100	0	0
do	1	50	1	50	0	0
could	0	0	1	50	1	50
would	1	50	1	50	0	0
basketball	1	50	1	50	0	0
ultimate frisbee	1	50	1	50	0	0
softball	1	50	1	50	0	0
Outdoor Activities						
can	0	0	2	100	0	0
do	1	50	1	50	0	0
could	0	0	0	0	2	100
would	1	50	0	0	1	50
snow ski	2	100	0	0	0	0

(Table continues)

Table 11 (continued)

Item	No	%N	Yes	%Y	Missing	%M
water ski	1	50	1	50	0	0
rapelling	2	100	0	0	0	0
backpacking	1	50	1	50	0	0
canoeing	1	50	1	50	0	0
fishing	1	50	1	50	0	0
bicycling	1	50	1	50	0	0
Weight Training						
can	0	0	2	100	0	0
do	1	50	1	50	0	0
could	0	0	0	0	2	100
would	1	50	0	0	1	50
Other Activities						
can	0	0	2	100	0	0
do	0	0	2	100	0	0
could	0	0	0	0	2	100
would	0	0	1	50	1	50
picnics	0	0	2	100	0	0
minor league games	1	50	1	50	0	0
horsebackriding	1	50	1	50	0	0
museums	1	50	1	50	0	0
theatres	2	100	0	0	0	0

Note. n = 2.

Table 12

**Response Frequencies--Wheelchair, Orthopedic, and
Chronic Health Impairments**

Item	No	%N	Yes	%Y	Missing	%M
Swimming						
can	1	13	7	87	0	0
do	4	50	4	50	0	0
could	0	0	7	87	1	13
would	1	13	4	50	3	37
rec. swim	1	13	7	87	0	0
aq. aerobics	4	50	4	50	0	0
waterpolo	6	75	2	25	0	0
comp. swimming	7	87	1	13	0	0
Individual Sports						
can	4	50	4	50	0	0
do	8	100	0	0	0	0
could	3	37	4	50	1	13
would	3	37	4	50	1	13
bowling	4	50	4	50	0	0
golf	7	87	1	13	0	0
tennis	6	75	2	25	0	0
horseshoes	8	100	0	0	0	0
billiards	4	50	4	50	0	0
badminton	8	100	0	0	0	0
archery	4	50	4	50	0	0
table tennis	4	50	4	50	0	0
shuffleboard	8	100	0	0	0	0
Team Sports						
can	6	75	1	13	1	13
do	8	100	0	0	0	0
could	4	50	4	50	0	0
would	5	63	3	37	0	0
basketball	5	63	3	37	0	0
ultimate frisbee	7	87	1	13	0	0
softball	7	87	1	13	0	0
Outdoor Activities						
can	2	25	5	63	1	13
do	7	87	0	0	1	13
could	1	13	6	75	1	13

(Table continues)

Table 12 (continued)

Item	No	%N	Yes	%Y	Missing	%M
would	2	25	5	63	1	13
snow ski	7	87	1	13	0	0
water ski	5	63	3	37	0	0
rapelling	8	100	0	0	0	0
backpacking	5	63	3	37	0	0
canoeing	5	63	3	37	0	0
fishing	5	63	3	37	0	0
bicycling	7	87	1	13	0	0
Weight Training						
can	2	25	5	63	1	13
do	5	63	3	37	0	0
could	3	37	5	63	0	0
would	4	50	4	50	0	0
Other Activities						
can	2	25	6	75	0	0
do	2	25	4	50	2	25
could	1	13	4	50	3	37
would	2	25	3	37	3	37
picnics	4	50	4	50	0	0
minor league games	6	75	2	25	0	0
horsebackriding	4	50	4	50	0	0
museums	4	50	4	50	0	0
theatres	2	25	6	75	0	0

Note. n = 8.

activity preferences. Even in this sorting there are no significant differences from the overall summary.

Proposed Programs

Recreational Swimming Program

Goals and Objectives

The recreational swimming program will be designed to help participants with various disabilities develop and engage in their own personal swimming fitness program. Objectives to achieve this goal will include the teaching of exercise principles, introduction of a series of different activities to broaden the idea of recreation as fitness, the assignment of a "swimming buddy" to aid each handicapped swimmer, and the use of a group warm-up period to introduce participants to each other and to the volunteers.

Staffing

Program development, scheduling, recruitment and selection of volunteers, and marketing of the program will be controlled by the aquatic program director with the help of a graduate assistant. Registration for the program will be handled by the regular office staff, including administrative assistants and work studies.

Actual program staff will consist of both physical education interns (or field study students) and volunteers from the university community. Life guards will be hired to monitor the pool area for the duration of the program.

Life guards and program staff will be trained in first aid and cardiopulmonary resuscitation before being hired. Volunteer staff members may assist without certification, but such training is strongly recommended. Program staff and volunteers will be required to attend a special training session where the different types of disabilities and the special needs of such participants will be discussed. Policies and procedures of the swimming program will be presented, as well as general information about the recreational sports department. Emergency procedures will be discussed and practiced.

Duties of the program staff will include locker room duty both before and after the program time. Staff members may be required to assist participants in dressing, showering, and/or entering the pool itself. The staff members will not have to swim with the participants unless some participants require aid in the water, but participation is recommended. Volunteer staff

members will be assigned as a participant's "swimming buddy". Duties of the buddy will include assisting the participant during aquatic aerobics or other activity, if necessary, and motivating the participant to attend.

Equipment

The handicapped access lift will be used when necessary to aid participants entering the pool. All staff members should be able to operate the lift. Other equipment will be necessary according to the daily activity or participants' needs. Flotation devices will be available for participant use. Innertubes, balls, and caps will be available for possible innertube water polo games.

Budget

The cost of the program will include wages for life guards and salaried staff members, plus the paper, printing, and postage of flyers for program advertising. For a program running fifteen weeks (one semester) which meets twice a week for one hour (one guard per session), guard costs (estimated at \$8/hour) will be \$240. No more than one salaried staff member (\$10/hour) will be necessary per session to supervise the volunteers and

student interns. This equals a semester cost of \$300. Advertising should cost no more than \$35. Other pool fees, such as the overhead costs will be absorbed by the aquatics program. Total cost of the program per semester will be approximately \$575.

The cost of the program will be offset by charging the participants \$30 per semester, collected at the time of registration. By achieving an enrollment of twenty participants per session, the department will not only recover the entire cost of the program, but will also realize a \$25 profit which may be applied to other program needs.

Marketing

Flyers announcing registration for the program will be designed using bright colors and will be posted throughout the gymnasium, with special attention to the area near the pool and the second and third floor pool windows. A flyer will be designed which can be mailed to those students listed with the Assistant Dean of Students, Special Services, as having a physical handicap. Any special interest group on campus should also be contacted by mail or phone about the service available. If it is possible, the aquatics director, or

graduate assistant should try to speak to such special interest groups concerning the special programs available.

Liability

In order to lower the risk of injury to a participant or volunteer many safety precautions will be taken. The participants will be asked to read and sign an assumption of risk form while registering for the program. A lifeguard and salaried staff member will be in the pool area at all times while the program is in session. Emergency procedures training and practice will be required and provided for all staff members and volunteers. On days when the instructor decides there are not enough volunteer aides in attendance, or when no life guard is present, class will not be held.

Eligibility & Scheduling

Any student, faculty member, or staff member possessing a valid Virginia Tech identification card who is listed with the Special Services office as being physically disabled will be eligible to participate in the swimming program. Special cases may be appealed to

the aquatics program director whose decision on eligibility will be final.

The scheduling of the program will be accomplished by the aquatics director, with the aid of a graduate assistant. The time slot chosen will be dependent on the availability of the pool, but will be different from the time slot chosen for the aquatics challenge program to allow for greater participation.

Program Procedures

The recreational swimming program will begin with a group warm-up period in the water. Slightly elevating heart rates, stretching (as the participants are able), and instruction in exercise and fitness will be the main objectives during this section of the session. Volunteers and interns will be in the water, as necessary, to aid participants in this endeavor.

The activity section of the session will alternate as the participants and the interns desire. Recreational swimming, aquatic aerobics, and innertube water polo should all be used throughout the course of the semester. Emphasis will be placed on the recreational swimming since the response to the activity was so overwhelming.

A cool-down period will be used at the end of each session to slow heart rates and to discuss any questions the participants may have about the exercise just completed. Volunteers and staff members will be available to aid participants in exiting the water after the cool-down is complete. After the final session, participants and staff members will complete program evaluation forms.

Policies

Injuries, accidents, and other incidents will be reported to the recreational sports office immediately. Written statements of problems will be recorded on forms available in the office and such reports will be kept on file for future use. In the case of injuries a follow-up contact will be made by the aquatics director, or graduate assistant, to update the injury form as to the outcome of the injury.

No refunds or reimbursements for missed sessions will be granted. No transfers of registration fees from one participant to another will be allowed.

Staff members will be allowed to secure other trained staff members to substitute for a session if they become unavailable for work. At least twenty-four hours

in advance a substitute must be secured and reported in writing to the recreational sports office staff. Substitution forms will be available in the recreational sports office.

Special Events Program

Goals and Objectives

The special events program will be designed to assist students, faculty members, and staff members to engage in a variety of activities which can meet their social, psychological, and physical needs. To achieve this goal the recreational sports department will attempt to host at least four outings per semester. Activities included in the program will be picnics, backpacking, fishing, museum trips, and theatre trips. Where possible the trips should be contracted out to private organizations.

Staffing

The Outdoor Adventure Program Coordinator, with the aid of a graduate assistant will be responsible for program development, scheduling, marketing, and the recruitment and selection of trip leaders and volunteers. Recreational sports office staff, including

administrative assistants and work study students, will coordinate the registration of participants in the activities.

A ratio of no more than five participants per staff member will be used (D. Byrnes, personal communication, March 25, 1991). The number of volunteers needed will be determined individually by activity difficulty and participants' needs. Outing leaders, if the activity is not contracted to a private organization, will be thoroughly trained for outdoor activities and first aid procedures in the beginning of each school year, possibly not for the special populations exclusively, but for the whole outdoor adventure program. Additionally, volunteers and trip leaders will be required to attend a pre-outing training session one week before the event for further training on the specifics of the trip and practice of the first aid procedures. The staff will also be encouraged to attend the pre-outing meeting held for the participants (as necessary) on a separate night.

Equipment

Since each type of trip requires different types of equipment, any necessary equipment for trips will be acquired by the outdoor adventure program coordinator. If

the trip is contracted to a private organization, the outdoor coordinator will contact the organization to ensure proper equipment will be used. State vans may be used from the motor pool to transport participants to the sites. In the case of picnicking trips, food may be provided for a small fee or participants may be required to bring a bag lunch with them.

Budget

For those trips organized and run through the outdoor program fees will be set by the outdoor program coordinator according to the cost of the individual trip. If a minimum number of participants is needed to recover the cost of the trip, then the trip may be cancelled for lack of interest. Other solutions are recommended, however, such as opening the trip to able-bodied participants before cancellation. In calculating the cost of the trips, the outdoor coordinator will include trip leaders' wages, transportation, equipment rental or purchase, and the cost of marketing the activities. Fees will be collected from participants at the time of registration.

Fees for those trips contracted to private organizations will be set by the staff of that

organization. The outdoor coordinator will be responsible to find the best price for the best quality activity in order to keep the cost to the participants at a minimum. Again, lack of participation will be a valid reason for cancellation of any activity for which the organization requires a specific number of participants.

Marketing

Trips will be organized at least one semester before their planned date. This will allow the trips to be included in outdoor adventure program literature. Other brochures or flyers will be designed and posted in the gymnasium and around the campus. Some brochures will be left with the Special Services office staff for possible distribution or mailing at the beginning of each semester. Information on outings for special populations will be included in an advertisement regularly placed in the Collegiate Times by the outdoor adventure program coordinator.

Liability

Training of staff members, both salaried and volunteer, should eliminate many possible accidents and will ensure the use of proper first aid procedures in

case of injury. Participants will be required to read and sign assumption of risk forms similar to those already in use by the Recreational Services Department. Searching for the best quality activity in those cases where private organizations are contracted to perform services will be necessary.

Eligibility and Scheduling

The handicapped students, faculty members, and staff members, along with their family and friends, will be eligible to participate in all trips for more than fifteen participants. Participation will be limited to handicapped students, faculty members, and staff members when enrollment is limited to fewer than fifteen individuals. All registrations for outings will be on a first come, first serve basis. Eligibility appeals may be made to the outdoor coordinator. Any decision made by the coordinator will be final.

Scheduling will be accomplished by the outdoor coordinator, with the aid of a graduate assistant, at least one semester prior to the outing date. At that time, alternate dates will be determined in case of inclement weather.

Program Procedures

A pre-outing meeting will be scheduled by the outdoor coordinator during the week before the event is to occur. A discussion will be held to inform participants of the exact activities which will be occurring during the outing. What to bring, what to wear, time and place to meet, any educational facts, and practice of any necessary skills will be included. A question and answer period will end the pre-outing meeting. Attendance for the pre-outing meeting will be mandatory for all participants.

If the outdoor coordinator will not be in attendance for the trip, the coordinator will contact the trip leader one day before the event to ensure the leader's participation. Last minute questions will be answered, possible problems discussed, and a list of paid participants will be given to the trip leader. Only those individuals on the list will be allowed to board the van or bus used to transport the group to the event.

A summary report will be written at the end of the outing for future reference. Included in the report will be an account of the trip itself, any problems which occurred, and possible suggestions for improvement of the

trip. Copies of the report will be given to the outdoor coordinator, the director of recreational sports, and to the private organization hired, if any, for review. The report will also be filed for use in planning the next such trip. Also, participant evaluations will be administered after each event.

Policies

No refunds will be granted for participant cancellation without written notice at least two weeks in advance of the trip. Refunds will be granted if inclement weather forces the event to be postponed and then finally cancelled. Participants may not transfer registration to another participant for any reason.

Staff substitutions can be made in writing at least one week in advance of the event. In case of emergency, an extra trip leader will be assigned to train for the event and to attend pre-outing meetings. The extra will be paid for time spent training if he/she is not needed for the event.

Individual Sports Program

Goals and Objectives

The individual sport program will be expanded to help physically disabled students, faculty members, and staff members engage in activities which may meet their social, psychological, and physical needs. Two objectives are necessary for this program to succeed. First, competitive individual sports and "Want-a-Partner" program will be expanded to include the handicapped. Second, instruction will become a part of the individual sports program. Activities determined to have the greatest interest include bowling, billiards, and archery.

Staffing

As a part of the individual sports program the development of programs, scheduling, marketing, and recruitment and selection of competent volunteer teachers will be controlled by the individual sports coordinator. Registration will be accomplished with the help of the recreational sports office staff, including administrative assistants and work study students. A graduate assistant will be used to monitor the records of

the tournament participants, assist in finding partners for those individuals who desire playing partners, and in the recruitment and selection of teaching volunteers.

Teaching volunteers will be selected from the tournament winners of past leagues, sport club members, and those the graduate teaching assistant coordinator knows are knowledgeable for a particular sport. Advertising for instructors may be necessary in some sports. These volunteers will be matched with handicapped participants interested in learning a sport with a one-on-one ratio. Volunteers will be provided with necessary equipment, facilities, and teaching materials requested.

Equipment

Equipment necessary for participation in most activities will be available for use at the equipment room in the basement of the gymnasium. Billiards tables are located in the Pritchard dormitory lounge. Bowling tournaments can be conducted on-campus for a small fee. Other equipment necessary can be requested from the recreational sports staff.

Budget

Because most events will be unsupervised, or will utilize volunteers, no fees will be imposed for league play or instruction. In the case of one-day tournaments where a supervisor or officials are needed, a small fee will be imposed to recover costs spent. The individual sports coordinator will take into consideration supervisors' and officials' wages, marketing costs, and facility rental fees (such as bowling facilities) when determining the entry fees.

Marketing

A note will be made in the individual sports brochure stating that tournaments will include those individuals with disabilities. Special flyers will be developed and posted in the gymnasium, as well as across campus, for special tournaments. Flyers will be mailed to those individuals listed with the Special Services office staff as having physical disabilities. Any special interest groups will be approached by the individual sports coordinator or a graduate assistant for a possible speaking engagement to promote the program.

Liability

All participants will be required to read and sign an assumption of risk form similar to those currently in use by the recreational sports department at the time of registration for an activity. Volunteer instructors will be required to complete injury and incident forms as such events occur. These forms will be kept on file for review when planning new activities or revising activities for the following year.

Eligibility and Scheduling

Students, faculty members, and staff members who have valid Virginia Tech identification and who are listed with the Special Services office staff as physically disabled will be eligible for special tournaments and volunteer instructional help. Anyone related to Virginia Tech who possesses proper identification may complete a "Want a Partner" notice.

Scheduling of tournaments will be completed by the individual sports coordinator or a graduate assistant. If there is a lack of entries for a particular activity, the possible participants may be invited to enter the tournament with able-bodied participants. If entry into

the able-bodied league is not desired, then the tournament for special populations will be cancelled.

Program Procedures

Competitive tournaments will operate as the rest of the individual sports program operates. A participants meeting will be held for rules clarifications and win/loss/forfeit reporting procedures. Participants will have one week to complete and report each match in the tournament. Winners will receive championship T-shirts.

Instructional requests must be made in writing to the individual sports coordinator. The coordinator will maintain a listing of those competent individuals interested in instructing disabled participants. The coordinator will compare the availability of the participant to that of the possible instructors to determine who might match. The instructor and participant will be phoned to set up a first lesson date and time. The instructor and participant will determine a permanent lesson time and report that time to the individual sports coordinator for filing.

"Want a partner" notices will be available in the recreational sports office. The graduate assistant in charge of the program will try to pair up those

individuals interested in finding fairly permanent playing partners who match each other in ability and availability. Evaluation forms will be completed by participants, instructors, and the individual sport coordinator following completion of activities.

Policies

Policies for the expanded individual sports program will follow those already in place for that program. Special circumstances which arise will be resolved by the individual sports coordinator and any new policies deemed necessary will be added to the current policies and procedures.

Schedule of Implementation

The individual sports program should expand immediately. Program brochures and flyers created should be revised as soon as possible. The special events program and the recreational swimming programs should be organized as soon as possible to begin in the Fall of 1991.

Summary

The three programs chosen as most needed from the information collected by the questionnaire were another recreational swim program (Appendix D), a special events

program (Appendix E), and an addition to the current individual sports program to include special populations (Appendix F). Recreational swimming with adaptations was the top priority because most of the subjects indicated they could and would enjoy participating in such a program.

Special events programming should include picnics, backpacking, fishing, museum trips, and theatre trips. These activities were combined into a single program to promote variety in programming choices. Leading backpacking expeditions each weekend would not promote the lifetime learning theme suggested by Morrison (1988), and offering different trips might increase participation.

The individual sports program should include bowling, billiards, and archery tournaments for the handicapped. Water skiing and horseback riding should be added as competent instructors are found for such programs.

Although there is enough interest to start some of these programs as soon as possible, Virginia Tech does not need to hire a separate special programs coordinator. With only sixteen students out of an enrollment of

approximately twenty-two thousand showing interest in special programming, the coordinators currently on staff should be able to include special populations in their respective programs. If handicapped enrollment, or interest in recreation should increase, then the possibility of a special coordinators position should be brought to the vice president of student affairs.

Implications

Because recreation is an ever changing field, research should be repeated to determine the needs of the handicapped students in the future. Enrollment patterns for special programs should also be carefully monitored to help assess needs for new or different programming. Participant and instructor evaluation at the end of each sport season or special trip should be carefully studied for improvement in programs to occur.

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APPENDICES

VIRGINIA TECH

Division of Health and Physical Education
(703) 231-6561

War Memorial Hall
Blacksburg, Virginia 24061-0326

September 19, 1990

Janet M. Evers
Division of HPE
Recreational Sports Office
War Memorial Hall
Campus

Dear Janet,

Your request for permission to conduct the research project titled "Recreational Programs for Special Populations" has been approved by the Division's Human Subjects Review Committee. We wish you luck with your work.

Regards,



Charles R. Baffi, Chairman
HPE Human Subjects Committee

Recreational Sports Questionnaire

Please answer "yes" or "no" to the following questions by marking an "X" on the appropriate line.

	N	Y
I. <u>SWIMMING</u>		
A. Are you physically able to swim?	—	—
B. Do you swim here at Tech?	—	—
C. If adaptations were made (either for you or in the facility), could you swim?	—	—
D. If adaptations were made, would you swim?	—	—
E. In which of the following would you participate:		
1. recreational swimming	—	—
2. aquatic aerobics	—	—
3. innertube water polo	—	—
4. competitive swimming	—	—
II. <u>INDIVIDUAL SPORTS</u>		
A. Are you physically able to participate?	—	—
B. Do you participate here at Tech?	—	—
C. If adaptations were made (either for you or in the facility), could you participate?	—	—
D. If adaptations were made would you participate?	—	—
E. In which of the following would you participate:		
1. bowling	—	—
2. golf	—	—
3. tennis	—	—
4. horseshoes	—	—
5. billiards	—	—
6. badminton	—	—
7. archery	—	—
8. table tennis	—	—
9. shuffleboard	—	—
10. others _____	—	—
III. <u>TEAM SPORTS</u>		
A. Are you physically able to participate?	—	—

- B. Do you participate here at Tech? __ __
- C. If adaptations were made (either for you or in the facility), could you participate? __ __
- D. If adaptations were made would you participate? __ __
- E. In which of the following would you participate:
1. basketball __ __
 2. ultimate frisbee __ __
 3. softball __ __
 4. others _____ __ __

IV. OUTDOOR ACTIVITIES

- A. Are you physically able to participate? __ __
- B. Do you participate here at Tech? __ __
- C. If adaptations were made (either for you or in the facility), could you participate? __ __
- D. If adaptations were made would you participate? __ __
- E. In which of the following would you participate:
1. snow skiing __ __
 2. water skiing __ __
 3. repelling __ __
 4. backpacking __ __
 5. canoeing __ __
 6. fishing __ __
 7. tandem bicycling __ __
 8. others _____ __ __

V. INDIVIDUALIZED WEIGHT TRAINING

- A. Are you physically able to participate? __ __
- B. Do you participate here at Tech? __ __
- C. If adaptations were made (either for you or in the facility), could you participate? __ __
- D. If adaptations were made would you participate? __ __

VI. OTHER ACTIVITIES

- A. Are you physically able to participate? __ __

- B. Do you participate here at Tech? _ _
- C. If adaptations were made (either for you or in the facility), could you participate? _ _
- D. If adaptations were made would you participate? _ _
- E. In which of the following would you participate:
1. picnics _ _
 2. trips to minor league baseball games _ _
 3. horseback riding _ _
 4. trips to museums _ _
 5. trips to theatrical shows _ _

VII. DEMOGRAPHICS

- A. Are you: Male Female
- B. Indicate the extent of your disability, choosing the description that best describes your condition.
- [] (a) Wheelchair user. This category includes all individuals routinely requiring the use of a wheelchair. Many individuals who are functionally quadriplegic and paraplegic are in this category, as well as many individuals with severe cerebral palsy, arthritis, or similar impairments of a severe nature.
- [] (b) Orthopedic impairment. This category will include individuals who do not use a wheelchair, who are ambulatory, or semi-ambulatory with prothesis.
- [] (c) Visual Impairment.
- [] (d) Hearing Impairment.
- [] (e) Chronic Health Impairment. This category will include individuals with cardiac, respiratory, arthritic, and similar chronic impairments.
- [] (f) Other Impairment. Please specify: _____

Thank you for your valuable time and input.

RETURN TO:

Janet Evers
125E War Memorial Hall
Virginia Tech
Blacksburg, VA 24061-0326

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Appendix C

September 30, 1990

Virginia Tech Student
Street Address
City, State, Zip

Dear Student:

As part of my master's project, I am requesting that special populations at Virginia Tech take a few moments to answer the enclosed questionnaire. The results from this questionnaire will be used to assist me in making recommendations to the Director of the Recreation Sports Department at Virginia Tech regarding recreational programming more specific to your identified needs.

Please be assured that these questionnaires will remain confidential. To help in this endeavor, the Dean of Students has agreed to assume responsibility for addressing the envelopes. Therefore, even I will be unaware of specific names of individuals used in this study. Results reported in the project report will include only number codes assigned to the questionnaires. The number codes will be used strictly to produce a second mailing to nonrespondents.

To expedite the study, development of recommendations, and implementation of programming, I am asking that you complete the questionnaire and return it to me not later than November 1, 1990. Thank you for your assistance in this endeavor. Hopefully, special populations will benefit greatly from the results of this study.

Sincerely,

Janet M. Evers
Graduate Assistant
Recreational Sports

/jme

Enclosure

Please check below if you desire a copy of the final project report. _____