Presented are 20 papers delivered at the 1975 Northwest Regional Conference on Recreation for the Deaf-Blind. Included are papers on the following topics (with sample papers in parentheses): national trends; interdisciplinary considerations ("Movement and Physical Activity: the Foundation for the Most Important R" by J. Stein); community organization ("Serving Special Populations--Concerns in a Large Community Setting" by S. Tingley); curriculum ("Music and Rhythms for the Deaf-Blind" by W. Sheridan and "Nature, Dating and Transcendental Meditation for Multi-Handicapped Adults" by B. Questad and J. Tiefenthaler); and information resources ("The Learning Resources System as a Resource for Teachers of the Deaf-Blind" by W. Lance). Also provided are conference evaluation results and a list of conference participants.
OUR NEW CHALLENGE: RECREATION FOR THE DEAF-BLIND

Based on Proceedings of the Northwest Regional Conference on Recreation for the Deaf-Blind held at Bowman's Lodge, Kemme, Oregon, March 9-12, 1975.

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Edited by
Steve A. Brannan
Conference Director and
Associate Professor of Education
Special Education Department
Portland State University
Portland, Oregon

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"In the absence of sight and hearing, the sense of touch becomes the only viable link between a deaf-blind person and other human beings. The world contracts to the length of one's arm and touch becomes the conveyor of our feeling of reality and living warmth. Thus, to the isolated deaf-blind person, communication in itself is the most fulfilling recreation."

Dr. Richard Kinney, 1975
# TABLE OF CONTENTS

**PREFACE** .......................................................... 5  

**KEYNOTE ADDRESS**  
Communication "Is" Recreation ............................. 9  
Richard Kinney  

**NATIONAL TRENDS**  
National Trends in Recreation for the Deaf-Blind ........ 17  
Gordon Howard  

**INTERDISCIPLINARY CONSIDERATIONS**  
Positive Perspectives of Leisure Potential for the Deaf-Blind ........ 27  
Larry Neal  
What Brings You Joy, Brings Me Joy ...................... 39  
Madge Leslie  
Movement and Physical Activity: The Foundation for the Most Important R ........ 43  
Julian Stein  

**COMMUNITY ORGANIZATION**  
Community Support: The First Step in Organizing for Community-Based Recreation for Special Populations ........ 55  
Carol Stenersud  
Serving Special Populations - Concerns in a Large Community Setting ..................... 70  
Sue Tingley  

**CURRICULUM**  
Music and Rhythms for the Deaf-Blind .................. 76  
Wilma Sheridan  
Significance of Arts and Crafts ......................... 86  
Margaret Neel  
Hands On Hobbies ............................................. 88  
Helen Sherman  
Selecting Play Activities for the Young Multiply Handicapped Child: A Piagetian Approach .......... 97  
Brenda Moore  
Ingredients for Success: Planning and Flexibility ........ 102  
Jon Pike  
Recreation Via Motor Education ......................... 105  
Janice K. Thomas  
Let's Go Learning in the Outdoors .................... 114  
Steve Brannan  
Sports, Athletics and Games for the Deaf-Blind ........ 122  
Pam Earle and Gretchen Yost  
Developing Safe Swimming for the Deaf-Blind Child .......... 136  
Robert S. Mealey  
Nature, Dating and Transcendental Meditation for Multi-Handicapped Adults ........ 140  
Beverly Questad and Jim Tiefenthaler  
Activation Through Recreation for the World at Work .......... 146  
Jean Edwards  

**INFORMATION RESOURCES**  
The Learning Resources System as a Resource for Teachers of the Deaf-Blind ........ 152  
Wayne D. Lance  
Computerizing Information Resources for Therapeutic Recreation Service ........ 161  
Fred Martin  

**CONFERENCE EVALUATION** .................................... 168  

**CONFERENCE PARTICIPANTS** ................................. 172
PREFACE

In contrast to mankind's past history, modern society has more time, energy and resources to pursue goals that are non-vocational in nature. Whereas major concerns have traditionally been related to job, income and survival, man's future now appears more related to expending time and energy towards solving problems dealing with leisure and improving interhuman relationships. One implication of this trend is that the structuring of leisure towards maximum human satisfaction will most likely become a major goal of the school's curriculum. Already, concern for all individuals having the right to "full" participation for and participation in society is being advocated by special educators in their work with the handicapped. Special educators are now beginning to recognize that recreation and leisure should be part of a "total" curriculum, that recreation outcomes complement education outcomes, and that a relevant education must truly consider the lifespan needs of students. Related to such efforts has been a particular movement nationwide to meet the recreation and leisure needs of the more severely handicapped, namely the deaf-blind. This movement is in recognition that severely or multi-impaired persons require very specific intervention with extensive opportunities over time to develop competencies in any area of learning, including use of their leisure time. To increase training and service efforts for such individuals, a National Institute on Program Development and Training in Recreation for Deaf-Blind Children, Youth and Adults was held at the University of Icwaf during the Spring of 1974. A major purpose of the institute was to stimulate similar efforts on a regional basis that were being first proposed at the national meeting. In harmony with the goals set at the institute, the Northwest Regional Conference was also dedicated to increasing the contribution that recreation and leisure participation makes to self-realization for the individual who is deaf-blind, as well as the contribution that recreation makes to the education and habilitation of such persons. Specifically, this conference was set forth to accomplish the following objectives:

1. Establish a philosophical position on integrating education and recreation within the school curriculum.
2. Communicate methods for developing and implementing interdisciplinary and interagency programs in recreation for the deaf-blind.
3. Demonstrate diagnostic prescriptive models of instruction appropriate for use in recreation.
4. Develop a beginning resource of instructional ideas on recreation for deaf-blind for use by both professionals and parents.
5. Facilitate sharing of resources through increased interaction between regional professionals engaged in programs serving deaf-blind persons.

This conference and this monograph, which reports the proceedings of the northwest regional meeting, were completely underwritten by the Northwest Regional Center for Deaf-Blind...
and brought together nearly one hundred participants from the states of Alaska, Idaho, Montana, Oregon, and Washington. In keeping with the conference objectives, the main participants were teachers and aides directly working with the deaf-blind. In addition, professionals in specialized recreation and education and selected university students from both fields were invited to participate. Funding by the Northwest Regional Center also made it possible to involve twenty-five presentors representing local, state, and national levels, well known for their contributions in special education or recreation for the handicapped. The proceedings were submitted in writing by the presentors and funding also provided by the regional center for editing, typing, and printing of all materials. The editor has taken the liberty of editing all papers and the taped presentation by Dr. Kinney to provide the reader with a continuity of purpose, while at the same time honoring the excellent contributions made by all presentors. Full responsibility for this monograph rests with the editor.

The success of such a conference can be attributed to the unselfish giving of many individuals. The Conference Planning Committee is recognized for its excellent efforts and extensive time devoted to both planning and implementation. Particular appreciation should be acknowledged to Sue Wapnick who served as administrative assistant and conference registrar and provided invaluable assistance through all stages leading to the culmination of both the conference and the monograph. Special appreciation is also extended to the presentors for their outstanding contributions, to Bonnie Denny for typing the working drafts, to graduate students in special education at Portland State University for their assistance in providing travel arrangements, and especially to all the participants who contributed and shared substantially to the growing awareness of the importance of recreation and leisure for the deaf-blind. Acknowledgements are due Dick Ferris and Ron Nolan who photographed conference proceedings and enabled us to produce a more personal and interesting publication.

Finally, I wish to identify Mr. Jack Sweetser, Mr. Gordon Howard and Dr. Richard Kinney for their unique contributions. Jack Sweetser, serving as Director of the Northwest Regional Center for Deaf-Blind, was the catalyst in helping initiate the conference, assisted in planning, and coordinated all funding arrangements. Gordon Howard, serving as Project Coordinator (USOE-BEH) for Deaf-Blind at the University of Iowa, brought a national perspective to Oregon and provided excellent leadership support during the conference. Dr. Richard Kinney, President of The Hadley School for the Blind, gave an inspiring keynote address that generated much interest and enthusiasm and served as a guiding light during subsequent conference meetings.

In conclusion, the excellence of the papers and the quality of the interactions attest to the importance given to this conference by all those who attended. It is hoped that these published proceedings will serve to stimulate additional activity, both service and training, in meeting the recreation and leisure needs of deaf-blind children, youth and adults.

Steve A. Brannan
COMMUNICATION "IS" RECREATION

Dr. Richard Kinney, President, The Hadley School for the Blind, Winnetka, Illinois

I am truly delighted to be with you here participating in your recreational work, or should we say in your working recreation. In either case, the United States is the only country in the world where the work ethic could combine with the play ethic to produce a gourmet dinner followed by a dissertation for dessert. As a boy I always wanted to take the Oregon Trail and now here I am in Oregon. True, I came out by jet rather than by prairie schooner, but I think we are pioneering here today just as much as the pioneers of the old wagon days. I have with me my notes on two small braille pages, but don't get your hopes up, they are hourly notes. Dr. Brannan has been writing me to talk with you about personal and professional reflections on the value of recreation for deaf-blind persons. Now personal and professional; that covers a great deal of scope. The professional speaker can usually contend with the clock, but when he gets into personal things, something about his own life, you may need a calendar. I'll try to stick to the clock.

Let's begin first of all by considering that word life-span. I am so pleased that you are viewing recreation from the very young person to the senior citizen. After all, deaf-blind children do grow up to become adults and, hopefully, all of us here at this meeting will endure long enough to reach our second childhood. Therefore, we have the whole span of years to consider, but before I go into the age bracket concept, let me make one particular point which I consider of special importance. The point is simply that communication itself is recreation for a deaf-blind person. Let me explain that further. When you come right down to it, people who are deaf-blind, and it doesn't matter what the age may be, have essentially only one problem. They do not see and they do not hear. This means that the two primary distance perceptors are out of action. It is as if the computer were not operating with full input. Yet the point I would like to bring out is that these senses, the physical senses, are simply the channels by which the mind observes the world. It is the mind behind the senses that really is the person. When sight and hearing are both gone, the world contracts to the length of one's arm, and touch becomes the primary channel of observation, of communication. That is why I have distributed and you will receive a copy if you haven't already, my pamphlet called Touch Communication. The deaf-blind person knows the world through the sense of touch. Fortunately, this touch is our most primordial sense and the most basic. You can live without sight, you can live without hearing, but just try, just imagine life without being able to sense the physical world about you by touch; the sense that gives the world reality. Think of walking across the floor you couldn't feel beneath you--or picking up a spoon you couldn't feel in your hand--or trying to get a sense of human warmth with other persons whom perhaps you could see and hear but could never touch. So if we do
have only one sense left, we are fortunate that touch is the most indestructable. Yet because touch limits the environment to the length of our own arm, the deaf-blind person finds himself cut off from a high percentage of all the data that other people take for granted. He might, from what he can feel, by inference draw conclusions regarding what is happening beyond the length of his own arm. That is, he might be a walking, talking Sherlock Holmes. The greatest thing that can help him is to borrow the eyes and ears of other human beings who are willing to put their observations to use and transmit them to him through the sense that remains— that indestructable and valuable sense of touch. In the booklet which you are receiving, I have outlined a great number of ways in which such input can be used most effectively and rapidly. Remember, once the mind behind your senses has been educated, once it is well filled with data, then it can function on its own. By interpreting fresh data from day to day, reflecting upon the knowledge already stored up in that mind, it can operate independently. Sense is really the central message that I'm always advocating wherever I go.

Our challenge in special education is to reach the unhandicapped mind behind the handicapped senses. All this sounds terribly earnest and that is exactly why I am so pleased that you are putting the accent at this conference on recreation. If I had my way we would revise the pronunciation of recreation and say it is re-creation. After all, what we are doing in recreation is to re-create the world with a sense of imagination. We are adding an element of joy, a little bit of let's pretend, games, activities, and things that are pleasurable and releasing in themselves. We are, in a sense combining joy and growth; re-creation. Communication to a deaf-blind person is one of the most joyous and releasing activities in which he can engage. I know deaf-blind people who consider simply sitting down and chatting with someone who enjoys talking with them as one of the happiest events of the day. That is when you get the input on current things that may not otherwise be received. The isolation is broken.

Well, let's shift now to the age-span idea. Factual of course, someone once said to me, "Haven't you been deaf-blind all your life?" and I replied, "Not yet." But actually of course, as Madge Leslie has told you, I didn't lose my sight until age seven nor my hearing 'til age twenty. I am one of the fortunate ones who, for example, didn't need to learn to speak from the beginning. I had a problem only in keeping on talking after I became deaf, and this has been no problem, whatever as you are already beginning to suspect. But let's look at the deaf-blind child. I think that one of the most happy memories in my own life as a little boy is playing with clay, just plain old modeling clay. I remember sitting at a pool table when I was a little chap; a pool table because the rim on the table kept the clay from repeatedly falling on the floor. I remember making round balls, and squares; all kinds of figures. Sometimes I would put them in armies and have them engage in mock battles with each other--Or I would shape them into boats and pull them across the pool table in mock races--Or I would simply smash the clay and knead it. You know, working with clay gives the little child the sense of operating on material rather than being manipulated by others. It's a
wonderful releaser of imagination and I can't recommend it too highly. Of course any child can gain benefits from clay. This brings to mind my boy Clark, who is blond, blue-eyed, athletic, totally un-handicapped. I remember that when Clark was just two or three years old, playing with modeling clay was one of our first joint activities. I would model a rabbit for instance and then let Clark put on the tail. Or if I made an elephant, Clark would put on the ears. Gradually he put more and more of these animals together until in the end he was making animals that were unfamiliar to me. Now, art is said to be his strongest subject in school and of course his dad takes a little credit for this in getting him started.

I've also been remembering stuffed animals. We all know about the well-known security blanket, but I think stuffed animals are even better friends. I know that Clark, as a very little boy, worked up a collection of about 26 different stuffed animals. That is, in part I think, so that he could show them to me and we could then play with them together. However, the deaf-blind child especially enjoys stuffed animals if they have a cuddly, soft, appealing touch. He can take the animals to bed with him at night. They give him a sense of security, objects which he sees again and again, that he can take with him wherever he goes. Later as he matures, he can become acquainted with live pets. Not too soon, for we know how children can be rough on animals. Yet, somewhere along the line a pet becomes a wonderful recreational asset to any deaf-blind person. The pet, if the deaf-blind person is really his master, is fed by him, taken care of by him, and becomes something that relies on the deaf-blind person. This is important since the deaf-blind person so often must rely on others for protection and help. This gives him an idea of a two way street. Live pets are marvelous.

Another toy for a small deaf-blind child is something that vibrates. I remember I always liked drums. You can feel the vibrations if you touch the membrane, but you can also feel them in the air. Two weeks ago in Saudi Arabia, an orchestra of blind children played for me when I visited their school. Now of course I couldn't understand the music, but I could feel the vibrations of the drums and some of the other instruments. And in order to let the children know I was appreciating their music, I clapped ry hands in accompaniment to their rhythm. I know that as a deaf-blind adult I still enjoy putting my hand on a stereo or radio receiver and feeling the beat of the rhythm. We have a teacher at the Hadley School for the Blind who is totally deaf-blind, but who likes to play the piano. She tells me it is the sense of the vibrations, the muscular pattern of the finger exercises and movements, and the pleasure of entertaining others that appeal to her. I think the way to cultivate such things early is through percussion or vibrating instruments, no matter how simple, even if it's clicking two sticks together.

Let's go on a little further. The child begins to grow up. Somewhere along the line games come into the picture. I owe a great deal to games, because they form a link with others in social activities. When I lived alone in my own apartment, friends who came to visit me most often were those who shared an interest in a particular game, such as chess for example. I'm still a member of a Chicago Chess Club that
includes editors of familiar papers, college professors, and professionals of all kinds. One of my more treasured recollections is the time I came with Bobby Fischer once when he came to Trenton and, in one miracle that we will never understand, met Polly's queen. We protected, but the referee or tournament people did not, the forty-second move, but it will retell the story of the game.

Naturally, not all deaf-blind persons are chess fans. Scrabble is an excellent game in braille. I'm sure you know that there is a braille scrabble board. The tiles are marked in both braille and ink print. The board is corrugated so that the tiles stay in place. I have a friend who has come every winter evening for ten years to play scrabble with me. We've had great times and I know many other deaf-blind people who enjoy this game. Checkers is simpler, and one of the earliest Chinese Checkers. Clark's grandfather used to play it quite often. All these games can be purchased through the Home and Appliances Division of the American Foundation for the Blind. The Royal National Institute for the Blind in London also has a great catalog of assorted games.

Sports are also an important aspect of recreation. Now these can of course be of the participating kind or of the audience kind. For participation, I think that swimming was always my favorite. In fact when I was a very young man and first began training swimming, I was the inventor of the famous kiddies crawl. Stick to the bottom and crawl along it. Actually, my problem in swimming was that I never turned my head far enough to either side to get a breath of air. Finally, a friend solved this by teaching me the backstroke. That was my salvation. In Hanover, Germany, where they now have a fine center for the deaf-blind, a pool is one of the chief recreational features. I noticed that the bottom of the pool is corrugated with lines running across it, so that it's easier to determine direction when one touches the bottom. This feature solves the problem, since from the corrugation, one can deduce direction toward shore. One thing however, you do want a real lifeguard at a pool for deaf-blind people. If you are out in the deep end of the pool and need to get to shore in a hurry, there is the problem of knowing which way to turn. No one can call directions to you, so a lifeguard seems quite important.

In the direction of audience sports, I know that one of my favorite features is my father sitting in a box beside me and reading the list of the football scores. I wore a thin device inside, which you'll find described in the booklet you each received. I mentioned that ABC's written in short it was on the fingertips, points of the fingers, and palm of the hand. I memorized the locations. Did you also in your spelling the rebroadcasts of the football or baseball games. I know that deaf-blind people, especially those watching the rebroadcasts of games. Since there are a number of deaf-blinders, I wouldn't be surprised if we did. As a single listener to broadcast the game to the deaf, I could be just as if they were attending the game in person. It's electrically on: it's what a wonderful group activity. I told our gym teacher's group especially those who still miss games or the local football games.

A person could then say, it's going to the Rose Bowl. My son
has now reached an age where he has learned to re-broadcast to re-fresh the television screen, so I expect to become much more informed about sports once again in the next few years.

Let's turn now to the sense of taste, which certainly should be considered recreation. I will confess to you that I have traveled to some 10 countries and when I land in a new capital city, I blushingly admit that my first question is not, "What way to the museum?" but "What is the most interesting restaurant in the city?" What gives you the flavor of a community or culture is to visit their own restaurants. Also, when you are thinking about recreational presents for a deaf-blind person, you can usually go down to the supermarket and pick up some new food product that has just come out. After all, if you don't introduce it to him, how is he going to know about it? Can need not live by pepper alone, when there, rosemary, sage, and a dozen other spices are sitting in the windows.

Now let's look at braille. It definitely provides a method of immediate communication that helps the deaf-blind person in his recreation. I think braille is also an essential skill. Just think a minute. If you teach a deaf-blind child or youth to read braille, you give him or her access to that and tremendous input of all he can read in the numerous braille magazines. The Library of Congress now provides a tremendous variety of choice. I see that a new sports magazine will soon begin publication from the Braille Sports Foundation in Minneapolis. All this is just wonderful. The deaf-blind person can read his magazine and get a broad background on current events. After all, if you are going to have conversation with people, if you're going to gain the recreational release of conversation, you have to have something to talk about.

Close, related, letter writing provides another means of recreation, with the additional benefit of providing a communication and social link with friends. A special adaptation of letter writing is the circle or round-robin system in which each person writes a letter to a pre-determined person in a group of friends and includes all other letters that have been passed on to him. This way you get a dozen or more letters at the price of writing one. Of special significance, you get a sort of discussion by mail in which a dozen or more deaf-blind people can consider each others' thoughts. I knew when I first heard totally deaf-blind, much that I learned about how to become independent care by mail through correspondence with other deaf-blind people. In carrying the process of written communication a step further, correspondence education, such as employed at the Hadley School for the Blind, can actually be another tremendous form of recreation. But I see that we are running out of the clock stage toward the calendar stage, so I'm going to wind up now with a few basics.

Less than a week ago, at a meeting of international experts on service to the deaf-blind, I was saddened to hear a very distinguished worker in the field make a speech that I can only describe as pessimistic. According to this gentleman, deaf-blind people are becoming more, not less, handicapped; more retarded, more of a problem. The typical deaf-blind child will need custodial care at home, custodial care in school, and will eventually graduate to custodial-type work in a sheltered workshop. He finalized this address by saying...
that, actually, he knows of only ten competent deaf-blind people in the whole world. Well perhaps the gentleman was not feeling well that day. I happen to know at least 25 competent personal friends of mine who are deaf-blind right here in the United States. After all, our goal is not to make Einsteins or even Helen Kellers of the average deaf-blind person. What we are trying to do is to help each individual make the highest possible percentage of his potential blossom, whatever that potential may be, and the nearer we come to 100 percent potential, the more reason we have to be optimistic. When we realize that the senses are simply the channels of communication and that the mind behind the senses is the important thing, then we are in a better position to understand the deaf-blind or sighted person.

Handicapped or un-handicapped, we are all human beings living on one planet and destined for one fate. The old proverb of live and let live is inadequate. Our role today should be to live and help live. At conferences such as yours, we are thinking not merely of living in the sense of existing, but living in the sense of joy and fulfillment. I once heard Maurice Chevalier say recreation can add and should add to the beauty and grace of life. Recreation can be re-creation and the mind behind the handicap can blossom to its fullest extent. We are entering a new field in stressing recreation. We are bringing forward a new and broadening aspect of service for the deaf-blind. I have complete faith that the human mind can broach through any sensory barrier to reach other minds, and you and I have the great privilege of helping realize this conviction. Thank you for inviting me to join you. We have the most rewarding work in the world.
NATIONAL TRENDS IN RECREATION FOR THE DEAF-BLIND

Mr. Gordon Howard, Project Coordinator, National Institute on Program Development and Training in Recreation for Deaf-Blind Youth, Children and Adults, University of Iowa, Iowa City, Iowa

To understand the national picture of services, and particularly recreation and leisure services to the deaf-blind a brief look at some of the Public Laws that have provided an impetus to program development and service delivery may be of assistance.

Public Law 90-99 - This was signed into law in 1967. It establishes the National Center for Deaf-Blind Youths and Adults and later assists in the further development of the Industrial Home for the Blind to provide services to the deaf-blind.

Public Law 90-247 (1968) - This provides for the education programs for the deaf-blind.

It is the purpose of this part to provide through a limited number of model centers for deaf-blind children, a program designed to develop and bring to bear upon such children, beginning as early as feasible in life, those specialized, intensive professional and allied services, methods and aids that are found to be most effective to enable them to achieve their full potential for communication with and adjustment to the world around them, for useful and meaningful participation in society, and for self-fulfillment. (Iowa Rec. Pro. p. 19)

From this, ten regional centers have been established which initiate and carry out planning and developmental grants for services to deaf-blind.

Another section of Public Law 90-247, Section 610, provides for the recruitment and training of professional personnel as needed by programs.

Such schools as: San Francisco State, Boston College, Michigan State, Portland State, George Peabody and others have provided teacher preparation courses for teachers of deaf-blind children.

This and other laws and acts at the national level show that not only is the special need of the deaf-blind recognized but that national action is provided. In House testimony during discussion of the Public Laws concerning deaf-blind a report to the House stated:

The committee is convinced that there is probably no group that is more difficult to rehabilitate than the deaf-blind. According to most experts in the field the only feasible solution to meeting the needs of the deaf-blind in the immediate future is the establishment of a centralized rehabilitation service. (P.L. 90-247 10, p. 28)
In another testimony it was stated that:

one major difficulty in providing services to the deaf blind arises from the relatively small numbers of persons so affected and their wide geographical distribution. . . . This circumstance dictates the need for regional facilities to serve most of the deaf blind population. (Sen. Bill's 16116 10, p. 27)

The expression of national needs has helped establish both services and training of personnel to provide adequate programs for the deaf blind. Many schools are involved in teacher preparation within Special Education programs to train teachers for the deaf blind. To see where recreation and leisure services and personnel enter this picture a National Survey of Recreation Services (Nesbitt and Howard, p. 44 51) was undertaken by the project staff, the Recreation for Deaf-Blind Project Based at the University of Iowa (Nat. Inst. Project 31 4241).

Data received as a result of this survey shows that special education and classroom teachers are the persons primarily responsible for the recreation programs. Over half of the total staff involved with the recreation program were teachers and teachers aides. The employment and availability of the Recreation Specialist was notably small. When asked if the program had an "organized recreation program" (defined as staffed-funded) two-thirds of them responded as "No."

The age group served by the facilities survey fall into the ranges most reported and most familiar to the professional. Ages range from 5 to 12 and most (77 percent) of the program sites provided pre academic programs.

The facilities and equipment, programs and activities reported, all fit the pre academic and academic program. Classrooms and playground are the main recreation program sites and facilities. Most of the activities that the children engage in that may be considered recreation or physical education are those that assist in mobility (walking, running, skipping, jumping) or gross and fine motor skills. The equipment utilized reflects this same trend. The use of balance beams, mats, wagons, crawling mazes all provide for motor and skill development areas.

Trends

1. Training - National trends in the importance of recreation and leisure services and the personnel training needs that come from increasing recreation program development are, at present, slowly developing. Through the funding of projects such as the National Institute in Recreation for Deaf-Blind and the various regional institutes and workshops there was a first step in increasing recreation program development and training. As a result of workshops and in service education sessions provided by the Recreation for Deaf-Blind Project to various regional program sites, many are appointing one of the classroom teachers to be primarily concerned with the development of recreation services.

2. Education in Recreation - The first class of TR students specifically geared to recreation for deaf blind was held in the summer of 1974 at the University of Iowa.
Another class with this emphasis is being implemented at Texas Women's University in the summer of 1975. The training of recreation professionals, and particularly those that will be serving the severely multi handicapped, is a major necessity if deaf-blind service agencies are to develop staff positions for these specialists. Courses should also be available for persons outside the recreation field, especially for the special education student who will be primarily involved with deaf-blind education. Extension classes must be offered to the field teachers and other professionals so that they too may upgrade their abilities and skills for the provision of quality recreation and leisure services to the deaf-blind.

3. Instructional Materials

Instructional materials for use in these emerging college, extension and in-service training programs are being developed. The publication "Program Development in Recreation Service for the Deaf-Blind" is a result of the efforts of the National Project on Recreation for the Deaf-Blind and is one of the first steps for developing these necessary materials. Proceedings and papers resulting from workshops and Regional Institutes directed at recreation for deaf-blind will also result in educational materials, lesson outlines and position papers that will further provide material on recreation to the field.

Summary:
Recreation and leisure services for the deaf-blind is part of the total education program and has been provided to the deaf-blind child in varying degrees in pre-academic or academic settings by the classroom teacher and teacher aide. The employment and use of the recreation specialist in these programs is quite limited. Little has been done to specifically identify recreation and leisure service as a primary program need or area. Special education teachers do not always have training in specific recreation training in this particular disability as part of their education.

Workshops and institutes on the subject of recreation and deaf-blind held during the last year (1974-75) spearheaded by the National Institute on Recreation for Deaf-Blind have started to develop an awareness of this particular program area and to more clearly define its role and contribution to the total development of the deaf-blind child.

Projections:
Institute materials resulting from the National Institute provide the field with the preliminary materials to continue program development in this area. As more professionals become involved in recreation, as more instructional materials come from workshops and as deaf-blind education sites develop exemplary programs in recreation, this will all enhance the recreation program development effort.

Specific education courses provided by universities and colleges are training Special Education and TR Specialists. With the addition of courses in Recreation for Deaf-Blind, all allied professions in service to deaf-blind will have opportunities to develop the skills necessary to additionally contribute to this program development effort.

As regional centers continue to become involved in demonstration projects concerned with recreation for the deaf-blind, the needs for trained recreation professionals...
and the contribution that recreation and leisure services makes to the education of the deaf-blind will be developed. It is hoped that through this effort the employment of trained TR specialists and the in-service and pre-service training of special education teachers and other allied professions will further develop programs and services to the deaf-blind.

Suggested Readings on Recreation for Deaf-Blind

Part I - Reference to Recreation and Use of Recreation in Service to Deaf-Blind.


Recreation and leisure are inherent rights of all people. General public and many professionals have incorrect attitudes towards deaf-blind citizens.

We should cultivate the indomitable spirit that is inherent in all citizens.

Therapeutic Recreation people should possess a desire to meet the challenge rather than fear the assignment of providing recreational opportunities for deaf blind clients.


Communication is the key to leading successful and purposeful lives as communication helps to bring out the greatest potential that lies within them. Communication is the starting point.

Recreation is one area of service which provides for social intercourse and self-satisfying experiences. Recreation can be available almost immediately. Deaf-Blind should have a major role in deciding what activities they will participate in.


A discussion of the value of the kinesthetic sense in giving to deaf blind persons an understanding and appreciation of rhythm. Helen Keller and Helen Uty Martin, the Deaf Blind pianist, are given as examples.


Recreation is a service that can be available to the deaf-blind almost immediately, provided he receives personal attention from professionals.
Participants should be encouraged to play a major role in the planning of their recreation activities.


This book briefly describes all of the recreational and financial avenues open for invalids in Poland. It includes vocational rehabilitation, social security system, and the principles of invalids' cooperatives.


Development areas: self-care skills, motor development, language development, social awareness, and auditory training - possible training - or by-products of recreational activities.


IHIB Recreational services open to deaf-blind clients. Activities include social gatherings, games, arts and crafts, trips, dancing, roller skating, nature activities, bingo, etc. Clients conduct their own recreation program as much as possible.

Volunteers are used to provide leadership/guidance in many recreational activities.


This document is a copy of continuation contract for the time period between June 15, 1972 and June 14, 1973.

It describes the objectives of physical education and recreation in their relations to the deaf-blind.

Part II - Annotated and Non-Annotated Articles - General References for Recreation

Barkus, Andrea Storm and Orff Schulwerk, "A Proposal for Its Application to a Program of Rhythm Instruction for Deaf-
Blind Children." Boston College Teacher Training Class, Perkins School for the Blind, 1966-67. (Typed)


Bundschuh, Ernest L., "A Physical Education and Recreation Program within an Interdisciplinary Setting. Athens Unit, Georgia Retardation Center." Unpublished paper, University of Georgia Press, n.d. (Mimeographed)


These workshops are designed for those persons who are concerned with the needs of the visually impaired and the mechanics of transcribing materials. Information ranges from activities of daily living and self-help skills to how to make clear tape recorded teaching programs, foreign language transcriptions and lifelong needs of multi-handicapped persons. Academic, recreational and social ideas will be explored.


Howe, Eleanor., "Play Program for a Deaf-Blind Baby from Infancy Through Three Years Old, Boston University Teacher Training Class." Boston: Perkins Institute for the Blind, 1963-64. (Typed)


Nesbitt, John A. (ed) Papers on Program Development in Recreation and Physical Activity for Handicapped Chil-


Recreation and Physical Education for Handicapped Children: Initiating, Expanding, and Improving Programs at the Local, State and National Levels, Report of the Proceedings of the National Institute on Program Development in Recreation and Physical Education for the Handicapped Children. Held at San Jose State College, April 22, 1971. Papers by David C. Park, Dr. Diana Dunn, Wallace Breitman, Jr., Dr. John A. Nesbitt, Mrs.-Betty Wright, Mrs. Mildren Marcki, Mrs. Dorothy McDoughall, Mr. Ed Kelley, Mrs. Janet Pomeroy, and Mrs. Dolores Elliott; Directory of Registrants. 166 pp.

Reference Information on Recreation and Physical Education for Handicapped Children. Papers, Reports and Summaries of Papers by George Gotisch and Barbara Mumford, Dr. John A. Nesbitt, Nancy Steele, Dr. Genevie Dexter, California Division of Special Education, Excerpts from California Education Code; University of Illinois, Recreation Program, James L. Cardwell, Jr.; William A. Hillman, Jr.; and Helen Jo Mitchell; and a bibliography of selected PER and development reference publications, n.d. 55 pp.


Snow, Clifford. "A Sequential Approach to the Mobility Training of Educable and Trainable Blind Mentally Retarded at the Arkansas Children's Colony Conway Unit. Orientation and Mobility Specialist for the Blind."

This is a manual which explains step by step the methods used in teaching a blind person to walk. It includes
directions for architectural barriers, the use of a guide, a cane and pre-cane technique.
Tutt, Louis M., *Motor Skill Development of the Visually and Auditory Unique Child*. This is an explanation to parents and staff of how a deaf-blind child develops his motor-skills and the planning of activities and experiences stimulating further motor skills programs for these children.

**Visually Handicapped Workers in Recreation Services**, American Foundation for the Blind, 15 West Sixteenth Street, New York, N.Y. 10011.

A working relationship between those in the field of recreation and rehabilitation agencies interested in investigating employment opportunities for visually handicapped persons in the recreation field.

Unlimited range of jobs in recreation provide an opportunity to blind persons to fill some of these job positions.


This booklet shows the feasibility of putting blind persons into jobs with guidelines for selection, training, and placement.


**BIBLIOGRAPHY**

National Institute on Program Development and Training in Recreation for Deaf-Blind Youth, Children and Adults. USOE-BEH. OEGO-73-6143 Project Number 31-4241.
Nesbitt, J.A. and Howard, G.K. *Program Development in Recreation Service for the Deaf-Blind*. Iowa City, Iowa: University of Iowa Recreation Education Program, 44-51.
Senate Testimony - Public Law 90 247, (10, p. 28).
Senate Testimony Senate Bill S-1618 (10, p. 27).
Texas Women's University, College of Health, Physical Education and Welfare, Summer 1975.
University of Iowa Recreation Education Program, Summer 1974.
POSITIVE PERSPECTIVES OF LEISURE
POTENTIAL FOR THE DEAF-BLIND

Dr. Larry Neal, Director, Center of Leisure Studies, University of Oregon, Eugene, Oregon

Introduction

Where to begin? In a period of time beset with massive discussions such as exhausting our natural resources, of major food shortages, and the resultant famine, poverty and irreversible physical mental debilitation of death; rapidly increasing world-wide population; speculation as to major shifts in weather with a prediction that we may be heading for another Ice Age -- the consequences of all of these touch each of our lives. These are illustrations of pervasive problem areas. Life on this earth does not exist in a vacuum but we are inherently inextricably inter-dependent one with another and with each event.

It is with a degree of pride yet also with a degree of frustration that I find myself focusing on a very specific sub-part of this large population -- the deaf-blind individual. An additional delimitation is my specific interest in the lives of these people -- their leisure potential and the experiences, skills and attitudes they do or could possess. Potential/capacity is Reality now)

I am frustrated by the seemingly miniscule role I can play in altering the massive world wide problems identified above yet prideful of the fact that I (and we) can focus on smaller tasks and affect great change in that small sphere. The task of serving the leisure needs of the deaf-blind seems small indeed in comparison to world famine, population explosion, energy crisis, etc. But that should not deceive us for we have a task not wholly committed to until just recently. We are at the cutting edge of real service to the deaf-blind and in so doing we strengthen society as a whole.

As an illustration one is directed to the leadership role exhibited in recent years by the National Therapeutic Recreation Society (NTRS) of the National Recreation and Park Association. Within the organization NTRS is relatively small in number yet large in purpose/leadership -- taking the lead in many areas including: (1) the development of the first nation-wide voluntary registration program for recreation personnel, and (2) printing of two separate special publications (Therapeutic Recreation Annual, Therapeutic Recreation Journal) in addition to a number of special studies:

Dawn of Dedicated Action

Given the problems cited in the introduction, Thomas Paine's words spoken nearly 200 years ago seem most appropriate "-- these are the times that try men's souls." But I am here to confide in you that relative to service to the disabled/handicapped -- "these are the times to STIR men's souls."

As we move out of the darkness of isolation, removal or absence of concerns for the disabled in general toward the
emphasis of the marginally disabled in the early-to mid 60's, into the current period where the severely disabled are now the source of some attention, one is reminded of the words of the poet/philosopher Kahlil Gibran who said, "One may not reach the dawn save by the path at night."

"Times have been tough -- acknowledgement of the disabled, handicapped (specifically the deaf-blind) has often been met with tokenism -- and without true commitment; with well-meaning people wearing their wishbones where their backbones should be; with leaders often guiding the course of action by default -- that is through the negative side of the self-fulfilling prophecy in which, to think things impossible is to make it so. Motivation is a neutral concept; it can be either positive or negative."

Dawn has broken, 

abstinence has been replaced with awareness, and awareness now is replaced by action. Cited throughout this piece and I am sure part of much of the dialogue of this Recreation for the Deaf-Blind Conference are thoughts, plans and reports generated by the National Institute on Program Development and Training in Recreation for Deaf-Blind Children, Youth and Adults. This National Conference in March 1974 personifies both the awareness/action components of the State of the Art of leisure service to the Deaf-Blind. The March 1975 Bowman's Conference and this report is again extended action toward our common goal of leisure service for the deaf-blind.

Common Unity -- Another Cooperative Inter-Discipline Venture

I have a habit of clipping thoughts from professional journals, often only to find them for use the day after I needed the sage thought. Here, however, is a quote (Staley, 1965) which helped provide for me direction of my thoughts today. Taken from Dr. Edwin Staley who after this writing was credited with writing the popular NEA publication Leisure and the Quality of Life, it addresses itself to coordinated community recreation activity.

"National and state governmental agencies are demanding coordinated land use plans at the local level prior to making grants for acquisition or development. This is a laudable and reasonable request to protect the interests of all citizens regardless of their governmental jurisdiction. Many of us I am sure could recite frequent instances of competition, duplication and overlapping of programs, facilities and services in any one community by public and private agencies, resulting in an unnecessary inadequacy of inefficiency of services.

It may be enunciated as a fundamental principle that the effectiveness of the total community recreation effort is directly proportionate to the amount of coordinated planning and action by the agencies concerned. Communities can no longer afford the luxury of independent, unrelated program planning and administration. With expanding community needs and demands, cooperative planning and coordinated action in community recreation and related services are not just desirable, but are absolutely essential if all citizens are to better enjoy their leisure with the most efficient use of the total
community dollar -- both the tax dollar and the volunteer
dollar.

This strong statement for coordinated planning is a
decade old, yet very timely. Much has been done relative to
action in the communities to provide leisure social services.
The most recent highlight is the solidification of the Community
Education concept and corresponding federal funding (HR69-Title
IX, signed into law in August, 1974) to aid in establishing
community (neighborhood) councils to assess local needs
solutions. (NOTE: For more information I refer you to the
special Leisure Today publication entitled "Community Educa-
tion" April, 1974.)

Another action component toward serving the leisure needs
of handicapped youth will take place at this location,
probably in this very room in two weeks. It involves two of
the disciplines represented here at this conference: special
education and recreation and adds the third mentioned above --
community education. Under the title project COMMON-UNITY it
has as its purpose the same goals and objectives you have set
here. Because of this mandatory nature of coordinating
with other disciplines, I must confess I feel a sense of
warmth and confidence with the past, National Institute in
March; present, Bowman; and future Common-Unity articulation
of leisure services for the disabled handicapped. In brief
the project Common-Unity thrust is to bring the major aspects
of the three disciplines together as shown in the grid below.
The grid is simple and lends itself only to generalizations.
However the projected results will be the greater awareness
by the professionals of the other disciplines of the unique
contributions they have to give and receive from each other
toward affecting the leisure domain of the disabled.

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>BASIC CONTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education</td>
<td>Awareness and appreciation of differences; Prevalence; Etiologies; Terminology; Current assessment techniques; Behavioral modalities; Mainstreaming; Normalization.</td>
</tr>
<tr>
<td>Recreation</td>
<td>Leadership skills; Understanding of diverse activity options; Activity as a medium for growth, self-fulfillment; History; theory and benefits of play; Intervention techniques using activity; Applied recreation.</td>
</tr>
<tr>
<td>Community Education</td>
<td>Viewing community processes; Facilitators of Community Action; Needs assessment; Crisis intervention; rationale and development of community councils; Diverse social services and their inter-relationship.</td>
</tr>
</tbody>
</table>

Figure 1: COMMON-UNITY Interdisciplinary Expertise Expectations
Generally Accepted Recreation Concepts

Leisure: Leisure refers to free hours outside of survival needs. It may be earned, after the work of the day, or it may be unearned, because of the production of others — discretionary time. This free time carries no connotation of quality which is judged by standards of society.

Leisure is not synonymous with recreation — leisure refers to all the time left over after survival activities (eating, sleeping, wage work and general maintenance tasks, although all of them may be done in leisurely fashion); but left over time is not recreation time. Leisure is freedom from necessity of being occupied; is incompatible with necessity, obligation or pressure.

Real leisure means doing something solely because you want to do it, or doing nothing for the same reason. This is as opposed to enforced leisure such as unemployment, which is forced or pressured free time beyond the wishes of the individual.

Differentiating leisure and recreation:

"... the emphasis in leisure is on the time element, whereas recreation refers to the way leisure is spent..." (Neumeyer, p. 17)

"Unobligated hours available after caring for employment or the activities mandatory for self-maintenance." (Carlson, et al in Recreation in American Life)

"The state of having time at one’s own disposal, time which one can spend as one pleases, free or unoccupied time." (Oxford English Dictionary)

"For purposes of social-analysis the concept is usually narrowed and widened to mean simply freedom from activity centering around the making of a livelihood." (The Encyclopedia of Social Science)

Recreation

Recreation is the:

1. CREATiVE use of LEISURE TIME
2. ENGAGED in for its OWN SAKE
3. an activity which gives immediate SATISFACTION

I. CREATIVE use of LEISURE TIME

1. Creative — useful, wholesome, worthy, imaginative, stimulating, growing, educating, invigorating.
2. Leisure Time — freedom from necessity, compulsion, obligation, pressure.
3. Engaged in — connotes action (physical, mental)
4. Own Sake — the intrinsic end; supplies the basic difference between work and play.
5. Satisfaction — provides reinforcement, enjoyment, adjustment, release from tension.
Recreation is both organized and unorganized; planned and spontaneous; carried on singly or with others; voluntary, not pressured or compulsory; has the opportunity to satisfy many basic wishes which include: new experience, recognition, security, response, participation and aesthetics, beauty and harmony; it includes the elements of self-expression, achievement, challenge, motivation, self-realization, compensatory involvement, and socialization; it also is considered as both a means to an end and an end in itself.

Differentiating Recreation and Work:

**WORK**
- is compulsory
- Compensation is frequently in the form of money or status
- reward usually comes later
- consequences if unable to perform a task are serious
- individual must adapt himself to the requirements of his work life

**RECREATION**
- is voluntary
- compensation is derived from the satisfaction of the activity itself
- reward is immediate enjoyment
- consequences should not be serious
- individual may alter his choice of activities to suit his mental, physical, emotional capacities or urges of the moment.

Recreation is essentially an attitude. It is an attitude that exhilarates and refreshes. Much confusion has resulted from approaching recreation as an activity concept. Recreation is an attitude toward life or an area of daily living. Functionally, recreation is the natural expression of human needs and interests satisfaction during leisure hours. These expressions take a variety of forms, but they are motivated by the same basic needs, those primarily related to personality development.

**What is Needed?**
Leadership, Commitment, Change! Only through these can leisure services to severely limited individuals be affected. The key comes from stringing these together -- "leaders, committed to change" thereby placing great emphasis on the quality of the leaders we attract to carry out this important work and their related qualities. Leaders must possess courage backed by strength of conviction, a courage that must face and conquer obstacles of prejudice, misconceptions, disbelief, and outright antagonism. Initiative must also be taken now that action is deemed desirable. The National Institute on Program and Training in Recreation for Deaf-Blind Youth, Children and Adults in the spring of 1974 at the University of Iowa shows the initiative taken by the federal government (USOE/BEH) for funding such a project and commendable leadership in
the Department of Recreation Education at the University of Iowa for their part in the Deaf-Blind special project. (A complete proceedings of the institute is available from the University of Iowa, Department of Recreation Education. Request a copy of Program Development in Recreation Service for the Deaf-Blind.)

In addition to courage and initiative, leaders must have great faith -- faith in themselves, the cause of serving severely disabled individuals through an advocate role; great faith in the support services by others holding similar views; and most of all faith in the individuals who are so afflicted that benefits can and will be derived from the joint commitment between professional and consumer advocate alike.

The leadership possessing great faith with the courage and initiative to proceed will meet the challenge of a changing society in a most positive way. For change is inevitable. This is and has been acknowledged even before Alvin Toffler's *Future Shock* testimony of its ubiquitous and rapid nature. The highly quotable Adlai Stevenson once said it most clearly:

> There is a new America every morning when we wake up. It is upon us whether we like it or not. This new America is the sum total of many small changes. . . changes that add up to a transformation of our lives. Our task is to guide these changes for, though change is inevitable, changes for the better is a full-time job.

Our task then is to maintain this perspective; to seek positive change in service to the severely handicapped -- to "work and see" not "wait and see" to identify the handicapped population and represent as a leader and spokesman, their leisure needs. Humphrey (n.d.) has developed an Activity Involvement Triad to assist in serving the "participants" needs while at the same time emphasizing concepts such as the neutrality of activities (they are means to other ends), strengths and weaknesses of cognitive, affective and sensory-motor domain and concepts of integration (mainstreaming, normalization, etc.).

**Brief Survey of the Literature**

Few recreation research studies describe deaf children with additional handicapping conditions (i.e., deaf-blind). It is assumed that those children suffer greater developmental deficits. Recreational activities are generally seen by the various authors as enhancing social and emotional adjustment (Brill, 1934; Simon, 1948; Williams, 1951) In like fashion, much of the material available to the recreation worker that can be used with deaf-blind must be gleaned from general recreation and program material and adapted, or from material dealing with the multiple-handicapped and interpreted into recreation programs/activities.

It is observed that workers in services to the multi-handicapped become proficient in adapting ideas, materials and written material to deal not only with the deaf-blind in terms of overall needs; but also in providing the necessary program for individual skill development. This skill of interpretation...
and modification will continue to be an important part of competencies necessary for recreation specialists.

With few exceptions, research results indicate that most deaf children exhibit more limited social and emotional maturity than their hearing peers.

Many (deaf adults) have been exposed to educational, personal and social development in the sheltered environment of a residential school for the deaf or in the isolation of their own homes and communities. Characteristics manifested include extremes of dependency, inability to defer gratification, inability to be empathic with others, and fear of new and challenging situations. Many lack capacity to manage such daily living skills as personal grooming, handling money, use of public transportation and similar activities. (Kaufner, 1968)

Investigators have been studying aspects of social maturity more intensively since the early 1930's. Gesell (1956); Crouter (1941); Gregory (1938); Springer (1938); and Lyon (1934) obtained results which support the opinion that deaf children are retarded in social competence and emotional maturity. In some cases the results have been interpreted as the effects of "institutionalization." Later studies of day and residential students by Schlesinger and Meadow (1972) support this interpretation in part. However, the results of Craig's (1965) study on self concept are that both groups (residential and day) of deaf children score significantly below their hearing peers. It appears that situations, such as residential living and certain family constellations, that foster dependency, increase isolation and reduce exposure to novel experiences may strongly influence social and emotional development. Kaufner (1968) describes his adult rehabilitation clients as follows:

The clients need a series of monitored experiences graduated in exposure and complexity, to help them integrate the many social and vocationally related skills necessary for vocational adjustment. Such monitoring shall take place first within the facility and, as soon as feasible, within the reality context of the community.

Myklebust (1960) describes a number of studies he conducted in which the results are similar to the above investigators. In one, social maturity and age were negatively correlated. It would appear that, compared to the hearing child, it is increasingly more difficult for the deaf child to show equivalent growth in social maturity. He indicates that, unlike the hearing child, the deaf child needs consistent training in social maturity over a long period of time.

Some investigations as those conducted by Neyhus (1964); Gregory (1938), and Kaufner (1968) among others, indicate that the ability to form adequate social and interpersonal relationships is limited in the deaf people they studied. Difficulties in personality development are also described. Schroeder and Schiff (1972) and Craig (1965) studied attitudes and self concepts of deaf people and found them inaccurate and negative.
In addition to the issue of a general deficit in social development exhibited by deaf people, some authors have expressed concern about the effect of this deficit on integration into the general community. This often cited problem seems no closer to a solution after decades of rhetoric. As Bruce (1980) indicates in his summary of a follow-up study on graduates from the Clarke School (for the blind), the alumni felt that they had not been socially prepared. Their comments indicated that this social inadequacy hindered their ability to function within the community. How to live is certainly at least equally as important as how to make a living. The Clarke School graduates indicate that participation in the activities of the hearing community do not come easily and that failure to integrate can be contributed to lack of training rather than lack of ability on the part of deaf people. A report by Bitter (1973) deals with responses of educational personnel on questions related to educational integration. Items related to selection, placement and withdrawal of deaf children for these programs indicate the importance given to social functioning in making these decisions. There are a great number of published statements which discuss the need for adequate social functioning in the local community and the benefits, in terms of social development, derived from such recreational participation.

As yet there are no studies of deaf children that directly relate to the effectiveness of participation in recreational programs on social development. The Therapeutic Recreation Information Center (TRIC) system at the University of Oregon has received a number of requests for queries for therapeutic recreation/blindness, therapeutic recreation/deafness and therapeutic recreation/deaf-blind. This attests to new and expanding interest in this area. The general results of the searches are, however, disappointing. Only one citation is listed for therapeutic recreation/deaf-blind which interestingly is unique enough to be cited and annotated separately below.


The author, herself a blind-deaf person, attempts to answer such questions as how she perceives music, how she writes poetry, how she imagines sculpture, etc., relating her answers to her previous experiences.

Queries for therapeutic recreation/deafness produced 26 citations while the therapeutic recreation/blindness was most productive with 93 listings. Upon review of the abstracts there appear to be only a few significant studies on children in general or children with other handicaps that demonstrate improved social functioning as a result of a recreational experience. One such study is reported by Lefebvre (1972) on a small group of campers with a wide range of handicaps which indicated that there were significant increases in measures of adaptive behavior and significant decreases in levels of personality and behavior disorders. Her review of the literature indicates that several studies suggest that
activities are effective in enhancing social and emotional development. Freeberg's (1969) review of research draws the same conclusion. While these studies have been conducted with retarded children, they demonstrated that such programs can produce change in critical areas of adjustment.

It is clear from the literature that the major focus for study of children with other handicaps has been camp settings rather than year-round programs. Within this restricted area a strong need is expressed to conduct basic and applied research on needs, benefits, integration, and programs. There is a strong interest expressed (Amer. Assoc. for Health, 1969; Bitter, 1973) in studying sub-populations within major handicapping conditions with instruments that are more sensitive to changes in specific areas of behavior.

Leisure: A Time; An Attitude/Ethic

We need to develop an ethic of leisure to guide the use of our free time; to dissipate our national "guilt feelings" and to promote the idea that the effective use of leisure is a virtue in itself. Thus we, as professional advocates for the leisure rights of a minority group of handicapped youth, are facing Change. We are pilots of our own craft and leisure is playing a significant part of this changed society. How are we adapting? The task is not (repeat not!) easy since in essence there is a whole new culture evolving -- a leisure centered society or at worst a leisure/work society with each serving as a co-equal.

The great challenge to us who are concerned with enabling recreation to contribute to life's fulfillment is the need to provide the exposure and to initiate the skills which will make it possible for each in our society to create his own Utopia -- to make the most of each fleeting moment. Here in these United States the pursuit of happiness can be more than a right written into our Declaration of Independence, but a goal whose attainment is within our grasp. The able bodied thoroughly understand not only the "Pursuit of Happiness" but the Happiness of Pursuit -- need we curb this same opportunity for the deaf or blind youngster? No! We must expand, encourage, enlighten the deaf-blind to gain the same God-given joy of leisure fulfillment.

To achieve this, one thing is fundamental -- and that is the ability to provide for Every child in America the opportunity to experience a wide variety of recreation interests and skills -- upon which can be built a lifetime in which the enjoyment of a diversity of interests contribute to the ability of converting an existence into a meaningful life. The quality derived in large part through leisure experiences.
I took a piece of plastic clay and idly fashioned it one day
and as my fingers pressed it still, it bent and yielded to
my will.
I came again when days were past, the bit of clay was hard
at last.
My early impress still it bore and I could change its form no
more.
You take a piece of living clay and gently form it day by day,
Molding with your power a young boy's soft and yielding heart.
You come again when years are gone, it is a man you look upon.
Your early impress, still he bore and you can change him
never more.

The following serves as a preface to a forthcoming book
Educating the Handicapped Child for Leisure Fulfillment by
Nesbitt, Neal and Hillman and serves as a postscript to this
positive statement of the potential of leisure service to
the deaf-blind. I ask you to think carefully as you read the
following:

Those of us who have dedicated our professional lives
to the achievement of dignity, the acquisition of the
highest functional skills possible, and the attainment of
personal fulfillment for ALL citizens, for ALL people in
direct regard to those quirks of fate that serve to
differentiate the 'able bodied' from the 'non-able Bodied'
have before us the final challenge in the progressive
growth of the concept of rehabilitation in this century.
That final challenge is the achievement of personal
dignity and fulfillment through recreational cultural,
leisure participation. Enormous advances have been made
in first physical, medical and then in vocational rehabil-
itation, social rehabilitation, and recently in special
education. Now we are presented with the opportunity to
push the frontier of rehabilitation knowledge and service
even further to include recreation, culture and leisure
fulfillment. Hopefully, we professionals view this as
a responsibility, an opportunity and a challenge.

Ed Thacker, previous past president of the American
Recreation Society gave us the insight and charge when he
related:

Today we stand with a proud, (but
limited) past at our backs and a
bright future before us.
Hats off to the past!
Coats off to the future!
BIBLIOGRAPHY


Nesbitt, J. and Howard, G. (Eds) *Program Development in Recreation Service for the Deaf-Blind.* Iowa City, Iowa: University of Iowa, Department of Recreation Education, 1975, 443.


**Training Needs and Strategies in Camping for the Handicapped.**


My first reaction to the notice of a workshop to be held in Iowa City last April 29 - May 1, on Recreation for the Deaf-Blind, was one of anger. I was angered at the idea of spending a considerable amount of money on program development in recreation for persons who are deaf-blind. How could children whose major recreation is filtering light between fingers and eye or grinding teeth or hyperventilating ever come to know about recreation as a restorer, a renewer, a refresher? (according to The American Heritage Dictionary) What could Jenny, Bobby, Susan, or Brian ever know of recreation? It has taken years to teach Susan to roll over and to hold her head up, Brian has been years learning to walk, Jenny is still working hard to learn to sit up.

Then I began to see some flaws in my logic. Susan has been learning, as have Jenny, Bobby and Brian. In addition, Susan is a happy child and loves to be with other children. She tries hard to turn herself over and to hold her head up. Brian is a loving child who will work hard to achieve. It is true there may be a few who are so damaged they will not come to the point of desiring to struggle to learn—a few who will always resent the interjection of another individual’s attempt to get them to perform a difficult (new) task. For until the child who is deaf and blind and/or physically involved reaches the point where he joins the struggle willingly, he cannot learn. Committed teachers and cooperative parents, however, will continue to work hard and in most cases there will be a breakthrough and Bobby or Susan will begin to look forward to that intervention by another human. Coming out of that comfortable cocoon where nothing is expected of one to a world of struggle is frightening and many of these children fight hard to remain dependent. We all resist change and these children resist with all their might.

For those like Susan and Brian who begin to enjoy the struggle, there is the reward of working to please some other human. It may take a long time to get that cocoon loosened enough to slip the child out of it and he will need, at times, to climb back into its warmth and security. When he comes to the point where he can take his first tentative steps by himself—when he begins to reach for articles he knows and to explore something he does not know, teachers and parents know the second great breakthrough has come, and their joy is great.

In addition to the Susans, the Brians, etc, I began to recall some other children. There was Bill, who though quite independent and self sufficient, never smiled, which seemed a pretty sad characteristic in a three year old. But he had a lot of curiosity about things. One summer when he was four, an enterprising teacher brought an old fox fur to school and gave it to Bill. You should have seen him! He stroked it, shook it, and put it across pieces of furniture, put it around his neck, wadded it up, laid it out straight, and finally
folded it and put it in a box. You have never seen any greater
delight in a four year old boy--nor more creative play. And
he laughed! We all laughed!

Another day this same teacher brought a boy Bill's own
age to school and Bill nearly went wild with joy. One of their
games was to turn an old toy car over and spin the wheels and
some of the other children joined them. Bill obviously needed
to be with children who had some of the same attributes he
had. Bill often brought toys to Brian and some of the other
children and tried to engage them in play, but they were not
yet able to play with someone else.

Next I remembered Debbie, one of the few congenitally
totally blind and profoundly deaf children we knew before the
rubella epidemic, and how much she enjoyed the trampoline,
swimming, and other activities at the Washington State School
for the Blind. She developed into a healthy, attractive young
woman, mainly, I am certain, because of the excellent physical
education program styled to her needs.

Finally, I remembered that, like any area of human en-
deavor, each of us has his own personal way of recreating and
finding joy. A walk on the beach, a symphony concert, a
good mystery, a favorite book, a talk, or the wonders of nature
are my preferences for relaxation and leisure and though
possibly shared by others, they are my own pleasures. Like-
wise, activities that provide enjoyment for the deaf-blind,
although minimal by our standards, are valued as important by
the child. Again, each of us has his own unique way of
recreating and enjoying life.

Thus with the help of children and adults I knew, I
arrived at a starting place. From the teacher's view point,
when and where and how does recreation occur? Let's return now
to the group of very young and severely involved children we
have known since the mid 1960's. Recreation for one child be-
gan when as an infant she could tolerate and finally enjoy
being touched and then stroked and petted. As you are well
aware, some of the infants born as a result of rubella could
not tolerate being touched. Parents and teachers had to learn
how to make tentative approaches, such as talking as they came
near and touching the bed before picking the child up from the
bed or crib. The parent often met with a resistive, screaming
baby before she or he learned how to lead up to physical
contact. When the infant began to respond favorably to being
picked up, learning could begin. It was also recreation
because the baby and the adult began to enjoy each other.

For another child, recreation might be learning to enjoy
being rolled on the cage ball. Initially, the purpose of
rolling the child over the top of the ball may be to help him
learn to tolerate being on his back, and to strengthen the
back. After the adult performs this task many times with the
baby, the child may begin to enjoy it. Several purposes will
then be served: a child more physically able and fit, and a
child that plays and receives enjoyment from this activity.
Still another child may take weeks and months before he will
hold an object in his hand. When he begins to hold and then
to examine that object -- tactually, orally, and visually--
instead of releasing it immediately, one recognizes that the
child is interested and enjoying the activity. Isn't this
recreation?
I might interject here that oral examination by a child with vision and hearing deficits is a very important technique by which he learns about an object. To teachers it sometimes appears as a bizarre behavior to be eliminated as soon as possible. Stop and think: how does this child learn about objects? Mouthing is one way. Smelling is another way. The child who is congenitally blind will pick up an object and smell it. To the untutored adult this seems weird, but for the deaf-blind child -- a natural way to learn.

It is also good to know that at last we recognize the value of filtering to the child who is deaf-blind and use it now as a reward for task accomplishment. Filtering light through the fingers seems to be the only activity for some of these children. Some seem obsessed by filtering. The tendency at first was to eliminate that behavior completely and as quickly as possible. "We" deemed it unproductive, but is it? We watched a 4 year old last summer arrange transparent and translucent toys in an endless variety at the window so they would catch the light. She arranged and rearranged to get the most interesting light effects as she looked through them. (I love to look through a kaleidoscope, don't you?) Filtering is certainly a pleasurable pastime for some children and, therefore, recreation.

Do I seem to be encouraging bizarre behavior? You bet! Behavior is designated as bizarre when we don't understand its purpose. The result is that we often make a negative value judgment about it. We must recognize that such behavior is of use to the child and build from there -- using the behavior as a bridge to more learning (not necessarily better) but perhaps more constructive.

As teachers we want the child to achieve as much as he can, as do parents. Often, we will have more patience than the parent and must help them understand how the child must develop at his own pace. More productive play (learning) comes as the child begins to be able to accept more than one person, more than one object, a variety of textures, etc. Some children must work to control their bodies so they can function more effectively. All the time, ways to communicate are being tried out by child and adult. How much these children have taught us about communication! What a marvelous variety of ways there are to communicate! How tragic for those children who learned only one way -- although perhaps only a few held strictly to that way. The tragedy included the adult who did not recognize what possibilities there were for those children -- that there was potential that must have been prevented from emerging.

Just as we are admitting that not everyone can learn to read symbols, that there are other ways of reading and obtaining information, so we are burying the old conflict between oral and manual communication. The child who has multiple sensory impairment has taught us that he has a right to whatever mode or modes of communication work for him. As our biases break down, breakthroughs occur for the children. Just as in all good teaching/learning situations, the cues often come from the children. We may then improve upon those ways to enhance the child's learning.

In closing, I'm reminded of Dr. Richard Kinney's statement at a meeting in October 1974, at Louisville (Ky.):
"What brings you joy, brings me joy." The commitment of teachers who work with children who have multi-impairments is incredible. They are extremely innovative and tireless in trying to find ways to open the door to learning. They grieve over the child for whom there seems to be no way, but they never stop trying to find a way. When the key is found and progress for the child begins to occur, the teacher is over-joyed! The child's joy in learning is more than equalled by the teacher's joy that he is learning. This is all the teacher needs. This is the refresher—the renewer—the motivator that the teacher needs to continue, and soon the next step is planned and put into operation. To unlock the door to learning is difficult because each child is completely individualistic and totally unique. Thus, to watch the emergence of a person is a great, exhilarating experience. This is why teaching is so exciting.

One day last summer I happened to see Ben (age 2 1/2) when he found the tether ball. He hit it and laughed as the ball swung around the pole and came back to him. He hit it many times, let it hit his cheek, rolled it up and down his arm, punched it, and tried to taste it. Ben had a ball! He was recreating, and so was I. If I seem to be equating recreation with achievement (minimal though it may be at first), achievement with joy, and joy with recreation -- well I am.
Never check the actions of the child; follow him and watch to prevent any serious accidents, but do not even remove obstacles which he would learn to avoid by tumbling over them a few times. Teach him to jump rope, to swing weights, to raise his body by his arms, and to mingle as far as possible in the rough sports of the older boys. Do not be apprehensive of his safety. If you should see him climbing in the branches of a tree, be assured he is less likely to fall than if he had perfect vision. Do not too much regard bumps on the forehead, rough scratched, or bloody noses, even these may have their good influences. At worst, they affect only the bark and not the system like the rust of inaction.

Dr. Samuel Gridley Howe, patriarch in the field of education of the visually handicapped

One fine day as the centipede went on his merry way, an ant queried, "Frey thee Mr. Centipede, but how do you coordinate all of your legs?" For the first time in his life the centipede wondered just how did he walk and run? Thereafter he was unable to coordinate movements trying to figure out how he did move. Soon afterwards, the centipede had a nervous breakdown worrying about his locomotion!

To what extent have we played the role of the ant in dealing with impaired, disabled, and handicapped persons? In our desire to help and serve individuals with various handicapping conditions, what kinds of problems have we created by emphasizing differences, deviations, and deficiencies among individuals and in making categorical generalizations based on medical, psychological, and emotional conditions and labels? To what degree have we been sensitive to needs, interests, wishes, and wants of the very groups we are committed and dedicated to serve? Have we as Pogo so aptly and astutely said: "We have located the enemy and he is us!"

Over the past ten years staffs of the AAHPER Project on Recreation and Fitness for the Mentally Retarded and Unit on Programs for the Handicapped, and the Information and Research Utilization Center in Physical Education and Recreation for the Handicapped (IRUC) have been privileged to work with representatives of many different organizations and agencies serving persons with various handicapping conditions. As a project, we at AAHPER first dealt with physical education, recreation, and related areas for mentally retarded persons.
Now, as a Unit and through additional special projects we have expanded activities and involvement to include virtually every physical, mental, emotional, and social condition, regardless of type, severity, or their combinations. As staff members have talked with people from other groups and worked together to attain mutual goals and attack common problems, it has become increasingly evident that most all groups serving specific handicapping conditions have the same concerns and are confronted with identical problems! On many occasions, it has been scary and humorous because of ways our staff members have accurately predicted priorities of groups before meeting with them!

Books, articles, and authorities consistently emphasize that individuals, regardless of handicapping conditions, are more like their peers and contemporaries than they are different. Therefore, we can expect impaired, disabled, and handicapped persons, including deaf blind individuals and others with multiple conditions, to have needs, interests, and wishes more similar to than different from those of their peers. Despite current trends emphasizing normalization, education; and treatment for all, mainstreaming, noncategorical approaches, zero reject principles, and least restrictive alternatives, emphasis is still on conditions, categories, and labels; focus continues to be negative and on disability, deficiency, and deviation. Few programs involve persons being served—consumers themselves—with opportunities to provide input in decision and policy making processes that so directly and intimately affect their happiness, lives and their very destinies. In the past they have asked to be heard and involved; now they are demanding to be an active and equal partner in planning and implementing their programs and activities. Their approaches, which have previously been characterized as positive militancy, will undoubtedly become positively militant unless we hear and act. This need for involvement is no different for physical education, recreation, and related areas for deaf-blind populations.

Another factor complicating effective and efficient delivery of services is the tendency to confuse cause and effect relationships. The great American game of hardened categories continues. Regardless of inability, weakness, or problem, each is simplistically attributed to the specific handicapping condition. Little consideration and thought are given to background, experience, interest, motivation, attitudes, and a multitude of other highly individual and personal factors. Individuals are categorically labeled and looked upon as problems, not individuals with the same basic needs, drives, and desires as others their age that have additional complications involving other obstacles to overcome. How much of problems of deaf-blind persons in physical/motor/movement activities, recreation, and related areas has been our inability to break the communication barrier? Once through this barrier, just what are the differences among approaches, activities, and other program considerations for this and other populations?

Some brave and pioneering souls have had the courage of their convictions and given them more than lip service. Severely, profoundly, and multiply involved persons have been afforded opportunities for active participation in physical
and recreation activities. A prime example is staff at the Recreation Center for the Handicapped in San Francisco. For over 23 years, severely and profoundly retarded and multiply involved infants, children, youth, and adults of all ages, including deaf-blind persons, have participated actively in recreational activities of all types at the Center as well as throughout San Francisco, California, and adjoining states. No admission criteria have ever been imposed--participants do not have to be toilet trained, possess verbal communication, or even be partially ambulatory. Yet an "as if" philosophy, which sees and deals with every individual as if each did not possess any abnormal condition or combination of conditions, has been effective for almost a quarter century. Adaptations and modifications are made in methods and approaches, but not in basic program philosophy and objectives, activities, attitudes, not in recognizing every individual as a person of worth and dignity who can and does grow, progress, and develop. Emphasis is positive--not negative--and upon abilities--not disabilities; potential--not deficiency. Every individual is helped to function as independently as possible in a quality life that provides happiness through challenge and accomplishment. As Helen Keller said, "It is good to give the handicapped life, but better to give them a life worth living."

This philosophy, program, and approach are poignant contrast to a sad, sorrowful poster of the President's Committee on Mental Retardation stating: "My greatest handicap is your attitude toward me!"

Your positive or negative expectations are communicated both directly and subtly to affect ways in which individuals respond to us and various situations in which they are involved:

If you treat a man as he is he will remain as he is; if you treat a man as he should and could be, he may become what he should and could be--never underestimate another's potential for no man has a right to set limitations and restrictions on another man's potential. Each of us has an obligation to assist others to develop their potential.

If an individual is educated properly, and receives faith he deserves, it is no longer acceptable for anyone in placing a prop under his body to show a ceiling over his potential achievement.

When an individual is approached with doubts, reservations, restrictions, and limitations, often he develops an "I can't," "I won't," "What the hell," attitude. On the other hand, when expectations are positive, actions and results are positive. Research studies have reported amazing results when the experimental treatment consisted only of changing expectations of teachers and others in leadership roles.

Deaf-blind tumblers, trampoline performers, swimmers, wrestlers and skiers, along with others who have participated successfully in equally impossible activities, have had someone working with them who wouldn't take no for an answer. These modern da, Ann Sullivans provide emotional and psycho-
logical support as well as appropriately sequenced skill progressions. This emphasizes and reemphasizes the crucial importance of interpersonal relationships between participant and leader, and suggests two traps to avoid:

- Overestimating what an individual can do and providing activities that are entirely too difficult and complicated!
- Underestimating what an individual can do and insulting him with activities that are totally inappropriate, easy, and babyish!

Another complicating factor that must be faced is a tendency to make easy, simple and obvious things complex and overly technical. So often the forest can't be seen for the trees. Answers to problems and resolution of situations are many times as evident and obvious as the nose on Jimmy Durante's face. Instead of using research evidence for illuminating, we tend to use it as a drunk uses a lamp post--for support! Facts have value but ideas are priceless--for yesterday's truth may be today's deception and yesterday's false inference, tomorrow's revelation. Too often the KISS-MIP approach--keep it simple system--make it fun--is overlooked and even actively ignored. Yet, herein lies what kids of all ages want and need: this approach provides directions, if not answers, we all actively continue to seek. Somewhere too many people have forgotten that virtually all activities and learning are best accomplished in environments of fun and laughter, pride and pleasure.

What is important to a child? To an adolescent? Adults? You and me? As we ponder, each must admit and recognize that what's important to one is not necessarily looked upon the same way by others: that which causes problems and frustrations for one does not do so for another. Different perceptions of the same situation must be accepted, understood, and appreciated. For example, how many hyperactive children are created by hypoactive adults: Short attention spans by boredom, lack of interest, insufficient challenge and little motivation? However, play, recreation, active use of leisure, free and uncommitted time are important in the lives of most all people. Generally, these activities are even more important to persons with various handicapping conditions as they represent passage and entry into a life worth living. Creative use of the full gamut of recreational activities--active and passive, musical, dramatics, arts and crafts, aquatics, rhythmic and dance, physical fitness, games and sports, outdoor education and recreation, winter excursions, quiet games, special events social, organized groups, clubs, hobbies and collections, and community service--possesses all ingredients of education as opportunities promote:

- Self-realization
- Human relationships
- Civic responsibility
- Economic efficiency
A positive example of education through recreation occurred in Amarillo, Texas, where a special education class cleaned out an area behind a local junior high school. Prior to this effort every conceivable type of corruption and imaginable anti-social behavior took place in this area. The special education class worked three years on the project.

They constructed two dams to control a stream, put in a bicycle path that was also used by the high school cross country team, developed a small park complete with tables, seats and totem poles, provided areas for archery and air rifle activities, completed cement and asphalt play areas and paths, built storage bins, sheds and houses, and put in a nine hole pitch-and-putt golf course around the periphery of the area. This area is used constantly by students for outdoor education/recreation programs during school as well as throughout the year by families, agencies, and groups from throughout the city and surrounding counties.

An element of recreation's contribution to total education and personal development is present and exemplified by this project.

Many recreational activities can provide opportunities for individuals to gain basic proficiency in:

- **Self care and self help** – developing skills in taking care of oneself, including such personal needs as dressing, toileting, bathing, brushing teeth, maintaining good posture, and caring for other personal needs.

- **Social skills and adjustment** – developing an awareness of the environment in which the individual lives by making one's contribution through sharing, taking turns, using leisure time, and getting along in the neighborhood, and by interacting appropriately and meaningfully with other persons, including peers, adults, and leaders.

- **Physical proficiency and motor skills** – participating in physical activities and developing motor skills, perceptual-motor attributes, and control to enable the individual to use small and large muscles well to meet daily and emergency needs.

- **Communication, language development, and academic skills** – learning all aspects of communication and language including comprehension, speaking, sign recognition, listening, gesturing, and writing, along with such number concepts as counting, telling time, and money values.

- **Vocational skills** – learning to set a table, serve, use kitchen tools and equipment, clean and clean-up, sort, fold, stack, package, use simple tools, and other readiness, prevocational and vocational activities related to the individual's interests and abilities.

- **Leisure time skills** – enjoying singing, dancing, rhythms, playing simple instruments, drawing, doing
handicrafts, and playing games, as well as participating in arts and crafts, swimming and other aquatic activities, hobbies, service projects, musical activities, camping, drama and dramatics, in both indoor and outdoor settings.

Obviously active participation in recreational activities can contribute to every facet of an individual's growth and development. In past generations and to a large extent even today, emphasis remains on the 3 R's. No matter how disguised—academic achievement, intellectual progress, cognitive development, mental maturity—is still reading, writing, and arithmetic! Factors and forces today make it possible to suggest strongly that recreation, long ignored, neglected, maligned, and abused, is not only the most important R but increasingly so. This is not really a new phenomenon since philosophers, doctors, educators, and people from all walks of life have been telling us this through the ages.

For example:

- Plato said, "Lack of activity destroys the good condition of every human being while movement and physical exercise save it and preserve it."
- Charles Sherrington stated, "As we look along the scale of life, muscle is there before nerve and nerve is there before mind."
- John Dewey put it, "The proper development of the mind directly depends upon the proper use of the muscles and senses."
- John Locke summed it up, "A sound mind in a sound body is a short but full description of a happy state in this world."

Play, wholesome use of leisure time, and realizing the full impact of recreational activities are crucial to a quality life. Despite play truly being the important work of childhood, what really has happened to childhood? These observations are even truer when dealing with special populations.

However, in our desire and determination to reap greatest impact and full potential from recreational activities in the total physical, mental, emotional, and social growth of special populations, we often fail to recognize basic and fundamental reasons why certain individuals have problems or even fail in specific activities. Regardless of similarities in external and observable behavioral characteristics and traits of persons having difficulty with various activities, skills, or patterns, we dare not generalize cause and effect relationships based on labels or categorical generalizations. For most conditions, more variability can be found within that particular category, than between it as a group, the so-called normal, and those with quite different conditions!

In many cases, lack of physical development, motor proficiency, physical fitness, and/or related physical/motor attributes can and do influence degree to which success is
attained in many recreational activities. Consequently, it is fair to say that movement and physical activity are the foundation for the most important R.

As vital and valuable as physical development and motor proficiency are for all children, they are even more important for deaf-blind youngsters. While specific needs and means of expression vary from age to age and developmental level to level, certain fundamental considerations are consistent throughout all ages, stages, and levels. When sensory inputs are reduced or eliminated, increased opportunities must be provided to cultivate and develop more fully senses that remain intact. With deaf-blind persons, use and importance of tactile-kinesthetic programming and approaches are crucial. This adaptation is not automatic but must be carefully nurtured through intelligent use of active participation in activities that are sequentially progressive. This process can be cultivated through such techniques as manual manipulation and reaction which are based on the principle of kinesthetic feedback. Charley Boswell, a totally blind, golf champion who has had a hole-in-one and a best 18 of 81, says emphatically that hitting a golf ball gives him inner tingles and satisfactions that kicking a football, hitting a baseball, or striking a punching bag couldn't equal. Proprioceptive feedback that creates these feelings is operative in all of us. When each of us hits a golf ball, kicks a football, hits a baseball, or strikes a punching bag, our real satisfactions are also internal and come from ways the activity makes us feel—seeing the end result merely provides visual feedback and reinforces the inner feelings. Arthur Steinhaus aptly put it when he said that we see more with our muscles than with our eyes.

At an even more basic level is a teaching technique, or methodology in which an individual is manually or physically guided through a movement or pattern. In this approach the feel of the activity is obtained through this same proprioceptive feedback. Various specialties give their own unique names to this process—Doman Delacato calls it patterning, Kephart—controlling the output, physical therapists—assistive therapy, corrective therapists—resistive therapy, and physical educators—kinesthesia! Often in introducing skills, movements, and patterns to deaf-blind youngsters, an effective procedure is to have the student feel movements as you go through the motions. Still another approach is to get the feel of motions by monitoring a doll, pipe-cleaner figure, or manikin as it is manipulated through desired movements, tasks, activities, or patterns. These techniques utilize a tactile-kinesthetic modality based on proprioceptive feedback.

Motor responses provide each of us with initial input and understanding of ourselves and our environments. Planning and structuring these experiences from the earliest time are crucial to future progress of deaf-blind youngsters. Infant stimulation programs offer much promise for later and continued development of deaf-blind children. Research evidence data from empirical reports, and information from subjective observations regarding what, how, and why of physical/motor activities in the development of children need to be reviewed and applied appropriately to these youngsters. Let's not fall into the trap of making early experiences for these children
over-academic in nature. In fact, some studies and specialists in early childhood education suggest that formal academic training needs to be delayed, not introduced earlier to most children. Early educational experiences need to provide opportunities that emphasize exploration, problem solving, and education as a process that promotes a positive attitude toward and love for the fun in learning. Children with sensory and motor deficits need these additional opportunities to develop skills and abilities that will put them in good stead in later formal school and community situations, especially those in the mainstream of society. In addition to direct contributions these physical and recreational activities make to the growth and development of individual children, they make it more likely that each can adjust in normal programs and activities. Ability to play with one's peers and classmates is considered to be the best single predictor to determine when and if an individual can succeed in regular situations in the mainstream. Basically, stages of physical and motor development of deaf-blind children differ little if any from their sighted and hearing classmates. Play progresses through the same stages as for other youngsters—individual, parallel, and progressively more complex group, cooperative, or team activities. As adults, emphasis returns to activities of a parallel and individual nature. Typical of types of physical and motor emphasis needed by all children including deaf-blind youngsters are:

**Gross motor activities** including involuntary, reflexive, protective, and voluntary activities, movements, and patterns involving large muscles and muscle groups.

**Fine motor activities** including activities, movements, and patterns characterized by use of small muscles involving dexterity, manipulation, and control.

**Perceptual motor activities** in which sensory input is processed in terms of previous experiences to influence motor output as a basis by which the individual learns about himself and his environment; actions of this type can be vigorous or nonvigorous and overlap several of the other areas discussed.

**Basic movement and locomotor skills** including postural orientation (i.e., balance, standing, stretching, bending, twisting, falling, hanging, climbing, lifting), locomotor/mobility activities (i.e., crawling, sliding, galloping, skipping, stopping, dodging, pivoting, rolling), and other basic movements (i.e., rolling an object, tossing, throwing, bouncing, dribbling, catching, kicking, striking, pushing and pulling).

**Formal and informal physical fitness activities** designed to develop such traits as strength, power, agility, flexibility, muscular and cardiovascular endurance, balance, speed, and general coordination so that each individual is able to meet everyday situations and emergency situations adequately.
Low organized activities in which basic and fundamental patterns and movements are applied to increasingly complex situations to develop and refine such skills as throwing, catching, kicking, striking, running, pushing and rolling.

Lead-up activities in which patterns, movements, and skills are used for the expressed purpose of preparing an individual for participation in specific sports, games and higher organized activities such as swimming, tumbling, gymnastics, apparatus, wrestling and ball games.

Specific sports skills in which individuals participate actively in various sports, games and higher organized activities according to personal interests and abilities.

Recreational and leisure activities including lifetime sports skills in which opportunities are provided for active participation in sports, dance, active games, swimming, hiking, camping, winter activities (i.e., sledding, skating, skiing, snow games, ice fishing, tobogganing, snowmobiling, sleigh rides, snowshoeing), arts and crafts, musical activities, drama and dramatics, excursions and field trips, service projects and hobbies.

When differences are noted in interests and performances of deaf-blind and other persons, probing questions need to be asked about influences and effects of experience in activities, motivation, understanding of tasks, participant-lead relationships, and many other related factors.

Without any intent to minimize the importance of physical and physiological contributions of physical-motor involvement for deaf-blind persons, ways in which these activities contribute to emotional, psychological, and affective development could be most valuable of all. Along with inner feelings and satisfactions previously discussed, every success influences ways in which an individual looks upon himself. Self-confidence, self-image, and self-concept become more positive; pride in seeing a task through from beginning to end increases; socialization and emotional stability improve; cooperation and desire to do a good job increases. In short, an individual makes friends with himself through his body as he becomes captain of his own ship. Put another way, each has opportunities to experiment, spread his wings, and build his own rocket to the moon.

We can draw from the field of athletics, and restate what physical education, recreation, special education--yes, education itself--are all about. Basically, we want to help youngsters of all ages--

- Establish goals that are relevant, important and meaningful to each participant.
- Develop ability to follow through to attain goals that have been set.
Learn to deal with the reality of life that everyone must face and cope with daily. Despite setting goals and following through, no one is going to always reach established goals. A real and important difference exists between losing and failing. As Vince Lombardi said, "Winning isn't everything; the will to win is everything."

Recognize that even though each of us is an individual, everyone must daily sublimate what he wants to do for the good of the group. Rules, regulations, laws and mandates affect us all.

Douglas MacArthur put it this way, "Upon the fields of friendly strife are sown seeds that in other days and on other fields will bear fruits of victory."

The Credo of Abilities Incorporated (Albertson, New York) eloquently and pleadingly presents inner feelings, true desires, and personal perceptions of impaired, disabled, and handicapped persons. In helping each person gain this type of personal stature, dignity, and independence, we must heed these words:

I do not choose to be a common man. It is my right to be uncommon—if I can. I seek opportunity—not security. I do not wish to be a kept citizen, humbled and dulled by having the state look after me. I want to take the calculated risk; to dream and to build, to fail and to succeed. I refuse to barter incentive for a dole. I prefer the challenge of life to the guaranteed existence; the thrill of fulfillment to the stale calm of Utopia. I will not trade freedom for beneficence nor dignity for a handout. I will never cower before any master nor bend to any threat. It is my heritage to stand erect, proud and unafraid; to think and act for myself, enjoy the benefit of my creations and to face the world boldly and say, this I have done.
COMMUNITY SUPPORT: THE FIRST STEP IN ORGANIZING FOR COMMUNITY-BASED RECREATION FOR SPECIAL POPULATIONS

Ms. Carol Stensrud, Project Assistant, National Institute on Program Development and Training in Recreation for Deaf-Blind Youth, Children and Adults, University of Iowa, Iowa City, Iowa

DEFINITIONS

Special populations - those children and adults affected by social, emotional, economic, physical or mental disabilities. They may be living in institutions, on-going care centers, or residential settings in the community.

Community-based special population recreation programs - the utilization of community facilities, resources, and services for the programming of activities of integrated, segregated or intermediate nature.

JUSTIFICATIONS

It is becoming increasingly clear that the provision of wholesome opportunities for the satisfaction of leisure needs of special populations is an essential ingredient to good individual and community health. Special populations do exist within our community and are entitled to leisure opportunities that can give a feeling of worth and a measure of fulfillment to their lives. (Stein and Sessoms, 1973: 10-11)

If the public recreation program is to provide adequate recreation programs and resources for the total population, we must realize that there are significant numbers in our communities who will require special programs, and it is the community's responsibility to provide special programs for these special groups (Park, 1970:26)

It is the policy of this state to encourage and enable the blind and partially sighted and the physically disabled to participate fully in the social and economic life of the state. . . . (Chapter 601 D.1 Iowa Code)

Article 27 (1): Everyone has the right to freely participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits. (Universal Declaration of Human Rights)

...unalienable rights; that among these are life, liberty and the pursuit of happiness. . . . (Declaration of Independence)
Article IV: The mentally retarded person has a right to live with his own family or with foster-parents; to participate in all aspects of community life, and to be provided with appropriate leisure time activities. (Declaration of General and Special Rights of the Mentally Retarded)

Article IX: For every child a community which recognizes and plans for his needs, . . . provides him with safe and wholesome places for play and recreation; and makes provision for his cultural and social needs. (The Children's Charter, Nesbitt, May 4, 1972:2-3)

Integration is an essential part of normalization, and refers to those measures and practices which maximize a person's (potential) participation in the mainstream of culture. Integration can be facilitated (or obstructed) by both physical and social circumstances. Integration is achieved when he lives in a culturally sensitive community setting in ordinary community housing, communicates, socializes, and moves about in ways appropriate for his age; and is able to utilize, in culturally typical ways, typical community resources (such as the post office, social, recreation and religious facilities). . . . (Wolfensberger: PASS, 1973:9)

Chapter 104A, Code of Iowa, requires that all public buildings and facilities financed by state, county or municipal funds must be constructed "... accessible to and functional for the physically handicapped."

Almost every American knows someone who is handicapped, and few persons oppose the concept of equal rights for the disabled. However, general indifference and unthinking discrimination are the rule. (Hamer, 1974)

Deaf-blind people are people like any people. . . . Some can do many things and some are very limited in their recreational aptitudes. Like other people, deaf-blind people vary in their attitude toward specific recreational activities. Recreation is just one part of a rehabilitation process. (Bettica, 1959:3)

We are responsible for exposing the deaf-blind child with an ever broadening range of leisure time choices, but we must not be close-minded about these choices. . . . Recreation can help us shape the child's behaviors and help develop him as a more self-actualizing individual, but we must respect his individuality at all times. (Stensrud, November, 1974: 21)

Community based services tend to promote resource utilization by the individual; achieving the pinnacle of Maslow's hierarchy of needs is virtually impossible in the institution due to its inherent organizational weaknesses. (Compton, December 3, 1974: 5)
The preceding quotes show us that community-based recreation for Special Populations is justified legally, morally, socially, philosophically and most importantly, humanistically.

Every person is first an individual and secondly a citizen. It is the community's responsibility to provide recreational services to all its citizens regardless of age, sex or ability.

You as a group of individuals, all concerned with the development of human potential in deaf-blind individuals and other Special Populations, are already advocates of "handicapped liberation." With this in mind, I don't think it is necessary to elaborate on the justification of community-based recreation programs for Special Populations. Justification gives us a leg to stand on, but no power to run with at the present time.

I believe the enabling power to set up a community-based program for Special Populations lies in community support. Without the support of the total community, community-based services to Special Populations will not be provided, or if provided, they will not survive because they have no long-term support base.

PURPOSE OF THIS PRESENTATION

I feel very strongly that the first step in organizing for community-based recreation services for special populations is gaining total community support, and it is to this issue I would like to address this conference.

This summer I was involved with the deaf-blind workshop in Seattle. Arriving two weeks prior to the program, I delved into the city's recreational resources, community organizations, and agencies serving children of every kind in an attempt to provide our deaf-blind children with a wide variety of community-based experiences. During the seven weeks of the workshop, our children did experience the community and utilize many resources, and, in turn, the city of Seattle experienced deaf-blind children and their beautiful uniqueness. (For further information on the specific activities we engaged in, please see "Jungle Fun, Recreation for the Deaf-Blind Child," in Program Development in Recreation Service for Deaf-Blind. John A. Nesbitt (ed.) University of Iowa, 1975)

This year I am co-coordinating a community-based recreation program, S.P.I., Special Populations Involvement, in the small community of Iowa City. This community has no deaf-blind populations that I know of, but S.P.I. program does serve many different kinds of individuals, including the multi-handicapped, and could very feasibly serve deaf-blind children and adults.

My involvement in both of these programs was of a similar nature in that I have tried to gain the support of a community (its people, places and resources) in an attempt to provide a normalizing recreational experience.

I would like to share with you my personal philosophies on gaining community support for recreation services for Special Populations in an effort to aid you and support you in your efforts to organize for community-based recreation programs for Special Populations.
Most of my life is centered presently around S.P.I. programs, so this paper is a reflection of this program.

COMMUNITY AWARENESS

In advocating for community-based recreation for Special Populations, one must look at the level of awareness that the community has regarding Special Populations. In other words, one must realize where they are coming from. Looking at the reason why Special Populations haven't been served in the past might help us understand better where some of the community members are regarding awareness to Special Populations.

The two major reasons services have been denied to special groups in the community are stated by Wolfensberger (a73: 45). One was the the generic agency did not possess the necessary specialized skills and resources, and the other was that the person with a special condition would be better served by a special, segregated service.

The second reason or excuse for non-service has reached my ears an disguised words so many times that it makes my heart ache. The community and civic leaders are proud of this community's "fine rehabilitation centers," i.e., University Hospital School, Veteran's Hospital, Nelson Developmental Center, etc. They support services for Special Populations, as long as they are personally not threatened by meeting one of these "handicapped" persons, for it might be contagious. Their lack of understanding of the self-defeating process of segregation, reinforces their belief that "they" are better off with "their own kind."

The first reason, that being lack of specialized resources and skills, also stems from lack of understanding. A member of Special Populations has more characteristics in common than uncommon when comparing with the "normal" individual. The public recreation professional will be, like many others, aware of Special Populations to the limited extent that he sees how "they" differ, their disabilities and their problems. He may not be aware of the vast abilities they possess and their likeness when compared to other participants.

The public recreator, when approached as to providing recreation services for Special Populations, will probably envision a segregated specialized program, extensive facility adaptations, expensive staff and resource additions, along with loss of attendance by his "normal" participants. All these visions justify his lack of service regardless of the right or needs of his community members in Special Populations. He may not be aware of the present programs he now offers that could be easily adapted so that Special Populations could participate. He may be uninformed as to funding potentials or the specifics of accessibility, and because of his lack of knowledge, will deny service to Special Populations.

It is evident that before community-based recreation programs for Special Populations can be implemented, a wall of fears, prejudices, misconceptions and lack of knowledge must come tumbling down. The foundations of support for community-based service are made of knowledge, and awareness of Special Populations, their needs, rights and potentials.
A community-based recreation program for Special Populations must have the support of the total community, including civic leaders, park and recreation professionals, rehabilitation agency representatives, Special Populations and the public at large. Building support is a very difficult process, I have found, but crucial to the survival of community-based service. Support is achieved by continual education, communication and direct involvement of and with the community.

Civic Leaders

The civic leaders will be my first target for education. We must provide them with a general knowledge of Special Populations and the justifications for providing community-based recreation services to all citizens. This could be done by providing them written data, showing films, inviting them to visit community-based programs already in existence, inviting guest speakers involved with community service, etc.

More specifically, the data to support the need for recreational services for special populations in the particular community must be provided. The method we used was a survey of the present recreational needs and involvement of Special Populations in Iowa City. (See Appendix 1) With this data, we could objectively document the definite need for a community-based recreation program for Special Populations in Iowa City. When we presented the survey to the Park and Recreation Commission, nobody waved a check for the program in our faces. We didn't expect it. We did, however, effect an increase in their level of awareness, thus increasing our support basis.

Community Recreation Professionals

Obviously, the support of the community recreation professional is needed to initiate and implement a community-based program. The community recreation director must also be made aware of who Special Populations are, their needs and their rights to service. Most importantly, he must be provided with feasible methods of providing services to Special Populations.

He may be able to employ the services of a recreation consultant. More likely, another recreation professional, educator, or advocate can voluntarily provide him with information concerning Special Populations, philosophy of community-based recreation, legal bases, funding, accessibility, volunteer services, resources available, programming and adaptations. (See Appendix 2)

He may then be able to see possibilities for services to Special Populations. If finances and staff are available, he may then be able to initiate a program. More than likely, consultation will serve to make community recreation personnel more aware of Special Populations and more willing to serve, providing they don't have to make any major commitment. (i.e., finance, staff, etc.)

Community Organizations, Agencies and Institutions

The power of numbers, involved and supportive numbers, is
the best kind of support. You as a Special Populations member, parent's group member, educator, community recreator, therapeutic recreation specialist or advocate, group member, cannot initiate community-based services without the support of other organizations within the community.

After the need for service has been documented, the next step is to evaluate what services are available in the community and what additional services are needed. We can then begin to match the needs and services and implement new methods of service.

Calling together representatives of all community agencies and organizations for an organizational meeting was our first step toward action. The organizational meeting included Special Population representatives, civic leaders, Park and Recreation Board representatives, Recreation Education Department representatives, therapeutic recreation specialists, rehabilitation agency representatives, service organization and club representatives, parents and various professionals.

Education of these community members is again needed. Even representatives dealing with Special Populations may not be aware of their prejudices and denial of normalizing lifestyles to Special Populations. The philosophy of community-based recreation for Special Populations has its foundations in the belief that all habilitation has as its major goal the preparation of the individual toward independent and normative functioning. Programs that fail to incorporate a relatively demanding pace of carrying clients step wise and increasingly, into culturally normative (and therefore culturally integrated) contexts and activities are, by their very nature, not genuinely habilitational. (Wolfensberger 1973:46)

Agencies must be made aware of this philosophy and helped to realize that community-based programs are not duplicating or threatening existing services, but are a pooling of all community resources in an attempt to provide the most normalization service possible.

I feel that the community organizational meeting should be a sharing of philosophies, needs and present services available. From this meeting, smaller advisory committees could be formed. These committees would be responsible for deciding upon a course of action to implement community-based recreation services for Special Populations. The committees could direct their energies to funding, programming, staffing, transportation and resource utilization alternatives.

The Public

A final faction that must be educated so they can be supportive of community-based service is the general public. I believe that the best way to do this is to directly involve them with Special Populations. This will happen in an effective community-based recreation program for Special Populations. So let us look at getting it started.

BUILDING THE PROGRAM

The foundations have been laid for the beginning of service. The need has been proven, and the community has been educated and involved in the possibilities of program planning. Next?
Our plan of action was decided upon. A pilot program was to be directed by the University of Iowa’s Recreation Education Department in cooperation with the Iowa City Park Department. All funding would come from the Bureau of Education for the Handicapped grant awarded to the University.

Two graduate assistants in therapeutic recreation, myself and Twyla Misselhorn, would be on quarter-time salaries from the grant. The rest of the staff would be drawn from community volunteers and therapeutic recreation students. The community recreation center would be used for the program if the program was approved by the City Council.

The survey and proposed pilot program were submitted to the City Council and Park and Recreation Board, and after two months of political hassle, the program was approved.

I attribute the slow process of program approval to the lack of community support. During the two-month interim, we failed to utilize the advisory committee or solicit continued community support. Actually, we were prohibited from using the committees because the Park Board felt that too many “outsiders” were having a say in the program. Our community support diminished, so the fight for the program approval was a long and lonely one, but a worthwhile one, I must add.

**WE’VE COME A LONG WAY**

S.P.I., Special Populations Involvement, is in its fifth month of operation. It has grown tremendously and will continue to grow as we become more aware of how to elicit community support. As this support grows, S.P.I. services expand to serve more people and provide higher quality programs of a more diverse nature.

I see most of the early failings of S.P.I. caused by the lack of broadly based community support that is gained through education, communication and involvement. The body of this paper concerned itself with ideas on how to gain much needed initial community support in an attempt to help advocates of community-based recreation programs serving Special Populations avoid some of the mistakes I’ve encountered.

The successes of S.P.I. have come through the increasing community support (awareness, inter-agency communication, education of community leaders, and effective coordination of more and more community resources).

In closing, I would like to briefly describe some of the aspects of S.P.I. development that I attribute to the growing community support and also describe the ways in which we are trying to further this vital support.

To begin an integrated program (that is, normal and handicapped people recreating together) of community-based recreation was more than any civic leader or recreation leader in Iowa City was ready to handle at this level of understanding. S.P.I. began as a special program of recreation for Special Populations only, utilizing community resources. The hesitancy and denial of integrative benefits and rights was still present after two months of programming.

I wanted our programs to be offered to the general public. I thought it would be a great addition to the community’s program if they could now offer creative dramatics, scouting,
swimming, skill development and an adult night. They didn't agree. They did concede that I could begin selective integration (choosing special groups and inviting them to come on a limited basis to S.P.I. programs).

This semester I am proud to say that every S.P.I. program is attended by both "normal" and Special Populations. Our adult program even approaches normalization, for we have more "normal" participants than Special Populations attending. Our swim program is totally integrated for we utilize the public pool during public hours and provide only the extra needed supervision and a short period of instruction to our S.P.I. participants.

This month's flyer defines Special Population Involvement as a community-based recreation program for all people, especially geared to meet the needs of this community's Special Populations. This kind of program is possible because of community awareness and support.

S.P.I. has broadened its service base to include a greater number of participants who are serviced and reside in the community and a greater number of participants that are served in institutions.

Initially, program participants were limited to those who could independently travel to the recreation center. Looking at the downtown location of the center, and the inaccessibility to limited public transportation, one could predict poor participation figures.

Utilizing volunteers, we began phone teams (calling possible participants, or agencies of referral and local institutions to encourage participation and to find out how we could better serve them.) Transportation was the major problem stated. Transportation is still a major problem, but we have had a few breakthroughs. Two local institutions who have accessible vans were shown that S.P.I. programs were much more normalizing and beneficial than the in-house service that they were providing. The Veteran's Hospital men now come to S.P.I. adult programs, along with staff, and they have the use of a van that other S.P.I. participants can also use when we travel to other community facilities. The Johnson County Care Facility also has a van and lots of willing participants, but in the past they couldn't participate because they lacked the staff. We now provide the bus driver and staff to enable these special people to attend S.P.I.

Many of my volunteers have provided transportation or needed traveling assistance to individual participants and have thus enabled S.P.I. to serve more of this community's citizens.

Transportation is a major expense, and very hard to justify to the civic leaders because it is "above and beyond" services offered to the general community. An inaccessible program is not much better than no program at all, so we are looking for a good fairy to bring us a van.

More realistically, we are seriously looking into many different alternatives of short and long term funding for S.P.I. The city has approved the funding on one half-time staff for S.P.I. in 1977. Even at that time, much greater funding support will be necessary, and until then we really need to procure funding other than through B.E.M.
We are investigating Federal grants, Social Security funding, local community organizations, and charity funding. Because of the immediate need for funds, our emphasis has been on procuring local funding. Again, greater awareness, communication and involvement aid in the development of this support.

Here are some of the present projects we are undertaking to develop better total community support:

1. Street survey of the public's awareness of S.P.I.
2. Development of a video-tape presentation and slide show to be used in public relations.
3. Organization of a Publicity Committee which will:
   A. Develop a brochure
   B. Expand public relations to include radio and T.V. spots.
   C. Establish contact with local and state newspapers, interesting them in writing stories on S.P.I.
4. Publish a monthly newsletter to be sent to all participants and agencies and to be printed in other local publications such as the ARC bulletin, etc.
5. Personal contact with every organization and club to set up an interview or speaking engagement and to solicit support (financial or other).
6. Procuring community service organizations to sponsor fundraising events for S.P.I.
7. Directly involving the community - personal invitations to civic leaders to participate in programs, various clubs and organizations serving as volunteers, etc.
8. Sponsoring our second benefit public dance to raise money for S.P.I. and increase our community's awareness of Special Populations.

A detailed description and listing of various programs, funding, and personnel resources are included in Appendix 2.

CONCLUSION

I firmly believe that within every community, regardless of size, there exists the needed funds, facilities, and staff to provide community-based recreation services to all of the community members, and that includes Special Populations. The task of initiating a program may seem monumental, but it can be done if the community is willing to work together, utilizing all community resources and community members on all levels of the program's development. Through support by the total community, community-based recreation services for Special Populations will be made available and their continued existence will be insured.

I'll end with our slogan:
HELP KEEP SPECIAL POPULATIONS IN THE COMMUNITY, SUPPORT S.P.I.
This study was undertaken to assess the recreational needs and involvement of special populations in Iowa City. From this study it was hoped that the necessary supportive data would be available to justify a program for special populations.

The project staff surveyed two hundred (200) various individual members of special populations in nine (9) different categories in the community and residing in various collective centers in Iowa City. The purpose of this survey was to assess their participation and interest in recreational activities. The project staff also sent questionnaires to all supporting agencies in Iowa City to determine their interest in and support for a community-based recreation program. A list of all physical recreational resources in Iowa City was also obtained which could be used by such a program.

After the survey tabulations had been completed, it was noted that there is a definite need for and interest in a community-based recreation program for special populations in Iowa City. Survey participants felt that recreation is a vital part of their life (88.76%) but that their needs are not currently being met (47.62%). Respondents also indicated that the Iowa City Recreation Center would be an appropriate place for them to attend (86.75%).

Approximately fifty percent (50%) of the agencies returned their questionnaires. Ninety-eight (98%) indicated their support in establishing a community-based recreation program for special populations. Several agencies also offered to assist in the program development in any way that they could.

APPENDIX 2
SUGGESTED RESOURCES

Community Support

Here are a few of the people, places, and things that communities have offered in support of the programs I've been involved in. You may have tried them already, but if you haven't ...

1. Students - My programs are supported by a team of indispensable volunteers. They supervise, participate, plan activities, share skills, drive, type, solicit funds, organize special events, provide music therapy, dance therapy and W.S.I. swim instructions. They are of both high school and college age and are a fantastic energy source. My greatest thanks to them all.

2. Local craftsmen - When asked to come and share their skills they are often flattered and more than willing to provide recreation education. We've had scuba, karate, horseback riding, backpacking, swimming, cooking, yoga, folk
dancing and square dancing, all for free.

3. Civic leaders - Often these community members will become directly involved when asked to come and speak about civic events, or are receptive to group tours of the civic center, fire station, police station, etc. Try approaching them to sponsor a Special Populations Week.

4. Media centers - We've interested local newsmen in doing video-tape presentations, feature stories and news spots for our program. Our dances have been disc-jockied by local radio personalities all for just love.

5. Clubs and organizations - People want to give their support in many ways besides just donating money. Clubs have donated equipment and supplies. They have sponsored parties and invited us to their special events. Many volunteers have been drawn from service clubs. Most importantly, club members have been involved as participants, i.e. Boy Scouts, Upward Bound, Jay-Cees, Folk Dance Club, etc. and have helped to normalize our program.

6. Schools - Children from all kinds of classes and every age have been invited to participate with us in S.P.I. This summer, local daycare centers were more than willing to come and join in on our music therapy sessions. Kids take care of one another and the integration process is just beautiful to watch.

7. Professionals - Doctors and nurses have given voluntarily to these programs, enabling us to go to events in the community with severely disabled participants. Who knows? You might interest a lawyer to lobby for your community-based programs or press for accessibility in the community. How about a teacher of the deaf giving recreation leaders an in-service workshop on sign language?

8. Private business - Donations and sponsorships have been given by this sector of the community. More success has come through specific requests such as for food, paper goods, tickets, passes, printing services, free rental of camping gear, lumber, sand, parachutes, musical instruments, and any kind of throw-away stuff imaginable.

9. Places - Zoos, public and private pools, gymnasiums, parks, amusement concessions, theaters, stadiums, camps, churches, stores, stimulation centers, restaurants, libraries, museums, auditoriums, night clubs, bus stations, airports, farms, factories, lakes, beaches, forests and the whole environment can be used for education and recreation. A phone call and a preliminary visit to make sure your group can be accommodated and may be provided a needed extra to enhance the experience is a must.

10. Trash - The world of waste that we live in is a free-bee's heaven if you swallow self-pride and aren't afraid to get your hands dirty. This summer, an indoor playroom and a wooden playground materialized out of scrounged trash. Borrow a big vehicle and cruise local factories, surplus warehouses, and junk yards. You'll be amazed at what you can find for free. A few fantastic resources I'm acquainted with and hope you will be also are:

One cannot thank these community members enough for their financial, physical, mental and morale support that makes community-based recreation for special populations possible.

**FUNDING SUPPORT**

Social Rehabilitation Programs for Aid to the Blind, Old Age Assistance and Aid to the Totally Disabled - HEW Title XIV
(Provides 75 percent Federal Funds - Requires 25 percent local matching funds.)

**Eligible Handicapped** - Handicapped and retarded who receive
Aid to the Totally Disabled - 18 years of age and up.

**Eligible Recreation Agencies** - Public and private, i.e.,
Municipal Recreation Depts.; Private Social Dev.; Day Activity Centers; Recreation Agencies. License required.

Who to Contact - County Welfare Department, ATD Division

Contractual Services - County Welfare Dept., Contractual Services from Public or Private Agencies.

Matching Funds - Any local funds may be used, i.e., Foundations, Individuals, Public Funds such as Recreation and Park subsidy; Recreation and Park can use facilities for "In Kind" matching funds.


Other items covered in the documents cited are:

I. Contractual Services Administered at the County Level:
   A. Day Care, HEW Title IV, Social Security Act, SDSW Contract.
   B. Social Rehabilitation for AB (Aid to the Blind) OAA (Old Age Assistance) ATD (Aid to the Totally Disabled) Recipients, Title XIV Contract.
   C. Community Mental Health Services - Short Doyle Contract.
   D. Recreation and Park Department. Contract.
   E. Special Food Service Program for Children. Agreement.

II. Contractual Service Administered at the Regional Level:
   A. Regional Centers for MR (Lanterman Act) Vendor Service.

III. Federal Grants Awarded to the Recreation Center for the Handicapped:
   A. Research and Demonstration and Service Grants. Improvement or Expansion of Community Activities for the Mentally Retarded, Department of HEW.
B. Construction Grant

C. Staffing Grant - Community Mental Retardation Facilities

IV. Private Funds:
A. Foundations (Example: Homebound Recreation Program)
B. Service Clubs

Time limited grants: These grants are available from various sources such as WEW's public health services, Title V, Department of HEW, social and rehabilitation service, Title IV, for Aid to Families with Dependent Children, and the Bureau of Education for the Handicapped, special pilot programs and training grants. Major funds for recreation have been also provided by the Developmental Disabilities Services and Facilities Construction Act, P.L. 91-517.

State funds: Funds may be secured through the State Department of Public Health, Regional Centers for the Mentally Retarded, State Departments of Mental Health, Regional Centers for the Deaf-Blind and State Departments of Social Welfare.

Private funds: Most states have a foundation directory that can be found at the Grants Management Office, Registry of Charity Trusts. Pomeroy (T.R. Journal, Third Quarter, 1974) lists these other helpful resources.

Federal Register, National Grants.
Where America's Large Foundation Make Their Grants. New York: Public Service Materials Center, 104 E. 40th St.

ROSTER OF CONSULTANTS ON RECREATION FOR HANDICAPPED MODELS

1. Voluntary Health Agency Recreation Program Model
John Huckstadt, Executive Director and Jane A. Lefferdink, Adolescent and Adult Services Coordinator,
United Cerebral Palsy Association of Santa Clara County P.O. Box 5364
San Jose, California 408/293-2777

2. Community Recreation for Handicapped Association Model
Roberta Heimark, Vice President Association on Recreation Services for the Handicapped
3. ATD Municipal Recreation Program Model
Gene Saalwaechter, Director and Charles Dougherty, Handicapped Supervisor
San Jose Parks and Recreation Department
151 West Mission Street - Room 203
San Jose, California
408/277-4000, Mr. Saalwaechter (Ext. 4191) Mr. Dougherty, (Ext. 4661)

4. Cooperative Recreation Department - School Recreation Program Model
Mary Kucala, Acting Center Supervisor
Veteran Memorial Recreation Center
1455 Madison Avenue
Redwood City, California 94061
415/366-9913

5. Municipal Recreation Senior Education Center Model
Gene Saalwaechter, Director Sam Bozo, Personnel Officer, and Paula Popovich, Director of Senior Education Center
San Jose Parks and Recreation Department
759 North 3rd Street
San Jose, California
408/277-4000 (Ext. 4195)

6. Leisure Center for the Handicapped Model
Philip Dononcourt, Recreation Supervisor
Hayward Parks and Recreation
3638 Quail Avenue
Castro Valley, California 94546
415/581-6331

7. Recreation Center for the Handicapped Model
Janet Pomeroy, Director and Delores Elliott, Business Manager, Recreation Center for the Handicapped
Great Highway and Sloat
San Francisco, California
415/681-7462

8. Therapeutic Recreation Service TARID Center Model
Dr. John A. Nesbitt, Chairman
Recreation Education Program
University of Iowa
Iowa City, Iowa 52240
319/351-3924

9. IRUC, Information and Research Utilization Center in Physical Education and Recreation for the Handicapped
BIBLIOGRAPHY


SERVING SPECIAL POPULATIONS - CONCERNS

IN A LARGE COMMUNITY SETTING

Ms. Sue Tingley, Director, Specialized Recreation, Bureau of Parks and Public Recreation, Portland, Oregon

Recently, much is being said about the increased amount of leisure time available to today's population. Shorter work weeks and other factors play a part in this increase of leisure time, and recreators are taking a closer look at the services they provide to "the mass." They are also realizing the need for more socio-recreational activities and programs rather than merely sports and games. In short, recreators are realizing the need for review and re-evaluation of existing services. (Stein and Sessoms, 1973)

Advisory councils are being formed to give input to community recreation agencies, and to prioritize leisure time and recreational needs. No longer are programs being offered solely on the basis of past merit or assumed need. Local citizens are actively participating in the decision making and budget process, to insure that quality programs are both initiated and maintained.

One consideration that citizens advisory councils must give when reviewing programs is the potential number of people to be served. For this reason, more emphasis is placed on new tennis courts, swimming pools, community centers and new facilities than individual or small group needs. For reasons of budget and proposal justifications, citizen's advisory councils must deal very realistically with large numbers - the mass. As a result of the work of these councils, many new facilities can be seen throughout several communities; existing facilities have been renovated, and new equipment has been provided.

Even with the current trend toward re-evaluation and improvement of recreational services, still embarrassingly little consideration has been given to the leisure time and recreational pursuits of special populations. Several reasons have been given for this lack of attention. Most pronounced of these is the difficulty in justifying expenditures for the small and often unnoticed segment of our population. Another is that community recreation leaders have no training in therapeutic recreation, nor have they been exposed to citizens with special needs. Other reasons given are existing architectural barriers, lack of proper insurance, and lack of special equipment, etc. (Hormachea and Hormachea, 1972)

That is not to say that special populations are denied recreational opportunities, specialized recreation departments and staff persons at various centers for the handicapped and elderly provide activities and programs for special clientele. Others, such as associations for retarded citizens, Easter Seal, Kiwanis and Lions Clubs provide funds and some staffing for special excursions and outdoor recreation. Some needs of our special citizenry are being met through the efforts of these individuals and agencies.
Recreational opportunities for special populations in large communities vary greatly, depending upon facilities and staff available, types of special citizens to be served, and prevailing community attitudes. Largely, activities and programs available to the handicapped and elderly are segregated and specialized, and offered wherever scheduling for the normal population doesn’t interfere. Those persons offering recreational services to special populations often utilize hidden activity rooms, or find themselves scheduled into community buildings at odd and inconvenient times.

Programs serving the handicapped and other special populations have seemingly taken the back seat in years past. The hidden activity rooms and odd scheduling were accepted as the only available times and locations for potential programs. The prevailing feeling was - better these circumstances than no program at all. Therapeutic recreators were able to build programs, piece by piece, and were offering quality motor development and swimming classes, social evenings, excursions, bowling and day camping experiences. These programs were well attended and received by participants, and were deemed quite satisfactory by parents and other recreators.

Recently, however, therapeutic recreators and others providing programs to special populations have been re-examining the need and value of several activities. They can no longer be content with the programs they’ve been offering; they, too, must take a closer look at the current and changing needs of the population they serve. Community program planners must contend with the trend toward de-institutionalization, which has led to the growth of group and boarding homes for the adult population. They also must contend realistically with the concept normalization for all segments of special populations. They need to review their basic program philosophy and purpose, and change them, if necessary, to suit the current need. Those programs serving only one special group must now recognize the rights of all citizens with special needs.

In order to realistically contend with the current and future needs of special populations, community planners must first of all come together to evaluate the total recreation service delivery system. In any setting, it is mandatory that community leaders communicate with one another about program and resource possibilities. If these leaders are brought together, they will discover the vast number of recreational opportunities available to special populations. They will further be able to determine whether recreational needs are being met, and where to begin positive planning.

Bringing community leaders together is in itself an overwhelming chore. Some are accustomed to the privacy or individuality that their program provides to special populations, and they are content not to communicate with other community planners. However, most leaders are willing to come together to share philosophies and program possibilities, in order to upgrade the quality of the total recreational picture for citizens with special needs. Once these leaders are bonded by common interest, the action begins, and brainstorming is usually the next step. Many thoughts will be mutual; first of all, the total number of services offered are inadequate to meet the needs of the growing special population. Secondly,
new direction must be considered to offer quality programs and services.

In fact, community planners will be groping for ways of extending community recreational services to the mentally and physically limited and the elderly. When considering a large community setting, one must realize the number of existing recreational opportunities available to the normal population: community centers, YMCA, scouting programs, softball leagues, arts and crafts schools, community college programs; the possibilities are overwhelming. Special recreators cannot and should not attempt to duplicate these types of services. They must however, consider them as definite avenues toward quality services for special citizens.

Community planners must realize the need for two definite types of programs: sheltered or segregated, and integrated. It should be noted that segregated programs are important because they develop skills which may not have been previously developed. It must also be recognized that some severely handicapped individuals are not able to participate in integrated recreational experiences. Therefore, some sheltered or segregated experiences should be offered for those special citizens not assured of fair success in an integrated experience. (Latchaw and Brown, 1962)

The ultimate goal for the majority of our special populations should be involvement in a vast array of integrated recreational opportunities. In realizing this, community leaders must contend with apprehensive community attitudes and some budget restraints. However, if the community leaders have been brought together as a strong voice for special populations, they should be able to bring about heightened community awareness, and have only trivial budget problems. Community recreation administrators should be reminded that provision and extension of services to special populations is in direct agreement with their philosophy of recreation for all.

Only if community planners communicate among themselves, and coordinate services, will we be able to take the necessary steps toward positive recreational services for special populations. If we are to provide healthy social situations through integration, we must speak together as a strong voice to an apprehensive community. We must repeat again and again that the needs of special citizens are more like than unlike the needs of normal citizens.

We have a strong framework from which to build. We must utilize the normal means of citizen's advisory councils, and recognize the already immense number of existing programs that special citizens rightfully should utilize. We must admit that, "if anything tends to alienate people more, it is the flagrant segregation of activity programs." (Bucher and Bucher, 1974) Recreators must begin to bring special and normal groups together whenever possible, so that they can benefit from each other's company in recreational settings. Our challenge today is to communicate, coordinate and advocate normal recreation for special citizens.
BIBLIOGRAPHY


Music and Rhythms for the Deaf-Blind

Ms. Wilma Sheridan, Assistant Professor of Education, Department of Music, Portland State University, Portland, Oregon

Music for the deaf-blind does not seem to be a promising pursuit at first glance, because of the obvious fact that discrimination of sound is very important in the aesthetic satisfactions of music. However, if we dismiss the deaf-blind from participation, we condemn them to a poorer life, and possibly deny them satisfaction which is not beyond their reach.

Recreation and self-expression are needs of all people and music is a satisfying and acceptable form of meeting both of these needs. It then becomes crucial for educators and musicians to search for means of making music meaningful to all people.

It would be presumptuous of a music teacher to discuss the technical descriptions of audio and visual loss with you, the experts, but may I discuss the application of music to these areas?

The person with a mild-marginal loss of hearing (20-40db) will hear sound, but may have difficulty hearing soft parts of music, and may find it impossible to appreciate a solo part of a symphony, or the subtleties of texture in music—the threads of melody which are tossed from one instrument to another, or one group of instruments to another.

The person who has experienced moderate loss of hearing (40-60db) cannot hear the soft parts of music and will be more likely to lose high-pitched tones.

And the individual with severe loss or profound loss will find it very difficult to obtain much satisfaction from any music that has to be appreciated aurally.

The individual with loss of vision, only, will experience much satisfaction from hearing music of all kinds, and will have many experiences with music which are rewarding to him. His area of handicap is understanding and interpreting notation—the reading of printed music.

Since every individual is just that—a unique creature, we must consider the degree of handicap in either the audio or visual area, and cope with each handicap separately and together, experimenting with an open mind, and never pre-judging the uselessness of an idea.

Elements, Use, and Methods. The properties of music which may be considered in a subjective context are melody, harmony (or texture), rhythm and timbre. The physical properties are frequency and intensity. Frequency determines pitch, which is closely related to melody and harmony. Intensity determines loudness, which is a property to be considered by itself, and which has something to do with rhythm (accent).

Audio-handicapped people can usually hear lower frequencies—a fact which should determine choices in the pitch of music, and in choosing instruments.

The element of music called timbre has to do with the tone color of a given instrument or voice—that unmistakable quality that enables one to know that an oboe is being
played or a tenor is singing, regardless of pitch. The quality is determined by the intensity of each overtone in relation to the other overtones, and some patterns are more likely to be heard than those of other instruments. The teacher must experiment with the students and find those instruments which are most clearly heard without distortion, but violins, trumpets, trombones, and flutes (preferably two or more) seem to be easier for the audio-handicapped to hear.

Music may be used as an aid to developing skills—the incidental use of music, or it may be an end in itself. If it is used as a means for developing skills, music can be used to improve speech through singing (even the selection of songs which stress specific sounds), physical coordination (clapping, using rhythm sticks, bouncing a ball, or moving to get the aesthetic satisfaction obtained from music for music's sake—very important to the "life span" recreation needs of the multiply handicapped.

A tactile approach to music is probably the most successful for severely audio-handicapped people. They should be encouraged to place their hands on the piano and feel the vibrations. Always try every possible variation of any activity—standing with the back touching the piano, or putting the head on the top or back of the piano so that the ear is touching wood. A bass drum with a membrane on one side only, makes an excellent resonator for sound. Place the detachable speakers of a record player under the drum so that the vibrations may be felt through the drum head. A wood floor will help in this activity, and is, itself, an important tool for "feeling" music. If the speakers touch the wood floor, the vibrations can be felt on the wood—but have the students remove their shoes. Music with no great vibrations in intensity (loudness and softness) and with strong bass parts will be the easiest for the students to feel and appreciate. The volume must be turned as loud as possible without distorting the music.

The obvious concept which must be understood to appreciate melody is pitch, and the teacher should start with the widest contrasts possible—high and low. Do not use the outer extremities of the piano, but rather the three inside octaves (beginning one octave below middle C). The students may place their hands, heads or backs against the piano, and the teacher plays low notes, and places a card with the word "low" on the appropriate place on the keyboard, and encourages the students to say the word. The same procedure is repeated for high notes, then low and high chords—G E C, for instance. When the students are successful with the two extreme concepts, it is time to introduce "middle" pitch. If the hearing loss is not too severe, students may be able to trace the contours of a melody in the air, showing high, low and medium pitch.

Harmony and texture are more subtle and may be beyond the comprehension of those persons with severe loss, but the teacher should play a Bach fugue (The "Little" Fugue in G Minor is a good choice) and observe the reactions of the students, and the chorales of the seventeenth and eighteenth centuries are rich with slow-moving harmonies. Sixteenth and seventeenth century "tower music" is usually performed by a brass ensemble, and is good for consistent volume and slow harmonic changes.
Rhythm is usually understood in terms of accent, and so we must determine that the student hears or feels hard accents and softer beats. It helps to use a bass drum on a wood floor (with shoes off) and to clap the beats, showing the accent with wide gestures. The students should use their feet and hands to express beat and when the teacher feels that the students are successfully responding to beat, they should be encouraged to use their hands to express what their feet are feeling from the floor, their feet to express what their hands are absorbing from the wall or table, and either hands or feet to express what they are seeing as the teacher claps with large gestures. Students can learn about accent by using the words "weak" and "strong," reinforced by cards bearing these words and saying "mmmmm" in varying degrees of intensity.

A visual symbol will help in putting rhythm into patterns such as:

\[
\begin{array}{cccc}
\text{a} & \text{b} & \text{c} & \text{d} \\
\text{e} & \text{f} & \text{g} & \text{h} \\
\end{array}
\]

or strong, weak, weak, and a metronome will help if they can see the pendulum moving back and forth. When the students are experiencing success in interpreting rhythm as patterns of beats, they should then progress to music by clapping meter and using rhythm instruments. One of the most helpful of the rhythm instruments is a drum, and hopefully, several drums may be available. Since some persons hear higher or lower pitches better, the drums should be of definite variation in pitch, and of good quality. The membrane should be high-quality plastic or hide, so that the tone is clear. As an aid to keeping together in group situations, bright ribbons may be tied to the beater of the drum, or to the hand drum, and this may also be helpful with the tambourine and triangle.

When the student is able to express rhythm physically, he is ready to move to music. Music with strong rhythmic pattern, loud, and not given to decrescendos of sudden soft parts, and preferably performed by band, pipe organ, accordion, orchestra or synthesizer should be acceptable. A structured dance may be taught by seeing each step done slowly, with the teacher out in front of the students. If there is not enough vision for this to be possible for the dancers, they may be told how to do the dance while feeling the music from the floor, and their bodies moved by the teacher or an aide. If there is neither sight nor hearing, the instructor must move the dancer while he is feeling the beat on the floor. Even severely handicapped students will get pleasure from playing patterns on different instruments as the teacher or a student leader points to them, and others move their hands or feet to the beat. Charts showing accented and unaccented beats may be used, and students can play any rhythm instrument they prefer, or charts may be made with orchestration, such as the following:
A leader can visibly and audibly tap the beats along the chart from left to right, to keep the group together, while the music for the Skater's Waltz is being played on the record player.

**A Total Program of Activities.** The activities which should be presented in a well-rounded music program for all students are equally appropriate for use with handicapped students. These activities are: singing, moving (structured and free), listening, playing (pitched and rhythm instruments), reading (notation), and creating. These musical activities are also appropriate for any age group.

Singing will help in the formation of speech patterns and should be done with the aid of recordings to give a desirable aural model, with the leader forming the words, pointing to key printed words, or letting the students feel the face or throat. A group of persons with varying degrees of auditory handicap will have difficulty producing correct pitch, and those who have more ability to hear must have the accurate pitch to emulate. If the group is young, try to use records sung by children (Silver Burdett) or someone with whom the children can identify. In all cases, avoid most sopranos,
opera voices, or poor singers. Songs that combine singing with motions can be beneficial, because the motions provide a visual aid to the deaf.

Moving, often a happy aid to the release of tension, is important to the visually handicapped for orientation in space, and is a means of achieving success in music for the auditorily handicapped. Free, creative movement may be limited for the severely deaf because it implies interaction with what one hears, but it can be employed if the drum is used, or some highly visual instrument. They must feel the music from the vibrations, or see it being produced. A flowing scarf or anything that can be held in the hand and used as an extension of the arm may help the participants to free themselves and become involved in movement.

Structured movement is usually more successful for the severely deaf, because they can observe the same movement being reinforced all around them. If the student is handicapped both visually and aurally, the possibilities are truly limited, but feeling vibrations from the floor, wall, or instrument, or feeling the vibrations through a drum membrane may enable the student to begin to make expressive motions. In the beginning, the teacher may have to take the participant's hands and clap them together, pat the knees, and make other motions until he can coordinate his actions with the vibrations which he is feeling.

Listening is a highly individual process, and the teacher must experiment on an individual basis, observing whether the student hears high or low vibrations (if he reacts to them), if he can hear if the volume is very loud, if he reacts to feeling vibrations on a drum head, through a balloon, or from the floor, and what media (orchestra, synthesizer, choir, rhythm instruments) are most rewarding. When the teacher determines what media are successful and has some idea of what is being absorbed, he can make decisions about listening to the more subtle elements of music.

Playing instruments is an aid to coordination of eye and hand, is pleasing to most participants, and aids in social development when done in a group situation. The visually handicapped student needs experiences in playing instruments to help him find an object in space and build his confidence. Playing instruments may be more successful if charts are used, or playing to a record may be more beneficial. Sometimes the group may be able to orchestrate a song and accompany their singing by ear or by making a chart.

The reading of notation is important if the participant is to gain any degree of success in music, but it is not the most crucial of activities for the deaf or blind. Braille notation is available to any student who can benefit from its use, and should be introduced to those few blind students who have demonstrated talent which should be encouraged. This will take individual teaching, but resource materials are available. (Library of Congress, Washington, D.C.: Braille music and slow tapes.) If there is enough hearing to enable a participant to hear most pitches (even if amplified), notation should be introduced. If the teacher feels inadequate in this area, the Threshold to Music charts will be useful for rhythm, but the pitch is approached totally by singing and should be reinforced with pitched instruments that the
When any pitch discrimination is possible on the part of the learner, the teacher should encourage the students to show with their hands or bodies which notes are high and which are low, all of which is a beginning to reading notation.

Creating music will have to be explored with the teacher observing the successful activities. The Orff approach to creating music has been successful for many teachers, and can cut across the lines of the handicaps of both the visually and aurally handicapped (Orff, Carl.) This approach is based upon rhythm, derived from speech and used for composing melodies, ostinati, instrumental parts, and for movement. The point of departure is the rhythm of the speech pattern:

Hickory, dickory dock,
The mouse ran up the clock.

The rhyme is chanted until the rhythm is clear, and the students then compose a melody (it can be severely limited to two tones, or delimited, but a maximum of five tones is suggested, such as C, D, E, G, A, because this composes the pentatonic scale and is easier for ostinati to be realized.)

When the melody is going well, instrumentally or vocally, it can be orchestrated with rhythm instruments, one or more harmonic parts added, movement can be added, or any one of these extra parts may be used with just the melody. It is important to do one thing at a time and to add new ideas only when the participants seem ready.

Conclusion

The word "student" appears many times in this paper, but the student is any one who learns, and this can be in a formal school environment or in any situation where learning takes place. We are all students at one time or another and we are constantly learning.

The music activities described herein are for any age group. The singing activities are for all ages, but the songs will differ from one age group to another. Moving is common to all of us, but the way we move differs with our age. Listening changes little from one group to another. Everyone enjoys playing instruments according to his ability, and melodies created by five-year-olds are often similar to those created by untrained college students--only the poetry which forms the basis for the creation changes with the age-group. The kindergarten child enjoys participating in a rhythm band for the same reason that the senior citizen joins a kitchen-utensil or jug band--he enjoys making music with a group.

Our goals for music for the deaf-blind persons are the same as music goals for any group of people--participation in as many types of learning activities as seems beneficial for a rich, useful life. Implementing these goals takes patience and training, and the progress may be painfully slow, but we remember Aristotle's words, "They who teach students well are as much to be honored as they who bear them."
USE OF RHYTHM INSTRUMENTS AND OTHER INSTRUMENTS
FOR THE VISUALLY HANDICAPPED

Autoharp -- This instrument is easily played by "feel" and is ideal for the visually handicapped. If the student hears well, he will be able to choose correct chords by ear; if he is auditorily handicapped, there are Braille Chord Labels available from Oscar Schmidt-International Inc., 87 Ferry Street, Jersey City, New Jersey.

Ukulele and Guitar -- The ukulele, with only four strings, is easier than the guitar for beginners. Students can get the feel of the finger positions for chords, and can learn to move their fingers up and down the strings to hear separate pitches. Sometimes a baritone ukulele is a good intermediate step before the guitar.

Harmonica -- Little training is necessary for this instrument as is usually played by ear. If the student is also auditorily handicapped, a chart "How-to Play the Hohner Harmonica" (available from the Hohner Company and in most music stores) may be adapted by use of sandpaper or velvet, to help the student feel the positions.

Melodica -- Similar to harmonica, but no blowing required, and a sense of keyboard may be developed, leading to the piano.

Song Flute (Tonette, Record) -- The song flute is better for young children or inexperienced learners and also for auditorily handicapped. If the student is older or learns song flute first, he may prefer the recorder with a much better tone, but more difficult fingering.

Drums -- Very satisfying and successful. The student may prefer to use his hand at first, but when this is mastered, he should use drum sticks or beaters to help his orientation in space.

Tambourine -- Should be used with movement to encourage the visually handicapped to move about in space. Encourage them to move it about in the air and strike it behind them, to the side, etc., making sure that there is adequate space.

Sand Blocks -- Very good for the student who is afraid to move about. Encourage the student to hold one stick in a stationary position, and to find that one with the other stick. Experiment with different size of sticks and different woods, and encourage the students to express what they hear.

Tone Block -- Hold the tone block in a steady position and move the tapper up and down. It is easily held because of the handle.

Wood Block -- An instrument capable of many different sounds as the student experiments with places to strike it. Encourage this exploration and work toward having the student hold it suspended on string, and being able to find the block in space.

Claves -- Visually handicapped students must be shown how to hold the instruments and may be taught complicated patterns by ear.

Maracas -- Excellent because they are easily held and played and are capable of a wide variety of sounds, depending upon how they are held and how the sound is initiated—swishing, tapping, or percussive (against the hand or knee).
Cymbals -- They are small and require precise percussion, so should be held closely together at first and the student encouraged to find one in space.

Castanets -- Use the ones on handles or on a board and the student will enjoy playing them.

Triangle -- Keep the tapper inside the triangle, tapping the lower horizontal bar, or in one lower corner, to remain oriented in space.

Sleigh Bells -- Another good way to help a student find his way in space. Put them on wrists or ankles and do rhythmic exercises.

Song Bells (Resonator bells, tone bells) -- Mark Middle C or some point of identification, or use sandpaper letters to indicate each bell.

Electric Organ (Magnachord, reed organ, etc.) -- Mark some point of identification on the keys and know that Braille music is available for those who can benefit from it, as well as slow tapes (music taped at a slow speed so the student can memorize it by ear).

Piano -- Much music in a close area. The same advantages as the organ, but the sound is initiated with more force, which may be beneficial to shy students.

USE OF RHYTHM INSTRUMENTS AND OTHER INSTRUMENTS FOR THE AUDITORY HANDICAPPED

Autoharp -- Sensory satisfaction may be gained by placing open hands on back of autoharp. Students may enjoy strumming it. Because of the wide range of pitch, some students may hear the higher pitches, while more may hear the low ones.

Ukulele and Guitar -- Unless the instrument can be amplified (and this is possible), these instruments are not as easily heard by the students.

Harmonica -- The student holds the instrument to his mouth and feels the vibrations and he may hear the sound. The blowing and pulling of the breath and manipulation of lips and tongue are important in speech development.

Melodica -- Same advantages as the harmonica, but it is played from a small keyboard, which may lead to piano skills. It lacks the requirement of pulling the breath using only blowing.

Song Flute (Tonette, Recorder) -- Vibrations may be felt in the fingers and mouth, but the sound is not particularly easy to hear.

Drums -- Very satisfactory to see and accompany rhythm. Be sure to have good quality drums and those of both high and low pitch.

Tambourine -- More attractive if brightly colored ribbons are attached for a visual reinforcement. The tone will not be heard by the students with severe hearing loss.

Sand Blocks -- Visual satisfaction, but the sound is not easily heard.

Rhythm Sticks -- Not easily heard, but can be visually satisfying. They should be brightly colored to be more attractive.
Tone Block -- If students have more acute hearing in the higher registers, the tone block may be heard. It is a visual instrument and may be used in that manner.

Wood Block -- Better carrying power than the tone block if struck firmly with wood.

Claves -- Can be heard by students with moderate loss and sometimes by those with more severe loss. The hardness of the wood makes them more easily heard than rhythm sticks.

Maracas -- Sensory appeal, but not promising for severe hearing loss. The student may be feeling the vibrations from the seeds, so the instrument should not be dismissed. Since maracas are often played in syncopated rhythms, the visual appeal may be interesting, if the student can see.

Finger Cymbals -- Not appropriate for anyone who has severe loss of hearing or cannot hear the high registers.

Castanets -- May be heard because of percussive quality of sound.

Triangle -- Same application as finger cymbals.

Sleigh Bells -- Not especially promising for being heard, but highly visual. The bells can be shaken with the hands, or worn on wrists or ankles and used in rhythmic movement.

Song Bells (Resonater Bells, Tone Bells) -- Not especially promising for being heard because of their light tone and high register. If there is enough ability to hear them, be sure the bells are of high quality, in tune, and struck with the proper medium. Wood, hard rubber or fiber glass, but not wooden balls. If they can be heard, they are an excellent medium for teaching high, low, and medium pitches because of the visual reinforcement.

Electric Organ -- The wide variety of pitches makes it more likely that people can hear some pitches, and the volume can usually be regulated to allow maximum sound.

Piano -- the wide variety of pitches is helpful and the percussiveness, combined with the ability to feel vibrations in several places, makes it useful. Electronic pianos are now available with amplification and head sets for louder sound. The electronic piano with strings is preferable.

BIBLIOGRAPHY


Ms. Margaret Neel, Arts and Crafts Teacher, 
Washington State School for the Blind 
Vancouver, Washington

After reading the informational letter, asking me to direct my attention to a discussion and paper about Arts and Crafts for the Deaf Blind -- with life span emphasis -- I did a tremendous amount of thinking and came to the conclusion that the "making" and "doing" of things does not lend itself to verbal exposition. It did, however, remind me of this quotation . . . .

"Then only are we thinking when the subject on which we are thinking cannot be thought out." Goethe

Accordingly, and since this is such a vast subject, I would like to share some of my philosophical thoughts with you. At the outset it is important to state that the deaf-blind person is entirely dependent upon bodily experiences, upon contacts of the self with the outer world. Bodily experiences are the connecting medium between ego and its surrounding world. Therefore, it is essential to emphasize and stimulate bodily sensations as much as possible. Even though the deaf-blind learn many skills, much of the learning remains abstract unless the teacher brings it into relation with reality. This is possible, of course, only through the sense of touch, through bodily feelings which are in close relation to the kinesthetic sensations.

Often the mere experience of various objects or materials does not reveal the whole picture to the student. There is much to be said for clay or modeling clay. The teacher will find the individual over-emphasizes the meaningful parts of the environment and de-emphasizes the meaningless parts. In the demonstration of this subjective attitude much vital information may be gained and used to reveal the limitations of imagination and bodily feelings. This can serve as a valuable chart for future instruction. The mention of clay while most important is only one material that can be employed using the same thinking and techniques.

As to the general organization of the student in a class, I begin with a general assessment that would take into account skills, attitudes, past achievement and projected potential growth (when possible). This evaluation also takes into account the disability of the student—in this case, deaf-blindness. At some point there will be an intersection of this diverse data and that is the point of action.

My next concern is HOW? To me this means providing a climate that encourages action, growth, thoughtful decisions, stimulating ideas, much justified encouragement, judicious criticism and a general openness that pervades all else and asks only -- is some desirable growth and benefit evident from this particular endeavor?

In this climate the product is not important because it is merely a record of the progress that has taken place. This climate also puts a high priority on the encouragement of imagination. Imagination is the ability to picture in
the mind what is not present to the senses... or another way to express it is -- Imagination is the faculty by which we perceive what we have not observed or experienced. This is a precious and necessary tool for the deaf-blind student.

My next concern has to do with WHY. The circle is now complete and I return to my preliminary statement. Through the activity, the consciousness of body feelings, actions and kinesthetic experiences should bring the student into closer contact with the surroundings and add something of value to the growth pattern. Many times the creative activity will relieve the tension which did not permit the individual to communicate freely, or it may result in understanding a simple living skill. It need not be a result in arts and crafts per se, but the desirable growth is the result of some activity in this field. On the whole, the activity has contributed to a better understanding of self and released a desire for contact with the environment that can be projected to activate dozens of sources of learning.

BIBLIOGRAPHY

Indian Handicraft Series. U.S. Department of Interior, Bureau of Indian Affairs. Listings and purchase through Haskell Institute, Laurence, Kansas.
HANDS ON HOBBIES


In working with young blind and deaf-blind children at the Washington State School for the Blind, I have observed that it is extremely difficult to capture interest and create in many of these children a curiosity and awareness of the world around them.

The stimuli of light and sound that normal children receive from the day they are born are especially denied to the deaf-blind. Because these children are so slow in acquiring an awareness of their surroundings, the problem of reaching them and awakening them to their environment becomes acute, depending upon their degree of deafness, blindness, or both.

To me it became apparent that I must find ways of developing and stimulating interest in these children. I would have to encourage each child to use his remaining senses of touch, taste and smell to the fullest extent. As I watched some of these children finding enjoyment by filtering light through their fingers and rattling objects for sound or vibration, it occurred to me that, if something could be placed in their hands that produced interesting vibrations when handled, shaken or placed in the mouth, one might be able to teach concepts of weight, temperature and texture, and develop hand-finger dexterity.

Objects are chosen which, when placed in sealed fish cans, produce different types of vibrations when shaken. I chose canning objects in enameled tins smaller than a can of tuna, for they are easy for the young to handle and -- yes, to put in the mouth. They glitter and roll nicely and are easily washed, stacked and stored. The materials sealed in the cans include such objects as wet sand, ball bearings, coins, bells, stones (stones with metal, stones with glass), wood, broken glass, marble in water, nuts, beans, magnets, bolts, nails; some of the sealed cans are also left empty.

Experimental use of Canned Curiosity which I developed for the children at the Washington State School for the Blind has shown not only that they notice the weight and vibration differences between substances in the cans, but are more fascinated by "the feel" of some of the objects than they are of others. The cans containing water, for example, have proven to be quite exciting, while the cans containing little or nothing are soon discarded. Similarly, a child who is intrigued for awhile with the vibrations of a can containing rolling objects may later prefer a can containing sand or a substance of heavier weight and greater solidity.

Possibilities for expanding the Canned Curiosity experiment are unlimited. Not only could one experiment with different objects in different types of containers, but it might also be possible that the child could learn to select the lightest or heaviest can, etc. Then again it might prove interesting to use cans that could be opened, should the child become eager enough to find what is inside. To pursue this
idea further, it might be extremely stimulating to discover upon opening a can that it contains edible goodies as a reward. Furthermore, some of these foods could be placed in containers that would require a bit of ingenuity and manual dexterity to open.

My Canned Curiosity project was not started for any specific reason other than to get the child's attention, and hold it long enough to make him curious and eager to learn, while at the same time being entertained. Because this idea met with considerable enthusiasm from members of our faculty, I thought I might like to share it with anyone interested. Perhaps if more people experiment with this project, new ideas could be developed. Sharing these ideas might make this program a truly exciting one. If you give Canned Curiosity a try, be sure to hide all can openers from the adults as they might become as curious as the kids to discover what's inside.

Because deaf-blind seem to have little curiosity about their surroundings, I feel it necessary to make them aware of the pleasure and satisfaction of all fascinating things derived from their hands. Inexpensive leisure time projects should start with your hands on theirs, manipulating their fingers, exploring, squeezing, pounding, etc., hopefully to stimulate interest while knowledgeable skills are developing. The problem is to get them out of their bubble to share with teachers, parents or others. Human touch of your hand over theirs may have to be a learned acceptance and should be an ongoing thing many times a day. Tasks such as washing hands or hanging up wraps and a multitude of other daily living skills will prove to be an invaluable learning experience for these children. Stimulus must be developed before motivation can be obtained. I have for sometime been aware that the deaf-blind find it hard to accept something new; even Canned Curiosity encroaches on their territorial rights and at first might be rejected. Once the barriers are broken, constant encounters with new situations encourages and builds creative expressions.

POTPOURRI OF HANDS-ON PROJECTS

Planning the handicrafts program should encompass a wide variety of learning experiences. It should be interwoven within the entire school program and, in fact, should become one of the foundation stones of the curriculum. Projects such as field trips, science, daily living skills, etc. could be enriched and strengthened by planning craft projects which reinforce these other activities. When a child is reading about Spot the dog, that is a good time to make a leash for a stuffed dog. The knot used is the first step in crocheting. Later the leash may be used as a jump rope. Developing basic hands-on skills with a deaf-blind child is very important. An outstanding example of simulated work preparation is to have craft projects lined up in front of the child so he can work left to right and top to bottom.

Now that we have entered the school's reading, physical education and vocational programs, let's do a little nature study. When wind has been blowing hard all day cut six, two-inch strips from crepe paper about four feet long and tie a
string in the center. Let the child hold the string and the wind will blow the strips. Go to a corner of the building to find more or less wind. This also is teaching early mobility. Other early mobility training is taught by telling the child, “Your work is posted on the north bulletin board.” “Get the scissors from the drawers on the south wall,” etc.

**Objects**

A pumpkin in the room in October will last longer if Jack-o-lantern features are pinned on — using rug, cardboard, buttons, etc. October 26 is a good time to make a real Jack-o-lantern. Real and pretend — be it a Jack-o-lantern or snowman develops humor and imagination. Have an object touch table, box or drawer. Every day add something that is either found on the way to school or brought from home. These objects, which can be pressed in clay, offer another good source for tactual experiences. These same materials can be used in helping the development of speech, spelling and math. Near the end of craft time period, take time to throw in some humor by putting a glob of clay on your nose, finger, etc. “See my nose.” Let the child know you are laughing. It may take awhile for him to imitate you or perhaps put it on his nose and laugh.

**Paper**

A paper tearing session is enjoyed by most children once they learn what to do. Put torn paper into a big box and let the child sit in the box, tearing, covering self and throwing. Later, when the fun is over, the torn paper can be put in a pillow case, pin or stitch closed. Not bad to sit on or use at rest time!

**Leaves**

The same thing mentioned above can be done with dry leaves. Also, autumn leaves can be glued on art paper or pressed with an iron between two pieces of wax paper. They can also be used as rubbings by placing a leaf on the table, covering it with paper and rubbing a crayon over it.

**Cutting**

Dual scissors (4 holes) are good for teaching cutting. By riding piggyback on the child’s hand, you can help him go through the motions of working the scissors. I have also found that I can help a child learn to cut by pressing on the end of blunt scissors, but this is dangerous territory at first. Items cut or found outside can be mounted. If they are not over a quarter-inch diameter they can be thermoformed thus giving another dimension. These can be duplicated on cards and used in a matching game.

**Stringing**

Cut art paper in squares, circles or triangles; can also be glued on cards for matching or counting. Cut soda straws for stringing. Alternate paper shapes between straws. String macaroni, paper beads; made by using a 4 inch strip, 1/2 inch wide triangle; roll from wide end to narrow on a toothpick. Glue the point and slide out pick. Beads made of clay, flour and salt, molding clay, foil balls, styrofoam packing material,
fresh corn, orange peel, cloth squares, popcorn, cranberries, and many more are excellent.

Clay
Clay used once a week, rolling, pounding, squeezing, pressing, pat and poked holes in is an excellent tension reliever. I've seen a lot of clay eaten but haven't heard of any illnesses or deaths. Experiment with different clays for the texture of some clays is rejected by some youngsters. Use a ball of clay to hold flowers, feathers, sticks, rocks or other things.

Paper Mache
Many children do not like putting their hands in cold gooey paste. First let them feel dry wheat paste. Later add water, letting them stir, squeeze and mix it with their hands. They can wipe the paste from their hands on paper towels while making a ball. The next day the ball can be painted. Five paper towels squeezed together in a ball makes a pumpkin. Two pumpkin balls placed on top of each other with strips of paper to hold them in place and covered with cotton with features added will make a cute snowman. An Easter bunny is made using this same method.

When hands have developed enough skills and the child likes wheat paste, put strips of paper in wheat paste, sliding off excess paste and apply three or four layers to a blown-up balloon. These can be used as a large Easter egg, Christmas ornament, or a Pinata. Dip string in wheat paste and wrap around a blown-up balloon. Vary this by adding different shapes of cut crystal craft paper for a stained glass effect.

Stenciling
Stenciling teaches another dimension for life-long appreciation. Staple or use tape to keep the stencil in place until project is completed. Either fill the stencil with glue or dip the objects used in glue. A small jar lid is a good glue pot. Use fillers such as popped corn, fruit loops, used and dried coffee grounds, sawdust, sand, moss, crushed leaves, spices, paper, or try anything that will stick. Edibles are enjoyed the most by youngsters, but this project isn't advisable to use before lunch time. Make double patterns using plastic lids from coffee cans; staple together with paper in center. This material lets the child know when she is cutting into the pattern and teaches good cutting procedure. Remove staples and glue to braille paper which can be used for a wall hanging or matching cards.

Pipe Cleaners
Most cleaners children like to twist into shapes such as rings, circles, squares and curlicues made by wrapping around a pencil. These can be glued on braille paper and thermo-formed. Make a sweetheart: a heart shaped pipe cleaner with a marshmallow in the center. A Shamrock: three circles and a stem; add a safety pin. If cleaners are not colored, dip in green food coloring. Let dry before wearing.
Chain necklaces: cut foil 3 inches by 5 inches. Place an index finger below first knuckle, squeeze together all but the inch on the finger, slide off finger, join ends, pushing squeezed end into the other end, squeeze together making a ring. Add rings together making a long chain necklace or chain for Christmas.

Bowl: Double foil sheets and press over a bowl, slide out foil, press foil around edges to make a rather study bowl of foil. Use on camping trips and throw away.

Rubbing: Place a sheet of foil over an embossed object such as manhole covers. Rub hands on top of foil and get a copy to be mounted on a bulletin board. Write a story about it.

Collections
Use bottles, buckles, buttons, campaign buttons, china, clocks, cups and mugs, earrings, furniture, glassware, greeting cards, guns, keys, puzzles.

Flower Arranging
Most children and adults like flowers. Basic oriental three flower arrangements always look nice. Oriental people call the flowers heaven, earth and man. Man flower is placed so it will hang on the edge of a vase, earth a little taller and heaven taller yet. Heaven shouldn’t be over three times as tall as the vase. Add greenery and wait for compliments.

Gardening
Appreciation of growing things can be started by placing carrot tops, turnip or sweet potato in water and watching them grow. Measure daily growth. Place dirt in egg shells and plant such things as beans, flower seeds or pumpkin seeds taken from the Jack-o-lantern in the fall and dried. When the plants are four or five inches tall crack the shell and plant outside.

Most stores sell Punch n Grow vegetables and flowers. Directions are on the box. Patio tomatoes, strawberries and cucumbers are popular items for the amateur gardener.

Table Edibles
Make carrot rings, celery sticks, pickle rings; place on toothpicks. Cut a grapefruit in half. Place cut side down in bowl or on a plate. Push the other end of pick in grapefruit. Add radishes or olives. Do the same using mini-marshmallows and gum drops. Try fruit, too.

Rock Collecting
Rocks can be painted, glued together, glued on wood, kept as a souvenir from places visited. This can start a lifetime hobby. Agate jewelry made with tumbled agates is a very simple craft and make nice gifts for friends.

Sewing
Stringing beads is the first step to sewing; I would next give a youngster yarn on a blunt needle and a piece of plastic window screening. Allow him to stitch at random to learn what the yarn and needle can do. Later add to this pieces of soda straw, beads, cloth, and stitch around some twigs.
Burlap dresser cover can be made by pulling threads making a fringe around it. Place a stencil on cloth and let children fill in stencil with yarn stitches. By sewing edges together it could be a pillow or purse by adding a strap. Wall hangings can be made by stitching a collage of things on material and then stapling to a wooden dowel for hanging.

**Kitchen Specialties**

Make and/or experience sourdough starter, Brandied fruit, yogurt, cultured milk, sugared violets or pansies, home-dried fruits, Russian tea, sugared nuts, bean-sprouts growing, barbecues, bath salts, making wine or beer.

**Others**

Study astrology, write poetry, pen-paling, tying flies, upholster furniture, care for dogs, cats, fish, turtles, woodworking, refinishing, knitting, crochet, ceramics, weaving, play cards, Hi-Q, Scrabble, Chess, Checkers, candle-making, feeding birds, weather-watching.

**LOCAL CLUBS**

Touch and Gro Garden Club meets at Oral Hull once a month. Deaf-blind are welcome with an interpreter. Transportation is $1.00 for round-trip. They meet the first Saturday of the month from 11:30 A.M. to 2:30 P.M. Call Maria Webb for more information at 654-4195, Sandy, Oregon. Oral Hull has many activities throughout the year. A small charge of 50¢ a night for staying in the Booster Cabin is charged. A stroll in the Enchanted Gardens, picnicking, fishing, Bingo, and card games are enjoyed by all.

**HAM RADIO OPERATORS**

In the United States and Canada there are over 300,000 amateur radio operators. All have to know Morse code (dots and dashes) to get a license. I feel this is an excellent way for deaf-blind to communicate twenty-four hours a day for there is always someone on the air. To become a novice operator, one must be able to receive and send code at 5 words a minute and pass a written exam of twenty questions based on simple electronics theory and FCC regulations. Local "Ham" clubs have beginner classes. Hadley has a correspondence course that is available. Libraries have "How to Become a Radio Amateur." We have heard two deaf-blind men on the air but do not know if they were born with their handicaps.

**VOISPONDENCE**

A pen pal club for those wishing to correspond via tape or cassette. For information, write to Voispondence, Box 207, Shillington, PA. 19606.

**RECORDING EXCHANGE FOR THE BLIND**

For a yearly membership of $1.00, tapes may be borrowed or purchased. Write to Ray Irwin, 3712 Lyndale Ave. South, Minneapolis, Minn. 55409.
Audio Material

Jeffery Hutton Publishers, Inc., 145 E. 49th St., New York, N.Y. 10017. Has a free catalog of 4,000 entries of audio material including education, the arts, business, law, history, literature, political science, psychology, philosophy, religion, sociology, science, and technology. This material is to be purchased.

Braille Gift and Label Service

Wessian Distributing, P.O. Box 20015, Cleveland, Ohio 44120. A $1.00 membership in Braille Gift Service brings a bi-monthly braille news release of gift items gleaned from mail-order catalogs; all items are under $4.00. This same company has a braille label service. A sample kit can be obtained for fifty cents.

Study Tape Containers

May be purchased from Dialogue, Berwyn, Illinois, 60402. Also available are rubber stamps for Free Reading Matter for the Blind and Physically Handicapped and name and address.

Crockpot Cookbook

A two-volume braille edition available to blind cooks at $4.00 a copy. Order from Delores R. Hakan, Beth Shalom Sisterhood Braille Committee, 2100 West 79th Terrace, Prairie Village, Kansas 66208.

Children's Books

A number of books for children combining print and braille, plus illustrations are available from Howe Press. Some titles utilize braille fragrance. Catalogs in Braille or print are available from Howe Press of Perkins School for the Blind, Watertown, Mass. 02172.

Greeting Cards

To request brochure in braille or print, write Harry A. Fribush, Parkview Apartment 104, 400 Hudson Ave., Albany, N.Y. 12203. Both braille and print are on the cards.

Paper Money Identifier

A bill is inserted, and a button is pushed; a different musical tone is emitted for each denomination of money. PMI is available for $149.50 from Applied Rehabilitation Systems, 3902 Idlewild, Austin, Texas 73731.

Xavier Society for the Blind Publications

A free catalog listing braille, large print and taped material. Material is available from Xavier Society for the Blind, 154 E. 33rd St., New York, N.Y. 10010.

"Touch of Love" Pendants

These pendants spell out in braille the word Love and are in sterling silver or 14 carat yellow gold dots. There are three sizes ranging from $30.00 to $60.00. Order from Hausmann's, 732 Canal St., New Orleans, LA 70130.

Monopoly

Parker Brothers Monopoly game has been adapted to a
combination of braille and print. The cost is $30.00.
Order from Touch Aids, 1049 Redondo Way, Hemet, CA 92343.

Greeting Cards, Jewelry and Gifts
Mrs. Diane Vaughn, 1105 Sterling Street, Indianapolis, IN 46201, offers price list on cassette for $1.50. The print card and gift catalog is thirty-five cents. The jewelry catalog is forty cents.

Cooking with Betty Crocker Mixes
For large type, write: Large Type Edition, General Mills, Box 114, Minneapolis, MN 55460; for cassette, send $2.15 to Cooking with Betty Crocker Mixes, Cassette Tape Edition, General Mills, 9200 Film Center, Box 1113, Minneapolis, MN 55460; for braille, write: Minnesota State Services for the Blind, Communication Center, 1745 University Ave., St. Paul, MN 55104. Also available are: "Betty Crocker's Dinner in a Dish," "Betty Crocker's Bisquick Cookbook," and "Betty Crocker's Boys and Girls Cookbook."

Recipes and Household Tips
"Sharing" a book of household tips and recipes has been put together by the members of the Springfield District Association of the Blind. Braille: $1.50; tape: $2.00. Order from Springfield District Association of the Blind, P.O. Box 1135, Springfield, ILL. 62705. A 20-page pamphlet of "Convenience Foods" is available in braille for $1.00.

Fingertip Patterns
By Verna L. Dotson—braille patterns designed for the blind. $1.25 each. Write Fingertip Patterns, 155 N. Bellaire Ave., Louisville, KY.

Viking Sewing Machine

Amana Microwave Oven

Mini Garden

Gardening, flowers, trees, food for the family, clothing, money management and home furnishings
U.S. Dept. of Agriculture, Washington D.C., 20250 or Oregon State University, Extension, Corvallis, Oregon 97331.

Hadley School for the Blind
700 Elm Street, Winnetka, Illinois, 10093. Correspondence study texts in braille, records or tapes. All courses without charge.

Vacation Exchange Club
Cookbook
"A Leaf from our Table," $5.00 Catholic Guild for the Blind, 67 W. Division St., Chicago, ILL. 60610

Braille Book of Patterns
$5.00 - National Braille Press, 88th Street and Stevens Street, Boston Mass. 02115.
PEDIATRIC OCCUPATIONAL THERAPY is concerned with normal growth and development, with an emphasis on sensori-motor development. Among the treatment media used with disabled children is the medium of play. Dr. Jean Piaget, a Swiss psychologist, mathematician, zoologist, educator and epistemologist proposes a dynamic, developmental framework from which we can assess play and select appropriate materials. Occupational therapists often choose to use this theory as a guide. Play serves dual functions in childhood -- that of a child's occupation and leisure time activity. The two are almost synonymous. When used as leisure the child is also at work learning. When used as work the child is also having fun.

The three topics I would like to discuss today are: the importance of play, assessment of play, and the development of spatial intelligence as it relates to the multiply handicapped child: all in terms of Piagetian theory. I hope that my orientation toward methodology and process in the discussion of play and leisure time activities isn't too disappointing. As a therapist in pediatrics, I find it difficult to talk about activities outside of a developmental frame of reference. Like you, we continually ask ourselves, "how can we enhance and facilitate the next step on the continuum of development and adaptation?"

Play eludes definition and has been described by some as "pure fun" and others as a child's "work" and still others as a "learning process." Which ever way it is defined, most seem to agree to its profound value in human growth and development. Philosophers, psychologists, educators, physicians, sociologists, anthropologists, and therapists alike all share a common interest in play. This implies that play is a dynamic, synthesizing agent as reported by Takata (1974) and serves as the product of total development. Through play, motor skills are practiced, emotions gain expression, roles are rehearsed in preparation for adult life tasks, mental structures mature, social skills are learned and self-realization is nurtured. Again, motor skills as they relate to mental development and environmental adaptation are of primary concern to the occupational therapist.

With all this to accomplish, the child must play hard -- and he often needs help, particularly the sensory impaired and multiply handicapped child. And in order to help by providing the appropriate materials, space and opportunities at the appropriate time, we must possess knowledge of physical, mental and social development. We need to know how to structure a healthy and nurturing milieu.

For careful selection of play experiences, assessment is
Michelman's (1974) article on "Play and the Deficit Child" offers excellent guidelines and ideas for various play activities in the context of Piagetian theory. She suggests the use of art as a means of sensory stimulation and symbol formation. With increased symbolism she describes the evolution of games from practice games to games with rules. This is accompanied by a play agent, which serves as a guide to skillful intervention.

Spatial concepts develop and are an integral part of the various periods of mental development. Spatial representations are established by the organization of actions performed on objects in space, i.e., manipulating the world by overt motor action which later evolves into covert internalized actions. For example, our ability to "see" objects as together or separated in space is said to be a result of past actions of placing objects together and separating them rather than being a function of past visual experience. Spatial concepts then, according to Piaget, are not developed from visual perception alone but from active manipulations of the spatial environment.
Piaget (1963), has categorized space into 3 types -- topological, projective, or Euclidean according to geometric concepts. Topological space is the most rudimentary form and depends upon qualitative relations inherent in a particular figure. It is characterized by a simple position in space without relation to other reference points and emerges early in the pre-operational period.

Projective space develops later in the operational period and is the relationship between two objects from the observer's point of view. It requires locating objects in relation to each other as being before, behind, left, right, above, below, always with the child serving as a point of reference.

Euclidean space is distinct from projective space, although it develops in parallel form at the same time. It requires a coordination of different perspectives of an object and demonstrates the relationship between an object and a location from a point of orientation. Concrete operations coordinate the objects among themselves with reference to a total framework.

In play, we must recognize fundamental distinctions between the perceptual sensori-motor space occurring around 0-2 years, pre-operational space, 2-7 years and representational space resulting from direct contact with them. Pre operational space serves as a transitional stage from perception to representation. Mental images are rudimentary and isolated. Representation involves the evocation and mental manipulation of objects and their relationships in their absence.

Why do I mention all of this on space? I think these concepts on space have far reaching implications for deaf blind children. Spatial concepts are an integral part of mental development and other concepts such as movement, velocity, time, math and geometry. Since spatial concepts are internalized actions and not merely mental images of external objects or events, it seems that visually handicapped children would need more assistance in obtaining varied experiences than sighted children. Vision as a motor mediator for action is not present to elicit spontaneous play.

Swallow (1973), of California State University, reports that Piaget's theory has profound implications for blind children in a number of areas. In terms of orientation and mobility, much of the curriculum is designed around topological space, the discrimination and matching of objects. Seldom do activities include the coordination of perspectives on a two or three dimensional basis with and without concrete empirical props. There is little instruction to facilitate the transition from one stage to another. There should be more emphasis on projection fields, rotation of planes, coordination of perspectives to enhance mental development beyond pre-operational levels. Concrete and formal operations are necessary for application of mathematical and geometric principles, another reason for spatial development. Many visually limited children have difficulty with math concepts and do not operate at the concrete level of projective and Euclidean space.

Spatial intelligence also influences the development of language. Brislawn (1974), of Purdue University proposed that children possess representations and concepts of space before they acquire verbal or other symbolic means of expressing
knowledge of these structures. Accurate prepositional descriptions of space, both static (projective) and rotated (Euclidean), occur after the acquisition of operational structures representing those space relationships.

Winbliller (1974), of the University of California, Berkeley, confirms Bislaw's findings. In studying comprehension and production of spatial locatives, she found that spatial development determines comprehension but not production of spatial locatives. The implication here is the emphasis on the development of cognitive skills which in turn accelerate language, rather than an emphasis on language skills to influence cognition. The locatives in, out, on, off, inside, outside are thought to represent features of topological space. They describe position in space and indicate the features of dimensionality. The locatives which appear to reflect projective space are: on top of, over, above, under, below (vertical); in front of, behind, in back of, beside, next to (horizontal). These represent the relationship between two objects from an observer's point of view. Across, through, between, toward, along express Euclidean spatial relations, that is, the relationship between an object and a location from a point of orientation.

I'd like to stop here and sum things up in Takata's (1974) words:

It is seen that gathering a history of play monitors the state of play, diagnoses a state of learning and provides ultimately a prescription for play. For deficit children, play cannot be assumed as a spontaneously emerging behavior. Their play deficits express learning deficits. It is not enough that play should occur by mere happenstance or by fortuitous matching of persons and toys to a child. Selective play prescriptions or designs are a necessity rather than a baby sitting, luxury for those children who neither play well nor learn well.

BIBLIOGRAPHY


Recreational therapy is a fun paradox because it is both planned and flexible. Any successful recreation activity is geared to the ability level and interest of the child, but it must also give the child and the therapist the freedom to creatively explore the many possible experiences within that environment.

Finger painting can be recreation for some or pure "pain" for many others: expand the concept of "finger painting" to body smearing, sliding pad, tasting session, toe squishing, glasses blotting, hair dying and face painting and you have involved 95% of all M.H. children in some phase of texture experience that is fun and therapeutic. The plan is texture experience through "finger painting." The flexibility is creative expansion to find a way of making this experience spontaneously fun.

A trip to the farm can be to identify horses and cows; but real recreation and real learning will occur in the mud puddle, the fence climb, the straw flick, the examination of amazing body parts of the farm dog, and in the smell and tastes of a barnyard (pee u)!

Just wait till the children you teach are ready to experience a bowling alley! You'll have some who will enjoy bowling but many more who prefer imitating the bowling ball by sliding down the alley or scooting down the gutter. One may get a kick out of dropping the ball on the manager's toes and another will visit your neighbors. All in all you'll have "a ball" but not just like you planned!

So recreation is plan and flexibility. It is aimed at experience and ability levels though, if it is to be fun, it must have the flexibility to involve the therapist and the child in unexpected ways.

Recreation for deaf-blind children begins with simple movement development. It can give infants a sense of motion and confidence to explore and manipulate their environment. Even with the development of milestones like crawling, walking, object permanences, grasp, release and head control, recreation begins to focus attention on plan and flexibility.

The plans are to manipulate the child through motor competency at, or slightly above, the child's ability level and flexibility becomes the way we make those motor competencies fun. Walking in recreation, is not a matter of taking one step, then two, first with support and then independently. Recreation involves volition as its primary method. We care more that the child wants to come to our play than how he gets there. We don't decide the child must walk to our play, but if he or she is ready to try we are there to help it happen. This skill is incidental to the "peek-a-boo" or "water play" games we plan. The learning is incidental, but more efficient because of the special volitional participation of the child.

If movement and manipulation are the earliest forms of
recreational therapy they are almost always followed by a need to overcome a tactile defensive attitude familiar to over 90 percent of D-D children. To eliminate this defensive posture is no different from other recreational objectives: to actualize the possibilities for human experience and creativity. Tactile defensiveness limits our experiential abilities. We won't learn sand or grass or gravel through our feet, we won't learn hot or cold or sticky and smooth with our hands, or feel the arms, hands and faces of others because tactile defenses inhibit our exploring and learning potentials.

Recreational planning attacks these inhibitors in many different ways, not as a lesson in tactile experiences but as a day at the beach or a visit to the farm or a finger painting party.

Teaching and recreation are the same things at this point. A flexible teacher and an educationally, analytically recreational therapist will be doing the same things for the same reasons. This doesn't mean all learning is recreational, but it is a special learning situation flexible enough to accept the volitional interests of the child and develop it in individually creative ways.

Next is a brief schematic of some of the important ability levels and what types of activities would be appropriate.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Abilities</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-1 yr old</td>
<td>Curiosity - motivation to explore</td>
<td>Get into cupboards, powder room play, making (hair pulling play).</td>
</tr>
<tr>
<td>1-2 yr old</td>
<td>Movement - manipulated-partial-along</td>
<td>Under coffee tables, run away, &quot;gonna get you,&quot; scooter play, jump-bump and roll. Learning analysis will involve things like body orientation, body image, motor competency, dexterity, speed, strength, vestibular excitement, language and so on.</td>
</tr>
<tr>
<td>2-3 yr old</td>
<td>Imitation - early cognitive step where child recognizes &quot;other&quot;</td>
<td>Follow the leader, take turns, pop the balloon, catch, tree climbing and rhythm play.</td>
</tr>
<tr>
<td>3-4 yr old</td>
<td>Spontaneity - similar to parallel play</td>
<td>Child will enter play rather than be left out, tries anything to be like others.</td>
</tr>
<tr>
<td>4 year old</td>
<td>Sophistication - toward perfection is actualizing greater potential</td>
<td>Schemes to play with others and anticipates games with excitement.</td>
</tr>
<tr>
<td>5+</td>
<td>Skills toward perfection</td>
<td>Bowling, hiking, swimming, electrical work etc. trying to learn more.</td>
</tr>
</tbody>
</table>
A simple trip to the farm could accommodate all levels:

1. texture play
2. fence climbing - horse riding
3. cow milking - feeding rabbits
4. tag along helper
5. I want . . . what's that . . .
6. watch me, I can do it

The dynamic part of this scheme and of a successful recreational event is that each child can seek his own level of participation and learning. This means each child is "actualizing his potential." And that according to experience and Aristotle is happiness!

Just as we can schematize the growth process in D-B recreation, we can see this process is part of our own process toward higher and higher forms of actual perfections. D-B education is not an isolated phenomena that exists independently of the rest of our experience. It is counter-productive to see our work as a charitable effort or isolated situation. That non-expanded view of handicapped education will lead straight to futility and eventual destruction of our learning process.
RECREATION VIA MOTOR EDUCATION

Ms. Janice K. Thomas, Motor Skills Specialist,
Colorado School for the Deaf and Blind,
Colorado Springs, Colorado

Before examining the relationship between motor development and recreation it is essential to review the importance of motor development. In 1953, Charles Buell wrote:

"Shall they be handicapped with feebleness, awkwardness and helplessness in addition to blindness? The surroundings of the blind do not favor the development of activity, self-reliance and independence. Parents and friends find it easier to attend to the wants and requirements of their blind children than to teach them to be self-helpful in the common acts of everyday life. As a rule the average vitality of the blind is much below the average vitality of seeing persons, and any system of education which does not try to overcome that defect will be a failure. It is the lack of energy and determination, not the want of sight which causes so many failures among the blind. Even if a blind person becomes an accomplished scholar, a good musician, a skilled mechanic, who will employ him if he is timid, awkward and helpless? He must have faith in his own capacities and be able to inspire confidence in others. Without confidence, courage, and determination to go about freely in the world there is no chance of success for a blind person, and that confidence and courage are given by the playground and gymnasium." (Buell, 1953)

Although Buell was referring to the blind when he wrote the above quotation, it is applicable to the deaf-blind, multi-handicapped population as well. Indeed, motor development is essential to the entire development of the deaf-blind child. The deaf-blind child is "incapsulated in his own body" (Guldager, 1970). He is trapped within himself; oblivious to the world around him. People and objects exist only for one purpose: self-stimulatory activities. A motor development program helps the child discover himself and once he realizes he has two arms and legs and two hands that can hold, turn, twist and throw he begins to discover his environment. Then in turn, as the child explores his environment he learns more about himself. By moving through an obstacle course the child finds he can crawl under a table, walk around a hula hoop, crawl through the barrel, climb on and over the horse. He discovers how he can move, the size of his body, and that he cannot hide in a shoe box.

Theories of perceptual motor development such as "The Theory of Cortical Integration" by Domin and Delacato, "The Theory of Perceptual Training Through Movement" by Kephart and "The Dynamic Theory" by Oliver, have brought to light the interrelationship between motor and cognitive development.
Jones (1967) declares that the foundation for academic learning is the development of a body concept and VanDijk (1968), the father of co-active movement, believes the body is the basis for communication. "An American psychologist says that our basic concepts are built upon motor patterns, not on tactile sensations, form or shape. A thing for a little child is what he can do with it." (VanDijk, 1968)

In the "Central Cognitive Theory" Cratty states, "Movement activities which provoke thought may improve intelligence." (Cratty, 1967). All of the activities included in a motor skills or recreation program for deaf-blind children should be designed to do just that: provoke thought! Multi-handicapped children need help in associating a particular movement with a goal. They need to be shown a purpose for moving.

Many motor activities require perceptual skills and a concerted effort should be made to combine motor with perceptual tasks whenever possible. For example, the children can learn to alternate feet when made to step over the rungs of a ladder and match the colored tape on their shoes with the colored construction paper placed in the spaces of the ladder. Drawings of the objects in an obstacle course may be constructed and are quite useful. Six-point figure illustrations can be invaluable during a tumbling unit. It is imperative that the instructor employs visual aids designed according to each child's needs. The thought processes involved in interpreting the movement depicted by a stick-figure are basic to the intellectual processes involved in reading. It is apparent a motor skills-recreation curriculum offers activities that are vital to the deaf-blind child's cognitive development.

The inherent value of motor activity within itself is often overlooked, despite its importance. The deaf-blind child must be taught many basic skills which "normal" children seem to acquire naturally. Do you remember learning to jump or run? For some deaf-blind children learning to jump down from a chair is a monumental feat. Overwhelming fear masks the joy inherent in movement for many multi-handicapped children. Balance is dependent upon muscular sense, the inner ear mechanism, and visual orientation. Dancers and gymnasts have long used a technique called "spotting" to prevent dizziness by maintaining visual orientation. It is obvious that children with both visual and auditory problems would also have balance problems. The muscular strength and flexibility, cardiovascular endurance, general coordination and fitness of most deaf-blind children are also way below par.

Many educational programs for the multi-handicapped do not have a full-time motor skills specialist. It is up to the classroom teacher, aides, and houseparents to see that these children engage in activities to improve their basic motor abilities which will affect every aspect of their life style.

The underlying objective of a motor skills program should be to have fun. Motor development is a springboard for recreation. It is the development of a foundation for participation in constructive leisure time activities.
What is Recreation?

Recreation has been defined as:

Activities or experiences carried on within leisure, usually chosen voluntarily by the participant, either because of the satisfaction or pleasure he gains from them or because he perceives certain personal or social values to be derived from them. Like leisure, recreation does not have work connotations. (Kraus, 1971)

So that recreation complements the total education program it must be defined more specifically in relationship to the multi-handicapped child's orientation. Hence, any activity chosen voluntarily in which the student is interacting with another individual and/or his environment in a meaningful way should be viewed as recreational. Purposeful movement or motor skills are types of constructive recreation. Self-stimulatory activities such as eye-poking, flicking, rocking, masturbating or perseverating on lights, strings or other objects should not be considered purposeful recreational activities. Such a definition ensures that the activity is "socially acceptable." Educators are expected to normalize children. Behaviors that fall outside of a certain range are generally not accepted. Gifted children, as well as the handicapped, may exhibit what society labels deviant behaviors. Without delving into all the philosophical implications of imposing behavioral standards upon certain populations, it will suffice to say that because the present educational practice is to discourage self-stimulatory activities, this type of activity should not be considered recreational.

Problems of the Deaf-Blind

Let us re-examine the deaf-blind child. Cut off from the outside world by his sensory deprivations the child is withdrawn. Reality is within. The world as "normal" children perceive it is non-existent to the deaf-blind child. Initially, he has no options but to sit and rock or flick because relation is a nebulous concept. It is our responsibility to teach such children how to play; a task that begins by helping the child discover himself and his environment. At first the deaf-blind child may not enjoy all the activities included in a structured motor development or recreation program because of a fear of the unknown. It is very secure to stay within yourself, so the deaf-blind child may find new experiences which involve a change in routine quite terrifying. However, once this initial fear subsides and as the child's skill increases, some of the activities taught during organized periods will become his favorites and he will want to engage in them during his "free" time. This is when motor skills become recreation skills. It should be stressed that such metamorphosis does not occur overnight and many obstacles must first be surpassed. Motivation, or rather the lack of it, is a tremendous problem. Often times, the multi-handicapped child will just not be interested in an activity. Many games require considerable
understanding of language concepts. What does won or lost mean to the deaf-blind child? Cooperation and competition are complex social interactions difficult for severely handicapped children to understand. It is the educator's task to find or invent constructive recreational activities that are appropriate for each child's stage of development and are of personal interest. For some children, to win must mean a cookie; for others, a big hug will suffice. Ultimately, the won-lost concept will be understood and the activity itself will become motivating.

The "Nitty Gritty"

Several developmental stages in a child's play may be identified. Avedon (1974) has delineated the following phases of activity. Examples of activities for deaf-blind and other multi-handicapped children are given at each level.

Stage I. Intra-Individual Action requires no contact with the outside world. It is the type of activity that takes place within the mind of a person or action involving the mind and part of the body. Deaf-blind children engage in many socially unacceptable intra-individual activities such as flicking, rocking, eye poking and masturbating. Indeed, it appears as if many multi-handicapped children are stuck at this level of activity. Not all intra-individual action should be categorized as unacceptable, however. Purposeful movement such as tumbling skills or basic locomotors are examples of intra-individual activities and are constructive recreational activities as well. Intra-individual action may be depicted in the following manner.

Illustration of Intra-Individual Action

Stage II. Extra-Individual Action. This type of isolated play involves only inanimate objects in the child's environment. There is no contact with other children or adults; the action reflects what the child sees in his environment. Extra-individual activities which may be of special interest to the deaf-blind child are: play with balls, stuffed animals, dolls, clay, balloons, soap bubbles, pinwheels, musical instruments,
lincoln logs, and a "light bright." On the play ground, the sandbox, swing or horizontal bars may be inviting.

Stage III. **Aggregate Action** is frequently referred to as parallel play. It is any action directed by a person toward an object in the environment while in the presence of other persons engaged in similar activities. The child may be aware of others present but he does not acknowledge them. This is often the situation when multi-handicapped children rollerskate, swim or bowl.

Stage IV. **Inter-Individual Action** takes place when the child seeks others to be part of the play activity. It is of a competitive nature directed by one person toward another. Two man tag is a simple inter-individual activity. Pillow fights, squirt gun fights, and water balloon fights may be motivating interactive types of play for the deaf-blind. At a more advanced level, dual sports, checkers, card games, and other board games would be appropriate.
Stage V. **Unilateral Action** "Duck, duck, goose," tag, and "Drop the handkerchief" are types of unilateral play. It is of a competitive nature among three or more persons, one of whom is the antagonist.

Illustration of Unilateral Action

Stage VI. **Multilateral Action** is competition among three or more persons with no one person as the antagonist. A free-for-all pillow or water balloon fight, "Steal the bacon," and card or board games involving three or more persons are types of multilateral activities.

Illustration of Multilateral Action

Stage VII. **Inter Group Action** requires cooperation by two or more individuals. Rolling a ball back and forth or playing catch are simple forms of intergroup actions. Dual tumbling stunts such as riding on each other's backs in crawl fashion, pulling each other on gunny sacks or pushing each other on a scooter board are appropriate play activities at this level for deaf-blind children. Carving a pumpkin, building a group pyramid, or playing "house" are inter-group activities where the participants are cooperating to reach a mutual goal.

Illustration of Inter-Group Action
Stage VIII. Inter-Group Competitive Action takes place between two or more intra-groups. Keep-away, relays and all team sports fall into this category.

Illustration of Inter-Group Competitive Action

Regardless of the level of play, it is often necessary to include rather unusual activities in a recreation program for deaf-blind children because of their visual and auditory deficits. Pudding painting, body painting, shaving cream, squirt gun and water balloon fights are not generally considered normal recreation activities. "Normal" children do participate in these kinds of activities, however, whether mother knows it or not! The institutionalized child should not be deprived of such experiences, especially when the tactile system is one of the prime sensory modes.

Residential students often miss out on simple "home life" activities. They must be given an opportunity to wash a car or dog, make a cake, or just fly a kite. Again, these activities may not be considered traditional recreation activities, but they need to be incorporated into a program for deaf-blind children. outings such as picnics, hikes, shopping, or trips to the zoo, circus, or amusement park should also be an integral part of the recreation program.

ABSTRACT OF ARTICLE

Motor development is essential to the entire development of the deaf-blind child. "Movement activities which provoke thought may improve intelligence." (Cratty, 1967). All activities included in the motor skills or recreation program for deaf-blind children should be designed to do just that; provoke thought. Motor and perceptual tasks should be combined whenever possible. Deaf-blind children must be taught many basic motoric skills which "normal" children seem to acquire naturally. The balance and eye-foot coordination, muscular strength and flexibility, cardiovascular endurance, general coordination and fitness of most deaf-blind children are also way below par. Motor development is a spring board for recreation. Physical education or motor education, recreation and vocational education all overlap and may be illustrated as follows:
The three complement each other and all are essential to the child's total education.

Recreation must be defined in relationship to the multi-handicapped child's orientation. Because the present educational practice is to discourage self-stimulatory activities, this type of activity should not be considered recreational. It is necessary to teach the deaf-blind child how to play. At first, he may not enjoy all the activities included in a structured program. Eventually, however, some of the activities taught during organized periods will become the child's favorites and he will want to engage in them during his free time. This is when motor skills become recreation skills.

The lack of motivation is a tremendous obstacle to overcome. It is the educator's task to find or invent constructive recreational activities that are appropriate for each child's stage in development and which will be interesting for him.

Avedon (1974) has outlined the following phases of activity: intra individual action, extra-individual action, aggregate action, inter individual action, unilateral action, multi-lateral action, inter group action, and inter-group competitive action. Rather unusual activities that include pudding painting, shaving cream, squirt gun and water balloon fights should be included in a recreation program for the deaf-blind because the tactile system is one of their prime sensory modes.

BIBLIOGRAPHY


Hammer, E. "Psychological Assessment of Deaf-Blind Children." Video Tape of presentation given at Callier Speech and Hearing Center, Dallas, Texas.


Introduction

At last! Special education is emerging as an advocate promoting the worthy use of leisure as a relevant goal for handicapped youngsters. Perhaps more sensitive of the critical need to prepare such students with lifetime skills, special education teachers are now integrating leisure education into the school curriculum. Special leisure education has been defined by Nesbitt et al. (1974) as providing students "... with special competencies necessary to overcome, adapt, modify, or in other ways achieve the goal of normal recreational, leisure and cultural pursuits and participation. ..." It should be stressed that the education profession, like the recreation profession, has long recognized the importance of leisure, but until recently, educational leaders have given largely "lip" service to leisure preparation. In contrast, recreation leaders have been activists in providing recreation and leisure services to meet the lifespan needs of all people in society, including the handicapped. In an effort to provide a clear rationale for integrating leisure education into the special class curriculum and to emphasize the need for closer working relationships between the recreation and education fields, the author has identified the following as supportive of this position:

1. Education and recreation have similar goals, namely, those of improving the individual's mental, physical, social and emotional development.

2. The importance of preparing individuals to acquire recreation knowledge and skills takes on special significance when considering the increased leisure time being provided citizens, plus the significant amount of lifetime devoted to leisure versus academic and vocational activities.

3. A "whole" curriculum is needed for the "whole" person. Leisure plays a large part in meeting the life adjustment and/or lifespan needs of each individual.

4. Coordination of efforts between education and recreation seems especially significant when dealing with handicapped youngsters, since more comprehensive service is needed to assist the person deficient in one or more areas of human development.

5. Special educators are in a unique position to be advocates for special leisure education:
   a. Intervention during the early years is generally regarded as the most critical time to affect learning. A leisure thrust during this period seems logical if basic development of desired attitudes, knowledge and skills is to be achieved.
   b. The classroom teacher has the distinct advantage of more intensively affecting child development than any other professional.
especially in relation to meeting the needs of the deaf-blind:

1. The severely or multiply impaired individual requires very specific instruction with extensive opportunities over time to develop competencies in any area of learning. Leisure education can provide such opportunities and help bridge the gap between school and community for children who need more preparatory experiences.

2. Persons with severe or multiple impairments can be expected to have disproportionately large amounts of leisure because of more limited employment. Instead of less emphasis, special educators need to place increased emphasis on recreation "... to transform the experience of enforced leisure from 'killing time' into one where the individual may achieve his or her maximum potential." (Nesbitt, et al., 1974)

The Outdoors: Rationale and Potential

A child with an impairment(s) that affects his or her learning requires more individualized and direct learning experiences. Special educators have been especially sensitive to the need for involving handicapped children in learning experiences directly related to their environment. A recent example of this effort has been the participation of handicapped children in the outdoors as an extension of the classroom program. There is now increased recognition by special educators that the outdoors should be part of an ongoing school program, that a relevant education must extend beyond the contrived environment of the classroom, and that outdoor programming is a medium for integrating concepts from special education, therapeutic recreation, physical education and environmental education. Of special interest is that strong agreement now exists among various professionals regarding the importance of the outdoors. Special educators, therapeutic recreation specialists and environmental education specialists, although operating from different points of view, are all involved to some extent in implementing outdoor programs for the handicapped. A review of selected literature in the three fields reveals widespread agreement regarding the benefits of involving youngsters, and particularly the handicapped, in the outdoors (Blackman, 1974; Brannan, 1969, 1973, 1974; Nesbitt, 1972; Project Bicstop, 1974; VanMatre, 1972):

1. The outdoors enables youngsters to learn and recreate in a "total" living environment. Twenty-four hour living affords a full range of "true-life" learning opportunities that are not attainable in the typical school program.

2. The outdoors can help develop skills of lifetime usefulness (i.e., self-directed behavior, problem solving behavior, observation skills, acquisitiveness).

3. The outdoors is inherently motivating and therapeutic because of the fun and adventure associated with experiencing the natural environment.

4. Self-concept development is facilitated through numerous success experiences that are possible in the outdoors.
Social development is increased through interdependence and interactions with peers and adults. Trust relationships with others are developed; positive interpersonal relationships are formed (child-child; child-teacher; teacher-child).

Transfer of learning is also facilitated by enabling youngsters to directly apply skills and concepts to "real-life" problem situations encountered in the outdoor setting.

The attraction of the outdoors is an incentive that motivates persons to employ independent and self-initiated behaviors in order to interact with the environment. Increased self-awareness is often a byproduct of pursuing natural awareness.

The variety and high stimulatory effect of outdoor activities are excellent for increasing skill development in areas of learning typically stressed by special educators: communication (i.e., receptive, expressive, total), movement, mobility, spatial awareness, and body awareness.

The outdoors is an effective medium for employing a complete sensory approach to exploring and learning about one's environment, especially for the deaf-blind or multiply handicapped, opportunities abound for tactual learning.

Youngsters are able to "open up" and express their individual selves through the more informal and relaxed atmosphere unique to the outdoors. Such an atmosphere brings persons "closer together," promotes increased feelings of respect for each other as human beings, and enhances future relationships in the total school program.

Exposure to the outdoors captures children's inherent interest in nature and provides the logical setting for developing awareness, sensitivity and appreciation of their natural environment.

Although agreement exists among various professionals regarding the value of outdoor experiences for the handicapped, there exists a lack of interdisciplinary planning and coordination between professionals involved with outdoor curriculums. Special educators, specialized recreators and environmental education specialists tend to operate separate of each other; even though goals are similar and children served are the same in many instances. It is suggested that a closer look be given to the similarities between outdoor education and recreation programs. Although one stresses "learning about" and another stresses "recreating in" the natural environment, both actually involve children in many similar activities. Certainly fun, enjoyment and adventure are outcomes for all programs in the outdoors. It appears an expanded concept of the outdoors is needed, which recognizes the "wholeness" of learning and experiencing the natural environment. Instead of compartmentalizing learning and participation, we should take more advantage of the outdoors to "capture" the many experiences that are available (both educational and recreational) and not be restricted by traditional program philosophy. Employing this approach, activities and experiences are recognized for
their many values, and appropriate planning carried out so that multiple objectives can be achieved. For example, academic, social, emotional, physical, and aesthetic outcomes can be achieved through music activities. Especially for the severely handicapped, special effort needs to be made to integrate learning experiences, and less effort expended on segregating learning experiences. If we truly utilize the outdoors, traditional divisions between subject areas and programs will largely disappear.

**Curriculum Development**

Leisure Education. In special education today, there is widespread acceptance and use of individual assessment, prescriptive programming, and measurement of student performance as bases for effective instruction. Goals and objectives for the handicapped are consistently stated in terms of desired student behaviors that are observable and measurable. Unfortunately, very limited efforts have been made to develop curriculum materials dealing with leisure education, and even less effort has been given to including diagnostic and prescriptive methods of intervention. One notable exception is a state curriculum guide recently developed for use in educating mildly retarded students in the state of Oregon. (Oregon State Department of Education, 1974) In Toward Competency, leisure is included as a major section, with curriculum content presented as individual statements of desired student outcomes stated in behavioral or performance terms. Curriculum materials such as this one, that focus on observable student behaviors, facilitate measurement of individual progress and provide data for prescribing ongoing instruction. Although a variety of curriculum products dealing with leisure are available, most have been developed in the recreation field and, in terms of the author's experience, many of them describe outcomes for the handicapped that are too global in nature.

There has been a tendency by the recreationist to speak in generalizations (i.e., personal fulfillment, emotionally therapeutic, self-satisfying, socially worthwhile) when subscribing to the values of recreation and leisure activities. Not that these aren't relevant goals, but in terms of clearly communicating the direction for intervention with the handicapped, it is recommended that increased attention be given to employing a behavioral or competency-based model. When developing materials that relate to leisure education serving the deaf-blind or multiply handicapped, there is an even greater need to utilize such an instructional design.

**Outdoor Programming.** Since 1966, the author has been developing and operating a teacher training program at Portland State University that stresses an education/recreation concept of teaching handicapped children and youth. A recent development has been the responsibility for coordinating the Mt. Hood Kiwanis Carport, a residential camping program serving handicapped children and youth near Bend, Oregon. This is an interagency or "team" project in which Kiwanis service clubs provide the camp facilities, financial support and maintenance, and the Special Education Department at Portland State provides the professional support for operating the program. Staffed by specialists and counselors recruited and trained by Portland State University, the Mt. Hood Kiwanis
Camp offers handicapped children and youth a comprehensive program of planned activities unique to a mountain environment. Of equal importance, the camp provides the counselor trainees an opportunity to gain increased skills in planning, implementing, and evaluating education/recreation activities with handicapped youngsters in an outdoor setting.

To provide a meaningful program of training for counselors and service for campers, a behavioral curriculum was developed to serve as a diagnostic and prescriptive guide for outdoor education/recreation programming. The guide, an Experience/Skill Checklist, included a listing of desired camper outcomes stated in behavioral terms and covering such curricular areas as nature study, personal and social development, camping skills, swimming, physical development, fishing, music, and nature crafts (Brannan, 1974). The checklist also included an evaluation system for determining the degree of skill achievement and counselors, as part of their training, evaluated each camper on a variety of individual tasks under each of the above mentioned curriculum areas. The checklist was also designed and printed on self-carbonating paper so a copy could be sent to the camper’s teacher and parents following completion of the camp session. Experience with the checklist during its first summer of use revealed it to be a valuable tool for assessing camper achievement levels in all areas of outdoor programming. Of special significance, its use as an instructional guide for counselors and staff proved highly successful. As a prescribed curriculum, the checklist provided increased direction for all by identifying appropriate tasks to employ with handicapped youngsters in a camp setting. In addition, utilization of this guide as a diagnostic/prescriptive tool has been valuable in promoting a more individualized approach to instruction in the outdoors. Preliminary results from its use with teachers and parents are also favorable. Feedback from teachers indicates the additional information on student performance has been beneficial and the checklist has been an incentive for them to initiate outdoor activities with handicapped children during the school year. Parents have been very pleased to receive specific information regarding their child’s performance during the summer and seem more motivated about camp programs because of their increased knowledge of what constitutes an outdoor curriculum.

Curriculum development is an ongoing process and after using the initial checklist, recommendations for improvement were a natural outcome. The most obvious problem with the guide was its lack of task or skill content related to the more severely handicapped and the more able camper. As shown in Figure 1, a revised checklist has now been developed and includes an upward and a downward extension of many experiences and skills common to the original version. Of special interest to participants in this conference, skills are included that should be particularly appropriate for use with deaf-blind or multiply handicapped youngsters. In addition to lower level skills developed for each curriculum area, a more comprehensive listing of tasks has been included under the areas of Personal/Social, Self-Help, and Nature. Specifically, a more concentrated effort has been made to involve the multiply handicapped child in a “total” sensory approach to learning about the natural environment. Plans are to further explore the usefulness
of the revised guide with campers who are multiply handicapped & during the 1975 summer camp program.

Figure 1

REVISED OUTDOOR EDUCATION/RECREATION EXPERIENCE/SKILL CHECKLIST

<table>
<thead>
<tr>
<th>OUTDOOR EDUCATION/RECREATION Experience/Skill Checklist</th>
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<th>Date of Session</th>
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<tr>
<th>ELEVATION SYSTEM</th>
<th>PERSONAL/SOCIAL/SELF HELP</th>
<th>ARTS &amp; CRAFTS</th>
<th>NATURE</th>
<th>MUSIC/DRAMA</th>
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<tbody>
<tr>
<td>1. Perform independently</td>
<td>1.2.3.4.5 Communicates needs verbally</td>
<td>1.2.3.4.5 Cut with scissors</td>
<td>1.2.3.4.5 Set SK/lake rock</td>
<td>1.2.3.4.5 Employs hand/hy movements to music</td>
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<td>2. Performs with verbal and/or physical assistance</td>
<td>1.2.3.4.5 Instructs communication verbally</td>
<td>1.2.3.4.5 Tear &amp; fold paper</td>
<td>1.2.3.4.5 Runs to fast music</td>
<td>1.2.3.4.5 Describes sound of water (round of stream, fast stream, waterfall)</td>
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<tr>
<td>3. Unable to perform with verbal and/or physical assistance</td>
<td>1.2.3.4.5 Selects colors</td>
<td>1.2.3.4.5 Yves materials/tools correctly</td>
<td>1.2.3.4.5 Dances to music</td>
<td>1.2.3.4.5 Describes visual nature of water movement, color, height of waterfalls, things that float or sink in water</td>
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<td>4. unwilling to perform</td>
<td>1.2.3.4.5 Applies glue</td>
<td>1.2.3.4.5 Paints with materials/tools</td>
<td>1.2.3.4.5 Sings familiar songs</td>
<td>1.2.3.4.5 Describes small &amp; taste of water</td>
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<td>5. Not observed or employed with camper</td>
<td>1.2.3.4.5 Places materials with adult</td>
<td>1.2.3.4.5 Places in natural settings</td>
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<td>1.2.3.4.5 Participates in group activities</td>
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Conclusion

A basic premise of this paper is that preparation for leisure should be considered an important educational goal. In meeting the lifespan needs of the handicapped, special educators are now extending the classroom curriculum to include leisure education. Along with the "right to read," the "right to recreate" is now being advocated for special populations. Learning in the outdoors is a particularly significant area related to leisure preparation. Moving beyond the classroom.
walls to include the outdoors reflects the point of view that the natural environment is an ideal and "natural" learning laboratory, and one where education and recreation goals blend into a harmonious whole. It is the author's opinion that there needs to be more "outdoor" education in contrast to "indoor" education. Especially for deaf-blind and multiply handicapped learners, the outdoors offers a variety of multi-sensory experiences that are critically important to the child who is experientially deprived because of his communication problems. The stimulating effect of the outdoor environment is also viewed as particularly meaningful for the person who many times needs increased motivation in order to try new experiences. Finally, it is clear that the outdoors is a vastly unexplored area for the more severely handicapped, but the future looks most promising.

BIBLIOGRAPHY


Oregon State Department of Education. *Toward Competency--A Guide for Individualized Instruction.* Based on the proceedings of Special Study Institutes co-sponsored by the State Department of Education. Special Education Section and Portland State University, Special Education Department in cooperation with participating Oregon School Districts. Salem, Oregon, March 1974. (Student Edition pp.163; Teacher Edition pp.311)

**Project Bacstop.** An evaluation report of a federally funded outdoor social education project carried out in the Battle Creek Public Schools. Battle Creek, Michigan, Spring 1974.


Philosophy and Contributions of Leisure for the Deaf-Blind

Leisure-time activities are as desirable for the deaf-blind handicapped individual as they are for the norm of our population. Leisure time activities might need slight modifications for these individuals, but a wide range of activities in the sports, athletics and games are appropriate and necessary for an active and happy life. Often the attitudes of a great number of individuals do not understand the handicapping condition hinder the individual's participation; lack of participation is usually not due to their handicap, but to society's lack of awareness and understanding of it. Deaf-blind individuals and their families should be encouraged to participate and develop skills and interests in recreational activities of their choice. As recreation specialists, we have seen first hand the values gained through leisure activities. Our observations and experiences lead us to believe that all handicapped individuals including the deaf-blind have the right to leisure activities and their benefits.

As advocates for the deaf-blind, it is important that we communicate that the deaf-blind person is first of all an individual; second, he is deaf-blind. A deaf-blind individual has the same basic drives and needs as those who are not afflicted with a handicapping condition. Because of society's perceptual lag, many handicapped individuals have abilities that are underdeveloped. Especially for the deaf-blind, abilities are idle because these individuals have never had adequate opportunities to develop and use them. They have also lacked opportunities to recognize and employ personal needs as the motivation for meeting challenges and developing their capacities.

As professionals in recreation, we have a responsibility to provide for and develop these individuals to their fullest. We know they respond favorably to recreation and learn from it. In a sense we are teachers. We are working toward goals similar to those of the educational system: to train the handicapped individual so that he may be a functional member of society. The methods used might differ only in text and approach.

Similar to education for the handicapped, recreation for the handicapped takes on a slightly different definition than recreation for the "normal." Recreation for the handicapped serves as a mode of habilitation. We are interested in the field for the development of physical skills, social aware-
ness, integration into society, education through new experiences, and possible preparation for employment. Through recreation, the handicapped individual learns cooperation. He develops body awareness and coordination and gains physical efficiency. He is expressive, creative and interpretive. He is in a free state, untaxed by extensive goals. He becomes aware of people within his environment and learns to communicate. Of special importance is that the handicapped person should not be isolated. He needs to be an active member of society. As members of the field of recreation and related areas, we are in an excellent position to accomplish this task. The person will respond to cooperative recreation with "normals" when he is not in direct competition with them. He must be integrated slowly, so that his first experiences will leave a favorable, lasting impression. He will soon learn to accept his limitations within the "normal" situation and the "normals" will understand and aid him. This will also be a mutual process of integration: socializing the handicapped while educating the "normal."

Through recreation activities, modified, simplified, or invented, deaf-blind individuals are able to:
1. Realize self-identification (even self justification)
2. Overcome self consciousness; develop self-expression
3. Develop self confidence; inner discipline
4. Have the opportunity to emote naturally
5. Have the opportunity to experience successes and failures from which, with good program leadership and evaluation, should result appropriate social conduct, etc.
6. Develop a positive concept of self which is fundamental to forward movement with any measure of success.
7. Have the opportunity for self evaluation along with self satisfaction.
8. Develop physical dexterity, strength and endurance.
9. Develop social skills.
10. Acquire concepts and strategies for the development of new knowledge.
11. Develop skills of problem solving and creativity.

Program Opportunities for the Deaf-Blind a Sharing of Responsibilities

The opportunity for sports activities for the deaf-blind must be a cooperative effort among specialized municipal programs, educators, and parents. The programs must be of an open philosophy to allow the deaf-blind the chance to experience challenging activities of which he or she feels confident in participating. The activities should allow the individual an element of risk. Protecting the handicapped individual from any activity that might be harmful does not allow for personal growth. As Buell (1966) quotes:

More than 135 years ago Samuel Gridley Howe a pioneer educator of the blind said "Do not too much regard bumps upon the forehead, rough scratches or bloody noses; even these may have their good influences. At the worst, they affect only the bark, and do not injure the system like the rust of inaction."
An increasing number of municipal recreation agencies are providing specialized activities for members of the developmentally disabled population. These programs provide an excellent opportunity for the deaf-blind to be involved in and exposed to different types of sports, athletics, and games. The goal of any program, though, should be towards integration of the handicapped individual into regular ongoing programs. Buell (1966) aptly said "If children with handicapping conditions are to have well developed personalities they must work and play with physically normal individuals; they must have friends and feel there is a place for them."

The specialized programs offer a training ground for learning needed leisure skills. This is particularly important with the deaf-blind individual who has a great deal of free time and is generally sedentary without the proper motivation. Here again the special program can offer the needed stimulation and activity to help the deaf-blind find out what skills he does have, and more importantly what his interests are and what is fun for him. The activities should be based on his likes and dislikes rather than on a preconceived idea of what the handicapped individual ought to enjoy.

Programs designed for the handicapped also provide an excellent opportunity to make friends, increase socialization skills, and feel a part of a group. The self-confidence gained in this setting will allow a more successful experience when in an integrated situation. The physical confidence gained in the group setting or in an individual activity will help the deaf-blind in all aspects of his life.

Special programs should only be a supplementary service to a full rounded educational program in the schools which includes sports, athletics and games. A deaf-blind youngster's confidence needs to be built from an early age and physical activity offers the child the opportunity to explore and develop an awareness of the world around him, and to develop self-awareness through physical challenges. The school has a basic responsibility to provide this physical education in an integrated setting with activities that are as "normal" as possible.

An aware parent after meeting with the school's physical education teacher can help build skills at home. Appropriate activities are ones such as jogging, tandem bicycle riding, simple tumbling, arm wrestling, ball throwing, and many others. Also, family activities such as bowling, swimming, roller skating or playing miniature golf add extra stimulation and self confidence. The family plays a most important part in the success of the deaf-blind. It is up to the parents to help the child overcome his fear of trying new activities, and to overcome his negative feelings. Only with this cooperation will the deaf-blind individual realistically have the proper chance to lead a happy life.

**Introduction to Activities**

There are many normal sports activities that are very appropriate, rewarding, and fun for the deaf-blind. Some adaptations are necessary, but activities that need few adaptations are desirable because they represent the more normal activity.
There is little need for special consideration when a deaf-blind individual is involved in a group. He may need more time to learn a skill and individual help is necessary in the beginning, but this is the purpose of a specialized program. After understanding of the activity is learned and some basic skills developed, he should be integrated into a regular program. In a class situation the deaf-blind can be paired with another participant. This frees the instructor and there is no need for extra staff.

According to Tutt (1975), as outlined in his presentation at the 1974 Institute in Program Development and Training in Recreation for Deaf-Blind held in Iowa City, Iowa, some general rules for facilitating motor function in the deaf-blind are:

1. The deaf-blind need more stimulation in facilitating normal development milestones.
2. The deaf-blind may have to be moved into position and be propped in that position or held in order to develop the capacity to assume it independently.
3. The deaf-blind need actual help in order to learn motor activities. (co-active)
4. The deaf-blind require gradual increments of function rather than totally new motoric experiences. The "linking function" is essential to avoid confusion and/or panic.
5. The deaf-blind require a longer period to effectively master a task.
6. The deaf-blind require help in associating a movement with a goal.
7. The deaf-blind should be talked to and signaled to in keeping with the highest potential utilization of those senses which they might have.
8. The deaf-blind should be encouraged to perform motor activities as slowly as possible initially.

Suggested Activities

The following is a list of sports, games and athletic activities that have been successful with the blind, and with several deaf-blind individuals. Activities mentioned will require varying amounts of adaptation for use with this special population and will vary in their meaningfulness for lifetime participation.

Archery

Archery will always require the constant use of a buddy. There are targets available that beep for those with a degree of hearing. Also, a stick for a guide will help the individual line up his bow and arrow. Safety should be an important factor in teaching the beginner. A friend should always be present to make sure the area is clear and that he is shooting in the right direction. Many sports activities can lead to further interest in the sport along historical lines or cultural influences.

Beach Combing

There are many outdoor areas to explore but one of the most exciting is the beach. There are many things to discover and touch such as sea kelps, sea urchins, shells, star fish.
to explore, sand castles to build, dunes to slide down
or to stand on your head in, and of course the surf to explore
with your feet. This is a sport in itself and offers the
deaf-blind fresh air, exercise, and many happy memories.

Bicycling-Tandem

What better way to experience the freedom of movement
than on a bicycle! A tandem bicycle is also a practical means'
of transportation and a nice way to spend time with a friend.
Riding a bicycle would give the deaf-blind a chance to partici-
pate in a very popular activity.

Boating

Boating is an activity that offers a great deal of
independence and exercise. As an educational opportunity, the
deaf-blind should be aware of the different types of boating
from power boats, to crew shells, to row or pedal boats.

Bowling

Bowling is an activity that offers many ben
fits and is
a very desirable life time leisure skill for the deaf-blind.
There is some adaptive equipment available. Rails that are
placed along the approach to the alley can be purchased or
made simply with aluminum piping. There is a ball with a
retractable handle for the more physically handicapped indi-
vidual. The handle snaps shut as soon as the ball is released.
It is available from North American Recreation Convertibles,
Inc., P.O. Box 668, Westport, Conn. 06880.

A triangular piece of wood with pegs in the same order as
the bowling pins can be made so that the deaf-blind can feel,
which pins have been knocked down. Some bowling alleys have
three dimensional illustrations of the pins on the ball return.
For more information contact the Blind Bowlers Association.
Because of the nature of bowling and the use of a handicap for
all bowlers, this activity stands out as an ideal life time
leisure skill.

Calisthenics

Activity is particularly important for the deaf-blind,
and dail: exercise is something that can be done independently.
Exercise makes the individual feel better about himself, and
gives him the confidence and strength needed to handle daily
activities. It is something that should be stressed early
in the deaf-blind child's education and continued throughout
life.

Camping

Camping is an activity that teaches many skills involved
in independent living and helps in building ones' confidence in
himself. In addition, camping promotes a better understanding
of ones' personal relationship to the out-of-doors.

Fishing

Fishing is another way to enjoy the outdoors. It usually
involves exercise and sometimes provides an instant reward
(if the fish are biting). Learning how to handle the equip-
ment is very important and safety measures to be followed
should be reviewed frequently. (Fishing is also a good way to introduce boating or vice versa). All aspects of fishing should be taught, but only the more capable deaf-blind should attempt casting.

**Golf**

There are some simple tools that can be used for teaching golf to the deaf-blind. A survey of the equipment is the first step. The golfer should touch the tee, clubs, and ball in an indoor session and then advance to the golf course and be introduced to the green areas, as well as the tee off spots and how they are marked. The rules can be learned later when the individual is closer to playing an actual game.

The swing can be practiced by facing the wall, (two steps away) resting the forehead against the wall, and using the barrier as an aid to keep the shoulders straight. A simple device can be constructed for placement of the feet and club. It is a simple wood structure to help the golfer better understand the distance of the feet and relationship of the club to the body.

After several indoor sessions and as the deaf-blind becomes somewhat confident, a few visits to the driving range or even to a miniature golf course is wise before attempting the golf course itself. Golf may not be an ideal life time sport for the deaf-blind, but it can increase his awareness of popular activities and, added to his knowledge, make him more conversationally interesting. At the same time it does involve physical activity and furthers the individuals' awareness of his own capabilities.

**Gymnastics**

No adoptions are necessary for basic gymnastic exercises for the deaf-blind. Extra caution is important though, and spotters should be used at all times. Good activities are parallel bars, a modified beam, rope climbing, floor exercises, and trampoline.

**Hiking**

Hiking offers all the benefits of the out-of-doors: fresh air, exercise, the experience of new surroundings and many others. This is an activity that can be done any time and practically any place with no need for equipment. Don't overlook the opportunity to hike in town to explore new areas and discover new sights. This may be a more practical type of activity for the deaf-blind as it is often more accessible than areas out of town.

**Horseback Riding**

Horseback riding is an activity that needs no special equipment, but requires a quiet horse. Since physical touch is an important means by which blind persons become aware of their environment, it is essential that they be taught to ride on horses which will not react adversely to their movements during the early stages of their training. In addition, the rider who is blind must be given plenty of time to familiarize himself with the shape and dimensions of his horse and the equipment. He then can be taught in the normal manner,
receiving physical guidance and support only when necessary. Training on the lunge is a good way for the rider to gain confidence. He can then ride freely in an arena. When riding outside on trails, however, the blind rider should be lead by another sighted rider—

Hula Hoop
The hula hoop can easily be used by the deaf-blind individual and can be used in the usual manner around the waist or around the arms or a leg. It offers a challenge as well as a good time.

Parachute Play
Parachutes add interest to simple games and some folk dances. Many simple activities are possible such as running in different directions holding onto the parachute, throwing the parachute in the air and having everyone run underneath and be covered, having part of the group run underneath while the remaining group support the parachute, running with the parachute flying behind and placing a ball in the center, and having a competition to see which side can push the ball off the chute on the opponent's side. Records are available with activities.

Relay Races
Races are always a favorite. They encourage the deaf-blind to work in groups supporting one another. They also demonstrate competition and learning to see what it is to win or lose. Relays involve much physical exercise and can be run indoors or outdoors. Some popular relays are: wheelbarrow races, sack race, group race, three legged race, and partners relays. Much imagination can be used in relays, or they can be a most simple activity such as running backward, hopping, using scooters, putting on and taking off a T-shirt, or even chewing bubble gum.

Roller Skating
After the first reeling of instability, roller skating is a very exciting activity and one that can be carried on independently. The wheels on the skates can be adjusted to rotate slowly for the beginner and then changed to the normal speed. Skating is a good family activity and one to be enjoyed with a friend.

Snow Activities
Possible snow activities include: Innertubing, sledding, saucers, snowshoes and skiing.

Swimming
Swimming is especially worthwhile for the deaf-blind. This is another activity that can be done independently and would be high on the list of life time leisure activities. Major objectives of a swim program are: (1) to help the child overcome fear of the water, (2) to promote self realization, (3) to encourage involvement in an independent activity, (4) to improve coordination (5) and to make swimming a pleasureable experience.
Trampoline

Trampoline activities involve most muscles of the body, so they are an excellent type of physical exercise. Mechanical relays can be used at first for good control. Basic exercises should be learned such as seat drops, knee drops, front drops, and simply jumping with a feeling of freedom, relaxation, and fun. For those with some degree of hearing, a bell can be hung underneath the trampoline. This will help the student know when he is correctly jumping in the center.

Turbling

Turbling involves a great amount of body control, balance, and strength that are all necessary traits for participation in many other sports. Simple activities such as forward and backward rolls, armless sit down and rise, frog stand, log roll, and head and hand stands all involve many basic movements. Group activities such as building a pyramid are also fun.

Water Skiing

An activity for the more adventuresome deaf-blind. Caution must be taken by the driver of the boat and it should be done in an area free of boat traffic.

Weight Lifting

Weight training needs no modification and is an excellent activity for boys. It can be done with a minimum amount of equipment at home, in physical education classes, or in integrated community programs. Suggested activities:

1. Preparation is very important:
   a. Develop breathing technique
   b. Program what you will lift, how much, and in what order
   c. Before lifting, warm up thoroughly by doing various stretching exercises

2. Suggested lifts:
   a. Military press
   b. Arm curls
   c. Bench squats (spotter important)
   d. Bench press (spotter a necessity)
   e. Rowing

3. Possible competitive lifts
   a. Clean and jerk
   b. Snatch
   c. Military press

Wrestling

The deaf-blind has a disadvantage in the standing position in wrestling. The opponent should use the lock approach where each wrestler places a hand on the back of the head of his opponent and the other hand under the elbow of the opponents that has the hand on the back of the head. (Buell, 1966)

Teaching Suggestions

When working with the handicapped remember:

1. Progress slowly, offering familiar activities first. Use repetition, because these individuals need reinforcement of learning.
2. Introduce new activities during the early part of the session before individuals start to tire.
3. Be kind, firm, and patient. Always use the positive approach.
4. Be clear in directions without talking down to the individual. Use concrete examples.
5. Demonstrate and take active part in the activities.
6. Attempt to keep each individual actively involved in the process.
7. Offer activities, suggestions which could be useful during individual free time.
8. Remember the characteristics of the individual and consider personal skill levels, attention span and interests.
9. Let each individual compete with himself or herself. Some simple tests, measurement devices and lists provide interest and incentive.
10. Give the individuals goals in which they can have some measure of success and use praise as often as possible.
11. Allow some choice and suggestions for activities from each individual.
12. Include rhythmic activities, such as music or folk and square dancing.
13. Aid individuals in developing basic skills in the 4 program areas: daily living skills, work-activities skills, recreation-socialization, community experience skills.
14. Demonstrate good personal hygiene by being a good model.
15. Keep records of program training.
16. Aim for progression in all areas of the program.
(Yost, 1974)

Ideas From a Camp Program

1. Be patient. The handicapped will learn, in time.
2. Be redundant. Review, review and review until the individual responds to the instructions without step by step direction.
3. Do not pressure the individual. He will become frustrated and reject further instruction.
4. Make the activity fun. The individual will respond favorably.
5. If the individual is fearful of a new experience, do not push him. Take him through each step slowly, and explain each stage.
6. Consider all aspects of the individual's disability: mental, social and physical, then adjust the assignment to meet his capabilities.
7. Recognize any progress or task well done. Praise is the password for future positive responses.
8. Don't be critical. Explain the problems and errors, then work them out.
9. Be firm and discipline the individual. Don't let him get away with poor behavior.
10. Do not expect too much all at once. It takes the individual time to adjust.
11. Thin' out situations that are troubling the individual.
12. Communicate with the individual while you work with him.
13. Be a good listener. The individual might have a lot to say.
14. Don't allow the individual to be overly affectionate. Some are so inclined.
15. Don't allow him to play on your sympathy.
16. Never perform a task without knowing the individual's condition. If you do not know, then ask.
17. Do not allow the individual to dominate your time.
18. Give them a chance to experiment. If they fail, they will need help. Remember though, they may succeed and that is what we want.
19. Do not dominate the individual. Give him some independence.
20. Give the individual a new experience and let him have fun. (Yost, 1972)

Evaluation Suggestions

Any professional or volunteer involved in developing new programs or monitoring and teaching in existing programs needs to evaluate needs to develop a means of evaluating the total process as well as the pieces. If a program has objectives that are part of the instructional package, it should have an evaluation process to determine to what extent the program objectives are being met. It is through evaluation that each individual goal or objective can be reviewed to judge whether the program is meeting the needs of handicapped individuals.

Program evaluation should not be the last phase of the program or activity. Program evaluation should not be the forgotten ingredient as is so often the case. Evaluation starts during the initial planning stage and should continue to develop during the growth of the total program. It starts with philosophy and goals, through administration, personnel staffing, programming for the handicapped individual, and utilizing of facilities and equipment. In all cases there should be an established method to assess the needs, interests, competencies and capabilities of the individuals or groups of handicapped individuals you are trying to serve.

Two major aspects of each program that should be assessed are the:

1. People (i.e., consumers, staff, administration) and the
2. Program (i.e., activities, facilities, equipment)

Efforts carried on in these suggested areas should consider:

1. Evaluation of effectiveness in the reaching of goals and objectives previously outlined for the program.
2. Evaluation of the handicapped individuals' needs and interests.
3. Evaluation of handicapped individuals' active participation.
5. Evaluation of each specific program component.
6. Evaluation of program equipment and facilities.
7. Evaluation of program organization, administration and supervisory procedures.
After reviewing the literature it was decided that the bibliography presented by Charles L. Buell in his book Physical Education and Recreation for the Visually Handicapped is a good and extensive selection. It is presented here along with selections by the authors.


This is a how-to-do-it pamphlet explaining what the leader should know about blind children, how to prepare sighted children in the group for the presence of a blind child, and what adaptations the blind child might need.


Many activities described for adults in this book can be used for youth groups.

The text contains clinical observations and research evidence which lead toward appropriate educational measures to aid blind children to move and deal with space more effectively.

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This booklet presents research evidence which can be used by physical educators of blind children as a basis to organize training programs in space concepts and body image.

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Organization, administration, curriculum, class and individual techniques in physical education for exceptional children, including those who are blind, are considered.

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One chapter of the book is devoted to physical education of the visually impaired child. Since some blind children are multiply handicapped, the other deviations discussed will be of value.

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Pages 78 and 79 are devoted to recreation for blind children.

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Those seeking references on physical education of the blind which appeared before 1953 will find this book helpful.

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This is a report of the International Congress on the Essentials of Physical Education for Youth, Connecticut Valley, Connecticut, April, 1954.

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This is a report of a two-week workshop which drew 60 participants from all parts of the United States.


The basic approach is to discuss activities, mentioning modifications for handicapped individuals from time to time, including those who are blind.


A wide variety of hobbies for blind adolescents and adults is covered in detail.
This publication is based on questionnaire replies and teaching swimming to a few blind teenagers.

This practical guide is for public school physical educators who have handicapped children in their classes. A basic assumption of the book is that physical education and recreation for various groups of handicapped children is more alike than different from programs for children who have no impairments. Reference is made to a specific handicap, including visual impairment, only when it is necessary to modify an activity. Dorothy Carr was the principal investigator and Charles Buell acted as a consultant for the visually handicapped.


Information is very general in nature. Seven pages are devoted to visually impaired individuals.

DEVELOPING SAFE SWIMMING FOR
THE DEAF-BLIND CHILD

M. Robert S. Mealey, Instructor, Physical Education Department, Washington State School for the Blind
Vancouver, Washington

Swimming, to most of us, is a favorite recreational activity and it is also one that deaf-blind children can engage in very successfully. It offers opportunity for physical achievement, relaxation and personal satisfaction. It is an interest which provides vigorous activity for all ages and can truly be considered a lifetime recreational pleasure.

The child who is both deaf and blind needs to avail himself of every opportunity to stimulate and activate his mental and physical potentials. Those children who are exposed to a variety in changes of temperature and environment accumulate and store more information in their computers than those who experience unchanging conditions. Swimming should be a vital part of an effective physical education program for deaf-blind children. The goals are those of acquiring survival skills, developing muscular coordination and control, having fun and relaxation and developing swimming skill and competency.

At the Washington State School for the Blind, our deaf-blind children are introduced to physical education routines and swimming instruction concurrently. The gym activities are designed to promote strength, coordination, endurance and balance. For the very small children we include the simple activities of rolling, crawling, standing and learning to walk; very basic activities which, in addition to physical development, are directed toward stimulating interest and awareness. As the child progresses he is taught to climb the ladder, hang from the bars, swing, jump, fall, and further appreciate the force of gravity. In the gymnasium, bouncing on the trampoline is the all-out favorite.

In contrast to gymnasium activities, swimming offers an entirely different environment and medium for movement. Here the body naturally floats and learning to swim is learning to maintain and sustain this phenomenon. By learning breath control and body position for efficient floating, it is demonstrated that gravity has little effect and movement of arms and legs gives motion. Teaching this concept and promoting acceptance and enjoyment of the water, its fun and challenges, is the task of the swimming instructor.

Youngsters are usually curious about water. It feels cool, hot, creates a sensation as it moves across the skin: it swirls, splashes, drips, runs, squirts, and trickles. The bath tub and the shower are routine necessities but they should also be fun and provide learning experiences. The faucet, the hose and the wading pool may all be employed in building a readiness for swimming instruction. Too frequently we have found our children to have been protected and discouraged from an interest in water and they have developed
resistance to water experience. Whatever their initial attitude, regularly scheduled swimming lessons eventually bring our children to acceptance of the fact that a consistent routine of water activities is expected and will be completed. They are rewarded with a hug, a pat on the head, a squeeze...anything that will convey to them the good feeling of success and a happy time. Though the child may not appear to be at all happy on some occasions, eventually he begins to anticipate his sessions in the swimming pool. In fact, when given a choice of all activities, swimming is by far the most popular activity among our deaf-blind children.

Giving praise and showing satisfaction for each task the child does well develops a vehicle for mutual understanding—the beginning of physical language. Whether the child enjoyed the experience or not, the instructor shows satisfaction that he completed it. Eventually it becomes less objectionable to the child and at that time satisfaction is demonstrated for his not only completing the task, but for the fact that he also enjoyed it.

Each step must be manually imposed to let the child know what is expected of him. The child's limbs must be manipulated through the swimming movements. A tap on the head, a push downward, a pull upward...all of these signals become significant in the course of the lesson sequence. A working relationship develops between child and instructor and this sequence of activity and physical contact-communication provides mutual understanding that permits swimming progress.

A structured sequence of activities is important and it prepares the child to expect certain experiences routinely, whether he enjoys them or not, and by repetition he will eventually protest less. In the process, he learns to enjoy certain experiences and will then experiment and investigate on his own. A simple routine can be basic to all beginning levels and should include kicking the legs, back float position, front swim position with arm and leg motion, dipping the face in the water and learning breath control, and, for fun, splashing in the water, walking in the water, and playing with the instructor. This routine can be used with the smallest of children, but with all beginners, the instructor must generate security and confidence by the manner in which he handles the child. For the youngsters who are capable of standing and of walking, the procedure is much the same though with more emphasis on developing independent movements and interests. As deeper water is experienced, they will enjoy jumping into the water, gliding to and from the wall, and, in the process, developing breath control and swimming movements. As deep water skills improve, the instructor extends the distance the child swims in order to increase stamina, endurance, coordination and efficiency of swimming movements. Patience and repetition are basic factors in developing swimming competence in deaf-blind children.

For the beginner, there are two important hurdles to clear; achieving under water breath control and mastering the back float position. These two essentials are basic survival skills and are stressed throughout all levels of the learning routines. Our deaf-blind children learn to swim on their backs first because they are conditioned to be comfortable in this position and they develop water independence more rapidly.
The obvious approach in introducing children to the water is to start with shallow water and progress to gradually deeper water, keeping the water ever challenging until its depth is no longer a concern and the child is able to move about and handle himself with safety. It is important not to rush this process. Self-confidence, willingness and curiosity will be the motivating forces in the transitions.

For beginning swimmers, the warmer the water the more relaxing and comfortable the experience will be for them. The room temperature should be at least five degrees warmer than the water to avoid chill or discomfort. However, this will vary somewhat depending on the effect of heating and ventilating systems on room conditions. In the introductory period when the child is not as active as he will be later, these factors should be considered.

Young deaf-blind children require much special attention and personal care. The development of the simplest of movements or understandings can prove to be a major learning experience in the developing child. The swimming program has the assistance of supportive personnel, i.e., teacher aides, houseparents and volunteers. To guarantee maximum water time for the students, supportive personnel manage the travel of the youngsters and locker room preparations. In the locker room, though the major objective is to develop self-help skills, it usually takes all hands. Occasionally, emergency sanitation service requires a sharp eye on deck as well as routine surveillance checks on possible offenders in the pool.

Those who assist the instructor in working with the deaf-blind child in the water, i.e., teacher aides, student teachers, and volunteers, must have a positive attitude and be comfortable and firmly gentle with children. An individual’s feelings are transmitted in the manner in which he holds or moves the child. Negative feelings of indecision, hesitation, reluctance, disinterest or carelessness are quickly communicated and can lead to anxiety or fear in the child. A firm attitude and smooth, steady, rhythmical movements build security. Those handling the children in the water should be capable of building and reinforcing positive reactions in the child.

It is as true for deaf-blind children as it is true for all other children, that a balanced fare of recreational fun should include opportunity for swimming and for developing survival skills. The physical values are in the opportunity for vigorous exercise, relaxation, increased vital capacity, strength, coordination and stamina. It is a lifetime skill and a recreational interest that is in itself satisfying to the individual as well as in association with others in a social setting. These benefits accrue to all children but are of great significance for the deaf-blind child whose opportunities for recreation are markedly limited. Acquiring survival skills also broadens other recreational activities that are water-associated, i.e., boating, fishing, and camping. Swimming is one activity the child can enjoy with his mom and dad, brothers and sisters and friends...at home, in the neighbor’s pool, in the community pool, or in a motel pool. Pools are becoming so numerous that year-round swimming is available in most communities. Its merit as a general body conditioner and leisure time recreational interest should motivate those responsible for the education of deaf-blind
children to include swimming in the curriculum wherever possible, even when a pool is not immediately available and it means arranging for transporting the children to the community pool.

Swimming makes a unique contribution and it has remarkable therapeutic value. It creates desire for more physical activity, motivates interest and produces qualities of personality which enhance social involvement with others. It requires the application of judgment and decision-making for personal safety while also providing opportunity for relaxation and enjoyment. Swimming can be a strong force in the total development of the deaf-blind child.
We all grow and develop through the alternation of rest and activity. This principle is at work in all aspects of our lives. We rest at night in preparation for the activity of the day. However, in order for maximum growth, there must be a balance and purpose in both our rest and activity. We have found that many multi-handicapped adults who have been institutionalized spend large amounts of their time at activities not very purposeful. They spend abnormal amounts of time filtering and daydreaming and not enough time engaging in meaningful and stimulating activities. Our goal as teachers is therefore to recreate more purposeful experiences by educating the student to use periods of rest and activity in constructive, meaningful ways.

The institutionalized multi-handicapped adult usually has had little direction in sensory-motor or social development. In our adult classes, we observed that those adults, also lacked intrinsic motivation to develop themselves in these areas because of their apparent inability to see much purpose in many of the activities. Therefore, we attempted to teach the same skills we were teaching in the classrooms in recreational activities such as hiking and dating. In addition, to help release the tensions and fatigue of these adults, we introduced transcendental meditation. We received support and reimbursement from the Lighthouse for the Blind, Inc. for both the nature and transcendental meditation programs.

Nature Program
The nature program is designed to facilitate the awareness of each individual's relationship to his or her natural environment. The program has five areas of focus: exercise, adaptation to environment, acquaintance with animals, sound awareness, and sense awareness. Philosophically we are dealing with the total personality of each student. Therefore we cover such physiological, psychological, educational, and social objectives as increased physical stamina, increased independence and self-confidence, broadened orientation and mobility skills, ability to relate self to nature, increased communication skills, and enjoyment of nature. The five major areas of the nature program are divided into smaller components called phases and steps. Its structure is similar to the Teaching Research Curriculum in Oregon, except that the phases and steps of each part are percentaged so that the sum of the phases and steps in each part totals 100 percent. In this way programs may be graphed and data may be marked on a percentage-of-achievement basis. In
most cases, the components of the program are geared for the individual rather than the group.

Once a week a teacher and volunteer drive their class of four students out to the teacher’s farm in Carnation, a rural town east of Seattle. Here they spend approximately two hours taking a morning hike, traveling on a dirt and gravel road, a trail, and an obstacle course. Throughout the hike, the students travel by rope, which facilitates their following each other. They make frequent stops for independent exploration, and discussion about the cycles of nature. At noon the students eat lunch at the farmhouse. They make hot chocolate and review their morning experiences. After lunch, if the circumstances are right, the students interact with (observe, smell, touch) the farm animals, which includes horses, cattle, and dogs. On the return trip, they stop at the Tolt River. They feel the current by holding a 15-foot branch in the water. They travel along the river bed and learn how the river affects the total environment.

The nature program has been in existence for three months. At first the teacher took different students and baselined the degree of individual participation during the experience. The baseline chart graphed emotional attitude, degree of participation and demonstrated skills. The teacher then chose four students who exhibited different degrees of adaptation to the natural environment. These four students have now made eight trips to Carnation. Three show great enthusiasm and willingness to participate in every facet of the program. The fourth is overcoming fears and dependency on others.

Initially there was zero communication between the students, even though most of them have been working together for over a year. The rope they use in traveling has had the greatest effect on inter-communication because it makes them depend on each other, and in this way it facilitates their getting to know each other better. Currently, there is much spontaneous interaction among all of them. Physiologically, each student has shown improved stamina and agility. Each week the hikes are lengthened and made more difficult. Psychologically, the clients are showing a desire to independently explore and experience their environment. They are beginning to share discoveries with each other. One student now can distinguish tree types by feeling the bark and can identify several plants. We plan to continue these weekly excursions for the students, aiming towards the goal of 100 percent competency level in all five areas of the program.

Learning Through Dating: Exploration of using dating as a medium for developing basic skills and acceptable behaviors.

Dating is more than a guy and gal going out together for an activity. Dating requires many skills and behaviors which are relevant to the normal growth and development of the individual. The key obstacle to success in learning many of these skills and behaviors has been lack of student motivation. Because dating can be an intrinsically enjoyable experience, and because it is also a normal part of a single adult's life, it can be an ideal medium for developing such skills and behaviors as: money management, orientation and mobility, communication, self-help, values, recreating, and vocational
production. Therefore, the goal of our dating program is not necessarily to teach dating, but rather to develop skills and behaviors which are inherent to meaningful social relationships and transferable to many kinds of recreational activities. The following organizational procedure is one we employed and are recommending:

1. Meet with heads of residences to discuss ideas and work out an acceptable program.
2. Send a program description to parents and guardians explaining the program and asking permission for student participation.
3. Research neighborhoods where the students reside to discover nearby recreational establishments: (i.e., theater, restaurant, bowling alley, concert hall, park, bars, pool, etc.)
4. List possible activities in the larger community (i.e., party, tavern, dancing, movie, roller skating, ice skating, dinner with and without music, snack, concert, play, hiking, picnic, lunch, etc.)
5. Contact agencies that provide recreation services to learn what functions and activities are going on in the community (i.e., Northwest Regional Center Recreation Program, Sunshine Club, WARC, Community Services for the Blind, Seattle Park Department, etc.)

The actual procedure of the date differs with each student. In this exploratory program, we have baselined students on their observable social skills as well as experimented with teaching skills dealing with money management and self-help. However, the value and experience of friendship is more important than teaching most skills and behaviors. Many of our students are isolates—they are lonely, depressed and generally lack motivation for life. By getting to know each other through enjoyable social experiences, we hope to cultivate meaningful friendships and develop an improved self-image. Because we have not been emphasizing the more serious emotional aspects of dating, all dates have so far been on a dutch-treat basis. However, some of our students are on the threshold of more serious kinds of attachments and we have also been asked to help these persons with such relationships: So far we have hesitated because of the many different philosophies regarding sexual experience and marriage. We do hope to pursue further training for ourselves in this area. Right now we are learning from our students to determine future directions. We have learned to de-emphasize both the date aspect and the client-teacher relationship. We recognize their chronological age, not mental age. We travel as equals expecting and giving common courtesies, respect and warmth.

Transcendental Meditation

Transcendental Meditation (TM) is a simple and natural technique which allows the mind to take an inward direction to subtler levels of thought. Correspondingly, the body settles down and gains deep rest. Due to this rest, accumulated tension and fatigue which hinder efficient functioning of the nervous system are dissolved in a natural way. The results are increased energy and creative intelligence, more inner stability, and improved clarity of perception at all levels of experience. The effects of this technique have been and are currently being
The benefits in daily activity due to TM are wide ranging. They cover physiological, psychological, sociological and ecological facts of daily life. Physiologically during TM, oxygen consumption and metabolic rate markedly decrease, indicating a state of deep rest. Psychologically, meditation shows significant increases in the growth rate of intelligence. Sociologically, we find improved relations with supervisors and co-workers. Ecologically, meditators display more effective interaction with the environment. They recover from stress more quickly and in time become more resistant to incurring new stress. All these benefits and more are realized through the regular daily practice of this technique.

Within the contemporary condition of increasing stress and tension, certainly any method of relieving these conditions would be a welcomed addition to our lives. Because a person is handicapped does not make him or her immune to the tensions and fatigue of everyday life. In fact, it may make him or her more susceptible. Our goal is to give the handicapped individuals we serve a means to eliminate the accumulated tensions and stress and, thus, to enable them to function most efficiently.

An introductory lecture on TM was recently presented to interested staff and supportive services personnel at the Lighthouse for the Blind, Inc. This was followed by the same lecture being presented to our students. The lecture for students was presented on a simpler and concrete level, but covered the same information as the lecture given to the staff. There was a second lecture given to nine students who expressed an interest in learning more about TM. Out of these nine, four people decided they would like to learn how to meditate. Arrangements were made and the following week all four began TM. The course of instruction takes four sessions on four consecutive days. The course was taught by a qualified teacher of TM. The first day of instruction takes about one hour, during which the actual technique of TM is taught. The student mediates for the first time and receives some general instructions on how the technique works. The next three days instruction involves about one hour each day. During these sessions the practical benefits of TM are talked about and the student is given a vision of the possibilities that TM can bring. After this four day course of instruction, the student has been given all he needs to be able to continue meditating.

We have noticed some results in the short time these four students have been meditating. One student who is hyperactive and who rocks constantly, ceases all such motion the minute he begins meditating. Another student who seemed to be depressed most of the time now seems to be enjoying himself more and doesn't complain as much. All of the students look forward to their meditation and are enjoying the benefits. Two of the students meditate at home and two meditate at work. Once a week, a teacher of TM comes in to check with all of them to make sure their meditation is going smoothly. The reason two of our students meditate at work is because right now they are not independent enough in their living situation to meditate on their own. Hopefully, as they become stronger in the practice of TM, they too will be able to meditate on their own. The
goals of our TM program are first to give our students the opportunity to learn about TM. Then, if they wish, they can start and this will give them an independent and meaningful type of leisure time activity which provides a deep state of rest as a basis to promote other types of activity.

Conclusion

Many institutionalized multi-handicapped adults have led lives with little purposeful activity. Their care has been custodial. Therefore, the goal of the teacher is to help the adult establish a whole new life pattern wherein the adult experiences full meaningful activity appropriate for his/her age and an appropriate outlet for the tensions and fatigue accrued through living a full active day. In our explorations with teaching basic skills in recreational activities, we found that diversity and enjoyment were keys to maintaining attention and motivation at high levels. This is the basic reason we found much more rapid skill acquisition from both the nature and dating programs as compared to individualized classroom sessions. Transcendental meditation further enhanced the learning power of the multi-handicapped, as it correspondingly offered a channel for the normal release of stress acquired through activity.

A good definition of the all-encompassing nature of recreation has been stated by Maharishi Mahesh Yogi, chief proponent of Transcendental Meditation:

Recreation means re-creation of the normal functioning of the entire system so that it is capable of operating to its maximum capacity. When certain mechanisms of the body have been put to one specific type of activity, they become tired and a man loses efficiency in that activity. When he engages in another type of activity, other mechanisms become active and the tired ones take rest, thereby regaining their efficiency. This is said to be re-creation.

For multi-handicapped adults, this concept of re-creation must be introduced into their lives as they have so far led unnatural and sedentary types of existence. Because so much wasted time has already passed with such individuals, this introduction to rejuvenating rest and providing meaningful, diverse activity must proceed immediately with an eye on both mainstreaming and enjoyment.

BIBLIOGRAPHY


Tjoa, S.A. "Some Evidence That the Practice of Transcendental Meditation Increases Intelligence as Measured by a Psychological Test," Scientific Research on Transcendental

CREDITS
Marie Connors, teacher of Transcendental Meditation. Teaching Staff of the Lighthouse Pre-Vocational Training Program.
Art Marsh, Director of Greenwood Homes, Intermediate Care Facilities.
ACTIVATION THROUGH RECREATION
FOR THE WORLD AT WORK

Ms. Jean Edwards, Associate Professor of Education,
Special Education Department,
Portland State University

If I were to single out one word to best describe the characteristic that makes one acceptable for placement in the world of work, I would say activation. To me, activation means movement, mobility and socialization. How do we activate the lives of multiply handicapped persons? I think that recreation and community experiences are the key to that activation process. As I look out to the young people who are successfully employed in the community today, regardless of the nature of their handicap or degree of impairment, I see a group of young people whose lives have been activated. Ideally, this activation process would begin early in the preschool years when the parents of a blind, retarded or multi-handicapped youngster started encouraging their child to explore the world around him. Parents of a blind child might ring a bell and encourage the child to crawl toward it, or place a small toy just out of reach so the child would have to crawl to touch it. Too often we bring the world to the handicapped child, instead of encouraging the youngster to seek and to be activated by the world and the things around him.

Early, also, in the multiply handicapped child's life, recreation can be used as a vehicle for activation. Participation with normal brothers and sisters in play, in catching a ball, in walking, in going to the children's zoo, in petting the animals, and in other experiences common to young children is critically important for facilitating optimum development. As we enter the elementary school years and the intermediate years, activation becomes even more important. Field experiences, such as going to the barber shop, going to the store to shop, buying clothing, knowing what a store is like, knowing how to move in crowds, hearing a cash register jingle, and exploring the toys on the toy counter all demand movement and mobility on the part of the youngster. Associations with normal children in home, school and neighborhood settings also demand social interactions on the part of the youngster. All of these experiences provide movement, mobility, and socialization opportunities for the multiply handicapped and are necessary for activating their lives.

Too often we think of recreation and work as two different and separate kinds of functions. They are very much alike in some ways. In order to be effective in both of them, we must be active; we must be moving. Moving in one's environment is important in both work and play. Also, as we progress into the adolescent years, seeing ourselves as contributing members of society will be very important to the activation process and our adjustment to the work-a-day world. We can experience that activation and that confidence through the world of recreation. Once again, handicapped persons are able to view
appropriate young adult actions through participation with their normal peers. In doing so, they feel confident. Also, they present themselves to an employer in a completely different way because of their ability to communicate with normal young adults. Frequently, our institutional system prevents the multiply handicapped young person from acquiring the kinds of skills, normalized speech patterns, and activation behaviors that make it possible for him or her to move effectively and appropriately in the world of work. Our adolescents and young adults, who have spent many years in institutionalized kinds of settings, have mannerisms, speech expressions and grooming habits that are not appropriate, like, or normal, in comparison with other adolescents and young adults that they will be competing with in the world of work. It is not unusual for me to go to an institutional setting, such as a school for the blind or a home for the mentally retarded, and find adolescents and young adults playing child-like games. What do most adolescents and young adults do? They bowl, they dance, they play the guitar, and they sing. These are normal young adult types of behaviors. These are the kinds of activities we ought to be encouraging and teaching and activating multiply handicapped adolescents and young adults to participate in during their leisure. Thus, I recommend that the activation process begin very early in the handicapped child's life, and that we create, in as many ways as possible, opportunities to integrate with normal young people, and to participate in leisure time activities that are appropriate and like those of their normal peers.

At Portland State University we've had a very successful normalization club for several years. This club, dedicated to treating handicapped young adults as equals, as friends, and as peers, has been tremendously successful. Unlike other recreational organizations that serve handicapped young people, our club is not dedicated to doing things for handicapped people, but doing things with them. We believe very strongly that adolescent multiply handicapped young adults do not need someone to do things for them, but somebody to do things with them. In our program, activities are planned around what normal young adults enjoy doing. We never ask what should we do for these handicapped young people; we ask what we like to do and we do what we like to do because we are equals and we are peers. While many "normal" young people still hold in their minds that mentally retarded and multiply handicapped young people are different, our club is based on the premise that we are more alike than different, and our likenesses and not our differences are the basis for our friendship. We come together as young adults who enjoy doing some of the same kinds of activities. We may be different in many ways, just as you and I are different in many ways, but we come together on the basis of how we are alike. We are young adults who enjoy dancing, hiking, music, bowling, pool, singing, camping, walking on the beach, talking about work, and talking about feeling comfortable as a human being.

Work provides for us not only opportunity to be activated into the world of work, but also to be activated into the world of social and recreational experiences. Through activation in the world of work, money is realized; money in turn provides opportunities to participate in various forms of recreation.
In addition, we also recreate within the world of work by playing cards at noon time, talking with and sharing common interests with other employees, and even belonging to the bowling team where we work. Too often, the handicapped young person in the past has been set aside and segregated as different because he or she could not talk, socialize, or communicate in the same way as other young adults, in the work situation. It's apparent that the activation process, through recreation, is important to the "total" work situation. When we go to work we not only go to produce at a skill level, but out of that job comes many of our social activities, many of our friendships, and many of our ongoing communications that enhance our lives. That's why when we prepare a young handicapped person for the world of work, we must also prepare him for the many non-vocational and recreational possibilities that will result from making money. In addition to the many socialization and friendship opportunities offered by the job itself, money earned from working enables the young adult to engage in a multitude of social and recreational experiences in the community. Naturally, many of these experiences will result from associations made with others on the job. Yes, I would say that activation, recreation and work go together hand in hand. It is only when we begin to move, to communicate, to shake hands, to reach out, to go swimming, to go bowling, to play cards, and to dance that we are really a habilitated young adult. A job is not merely enough. If we go to work and come home without knowing how to use our money, or if we do not develop friendships, or if we do not socialize, then we are not whole persons. Recreation and work are interdependent and must be considered together if each one of us, including the multiply handicapped person, is to achieve our fullest potential as a human being.
THE LEARNING RESOURCES SYSTEM AS A RESOURCE
FOR TEACHERS OF THE DEAF-BLIND

Dr. Wayne D. Lance, Director, Northwest Area
Learning Resource Center, University of
Oregon, Eugene, Oregon

As special education programs for the handicapped began to develop at a rapid rate in the 1950's and early 1960's, it became painfully obvious that an adequate and readily available supply of instructional materials was not available to most teachers of exceptional children. Even in those rare instances where materials had been developed, only limited numbers of teachers were informed about the materials, and when information was disseminated, the actual materials were seldom available on an extended loan basis for direct use with children. And finally, when all of these conditions were met, it was often difficult to locate a person knowledgeable enough to instruct the teacher in the use of the material. Thus, four conditions were identified as being necessary for the effective utilization of materials with handicapped learners: (1) development of materials to match learner needs, (2) dissemination of information about the material and a method to retrieve it, (3) a procedure for circulating the material, and (4) training to assist the teacher in the proper utilization of the material.

An Emerging System

These conditions existed in varying degrees in different sections of the country and within the various categories of the handicapped. Some larger school districts had rather sophisticated delivery systems and teachers of children who were deaf or blind had access to a national depository of captioned films and materials from the American Printing House for the Blind. Unfortunately, most teachers were without these services. By relying upon their own creativity supplemented by hours and hours of hard work, many special education teachers developed their own materials and whenever possible, shared their materials with other teachers in their own geographical area.

As an awareness of these needs became apparent, especially through the recommendations of President Kennedy's Panel on Mental Retardation, the U.S. Office of Education began regional and, later, national efforts to achieve a solution to the problems. Regional Special Education Instructional Materials Centers were funded until, by the latter part of the 1960's, all sections of the country were served by a SEIMC. (Lance, 1973) While some coordination was attempted among the regional centers, each center functioned rather autonomously until the early 1970's. Several of the centers developed their own materials information retrieval systems; others focused on the development and evaluation of materials; some emphasized teacher training, while still others were more concerned with developing a system of associate centers to provide services.
directly to teachers at the district or multi-district level. This developmental phase was undoubtedly a healthy and necessary part of the maturation process in the evolution of a system for providing media and materials services for handicapped learners.

At the same time that national and regional efforts were progressing, many state education agencies and local districts were also concentrating their resources in the development of delivery systems. Several states adopted legislation to provide financial support to intermediate and/or local districts who desired to establish special education instructional materials centers, or learning resource centers as they are sometimes called. Almost every state utilized some portion of their federal dollars to support this activity. By 1974, nearly all the components of a system existed and awaited a plan whereby they could be merged into a true "system." A "system" implies interaction among an internal group of components for an expressed purpose over a period of time. (Hill, 1972; Lerner, 1973) If the system is synergistic, then the benefits resulting from the interaction of the parts are greater than the mere sum of the elements. It can not be claimed at this point in time that a true system exists: the elements abound in varying degrees of interrelationship or non-relationship.

In serving teachers of the deaf blind it is not necessary to establish a parallel system for delivering services. The goal should be to include this special population as an integral part of the total system. The population is relatively small, necessitating the focusing of resources on the development of "thin market" materials, that is, materials which will never reap sizeable profits for commercial producers. Thus, federal and state governments will probably have to bear the burden of development and distribution of many materials for the deaf-blind. Not all elements of resource systems will be able to hire experts to assist teachers in the selection and utilization of materials for this group -- one more justification for establishing a system that insures that the needs of every handicapped child are met.

A View of an Ideal System

A Learning Resources System (LRS) for special education can be defined as a merger of elements essential to the effective instruction of handicapped learners, such elements being interactive across levels of service for an extended period of time.

There are undoubtedly several ways in which one could analyze the elements of an LRS for the handicapped. For the purpose of this discussion, the educational requirements are viewed in terms of functions a teacher must perform and the related supportive services. Functions include appraisal, programming, materials selection/development/utilization, and acquisition/dissemination, materials circulation, training/consultation in all the essential elements, and management/monitoring. Figure 1 depicts the interactiveness of elements that comprise a Learning Resources System.
Appraisal. Appraisal refers to those tasks an educator performs in order to determine the pupils' current level of functioning, areas of strength and areas that are deficit, and where deficits occur, the precise instruction required to remediate the deficit. Norm referenced instruments may be used, but more probably, especially for the deaf-blind, criterion-referenced tests and task analysis inventories will be the tools employed.

Programming. By programming is meant the process of specifying objectives, activities, and methodologies to meet the needs of the learner. The program is based upon the results of the appraisal and is consistent with the curricular goals relevant to the learner in his particular environment. The program may be thought of as a prescription: a means to achieve an educational goal.
Materials Selection/Development/Utilization. This function requires the educator to in some way tap into an information bank and determine what instructional materials are appropriate and available in order to implement the program. When such materials are not available, they must be developed or those that approximate the learning requirements must be modified. The educator must then become competent in utilizing the materials with the handicapped pupil.

Management/Monitoring. The final function is that of orchestrating the instructional process in such a way that programs for individual learners can proceed within the constraints of time and space and, in monitoring the process, to determine when objectives are achieved or when mid-course corrections need to be made.

Support Services. Support services are those activities conducted by persons other than the teacher for the purpose of making resources readily available to the learner through the teacher.

Information Acquisition/Dissemination. If teachers are to be able to carry out the functions identified above, then it follows that information on appraisal and programming tools and procedures and information about instructional materials must be readily available. A review of the literature pertaining to information required by teachers of the handicapped indicated that teachers prefer local sources to more distant ones and that consultation is perceived as more desirable than other means of conveying information (Lange, Mattson, and Thomann, 1974). The implication for designing an LRS suggests that information should flow from its original source through channels which permit it to be available from a source close to the teacher, that source being human rather than delivered in some other manner.

Materials Circulation. Like the availability of information, teachers prefer immediate access to media and materials from a local source (Lange, Mattson, and Thomann, 1974). While this finding is not surprising, it suggests that if certain materials, because of their unique qualities or expense, cannot be maintained in local collections, then procedures must be found to bring such materials to the attention of teachers and to deliver them from a centralized or remote source with little hassle to the teacher. Again, this is a relevant concern for teachers of the deaf-blind. Systems for retrieving materials based upon a diagnostic/prescriptive base are available (Los Angeles Unified School District, 1972; Berdine, 1974; Northwest SEIMC, 1973a) and the National Center for Educational Media and Materials for the Handicapped is presently developing a National Instructional Materials Information System (NIMIS). These systems now make it possible for a teacher to extend the base upon which a search is made over a multitude of materials rather than the mere handful which may have been available within the school or district collection.

Training/Consultation. The training of teachers in educational technology received considerable emphasis from components of the network formerly known as the Special Education Instructional Materials Centers/Regional Media Centers for the Deaf (SEIMC/RMC) Network (Lance, 1973). Studies of teachers' perceived needs for training indicate that teachers...
desire training in educational appraisal and programming as well as in the selection and utilization of materials (Lange, Mattson, and Thomann, 1974). Training and consultation has probably more often been delivered through workshops and in-class assistance offered by an Instructional Specialist (Northwest SECIM, 1973b) than by the use of training packages, although the latter has received considerable emphasis in recent years (Hofmeister and Reavis, 1974; Thiagarajan, Semmel and Semmel, 1974; Baum and Chastain, 1972). With the emergence of the mainstreaming concept, it appears that even more reliance will be placed upon a training based model for delivery of special education services (Lilly, 1971; Cartwright and Cartwright, 1972). Thus, it appears that the LRS must attend to training and consultation services with at least equal intensity as that given to materials circulation and information acquisition/dissemination.

Management/Monitoring. Even as the teacher performs a function to orchestrate the instructional process within the classroom setting, so this function must be performed within the total LRS. It is by this process that the elements are either brought together in an interactive process at each level of service or the elements are left as somewhat unrelated services without the synergism that appears to be desirable.

Levels of Service

Elements of LRS support services may be offered at any of several levels. The levels to be considered here are as follows: classrooms, school building, local district, intermediate district, state, regional and national. See figure 2.

![Diagram of Levels of Learning Resource System (LRS) Services](image-url)
Classroom. The individual pupil in the classroom, in this instance the deaf blind pupil, is the focal point of all the service elements to be considered in the various levels that support the learner. It is here that the national, regional and state resources must impact if their existence is to be justified. The teacher's ability to utilize these resources with his or her pupils depends not only upon the quality and appropriateness of the services but also upon his or her competencies in selecting and managing such an array. Fortunately, these competencies can be developed and reinforced by an Instructional Specialist operating from the Local Learning Resource Center (LLRC). While the future holds promise of classroom terminals for computer assisted instruction and direct access to a multitude of media and materials, the present situation is marked by more traditional means of delivery such as consultation and technical assistance to the teacher in appraisal, programming, and materials selection, development/utilization.

School Building. Some authors (Hansen, 1972) have suggested a systematic approach to LRC design in which they emphasize the importance of involving all the staff in the planning of a center. This is necessary because the LRC encompasses all aspects of the school's environment. In describing the LRC as a "resourceteria" one writer (Wyman, 1974) supports this same concept when he indicates that the center is really a collection of functions rather than a place. These functions, if they are to be a part of a system, must be interrelated with the functions performed by the teacher in the classroom. By way of example, this can be demonstrated when one views the need to relate the diagnosis of a deficiency in learning a self help skill by a deaf blind child with the collection of self help skill materials in the LRC. The services of building level LRCs will vary greatly depending upon the needs of the children and teachers being served and the availability of services from sources outside the building. A centralized school where deaf blind pupils are housed will be quite different from a school serving only a handful of less handicapped children integrated into regular classes. Building level LRCs will most likely serve as a collection point for those media and materials utilized on a regular basis. In addition, it will provide a means of coordinating the functions of information dissemination, in-service training, and pupil and teacher development of materials.

Local District. The Local Learning Resource Center (LLRC) serves a number of schools, oftentimes fulfilling some or all of the functions of the school building LRC when individual schools are too small to develop their own centers. In addition, the LLRC usually has a service base large enough to enable them to collect and circulate materials that are too expensive or of too limited usage for inclusion in the school building collection. Another important distinction between the LLRC and building level centers is the emphasis on in-service training and consultation available through the district center. Considerable attention has been given in recent years to the "Teacher Center" concept (Ellis, 1974) and it appears that there would be several advantages in a model that would integrate special education media into the teacher center concept. When staffed by an Instructional Specialist know-
ledgeable in special education technology and with skills in delivering services, the LLRC becomes an immediate resource linking the classroom teacher with the intermediate, state and national elements of the network.

**Intermediate District.** An LRC at a county, multi-county or cooperative district level is sometimes referred to as a Regional Learning Resource Center (RLRC). While it may in some instances replace the LLRC, it more properly supplements the services of the building and district centers by acquiring and circulating thin-market materials (instructional materials that are utilized by a relatively small portion of the exceptional child population) and performs other services beyond the scope of the local centers (Welch, 1970; Liberman, 1972). Such services include educational diagnosis and prescription of difficult cases such as required for children with severe and multiple handicaps, development and production of specialized materials, and the training of teachers in the use of unique and highly sophisticated materials. In rural isolated areas the RLRC may employ a mobile unit with especially designed components for effective delivery of media and materials directly to the classroom (Morskin, 1972; Balthaser and Burns, 1972).

**State.** State Learning Resource Centers (SLRC) perform both coordinative and service functions. Coordination implies a focal point within the state for the flow of information and resources from and to the elements of the national network and a responsibility to insure that RLRCs and LLRCs are interacting between and among themselves in a manner which promotes the most effective delivery of services. Service functions of an SLRC may include information dissemination, materials circulation, and training -- the same functions found at local and intermediate levels, but differing in scope in much the same way as LLRCs and RLRCs differ. Information may be disseminated from the SLRC via a statewide newsletter, a union catalog of materials, or via electro-mechanical means. State libraries of materials for the handicapped are often limited to thin-market materials such as braille, large print, and specialized materials for the deaf. Training may more appropriately be directed to supportive personnel from the SLRC rather than attempting to directly impact upon teachers from this distance.

**Regional.** The regional components of the network, funded by the Bureau of Education for the Handicapped, U.S. Office of Education, are known as the Area Learning Resource Centers (ALRCs) and Regional Resource Centers (RRCs). Twenty-six such centers have been developed in the United States, providing service to all areas of the country. ALRC and RRC services are channeled through state education agencies (SEAs) to assist them in planning and developing their intra-state learning resource systems. While ALRCs and RRCs work cooperatively to assist their client states, the two regional centers do have differing workscopes. ALRCs assist SEAs with those functions concerned with media and materials for the handicapped, while RRCs focus on educational appraisal and programming.

**National.** At the present time the thirteen ALRCs and thirteen RRCs are closely tied in their workscopes to six national centers: four specialized offices (SOs), the National Center for Educational Media and Materials for the Handicapped
These projects, like the ALRCs and RRCs, are funded by the Bureau of Education for the Handicapped. Three of the SOs are charged with the responsibility for identifying, describing, developing, and evaluating of materials for the handicapped (one SO focuses on the visually impaired, the second on the hearing impaired, and the third on other handicapping conditions) while the fourth SO serves as a national depository for materials. The Specialized Office for Other Handicaps at the University of Wisconsin has the responsibility for identifying, testing, developing, and abstracting materials for the deaf blind. They will, of course, work closely with the other two Specialized Offices in this endeavor. NCEMH performs a coordinative role for the media materials portion of the system and CORRC coordinates the services delivered through the RRCs. NCEMH also has the responsibility to develop and maintain the National Instructional Materials Information System, to assist in producing and marketing materials developed by the SOs, and to identify media and materials needs. While not directly a part of the National LRS Network, the American Printing House for the Blind (APHB), Educational Media Distribution Center (EMDC), and Council for Exceptional Children Information Center all provide services essential to the operation of the Network.

Conclusion

The essential elements to develop an adequate and viable learning resource system for special education exist today. Competencies to perform the educational functions of appraisal, programming, and materials selection, development, utilization are apparent in special education personnel at all levels; LLRCs and RLRCs for the handicapped are operational in over 300 locations, SLRCs have been established in several states, and the national elements of the network have been in at least the initial phases of operation since 1974, and earlier in some instances. It would be premature to claim that a total system, especially a synergistic system exists today. Interaction among functions, levels of service, and support services exists to some degree, but as yet it is difficult to always specify in actual practice interrelationship among the elements.

For the teacher of deaf-blind pupils, the emerging system offers some bright spots. By the end of this year it is hoped that the National Instructional Materials Information System (NIMIS) will be operational with over 10,000 materials entered. The Specialized Office (SO) for Other Handicaps will be accepting recommendations for developing and testing materials for the deaf-blind. ALRCs will continue to offer assistance to state education agencies in developing their intra-state systems, and if the states request, will channel resources specifically to the concerns of the deaf-blind. As state, intermediate, and local LRCs become aware of the particular needs of the deaf-blind population, it is anticipated that they will acquire and circulate materials, disseminate information, and provide training and consultation to teachers of these children with special needs. To accomplish
these objectives, it is essential that teachers and others working with the deaf-blind make their needs known -- your input is requested.

BIBLIOGRAPHY


COMPUTERIZING INFORMATION RESOURCES

FOR THERAPEUTIC RECREATION SERVICES

Dr. Fred Martin, Director, Therapeutic Recreation
Information Center, University of Oregon,
Eugene, Oregon

The management of information production related to all aspects of work with disabled and disadvantaged persons has become a problem of serious magnitude all along the continuum from the "how to do it" type of material to the findings of research projects relevant to the various disability areas. The relatively modern heightening of awareness by the general public to the problems of the disabled has generated a proportionate increase in the demand for and the flow of information and materials related to a broad spectrum of prevention, treatment, and management services. Recreation and leisure service for the disabled and disadvantaged is one specific area of concern which has been part of this "information explosion."

A wide variety of techniques for managing information acquisition and dissemination have been developed during the past several years utilizing an incredibly diverse array of methods and technologies. (Tewes and Ellis, 1971; Kennedy, 1971) However, the most promising solution to the information handling problem has emerged from a combination of the traditional and the avant garde: a specialized branch of library service called Information Science (closely allied with Statistics) and the field of Computer Science, have provided us with computer-based information acquisition, storage, retrieval and dissemination systems. TRIC.— Therapeutic Recreation Information Center utilizes a computer-based system designed to organize and increase the flow of information concerning recreation and leisure service for disabled and disadvantaged persons.

What is TRIC?

TRIC is a literature and document acquisition, storage, retrieval and dissemination center for the field of Therapeutic Recreation Service. Published and unpublished articles, books, conference proceedings, project reports and other materials are identified, located, acquired, abstracted and indexed for storage in a computer-based information retrieval system designed specifically for the Therapeutic Recreation Information Center.

Information requests are accepted from educators, professionals, students, practitioners and others seeking information concerning recreation and leisure service for the disabled and disadvantaged. Persons are also encouraged to submit material for inclusion in TRIC's data base.

The Therapeutic Recreation Information Center was developed at Teachers College, Columbia University (New York) in 1971. In 1972 its operation was transferred to the Department of Recreation at the University of Waterloo in Waterloo,
Ontario, Canada where it was enhanced by the computer banks at Waterloo. In July of 1974 it moved to the University of Oregon - in affiliation with the Department of Recreation and Park Management and Project EXTEND-ED.

The TRIC Data Base

The TRIC data base was originally developed from a systematic search of selected information sources for a period from 1965 through 1970. Subsequent research grants have supported periodic updates making the system current through 1974. Information systems usually have a time lag with regard to current literature of about one year.

Secondary sources such as Psychological Abstracts, Sociological Abstracts, Mental Retardation Abstracts, Hospital Abstracts, Child Development Abstracts and Bibliography, Education Index, Current Index to Journals in Education, Educational Resources Information Center (ERIC), Rehabilitation Literature, and primary information sources such as Parks and Recreation; Journal of Health, Physical Education and Recreation; Research Quarterly: Journal of Leisure Research; Recreation for the Ill and the Handicapped; and Therapeutic Recreation Journal were exhaustively searched for the above stated period. The two latter publications were abstracted and indexed in their entirety for inclusion in the system.

Publishers' annuals and digests, as well as bibliographic collections, such as van der Smissen and Joyce's (1970) Bibliography of Theses and Dissertations in Recreation, Parks, Camping, and Outdoor Education and Martin's (1971) Bibliography of Leisure: 1965-1970, were also similarly searched for relevant references. Other information systems, particularly the Medical Literature Analysis and Retrieval System (MEDLARS), were used during various phases of the data base development, as well as to provide a comparative test of the scope and depth of the literature searches.

The data base citations and abstracts were indexed employing key words and key phrases directly from the titles and abstracts. Computer programs were designed to specifically manipulate the index and data base for the storage and retrieval of information while taking up a relatively small portion of the computer storage capability. TRIC now has several thousand references and is 100% abstracted. It is the only computer based information system directly related to the field of recreation which has this feature.

Although the data base presently contains citations and abstracts of literature published from 1965 through 1974, it will be continuously updated. A special effort was conducted to identify and secure material published in Canada relative to therapeutic recreation service for inclusion in the data base and this effort resulted in the publication of the first book related to therapeutic recreation in Canada: Therapeutic Recreation in Canada: An Annotated Bibliography.

How to Use TRIC

Information requests to the Therapeutic Recreation Information Center should specifically indicate the problem or...
research area generating the inquiry. A brief paragraph in which the information need is described, including one or more subject terms or phrases should accompany the information request.

The computer programs, which access the data base in response to information requests offer a number of options to the user. A request for material related to research on the aging will produce an output of citations and abstracts which deal with research and aging. If one only wants articles published in 1965 or by a specific author, this limitation can be included. If the user does not want material published in a given year or by a given author or wants to limit the output with any other descriptive parameter, this is also possible and need only be specified in the information request. Output may be limited to citations without abstracts, if desired, and this also should be specified. However, abstracts usually enhance the user's knowledge of article content.

The following examples of information requests and the formulations for processing are offered for clarification:

1. Request: List research reports on the aging which utilize the questionnaire method.
   Formulation: research report, aging, questionnaire.


3. Request: List sports program for physically disabled children in municipal recreation programs.
   Formulation: physically, disabled, children, sports, municipal recreation.

4. Request: List articles concerned with the philosophy of Therapeutic Recreation Service.
   Formulation: Therapeutic Recreation -- philosophy.

In request one through three, a comparison of the indexed data on each of the descriptors in the formulation will take place and the resulting printout will be of those articles which were indexed by each of those terms. Request four will simply produce a printout of all of the material in the data base indexed by that descriptor.

In general, the more limiting descriptors employed in a search, the fewer will be the number of citations and abstracts retrieved. But as the number of descriptors employed in the formulation increases, the article citations retrieved will exhibit greater specificity. Each user must decide how specific he wants the system's response to be and formulate his request accordingly.

Applications of TRIC

There are numerous applications for a computer-based information storage and retrieval center for the field of therapeutic recreation service. A recent survey identified
at least 80 colleges and universities in the United States and Canada offering course work in therapeutic recreation service. (Martin, Survey., 1971) TRIC can be used to assist the preparation of course bibliographies by educators offering these courses, students engaged in term projects, as well as for surveys of the literature for master's theses and doctoral dissertations. Researchers both within therapeutic recreation service and in other fields and disciplines can save valuable research time and avoid wasteful duplication of effort. Research gaps may become more clearly defined with systemically stored and retrievable data available.

Reducing the effort of the practitioner in obtaining research results and other information may increase the utilization of such material in programs removed from the academic sphere and ultimately improve on the delivery of service to clients. The client may even eventually learn to use such systems to expand his awareness of the availability of service.

Information Requests

Information requests should be submitted to the Therapeutic Recreation Information Center in the form outlined above. However, if one feels a particular information need does not fit that format, a simple description of the problem will be accepted for analysis by the Center.

A system of Major and Minor standard files has been developed to speed service to users interacting with the TRIC center. Basically a major file is defined as any descriptor term with one hundred or more references in the computer banks. A minor file is any descriptor with less than one hundred references in the data banks. The following are a list of all major files and their computer costs and a selected sample of the more than 2,000 minor files available. All minor files cost $5.00.

**TRIC MAJOR FILES**

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<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Cost</th>
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<tr>
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<tr>
<td>Aging</td>
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<td>$20.00</td>
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<td>Camping</td>
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<tr>
<td>Children</td>
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<tr>
<td>Corrections</td>
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<td>$5.00</td>
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<td>Disabled</td>
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<td>Institutions</td>
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<td>Physically Disabled</td>
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<td>Programs</td>
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<td>Rehabilitation</td>
<td>310</td>
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<td>Research-Reports</td>
<td>210</td>
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<tr>
<td>Schools</td>
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<td>$5.00</td>
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<tr>
<td>Social</td>
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<td>$10.00</td>
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<tr>
<td>Staff</td>
<td>100</td>
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<tr>
<td>Training</td>
<td>150</td>
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<tr>
<td>Youth</td>
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<td>$10.00</td>
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### SAMPLE TRIC MINOR FILES

<table>
<thead>
<tr>
<th>Adapted Activity</th>
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<th>Music</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>Delinquency</td>
<td>Normalization</td>
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<td>Adolescents</td>
<td>Disadvantaged</td>
<td>Nursing Homes</td>
</tr>
<tr>
<td>Agencies</td>
<td>Disturbed</td>
<td>Outdoors</td>
</tr>
<tr>
<td>Alcoholism</td>
<td>Dramatics</td>
<td>Planning</td>
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<td>Amputee</td>
<td>Education</td>
<td>Play</td>
</tr>
<tr>
<td>Art Therapy</td>
<td>Environment</td>
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</tr>
<tr>
<td>Arts</td>
<td>Equipment</td>
<td>Programming</td>
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<tr>
<td>Blindness</td>
<td>Exercise</td>
<td>Psychiatric</td>
</tr>
<tr>
<td>Blind-Deaf</td>
<td>Films</td>
<td>Reinforcement</td>
</tr>
<tr>
<td>Brain Injured</td>
<td>Finance</td>
<td>Remotivation</td>
</tr>
<tr>
<td>Canada</td>
<td>Forensics</td>
<td>Resources</td>
</tr>
<tr>
<td>Cardiac</td>
<td>Games</td>
<td>Senior Centers</td>
</tr>
<tr>
<td>Case History</td>
<td>Guidelines</td>
<td>Sports</td>
</tr>
<tr>
<td>Community</td>
<td>Hyperactivity</td>
<td>Supervision</td>
</tr>
<tr>
<td>Consultation</td>
<td>Integration</td>
<td>Survey</td>
</tr>
<tr>
<td>Counseling</td>
<td>Legislation</td>
<td>Swimming</td>
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<tr>
<td>Crafts</td>
<td>Measurement</td>
<td>Trails</td>
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<tr>
<td>Curriculum</td>
<td>Mental illness</td>
<td>Vocational</td>
</tr>
<tr>
<td>Dance</td>
<td>Motivation</td>
<td>Wheelchairs</td>
</tr>
</tbody>
</table>

Persons wishing to use the TRIC system or additional information should write to TRIC -- Therapeutic Recreation Information Center, 1597 Agate Street, Eugene, Oregon, 97403. Information requests are processed within a one week period.

### BIBLIOGRAPHY


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All participants were requested to evaluate the overall conference by providing written feedback relative to the following areas: (1) Conference objectives, (2) Selected aspects of total conference, and (3) Comments and suggestions. In reference to individual presentations, each presenter was evaluated following their presentation by the participants in attendance and later mailed a summary of the evaluation results. It was deemed inappropriate to report personal evaluations in this monograph. Included below are evaluation summaries for Areas One and Two with the data reported in percentages on a four point rating scale. The fact that only 60 percent of the participants responded was attributable to participant attrition at the end of the conference when the evaluation materials were distributed. It should be noted that discrepancies in the total number responding within sub-divisions of Areas One and Two were due to incomplete completion of evaluation forms by particular participants. In reference to Area Three, a long listing of comments and suggestions was also deemed inappropriate, so only a sampling of written responses has been included in this publication. A brief interpretation of the overall conference evaluation has also been provided by the editor. Lastly, special appreciation is extended to Mimi Brodsky, of Teaching Research, for assisting in the compiling and summarization of conference evaluation data.
### AREA ONE

#### ACHIEVEMENT OF CONFERENCE OBJECTIVES

<table>
<thead>
<tr>
<th>Area Sub-Divisions</th>
<th>Total No. of Resp.</th>
<th>Participant Ratings %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>1. Establish a philosophical position on integrating education and recreation within the school curriculum.</td>
<td>51</td>
<td>45</td>
</tr>
<tr>
<td>2. Communicate methods for developing and implementing interdisciplinary and interagency programs in recreation for the deaf-blind.</td>
<td>51</td>
<td>17</td>
</tr>
<tr>
<td>3. Demonstrate diagnostic/prescriptive models of instruction appropriate for use in recreation.</td>
<td>47</td>
<td>28</td>
</tr>
<tr>
<td>4. Explore a comprehensive curriculum of recreation and leisure that meets the lifespan needs of the deaf-blind.</td>
<td>48</td>
<td>23</td>
</tr>
<tr>
<td>5. Develop a beginning resource of instructional ideas on recreation for the deaf-blind for use by both professionals and parents.</td>
<td>49</td>
<td>37</td>
</tr>
<tr>
<td>6. Facilitate sharing of resources through increased interaction between regional professionals engaged in programs serving deaf-blind persons.</td>
<td>49</td>
<td>55</td>
</tr>
</tbody>
</table>
### AREA TWO

**QUALITY OF SELECTED ASPECTS OF TOTAL CONFERENCE**

<table>
<thead>
<tr>
<th>Area Sub-Divisions</th>
<th>Total No. of Resp.</th>
<th>Participant Ratings %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Excellent</td>
</tr>
<tr>
<td>Presentations</td>
<td>47</td>
<td>45</td>
</tr>
<tr>
<td>Evening Small Group Sessions</td>
<td>45</td>
<td>32</td>
</tr>
<tr>
<td>Conference Organization</td>
<td>46</td>
<td>63</td>
</tr>
<tr>
<td>Informal Social Times</td>
<td>47</td>
<td>40</td>
</tr>
<tr>
<td>Accommodations, (meals, lodging)</td>
<td>46</td>
<td>52</td>
</tr>
</tbody>
</table>

### AREA THREE

**COMMENTS AND SUGGESTIONS FROM CONFERENCE PARTICIPANTS**

1. Would have liked more small groups for agency idea sharing.
2. Best conference I've been to in three years of teaching.
3. More time for informal discussions -- More leisure time.
4. The idea of having a product come out of this conference has made it especially meaningful.
5. Topics in evening groups were too constricting.
6. Small group sessions and choices of topics to hear were beneficial to me.
7. Being involved in work groups and having the results of all the groups made available has made this time spent worthwhile and educational.
8. Need more deaf-blind adults -- deaf adults -- vocational rehabilitation personnel.
9. Great place to have a conference.
10. All in all very productive.
11. I hope there is follow through. Need organized method for follow-up. 
12. Would be better to not have so much planned. No evening programs.
13. Tremendous interaction at evening sessions--knowledgeable members.
14. Frustrating at times, but made good progress.
15. I'm glad a proceedings is being printed.
INTERPRETATION OF OVERALL CONFERENCE EVALUATION

1. An overall evaluation of the summative data reported for Areas One and Two reveals that, in nine of the eleven sub-divisions, total ratings of at least 60 percent were received when combining percentage figures for categories designated excellent and good.

2. This conference especially directed itself to the consideration of recreation and leisure as important areas for special educators to consider in providing a total curriculum for the deaf-blind child. In view of the relatively recent involvement of teachers with leisure education, the typically low priority given recreation within the classroom curriculum, and the lack of training in recreation and leisure for most special educators, the results of this conference were surprising and most gratifying.

3. It was the intention of the Conference Planning Committee to develop a program devoted to introducing, sharing, discussing and exploring concepts, to stimulating thought, and to motivating participants to greater communication and efforts with other professionals. With this purpose in mind, the conference was especially successful in relationship to the high rankings provided objectives two and six in Area One.

4. The Conference Planning Committee was a "grass roots" group that included a majority of persons with experience working with deaf-blind or multiply handicapped in education and/or recreation. In addition, committee members put much time, effort, and energy into careful planning for the total program. The evaluation results speak to the need for considering both of the above factors as important conference prerequisites.
CONFERENCE PARTICIPANTS

GORDON ANDERSON, Physical Education Specialist, Seattle School District #1, 550 Mercer Street, Seattle, Washington

RICHARD L. ANDERSON, Physical Education/Recreation Specialist, Washington State School for the Blind, Deaf-Blind Unit, P.O. Box 1865, Vancouver, Washington

RICHARD BLACKBURN, Teacher, Shoreline School District #412, Special Education Department, N.E. 158th and 20th Avenue, Seattle, Washington

JAN BONIN, Interpreter, The Hadley School for the Blind, 700 Elm Street, Winnetka, Illinois

STEVE BRANNAN, Program Director in Mental Retardation, Special Education Department, Portland State University, Portland, Oregon

JERRI BRODBECK, Teacher-Aide, Jackson County Intermediate Education District, Deaf-Blind Unit, 1133 South Riverside, Medford, Oregon

MIMI BRODSKY, Teacher, Oregon State School for the Blind, Deaf-Blind Unit, 700 Church Street, S.E., Salem, Oregon

KEN BROWN, Teacher, Boulder River School and Hospital, Deaf-Blind Unit, Boulder, Montana

SANDE BUCHHOLZ, Teacher, Thompson School, 7812 S. 124th, Seattle, Washington

JANICE BURKS, Teacher, Oregon State School for the Blind, Deaf-Blind Unit, 700 Church Street, S.E., Salem, Oregon

SCOTT BURKS, Student, Portland State University, 2409 S.E. Division, Portland, Oregon

CHRISTINE CARLSON, Teacher, Jackson County Intermediate Education District, Deaf-Blind Unit, 1133 South Riverside, Medford, Oregon

JUDY CARMEN, Physical Education/Recreation Specialist, Progress Center, 839 - 15th Avenue, Longview, Washington

PAT CARMEN, Aquatics Director, Fircrest School, Shoreline School District #412, N.E. 158th and 20th Avenue N.E., Seattle, Washington

LUCILLE CHAGNON, Teacher, Idaho State School, Satellite Deaf-Blind Program, 14th and Main Street, Gooding, Idaho

CHERRY ANNE CHAMPAGNE, Teacher, Program for the Hearing Impaired, Seattle School District #1, 550 Mercer Street, Seattle, Washington

JANICE CLARKE, Teacher-Aide, Child Development and Rehabilitation Center, University of Oregon Health Sciences Center, P.O. Box 574, Portland, Oregon

MARY COOK, Student, University of Oregon, Project Extend-Ed, 1587 Agate Street, Eugene, Oregon

RELAN COLEY, Teacher, Baker County I.E.D., 2030 Auburn, Baker, Oregon

WILLIAM F. CONYARD, Project Consultant, Alaska Treatment Program, 216 E. 8th Avenue, Anchorage, Alaska

LEE ANN DARNUTZER, Teacher, Montana School for Deaf-Blind, 3911 Central Avenue, Great Falls, Montana

JERRIE DIDDY, Teacher-Aide, Thompson School, 7812 S. 124th, Seattle, Washington

DIANA DIEHM, Teacher, Child Services Center, Portland Public Schools, 220 N.E. Beech Street, Portland, Oregon
PAUL DUNN, Student, University of Oregon, Project Extend-Ed, 1587 Agate Street, Eugene, Oregon

PAM EARLE, Specialized Recreation Supervisor, Eugene Parks and Recreation, 105 City Hall, Eugene, Oregon

CLYDE FARRINGTON, Training Specialist, Alaska Treatment Center, 216 E. 8th Avenue, Anchorage, Alaska

JANICE FISHER, Parent, Progress Center, 839 15th Avenue, Longview, Washington

JAMES O. GILLIS, Mobility Specialist, Greenlake Elementary School, Program for the Hearing Impaired, Seattle School District #1, 550 Mercer Street, Seattle, Washington

LINDA GLICK, Student, Boston College, Internship, Teaching Research, Monmouth, Oregon

DESLIE GORDON, Student, University of Oregon, Portland, Oregon

WILLIAM GORDON, Student, University of Oregon, Portland, Oregon

LIZ GOSSETT, Recreation Specialist, Northwest Regional Center for Deaf-Blind Children, 3411 S. Alaska, Seattle, Washington

DAVID HALBETT, Student, University of Oregon, Project Extend-Ed, 1587 Agate Street, Eugene, Oregon

JACK HEAD, Student, Portland State University, 431 S.W. Primrose, Portland, Oregon

GORDON HOWARD, Project Coordinator, Recreation/Education Program, University of Iowa, Iowa City, Iowa

DONNA IVerson, Recreation Specialist, Programs for Special Populations, City of Seattle, Seattle, Washington

BOB JOHNSON, Director of Rehabilitation, Lighthouse for the Blind, 2501 S. Plum, Seattle, Washington

RANDY SUE KATZ, Teacher, Progress Center, 839 15th Avenue, Longview, Washington

RICHARD KINNEY, Executive Director, The Hadley School for the Blind, 700 Elm Street, Winnetka, Illinois

WAYNE LANCE, Director, Northwest Area Learning Resource Center, Clinical Services Building, University of Oregon, Eugene, Oregon

MADSE LESLIE, Director, Programs for Visually and Multi-Handicapped, Special Education Department, Portland State University, Portland, Oregon

JEFF LICHTER, Student, Portland State University, 1831 S.W. Park #505, Portland, Oregon

KEVIN MAGIN, Teacher, Washington State School for the Blind, Deaf-Blind Unit, P.O. Box 1865, Vancouver, Washington

JANICE MACGREGOR, Assistant Professor, Eastern Washington State College, Department of H.P.E.R.A., Cheney, Washington

ERNAR MARSHALL, Child and Family Services Specialist, State Services for the Blind, 3411 S. Alaska Street, Seattle, Washington

LARRY L. MCLEAN, Teacher, Lakeland Village, Deaf-Blind Unit, P.O. Box 200, Medical Lake, Washington
GARY MCMANUS, Physical Education/Recreation Specialist, Montana State School for the Deaf and Blind, Deaf-Blind Unit, 391 Central Avenue, Great Falls, Montana

FRED W. MARTIN, Director of TRIC, College of Health, Physical Education and Recreation, University of Oregon, Eugene, Oregon

BOB MEALEY, Swimming Instructor, Physical Education Department, Washington State School for the Blind, P.O. Box 1865, Vancouver, Washington

EVELYN MITCHELL, Student, Portland State University, Portland, Oregon

LINELLE MITCHELL, Student, Portland State University, Portland, Oregon

BRENTA MOORE, Occupational Therapist, Department of Occupational Therapy, Crippled Children's Division, University of Oregon Health Sciences Center, 745 S.W. Gaines, Portland, Oregon

P. MARTIN MOORE, Mobility Education Instructor, Portland Public Schools, Regional Facility for the Blind, Portland, Oregon

CINDY MYERS, Recreation Specialist, Oregon School for the Deaf, Deaf-Blind Unit, 999 Locust Street, N.E., Salem, Oregon

LARRY NEAL, Director, Center of Leisure Studies, University of Oregon, 1587 Agate Street, Eugene, Oregon

MARCO NEEL, Arts and Crafts Teacher, Washington State School for the Blind, P.O. Box 1865, Vancouver, Washington

Marilyn Northam, Teacher, Birney Annex, Deaf-Blind Unit, P.O. Box 1357, Tacoma, Washington

Maurine Otos, Teacher, C.D.R.C., P.O. Box 574, Portland, Oregon

Paul Parrish, Physical Education/Recreation Specialist, Idaho State School and Hospital, Deaf-Blind Unit, 14th and Main Street, Gooding, Idaho

Ken Patten, Social Worker, Northwest Regional Center for Deaf-Blind Children, Seattle, Washington

Anna Persons, Student, Boston College, Internship, Teaching Research, Monmouth, Oregon

Jon Pike, Teacher, Idaho State School, Deaf-Blind Unit, 14th and Main Street, Gooding, Idaho

Beverly Questad, Program Specialist, Lighthouse for the Blind, 2501 S. Plum, Seattle, Washington

Gary Rittenmeyer, Recreation Specialist, Programs for Special Populations, City of Seattle, Seattle, Washington

Susan Sandall, Student, University of Oregon, Project ExtendEd, 1587 Agate Street, Eugene, Oregon

Jody Schierman, Teacher, Office of Developmentally Disabled, District #8, 25th and Tacoma South, Tacoma, Washington

Vera N. Schiller, Western Region Representative, National Center for Deaf-Blind Youth and Adults, 102 North Brand Blvd., Glendale, California

Karen Severson, Teacher-Aide, Oregon State School for the Deaf, Deaf-Blind Unit, 999 Locust Street N.E., Salem, Oregon

Wilma Sheridan, Assistant Professor of Music, Music Department, Portland State University, P.O. Box 751, Portland, Oregon

Helen L. Sherman, Teacher, Washington State School for the Blind, Deaf-Blind Unit, P.O. Box 1865, Vancouver, Washington