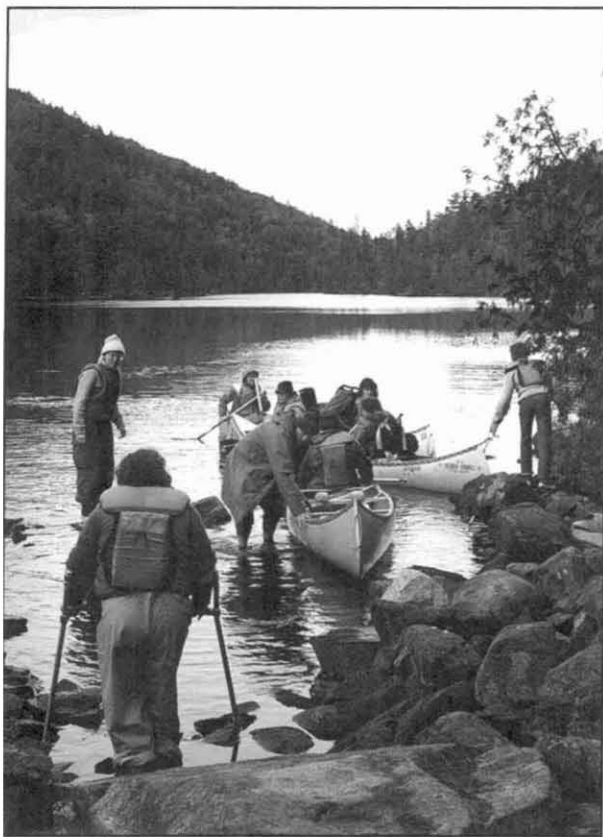


Together Successfully



Creating Recreational and Educational Programs That Integrate People With and Without Disabilities

By John E. Rynders, Ph.D., and Stuart J. Schleien, Ph.D.

Published by Association for Retarded Citizens of the United States

National Office of 4-H and Youth Development

Research and Training Center on Community Living, University of Minnesota

Institute on Community Integration (UAP), University of Minnesota

Together Successfully

Creating Recreational and Educational Programs
That Integrate People With and Without Disabilities

John E. Rynders, Ph.D.

Department of Educational Psychology, University of Minnesota

Stuart J. Schleien, Ph.D.

School of Kinesiology and Leisure Studies, University of Minnesota

Published by Association for Retarded Citizens of the United States

National Office of 4-H and Youth Development

Research and Training Center on Community Living, University of Minnesota

Institute on Community Integration (UAP), University of Minnesota

Copyright © 1991

The development and distribution of this handbook was partially supported by Cooperative Agreement No. H133B80048 funded by the National Institute on Disability and Rehabilitation Research, U.S. Department of Education, Grant Project No. H029F90067 funded by the Office of Special Education and Rehabilitative Services, U.S. Department of Education, and Grant No. 07DD0282/5 from the Administration on Developmental Disabilities, U.S. Department of Health and Human Services. The content and opinions expressed herein do not necessarily reflect the position or policy of the funding agencies, and no official endorsement should be inferred.

No portion of this handbook may be reproduced without written permission of the authors. To request permission contact Dr. John E. Rynders, Educational Psychology Department, University of Minnesota, 255 Burton Hall, Minneapolis, MN 55455, or Dr. Stuart J. Schleien, School of Kinesiology and Leisure Studies, University of Minnesota, 208 Cooke Hall, Minneapolis, MN 55455.

Additional copies of *Together Successfully* can be ordered by contacting the Association for Retarded Citizens of the United States, Publications Department, P.O. Box 1047, Arlington, TX 76004.

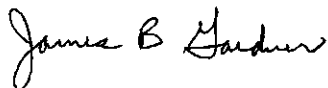
Forward

This handbook has been created through the combined sponsorship of three agencies: the Association for Retarded Citizens of the United States, National 4-H, and the University of Minnesota's Institute on Community Integration. Mutual interest in promoting the development of children, youth, and adults of all ability levels draws our agencies together on this project. But, it is more than furthering the development of individuals that motivates us. Our goal is to create a substantially improved society, one that values each person -- including those with disabilities -- so highly that it includes them as desired neighbors, fellow employees, and personal friends in all its communities.

In this and other areas in which societal change is occurring, the question, "But, how do we do it?" is interwoven with the question, "Why should we do it?". Sometimes by answering the "how," the concerns behind the "why" are resolved. Hence, this handbook is filled with practical, detailed, step-by-step directions that will virtually assure the success of an integrated recreation or education program when followed carefully. The success of such programs is an important piece in the transformation of our communities into places where people of all ability levels are valued, productive, participating citizens.

In the final analysis, we trust that "Together Successfully" will be more than a handbook title. We hope that through its use, an integrated ARC group, 4-H Club, YMCA, YWCA, Scout troop, or other youth-serving group can demonstrate inclusiveness and personal development so powerfully that the community, as well as society as a whole, will see the program as a model for itself.

Sincerely,



James B. Gardner, President
Association for Retarded Citizens of the United States



Leah Cox Hoopfer, Ph.D., Deputy Administrator
4-H and Youth Development
United States Department of Agriculture,
Extension Service



Robert Bruininks, Ph.D., Director
Research and Training Center on Community Living
Institute on Community Integration
University of Minnesota

Acknowledgments

We wish to acknowledge the outstanding support and generous contributions of numerous persons who put the interests of children, youth, and adults -- especially children, youth, and adults with disabilities -- at the very top of their list of priorities.

In particular, we wish to thank three individuals. Dr. Sharon Davis, Research and Program Services Director of the Association for Retarded Citizens of the United States, provided the impetus for the handbook project when she and Dr. Stuart J. Schleien met at the national ARC convention in 1986. Since that time, she has continued to work with us with unusual enthusiasm and insight. Caye Nelson, Professor Emeritus, former County Extension Director and County Extension Agent with 4-H, has been a true pioneer in developing programming for youth with disabilities and then working tirelessly for its implementation. And, Dr. Robert Bruininks, Director of the Institute on Community Integration and the Research and Training Center on Community Living at the University of Minnesota, who, seeing the potential of this project to benefit people with disabilities, supported the editing, graphic design, and illustration aspects with great generosity.

Editing and graphic design, when done well, make words come alive. The editor and graphic designer of this handbook, Ms. Vicki Gaylord, Assistant Director for Publications in the University of Minnesota's Institute on Community Integration, not only made the words in the handbook come alive, she imbued it with a vitality and clarity that we believe is outstanding. Her skill as an editor is without parallel as far as we are concerned.

Illustrations, done so carefully, appealingly, and sensitively by Ms. Jean Larson, Therapeutic Recreation Specialist at Vinland National Center, will, we are certain, be prized by everyone who has parented, recreated with, or worked with, a person who has a disability.

Ms. Linda Heyne, Therapeutic Recreation Grant Project Coordinator, University of Minnesota, played an essential part in the completion of this handbook through her editing of many activity plans.

Special thanks also to Ms. Sharon Conlon, Minnesota Extension Service, who took responsibility for and a great personal interest in developing the first draft of this handbook and nurturing its initial editing.

In addition to those just mentioned, we wish to acknowledge the devoted help of a group of 17 Minnesota reviewers who met with us frequently as the ideas took form in handbook pages. They are listed at the end of the handbook along with a number of individuals from ARCs around the country who critiqued materials and tried out activities.

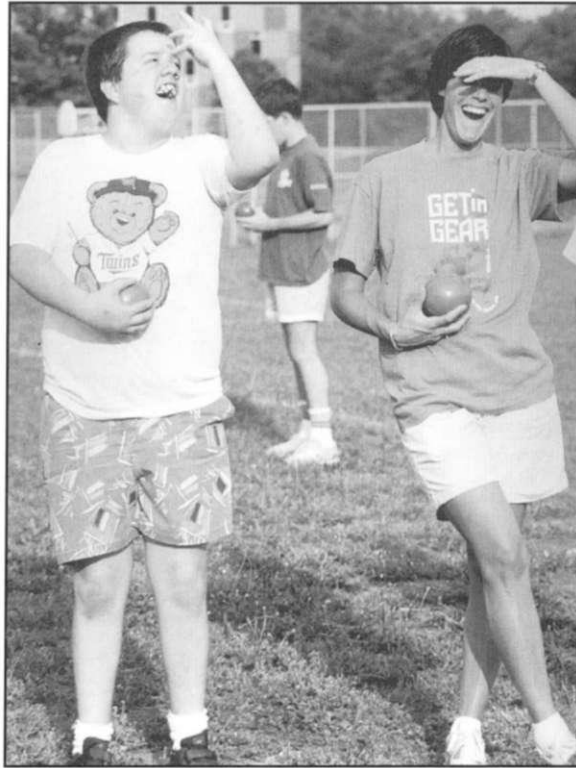
Table of Contents

	<u>Page</u>
■ Introduction	1
■ Chapter 1 Why Integrate?.....	3
• Absence vs Presence of Integrated Options: The Impacts	3
• Integrated Programming: Mandate for the 1990's	5
• Tommy and Aaron: A Mother's Hopes for Her Sons	6
■ Chapter 2 How to Integrate Successfully: Promoting Positive Interactions Between Participants With and Without Disabilities	7
• 8 Guidelines for Promoting Positive Interactions	8
- Structure Activities to Promote Positive Interactions	8
- Determine Primary Purpose of Activity	9
- Determine Desired Roles of Participants	10
- Recruit Nondisabled Participants	11
- Strengthen Friendship Skills	11
- Use a Supporting Curriculum	12
- Prepare Adults to be Facilitators	12
- Promote Integration as Everyone's Responsibility	13
• Avoiding 8 Common Problems	14
- Integrating Too Quickly	14
- Emphasizing Socialization at the Wrong Time	14
- Age Mismatch	14
- Lack of Preparation for Integration	15
- Lack of Individualization	15
- Failure to Take Advantage of Choice-Making	15
- Sacrificing Participant Safety	16
- Peers Assuming Adult Teaching Roles	16
• Appendix A: Integration Strategies for Different Settings ..	17
• Appendix B: Resources for Further Information	18
■ Chapter 3 How to Integrate Successfully: Adapting Activities	19
• 5 Guidelines for Adapting Activities	20
- Adapt Only When Necessary	20
- View Adaptations as Temporary	20
- Adapt on an Individual Basis	21
- Adapt for Normalization	21
- Adapt for Availability	21

• 5 Types of Adaptations	22
- Material Adaptations	22
- Procedural and Rule Adaptations	23
- Skill Sequence Adaptations	23
- Facility Adaptations	24
- Lead-Up Activity Adaptations	25
• Case Studies	26
- George: A Youth With a Visual Impairment	26
- Pat: A Youth With a Hearing Impairment	27
- Jean: A Youth With Mental Retardation	29
- Susan: A Youth With a Physical Disability	29
- Carl: A Youth With Social Maladjustment	30
- Roselyn: An Adult With Severe Multiple Disabilities	31
• Appendix A: Adaptation Tips for Common Activities	33
• Appendix B: Task Analysis Guidelines	39
• Appendix C: Resources for Further Information	40
■ Chapter 4 How to Integrate Successfully: Activity Plans That Work	41
• Tips for Companions and Adult Leaders.....	42
• Ice Breaker Activities	43
• Art Activities	52
• Craft Activities	67
• Games	88
• Outdoor Education Activities	92
■ Chapter 5 How to Integrate Successfully: Programs That Change Lives and Communities	99
• Traits of a Quality Integrated Program	100
• Promoting Involvement in Integrated Programs	101
• Program Profiles	102
- 4-H Horseback Riding	102
- Meadowlake Elementary School	103
- Dowling School/Environmental Learning Center	104
- KIDSPACE Gallery	105
- Wilderness Inquiry	106
- Jewish Community Center	107
- Howard County Recreation and Parks Department	108
- Chapel Hill Parks and Recreation Department	110
• Appendix A: Resources for Further Information	111
■ Further Acknowledgments	112

Introduction

Tim and his parents have a dream for his life. The dream is that he will become an adult who, though he has mental retardation, is able to live in his own apartment in the community, hold a job, and participate in community social activities with peers. If he is to succeed in living out this vision, he will need to be able to interact successfully with roommates, bus drivers, store clerks, employers, coworkers, and other persons in the community. Each opportunity he has to interact with a nondisabled person today is valuable preparation for that transition from high school to vocational training and ultimately to adult life in the community.



Last summer, when an opportunity to interact with nondisabled peers came along in the form of an integrated community recreation program, Tim and his parents jumped at the chance. He began attending the integrated community recreation program where he volunteered to learn to play bocce (a game similar to lawn bowling) with a nondisabled partner, Dana. Tim is enthusiastic about the game. He is even more enthusiastic about participating in the game with his new friend. Together they have learned new ball throwing skills. They've also learned to appreciate each other's personalities, and have given each other help, support, and encouragement.

As Tim continues to play bocce at the community recreation site, he shows steady progress in his social development and bocce skills. Though it may seem that learning to play bocce with a nondisabled partner has little to do with Tim's ability to live on his own in the community, the interpersonal skills, experience, and confidence he gains through the program are an important part of his preparation for graduation day and beyond.

Tim is living proof that participation in integrated programming can make a life-changing difference for an individual with a disability.

Tim is living proof that participation in integrated programming can make a life-changing difference for an individual with a disability. And, it is not only the person with a disability who benefits. In the bocce program, the waiting list of *nondisabled* persons who want to participate continues to grow. In addition, as a result of this positive experience, program personnel are considering opening up other types of integrated programming.

We are, after all, simply trying to demonstrate what people in a democratic society like ours should be at their best: *Together Successfully*.

Advocates of integrated programming need not approach the general public apologetically; we are offering something that will enrich the community at large. There is no need to be hesitant in proposing integrated programming to agencies, either. Integrated programming offers organizations such as ARC, 4-H, scouting, and Y's another means to carry out their missions, which are about building better *people* — all kinds of people — not just better *projects*.

Yes, integrated programming is a challenge. Yes, there are mistakes that can and will be made. And, there are many things we don't yet know about how to conduct integrated programming successfully every time. But, in spite of these it is important that we move ahead and put into action strategies that further those core values that so many community programs are built on, values that are inherent in the integration philosophy: development of each individual's character, abilities, creativity, and knowledge; the fostering of strong ties between people; and the creation of a society where all are valued, productive, participating citizens. We are, after all, simply trying to demonstrate what people in a democratic society like ours should be at their best: *Together Successfully*.

Chapter 1 Why Integrate?

The chance to make friends in the community, to learn and grow in supportive settings, to have fun, to be involved in the neighborhood, and to be included. These are some of the benefits of community recreation and education programs. These benefits are not, however, always available to individuals with disabilities. For too many people with disabilities the choice is between the limited social and personal growth available in segregated programs, the frustration and sense of failure often experienced in inappropriately competitive integrated programs, or the boredom and isolation of too much time alone. There is clearly a need for quality integrated programs.



The absence of quality integrated recreation and education programs in a community affects all its residents in a number of ways:

- For persons with disabilities, the absence of appropriate integrated recreation and education options can lead to:
- Lack of appropriate social interaction skills due to limited opportunities to interact with, and learn from, peers who do not have disabilities.
- Severely limited leisure skill repertoires due to little exposure to age-appropriate recreation activities and to easily accessible community education options.
- Low or unrealistic self-esteem due to a lack of positive, normalizing peer interaction and peer modeling, and due to a history of repeated failures in highly competitive activities.
- Lowered levels of physical fitness and energy due to too much solitary recreation activity, much of which is often passive in nature.
- For peers without disabilities, the absence of appropriate integrated recreation and education options can lead to:
- Lack of opportunities to develop an appreciation for the contributions that people, regardless of abilities, can make to society if given a chance to learn and participate.
- Inability to interact successfully with people who present unusual challenges.
- Missed opportunities for growth in areas of understanding, patience, appreciation of differences, communication, and ability to interact cooperatively.

Chapter 1: Contents

- **Absence vs Presence of Integrated Options**
Page 3
- **Integrated Programming: Mandate for the 1990's**
Page 5
- **Tommy and Aaron: a Mother's Hopes for Her Sons**
Page 6

The presence of quality integrated programs in a community also impacts all its residents in many ways:

The benefits of sound integrated options in any setting -- work, educational, social, leisure, recreational, or neighborhood living -- can be as significant for nondisabled individuals as for those who have disabilities.

- For persons with disabilities, the presence of appropriate integrated recreation and education options promotes:
- Development of life-long functional recreation skills appropriate for individuals living in community group homes or supported living settings as adults.
- The ability to live in community settings through building the social, recreation and other skills needed to successfully interact with people who do not have disabilities.
- Appropriate interdependent behavior (as in asking for assistance as needed) by experiencing the realistic challenges that are part of integrated community life rather than experiencing only the high predictability of the self-contained segregated environment.
- Enjoyment of recreation opportunities that reward different levels of ability, valuing each individual's contribution to the effort.
- For peers without disabilities, the presence of appropriate integrated recreation and education options promotes:
- Personal growth and increased social sensitivity, including improved capacity for compassion, kindness, and respect for others.
- Development of skills and attitudes needed to live harmoniously in communities that include people with and without disabilities.
- Enjoyment of recreation and education opportunities that reward different levels of ability, valuing each individual's contribution to the effort.

It is sometimes assumed by members of an organization or the community at large that the benefits of integration all flow in only one direction: solely to the people with disabilities. As you can see from the lists above, this is not true. The benefits of sound integrated options in any setting - whether work, educational, social, leisure, recreational, or neighborhood living - can be as significant for nondisabled individuals as for those who have disabilities. Integration enriches everyone.

Integrated Programming: Mandate for the 1990's

In the 1800s, self-contained (segregated) programming was the dominant model for services to people with disabilities. The practice was well-intended at the start, based on the ideal of protecting vulnerable people from society by housing them in isolated, often rural, settings called colonies. Unfortunately, the idyllic plan for creating intimate colonies to protect people with disabilities from society was later twisted into a way to protect society from people with disabilities. The shift came in the early 1900's with the *Eugenics Scare*.

The Eugenics Scare of the 1920's was premised on the erroneous notion that society's gene pool would be ruined by persons with mental retardation, who were thought to breed rampantly and indiscriminately. This false notion fueled a worldwide frenzy to build large geographically isolated institutions, and led to the promotion of a policy favoring lifelong institutional segregation of persons with mental retardation and the creation of huge overcrowded dormitories to house them at state institutions.

The mood of the 1960's and 70's produced another shift in this nation's response to people with disabilities. Those turbulent decades were conducive to the movement to bring people out of these large institutions and back into local communities. The push to establish rights for persons with disabilities was consistent with the public's increased sensitivity to equal rights for other groups, such as persons of color and women. Much of the early momentum for deinstitutionalization was also drawn from outrage over recurring evidence of inadequate, often deplorable, conditions in many state institutions.

A giant step toward including persons with disabilities as community members occurred in 1972 when a landmark court suit was brought by the Pennsylvania Association for Retarded Children on behalf of parents whose children were excluded from public schooling. The parents challenged the exclusion of their children from regular education programs, and won the case. A direct outgrowth of that ruling was the remarkable law, Public Law 94-142, the Education for All Handicapped Children Act of 1975, which mandated that all children, regardless of the type or severity of disability, have a right to a free, appropriate public education in the least restrictive environment. The words "all" and "least restrictive environment" have created unprecedented opportunities for those seeking to integrate children with disabilities into regular schools, park and recreation sites, youth serving agencies, and other community settings.

With the current movements to reduce the populations of many of the remaining large state institutions, and to integrate children and adults with disabilities into local communities, there is a clear mandate for the 1990's: we must develop ways to enable people with disabilities to exercise their right to be fully participating members of the communities in which they live. Community recreation and education programs play a vital role in helping the nation fulfill that mandate.

We must develop ways to enable people with disabilities to exercise their right to be fully participating members of the communities in which they live.

Tommy and Aaron: A Mother's Hopes for Her Sons

by Mary Ulrich, West Chester, Ohio

Perhaps we will be sustained by hope that someday a "community support" agency professional from somewhere, anywhere, will adapt, modify, and begin to open community activities for Aaron based on Aaron's choices, interests, and preferences.

Last summer, my 13-year old son Tommy...

... went to two weeks of Boy Scout camp, an experience that included a hike on the Appalachian Trail.

... had to choose between participating in two sports; he decided he liked baseball better than soccer. In August, he left both as he began training for the school cross-country team.

... was active in a neighborhood network that includes a Nintendo Exchange Club. His friends called him the minute he arrived home from school. At least once a week he stayed at a friend's or cousin's house.

... had a season pass to a nearby amusement park and, because he can arrange transportation on his own, spent at least one day a week there.

The days of summer flew by for Tommy. His major frustrations were either the lack of time for pursuing all his interests, or mom's suggestions that he do something "dumb" like read, or practice his clarinet.

Last summer, Tommy's brother Aaron, age 14, went to two weeks of special camp (with some integrated opportunities). His major summer/weekend/vacation activity was watching Tommy play baseball and Nintendo. Aaron also has a pass to the amusement park, but can only go with an adult (who so far is his mother). Aaron spent all of Saturday and Sunday mornings pacing the front hall saying, "Bus, bus. Ready, set, go." When the school bus didn't come, he sometimes licked the front window, bit his hands, and put on his coat and backpack. He was on the waiting list for a short Easter Seals sponsored program in August, the only other community recreation opportunity available to him in our rural county.

As I contrast the lives of my two boys, I can't help thinking...

... perhaps I wouldn't worry about Aaron's behaviors, physical condition, weight, and stamina if he were occasionally an active participant, rather than always an observer.

... perhaps the hours and hours of inaction would not occur if Aaron had better skills or could entertain himself.

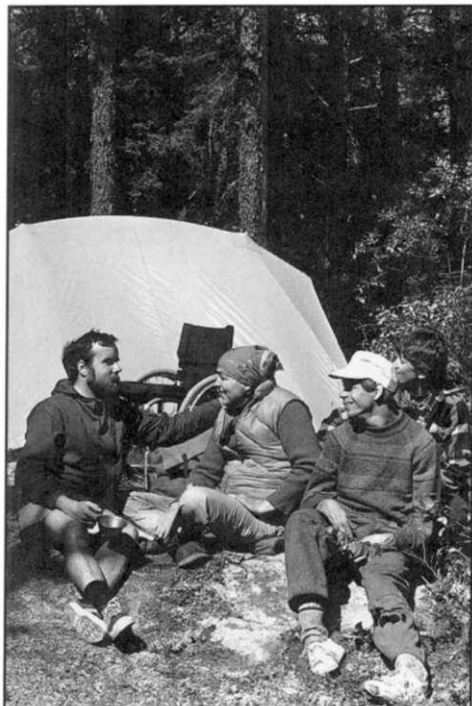
... perhaps our family will adjust eventually to the sadness (and stress) we feel knowing Aaron's only opportunities come from mom, dad, or brother -- and realizing it may always be that way.

... perhaps we'll resign ourselves to our community's "special" camps and "special" recreation programs, which effectively exclude Aaron from almost everything typical, regular, easily available, and low cost.

... perhaps we will be sustained by the hope that someday a "community support" agency professional from somewhere, anywhere, will adapt, modify, and begin to open community activities for Aaron based on Aaron's choices, interests, and preferences.

Chapter 2 How to Integrate Successfully: Promoting Positive Interactions Between Participants With and Without Disabilities

The focus of this chapter is on how the adult volunteer can set the stage for positive interactions between program participants, resulting in a successful integrated recreation or education experience. In the early days of integration, it was commonly believed that simply putting



children with and without disabilities together in the same classroom or recreation setting would cause them to interact positively. And, sometimes, merely putting them together did have that fortunate effect. However, physical proximity did not usually, in and of itself, produce positive interactions and interpersonal attraction. Thus, it became clear that the seeds of positive attitudes in learners without disabilities could not be assumed to exist, but had to be sown and then cultivated in a carefully structured manner.

Over the past 10 years, dozens of integrated recreation programs have sought to promote positive interactions between people with and without disabilities, while at the same time enhancing the recreation abilities, social skills, and self-concepts of all participants. The following eight guidelines are a synthesis of the techniques and approaches that have been found to be effective for use with community recreation, social, and education groups. There are a number of additional approaches to integration that are being successfully used in various settings, such as schools, and those are briefly described in Appendix A on page 17 of this chapter.

Chapter 2: Contents

- **8 Guidelines for Promoting Positive Interactions**
Page 8
- **Avoiding 8 Common Problems**
Page 14
- **Integration Strategies for Different Settings**
Page 17
- **Resources for Further Information**
Page 18

8 Guidelines for Positive Interactions

8 Guidelines for Promoting Positive Interactions

- **Structure Activities to Promote Cooperative Interactions**
Page 8
- **Determine Primary Purpose of Activity**
Page 9
- **Determine Desired Roles of Participants**
Page 10
- **Recruit Nondisabled Participants**
Page 11
- **Strengthen Friendship Skills of Nondisabled Participants**
Page 11
- **Use a Supporting Curriculum**
Page 12
- **Prepare Adults to be Facilitators**
Page 12
- **Promote Integration as Everyone's Responsibility**
Page 13

• Guideline 1: Structure Activities and Surroundings to Promote Cooperative Interactions

Without structuring an integrated situation for cooperative interactions, nondisabled individuals often view their peers with disabilities in negative ways, feel discomfort and uncertainty in interacting with them, and sometimes even display rejection toward them. Unless the setting is structured for cooperative learning experiences, competition might emerge and actually socialize children without disabilities to reject peers who are different in some way. What does it mean specifically to structure an activity for cooperative interactions?

One of three models of activity structure is usually applied when there is a group of people to instruct: Competitive, Individualistic, or Cooperative. Each is legitimate and has strengths in particular situations. Furthermore, sometimes they can be combined in an activity. We shall define each of them and look briefly at some applications.

Competitive

Competition in its traditional application leads to one person in a group winning, with all other group members losing. If it is used in a group where one or more of the members have disabilities that make successful task participation difficult, it will be likely that the participants with disabilities will "come in last." An example of competitive structuring from the world of camping would be five children, some of whom have movement disabilities, lining up at the edge of a lake for a canoe race. Each has a canoe and a paddle to use. The camp director tells them that the person who reaches the other side of the lake first will win a canoe paddle. It doesn't take much imagination to realize that the children with poor coordination and low muscle tone don't have much chance of winning. NOTE: Informed program leaders would not use a competitive goal structure in this manner of course, but would rely on one or both of the following structures instead.

Individualistic

In an individualistically structured situation, each member of a group works to improve his or her own past performance. Potentially, every member of the group, including members with disabilities, can win a prize for improvement if the targets for improved performance are not set too high or are not inappropriately matched with a disability condition. Using the canoe example again, suppose that the adult leader lines the group up on the shore of the lake and tells them that last week when they paddled across the lake each person's crossing time was recorded. Then, the adult says that each person will win a canoe paddle if he or she improves his or her time, even if the improvement is very small. Now everyone can be a winner. This structure is often used in amateur athletics where a child is encouraged to beat his or her last time or achieve a personal record.

Cooperative

Cooperatively structured activities are very helpful in many types of integrated programming, particularly if peer friendship is the goal. By its very nature, a cooperative learning structure (if handled properly) creates an interdependence because the group's attainment of an objective with everyone contributing is the quality that determines winning. Using the canoe illustration, the adult leader might have the five children climb into a war canoe (a large canoe), give each person a paddle, and tell them that they are each to paddle as well as they can and that they will all win a prize if they work together to keep the canoe inside some floating markers (placed in such a way that perfection in paddling isn't required). The adult leader will need to paddle alongside to determine that everyone is paddling, and that they are encouraging and assisting one another.

In conclusion, to promote *positive social interactions* between participants with and without disabilities, the cooperative structure will work better than the other two. Why? Because in a competitive situation, the child is concentrating on paddling the fastest; he or she doesn't have time for socialization. Similarly, in an individualistic structure the child is concentrating on bettering his or her own past performance; again, there is no incentive for socialization. In the cooperative structure, however, each person wants to encourage every person to achieve a group goal that is realistically attainable. This promotes positive social interactions such as encouragement, cheering, and pats on the back. In a word, cooperative structuring is the best means to achieving successful integration from a *socialization* standpoint.

• **Guideline 2: Determine Primary Purpose of Activity: Skill Development, Socialization, or Both?**

Most activities will probably promote both skill development and socialization, but there will also be times when one objective is given priority over the other. For instance, a 4-H club leader may designate certain periods of the year primarily for project completion, such as the months preceding the spring fashion show or county fair. These will be times when participants — especially those without disabilities -- will be intent on finishing their individual projects. Socializing will be minimal during these times and may even be regarded as a distraction by nondisabled 4-H members who are intent on making the "best bookshelf ever entered at the county fair." At times such as these, the leader must be clear about the intent of the activity in order to avoid creating a situation in which participants are frustrated by trying to fulfill conflicting objectives. When skill development is the focus, the program must be organized so that both participants with and without disabilities are able to pursue that objective. One option is to give nondisabled participants the opportunity to work on their own projects prior to the session with a partner who has a disability; that way they have time to develop their skills or complete their project, and also time to focus on interacting with their companions.

Additional Strategies for Promoting Cooperative Interactions

- **Seat participants in small integrated groups.**
- **If a participant with a disability has a behavior problem, have him or her become part of a larger group of participants without disabilities. Rotate the interaction responsibilities of members without disabilities.**
- **Arrange supplies so that everything needed by a group is in one small area rather than scattered around the room. This will help to keep group members involved with each other.**
- **Emphasize the importance of enjoying an activity with another person rather than the speed and/or accuracy with which it is done.**
- **Develop directions for the task in such a way that they require an interdependent (cooperative) effort, rather than independent or competitive effort.**

- **Guideline 3: Determine the Desired Roles of Participants**

It would seem that a peer tutoring approach is used if the primary objective is the acquisition of specific skills, or a peer friendship program is used if social interaction is the main objective. But making a choice between the two is not generally necessary.

It is important that the adult leader not only be clear as to the primary purpose of the activities, but also that he or she decides the desired role of nondisabled peers in interaction with peers who have disabilities. The leader must determine whether the nondisabled peers will be interacting as **companions, tutors, or both companions and tutors**. Each role has a different purpose and fits a slightly different overall goal. All of the roles fit well into a cooperative learning orientation.

The usual purpose of a **peer tutor** program is to have a peer without a disability teach a skill to a peer with a disability. The relationship of peers in a tutoring program can be thought of as "vertical," that is, the tutor is in charge ("I'm the teacher, you're the pupil."). A typical example of a peer tutor program is where a 12-year-old child without disabilities comes to a special class and works one-to-one on picture recognition skills with a 6-year old child with a disability. Using a set of flash cards, the older child gives systematic word practice drill to the younger one. This is the typical peer tutoring arrangement. However, the child with a disability should not always be involved in recreational activities as the one who receives "help," often an expectation when tutoring programs are used. It is important for a child with a disability to experience a giving as well as a receiving role.

The primary purpose of a **peer companion** program is to promote positive social interactions between a child with a disability and a child without a disability. To achieve this purpose, the peers should be approximately the same age, although it is fine if the child without disabilities is one or two years older than his or her partner. It is not often desirable for the child with a disability to be older than the child without a disability; our research shows that this can create a socially awkward situation. The relationship between two people in a peer companionship program can be thought of as "horizontal," that is, a relatively equalized, turn-taking relationship. A typical application of this arrangement is where two peers, one with a disability and one without, make a pizza by taking turns putting on the ingredients (sauce, cheese) and by washing the dishes together.

The two peer roles (companion and tutor) raise issues for program leaders to consider. At first, it may appear that the choice of one or the other is easy: the program or activity is tailored according to the outcome desired -- skill acquisition or socialization. It would seem that a peer tutoring approach is used if the primary objective is the acquisition of specific skills, or a peer companionship program is used if socialization is the main objective. But making a choice between the two is not generally necessary. Instead, leaders can opt for concentrating on the facilitation of friendship, at least initially. Then, later, it is very normalizing for one friend to teach another to play a new game, thus allowing the skill acquisition to occur in the natural course of the friendship.

• **Guideline 4: Recruit Nondisabled Participants**

A helpful tool for recruitment of nondisabled participants — as well as adult volunteers -- is a slide presentation that illustrates people with and without disabilities interacting in natural and interesting ways. This provides a positive image for prospective participants, many of whom may have negative mental pictures of integrated programs due to lack of exposure to persons with disabilities, stereotypes of persons with disabilities, or negative experiences with persons who have disabilities. Recruitment presentations that depict positive interactions between persons with and without disabilities help create, among potential members, the expectation that they will have a positive experience in an integrated program. Possession of that expectation alone can go a long way toward creating a successful program.

If you photograph your own slides, obtain written photo-use permission for each person in your pictures (for minors or others unable to legally sign for themselves, have the parent/guardian sign). Also, inform all parents or guardians of your intent to provide an integrated program and receive consent to have their son or daughter participate. While this type of permission may not be required, it is important to do it to avoid misunderstanding.

• **Guideline 5: Strengthen Friendship Skills of Nondisabled Participants**

Why should the adult leader spend time with instruction in friendship? Don't children without disabilities naturally interact in a friendly way with children who have disabilities? Yes, and no. Yes, they usually know how to interact in a friendly manner (although they may need to have their usual friendship skills sharpened or expanded). And no, peers without disabilities do not often have the knowledge and skills to interact easily and ably with a person who may be different in some manner. Frequently, a disabling condition presents interaction challenges never experienced by peers without disabilities. Participants without disabilities will need instruction in how to cope with communication, movement and other types of challenges.

Meetings involving nondisabled group members and adult leaders should occur frequently, perhaps immediately before or after an integrated session. During these meetings, discussion can focus on how a particular interaction problem can be overcome, new ideas for interacting, and specific techniques that can be used during one-to-one activities (see column at right for a list of techniques). A useful exercise for these meetings is to engage participants in problem solving based on the ideas for activity modification found in Chapter Three of this manual. For instance, they can think out loud about how to modify a pizza making task so that a child with cerebral palsy can participate with limited arm and hand use. When nondisabled peers apply themselves to figuring out how to enhance participation of a partner with a disability, it builds their empathy, self-awareness, and maturity.

How to Act as a Companion to a Peer With Disabilities

- **Welcome your partner and stay close to him/her during the activity.**
- **Smile, talk pleasantly, and try to maintain eye-contact when talking.**
- **Divide up tasks to encourage your partner to be involved.**
- **Make the activity enjoyable and let your partner know you are having a good time.**
- **Take turns. Your partner may not be used to this, so be patient. Don't help too much or too soon. But, if he/she appears to be confused, losing interest, or frustrated, step in. To assist, describe (pleasantly) how to perform the task, then invite him/her to do it. If that doesn't work... Show how to do the task as you continue to explain how to do it. Then invite him/her to do it like you did. If that doesn't work... Guide him/her through the task by gently nudging his/her arm toward it, or by actually moving your partner's hand to perform the task while continuing to explain how to do it. Then, invite him/her to do it.**
- **Say something pleasant about your time together as the activity ends.**

- **Guideline 6: Use a Supporting Curriculum to Enhance Knowledge of Companionship**

Use of the *Special Friends* curriculum (Voeltz et al., 1983; see resource list on page 18 of this chapter) can be helpful in enhancing the knowledge and motivation of participants without disabilities. Used for short informal group discussion periods of 15-30 minutes, these materials are often shared with nondisabled participants between interaction sessions. Suggested topics from the curriculum include:

- **How Do We Play Together?** Discuss how companions take turns, say nice things to each other, help each other out when a task is difficult, stay close to each other when playing, smile at each other, and so forth. In other words, reinforce the interaction techniques that they have been taught to apply during integrated activities.
- **How Do We Communicate?** Discuss communication tips, such as, talking slowly, allowing time for a response, trying another way to communicate if your companion does not understand you, and not giving up. The use of common, simple manual signs (e.g., "hello," "good," "you," "me") can be introduced, too.
- **What Is A Prosthesis?** Discuss the use of tools (e.g. ladder, paint brush) that people without disabilities need in order to do certain tasks (e.g., paint a house). Show examples of a prosthesis (for example, an artificial limb or adapted equipment) and explain how it is like a tool which people without disabilities use.
- **How Does A Person With A Disability Live In The Community?** Invite a person with disabilities to come and talk about how he or she travels from home to work, goes camping, etc.
- **What is a Best Friend?** Discuss the nature of friendship. Ask participants to think about similarities and differences in their relationship with their friend with a disability and their best friend (if not the same person).

An adult assuming an interaction-facilitating role will be instrumental in determining the success or failure of integrated activities.

- **Guideline 7: Prepare Adults to be Facilitators**

An adult assuming an interaction-facilitating role will be instrumental in determining the success or failure of integrated activities. Facilitation usually takes two forms:

- Overall planning and operation of the program, including recruiting participants, structuring activities for cooperation, and preparing nondisabled peers for the integrated program.
- Facilitating cooperative interactions by modeling appropriate behavior and reinforcing groups for interacting well.

The following is an illustration of how a leader might facilitate cooperative interactions. Suppose that the group is engaged in an art activity. The leader could do the following:

- **Prompt positive interactions** when they are not occurring, for example, "Mary, I'll bet that Jennifer would like to paint with you."
- **Reinforce positive interactions** when they are occurring, e.g., "Bill and Jim, you both did a really nice job with the mural." Rewarding words should not be given out indiscriminately, but should be given right after the desired behavior occurs.
- **Redirect behaviors** if either partner gets off task or is behaving inappropriately. For instance, the nondisabled partner may become "sloppy" in his/her interactions by becoming too autocratic, too laissez faire, or sometimes too absorbed in his/her own project. Or a participant with a disability may wander away from his/her companion.
- **Step in if a situation is deteriorating**, e.g., a child has a tantrum. Sometimes a child will need to be removed for a cooling-off period. The adult leader will need to gauge the seriousness of a problem situation and move in quickly if it is out of control or, better yet, if it is just beginning to get out of control.

- **Guideline 8: Promote the Essential Idea that Integration is *Everyone's* Responsibility**

While it is generally agreed that public and private recreation agencies must assume a leadership position in assuring equal access to their services, "key" individuals, such as group home staff members, parents, and teachers, must assist with the integration process. These individuals can be involved by helping recreation directors and activity leaders to complete environmental analyses and decide on appropriate adaptations to enhance participation in programs. They can also serve on community advisory boards that discuss efforts to assure that integration occurs, assist in recreation staff inservice training, and recruit volunteers (Schleien and Ray, 1988; see resource list on page 18 of this chapter).

Parents, especially, can play a key part in promoting integration. Susan Hamre-Nietupski and her associates bring this point out very well in an article titled, "Parents as Advocates" (see resource list on page 18). In the article, she describes several highly practical things that parents can do to see that an integrated program becomes a reality and thrives in the community.

Facilitating Cooperative Interactions

During activities, adult leaders can facilitate cooperative interactions between participants with and without disabilities by doing the following:

- **Prompt positive interactions when they are not occurring.**
- **Reinforce positive interactions when they are occurring.**
- **Redirect behavior if either partner gets off task or is behaving inappropriately.**
- **Step in if a situation is deteriorating.**

Avoiding 8 Common Problems

Occasionally our best intentions to extend programs to people with disabilities turn sour because we create unnecessary problems for ourselves. Eight of these common problems are discussed below, along with suggestions to help you avoid them.

Common Problems

- **Integrating Too Quickly**
Page 14
- **Using Cooperative Learning at the Wrong Time**
Page 14
- **Age Mismatch**
Page 14
- **Lack of Preparation for Integration in New Situations**
Page 15
- **Lack of Individualization**
Page 15
- **Failure to Take Advantage of Choice-Making Opportunities**
Page 15
- **Sacrificing Participant Safety to Integration**
Page 16
- **Peers Assuming Adult Teaching Roles**
Page 16

- **Problem: Integrating Too Quickly**

One community 4-H club voted unanimously to bring Janice, a child who has severe emotional problems, into their club. Not only did they want her to join immediately, they wanted to include her in every activity, 100% of the time. Their commendable enthusiasm and generosity turned to feelings of guilt when Janice soon had to be removed because the children could not cope with her inappropriate behavior. If the club leader and participants had gradually phased Janice into the program, perhaps choosing a short, largely social activity to begin with, Janice and her peers could probably have succeeded together.

- **Problem: Emphasizing Socialization at the Wrong Time**

Sometimes, an adult leader in a 4-H club asks peers without disabilities to devote themselves to socializing with a peer who has disabilities at a time in the club's schedule when every member is trying to finish his or her sewing or woodworking project for entry at the county fair. To avoid this problem, during times of individualistic or competitive skill-building activity let the participants without disabilities devote their time to their projects and ask a community volunteer or sibling to come in to help the person with a disability work on his or her project. Or, alternatively, perhaps the club members without disabilities will be willing to devote a portion of their meeting time to helping the child with a disability with his or her project using a cooperative "round-robin" system. Using this approach, nondisabled peers take turns as cooperating members of an integrated activity, each working for a short period of time with a partner who has a disability, but spending most of their time on their own projects.

- **Problem: Age Mismatch**

A young child without disabilities will feel socially awkward if expected to interact with a substantially older child with a disability — particularly if the interaction expectation is that of peer tutoring. A peer tutor structure works best when the tutor is considerably older (about twice as old or more) than the person to be tutored. Even when the expectation is friendship, the nondisabled peer should be at least as old as the peer with disabilities, and research indicates that a couple of years advantage for the nondisabled peer is even better.

- **Problem: Lack of Preparation for Integration in New Situations**

After you have organized your own integrated program — carefully preparing nondisabled participants in how to socialize effectively and instructing adult volunteers in what roles to take as facilitators -- you will need to assure that the same steps occur in other community environments in which you wish to have them participate. So, if your local bowling alley, library, or parks program is not yet fully prepared for integrated activity, loaning them this handbook may be very useful.

- **Problem: Lack of Individualization**

Individualization is a familiar concept for persons who routinely work with individuals who have disabilities. Often, it comes naturally after awhile because of the frequent need to adapt activities for persons who cannot perform them in the usual way. But, sometimes planners don't realize that peers without disabilities may also need to be introduced to integrated activities in an individualized fashion. For example, some nondisabled teenagers feel insecure in their own identities and so have difficulty extending themselves comfortably to anyone, including people with disabilities. Younger children are usually easiest to integrate successfully, followed by high school age people and adults. Middle school and junior high school students are a mixed lot - some are terrific while some are painfully out of their element and need to be introduced slowly and carefully to integrated programming.

- **Problem: Failure to Take Advantage of Choice-Making Opportunities**

Integration into activities does not automatically guarantee enjoyment for people with disabilities. It is possible that, after working many months to achieve community integration, parents and service providers will be frustrated because some people with disabilities do not want to participate in these integrated community recreation and education activities. Recreation and education preferences are extremely individual and failure to consider those personal preferences will undermine even the most noble and enthusiastic integration efforts. Fortunately, consideration of individual preferences can be accomplished by allowing people with disabilities to sample various pre-selected activities, and then to choose activities in which they wish to participate from those samples. Research has shown that when people with disabilities are allowed to choose the activities in which they wish to participate, they are more eager to learn the skills necessary to participate, they more readily generalize those skills to other settings, and they are more likely to continue to participate in those activities. (From "Ensuring Enjoyment in Integrated Community Recreation and Leisure Activities", by Donna Fletcher, Ph.D. See resource list on page 18 of this chapter).

Failure to consider personal preferences will undermine even the most noble and enthusiastic integration efforts.

Emphasizing the safety of all participants as your first concern will reap benefits for everyone . . .

- **Problem: Sacrificing Participant Safety in the Name of Integration**

One elementary school recently experienced a boycott of classes as parents kept their nondisabled children at home out of fear for their safety. The concern revolved around the presence in the classroom of a child with disabilities who was abusive toward other children. While the school's commitment to the integration of this child was admirable, it was inappropriate to sacrifice the safety of nondisabled students in implementing that ideal. It is prudent to remind ourselves occasionally that our society, while valuing altruism, also has a litigious element in it. Emphasizing the safety of all participants as your first concern will reap benefits for everyone in your program.

- **Problem: Peers Assuming Adult Teaching Roles**

Occasionally, a nondisabled peer assumes a skill teaching role that should be assumed by an adult. If using a tutorial role assignment, avoid having the peer without disabilities teach "heavy duty" skills. For example, a nondisabled peer should not be expected to teach a peer with a disability how to apply deodorant, put on undergarments, or brush teeth. These are tasks that are best left to parents.

Chapter 2: Appendix A

Integration Strategies for Different Settings

There are many techniques and approaches to bring about successful integrated programming in a variety of settings. A partial list follows with a short description of each.

There are many techniques and approaches to bring about successful integrated programming . . .

- **Team Teaching:** A special education teacher or aide accompanies students with disabilities into regular education classes, facilitating interactions and providing specialized assistance such as feeding children unable to eat independently.
- **Use of Enabling Technology:** Different electrical and mechanical devices are removing barriers for people with disabilities. For example, individuals who are unable to speak can use a voice synthesizer to communicate with others. Some adults in wheelchairs have vans with hydraulic ramps enabling them to board and drive their own vehicles.
- **Circle of Friends:** This group-support/group-counseling technique challenges nondisabled children to come up with ideas to make participation more rewarding for a classmate or group member with a severe disability, and then to turn the ideas into an implementation plan. Developed by Marsha Forest and others at Frontier College in Toronto.
- **MAPS (McGill Action Planning System):** This group-support/group-counseling approach focuses on key adults who are intimately acquainted with a child who has a disability. The adults are asked to create a vision for the child's life, including goals and possibilities, and to do systematic planning to make that vision a reality. Developed by Marsha Forest and others at Frontier College in Toronto, Ontario.
- **Integrated Creative Arts Activities:** Activities such as creative drama, cooperative art projects, and cooperative games offer a wider acceptance of different forms of participation because they emphasize cooperation, playfulness, and tolerance for nontraditional contributions.
- **Affection-Based Games:** Young children with and without disabilities can learn to interact using appropriate types of affection including appropriate touch, a warm smile, and words of kindness. Dr. Mary McEvoy at the University of Minnesota has done much to advance this technique.
- **Bias-Free Curriculum:** Instead of the usual tourist-type approach to giving young nondisabled children an idea of how a member with a disability lives (e.g., today we'll wear blindfolds and pretend we're blind), the teacher and parents infuse the entire curriculum with interesting insights about different aspects of disabilities and how they can be handled to everyone's advantage. This approach has been advanced through the work of Dr. Louise Derman-Sparks.

Chapter 2: Appendix B

Resources for Further Information

- Derman-Sparks, L. (1989). Anti-bias curriculum: Tools for empowering young children. Washington, D.C.: National Association for the Education of Young Children.
- Fletcher, D. (1990). "Ensuring Enjoyment in Integrated Community Recreation and Leisure Activities". Paper delivered at the National Conference of the American Association on Mental Retardation, May, 1990, in Atlanta, Georgia.
- Forest, M. (Ed.). (1984). Education/Integration: A collection of readings on the integration of children with mental handicaps into regular school systems. Downsview, Ontario: G. Allan Roeher Institute.
- Forest, M. (ed.). (1987). More education/integration. Downsview, Ontario: G. Allan Roeher Institute.
- Nietupski, Susan Hamre, et. al., "Parents as Advocates", IMPACT: Feature Issue on Integrated Leisure and Recreation. Fall 1989, Institute on Community Integration, University of Minnesota.
- Odom, S. & McEvoy, M. (1988). Integration of young children with handicaps and normally developing children. In S. Odom and M. Karnes (eds.), Early intervention for infants and children with handicaps. Baltimore: Paul H. Brookes Publishing Co.
- Schleien, S. and Ray, M.T. (1988). Community recreation and persons with disabilities: Strategies for integration. Baltimore: Paul H. Brookes Publishing Co.
- Voeltz, L.J., Hemphill, N.J., Brown, S., Kishi, G., Klein, R., Fruehling, R., Collie, J., Levy, G., & Kube, C. (1983). The Special Friends Program: A trainer's manual for integrated school settings (rev. ed.). Honolulu: University of Hawaii Department of Special Education.

Chapter 3 How to Integrate Successfully: Adapting Activities

People with disabilities typically have functional problems seeing (blindness), hearing (deafness), thinking (mental retardation), manipulating objects and moving (physical impairment), and socializing



(social maladjustment). Other problems may occur in a particular educational situation (learning disability) or can come about through a health impairment such as a heart defect. There are many specific names for impairments: cerebral palsy, Down syndrome, cystic fibrosis, retinal detachment, epilepsy. While each affects individuals somewhat differently, what they all have in common is that they may hinder an individual's participation in standard recreation, social, and educational activities.

The focus in this chapter is on facilitating participation by adapting activities to meet the needs of persons with disabilities, that is, making activities more accessible, more tolerant of limitations in skill, and more accepting of partial participation. A number of strategies for successful and appropriate adaptation are presented. They include alterations in materials and equipment, the manner in which materials and equipment are used, the way the activity is structured, and the physical environment in which the activity occurs. Underlying these strategies is the principle that individuals with disabilities are entitled to have as much opportunity for choice-making in their lives as is feasible. Just as nondisabled people choose to pursue the non-work activities they enjoy, persons with disabilities ought to be able to follow their individual preferences by pursuing the activities that appeal to them. For this to happen, two criteria must be met. First, individuals with disabilities must be exposed to different options and allowed to explore those that interest them. And second, program leaders must be willing to make adaptations that will enable an individual with disabilities to participate in and enjoy the activities of his or her choosing.

Chapter 3: Contents

- **5 Guidelines for Adaptation**
Page 20
- **5 Types of Adaptations**
Page 22
- **Case Studies**
Page 26
- **Adaptation Tips for Common Activities**
Page 33
- **Task Analysis Guidelines**
Page 39
- **Resources for Further Information**
Page 40

5 Guidelines for Adapting Activities

Adaptation Guidelines

- **Adapt Only When Necessary**
- **Adapt as a Temporary Change**
- **Adapt on an Individual Basis**
- **Adapt to Normalize**
- **Adapt for Availability**

Adapting an activity can in some ways change its appearance. Consistent with the *principle of normalization* (Wolfensberger, 1972; see resource list on page 40 of this chapter), all persons should learn skills and participate in activities in as normal a manner as feasible. Therefore, it is necessary to carefully analyze the total environment before changes are made in an activity. When adaptations are made cautiously, participants with disabilities will not appear too different from their nondisabled peers. The following five guidelines have been found helpful in assisting program leaders to successfully implement appropriate adaptations.

- **Guideline 1: Adapt Only When Necessary**

Many times, unfortunately, activity leaders use adaptations without considering participants' needs. Frequently, a material or procedural modification is used because it was purchased with funds difficult to come by, is available, or because the leader is familiar with the application. However, when using such criteria, the ability level of the participant is sometimes overlooked. A simplified version of the activity may not have been necessary; he or she might have participated successfully using the standard rules and equipment.

A *task analysis* can help a group leader clarify the need for an adaptation through identifying the skills required for successful participation (discussion of the use of a task analysis appears on page 39). After conducting a task analysis, the participant's ability to perform the requisite skills of the targeted activity must next be assessed. A modification should then be used only if it is positively essential for participation, success, and enjoyment. Adapt only when necessary! But remember, the overall goal of the program is to promote success, so you should not hesitate to make a change that helps a participant succeed.

- **Guideline 2: View Adaptations as Temporary Transitional Changes**

An adaptation should be viewed as a temporary and transitional change in the original activity. Whenever possible, the leader and participant must work toward engagement in the original activity. The acquisition of a skill using modifications in one setting could become a hindrance in other settings. For instance, teaching the necessary skills for newcomb, a simplified version of volleyball, at home, would not be sufficient for participation in a typical volleyball game at a community recreation center. Newcomb requires the player to merely catch and throw the ball over the net instead of tapping the ball to a teammate or over the net. In a standard game of volleyball, the participant who is proficient only in the modified game of newcomb would be the butt of criticism rather than a candidate for normalization.

- **Guideline 3: Adapt on an Individual Basis**

An adapted physical education class was recently observed by the authors in which 12 students with movement problems were all tossing light-weight Nerf frisbees. It was noted, however, that all but two of the students had the minimum eye-hand coordination required to throw a standard, hard plastic frisbee. Nevertheless, when asked why all were using the modified equipment, the adapted physical education teacher responded: "We recently purchased a carton of Nerf frisbees for the school, and also, it would probably be too dangerous for two of the students to be playing with a hard frisbee." Unfortunately, for the remaining 10 students, they never did receive frisbee instruction commensurate with their ability levels. The solution to this problem would have been to individualize the modification so that only the two pupils for whom it was absolutely necessary would use the Nerf frisbee while their classmates were learning to toss the more age-appropriate models.

- **Guideline 4: Adapt for Normalization**

If it is found that an individual requires a modification to the activity, care should be taken to keep the activity as close to the original or standard version as possible. The implementation of unnecessarily exaggerated adaptations could make the participant stand out by accentuating his or her disabilities. In this manner, others could become more aware of the differences, and not the similarities, between themselves and the "atypical" individual.

- **Guideline 5: Adapt for Availability**

Often an individual learns to see adapted equipment or materials exclusively in one environment, usually a "training" environment. The same modifications are usually not found or applicable in other "non-training" settings. For example, a person who learns to bowl using a tubular steel bowling ramp may not be able to do so at a community alley where a ramp is not available. It may have been more practical to teach the individual how to use a bowling ball pusher, which is less costly, more portable, and therefore, makes play accessible in any neighborhood bowling alley. Admittedly, though, elaborate and expensive devices such as a bowling ramp are necessary for persons with more severe disabilities and should be employed. It is the activity leader's responsibility to consider these factors when making adaptation decisions. Problems with cost and availability may sometimes be overcome by encouraging community facility managers and owners to procure the specialized equipment themselves. Instead of "feeling sorry" for persons with disabilities, the business owner or facility manager could purchase such devices as wise business investments. A bowling alley owner who makes a bowling ramp available will consequently make his or her facility accessible to all citizens of the community. The resulting increase in patronage could easily pay for the equipment many times over in a very short period of time.

Activity Leader's Adaptation Checklist

Ask yourself these questions as you consider making a specific adaptation:

- **Is this activity adaptation absolutely necessary to enhance participation, success, and enjoyment?**
- **Is this activity adaptation being viewed as only a temporary change?**
- **Is this activity adaptation being made on a personal basis to meet one individual's needs?**
- **Is this activity adaptation of reasonable cost and available in community settings?**
- **Does this activity adaptation help the participant fit in with his/her peers (i.e., is it normalizing)?**

All five questions must be answered "yes" for a particular adaptation to be considered appropriate and important.

5 Types of Adaptations

There are five types of adaptations that should be considered: material adaptations, procedural and rule adaptations, skill sequence adaptations, facility adaptations, and the use of adaptations in lead-up activities. Each type is described in this section, with examples. Specific suggestions for modifying typical activities found in 4-H and other youth groups appear in Appendix A on page 33 of this chapter.

Types of Adaptations

■ **Material Adaptations**

Page 22

■ **Procedural and Rule Adaptations**

Page 23

■ **Skill Sequence Adaptations**

Page 23

■ **Facility Adaptations**

Page 24

■ **Lead-Up Activity Adaptations**

Page 25

• **Material Adaptations**

Materials and equipment used in an activity can be barriers to participation because they've been designed by and for nonhandicapped individuals. However, materials and equipment may be adapted.

For example, equipment may be modified to permit bowling by individuals who have difficulties in fine and gross motor coordination, balance, and muscular strength required to lift and roll a bowling ball down an alley. In such circumstances,

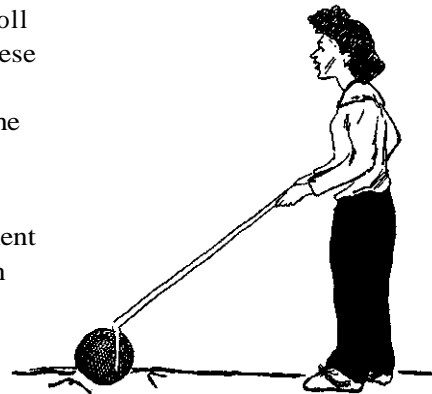


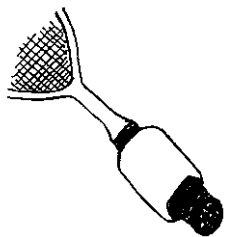
the bowling ball may be placed on top of a tubular steel bowling ramp. The bowler then "aims" the ramp at the pins and releases the ball. A bowling ball pusher, similar to a shuffleboard stick, may also be used to push the ball down the alley. The pusher may be adjusted to various lengths, allowing both ambulatory and nonambulatory, short and tall, individuals to play. A third adapted bowling device that can be used by a person unable to lift a

conventional ball is a handle-grip bowling ball. A simple grasp of the handle in the palm of one's hand and basic gross motor arm movements are required to manipulate this adapted device. Once released, the handle snaps back, flush, into the bowling ball, allowing the ball to roll down the alley toward the pins. These three adaptations can permit many persons with disabilities to enjoy the game of bowling.

Some types of adapted equipment are available commercially and can be purchased from sporting goods and hobby stores, specialty shops, and mail order houses. Many adapted recreational materials and equipment can be devised by an activity leader or parent. For instance,

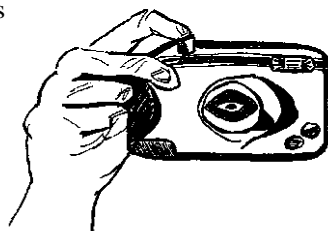
a tennis racket handle may be enlarged using sponge or foam rubber and wrapped with masking tape, to allow for easier grasping and





homemade material adaptations that can be applied to a myriad of recreational pursuits.

control of the racket. Another simple adaptation that can make a camera easier to use is extending the shutter release button by attaching a crayon; this makes the button easier to locate and press. There is an infinite variety of both commercially available and



While these physical modifications are reducing barriers, one principle must be emphasized: The person using the equipment or facility must not, at the same time, be separated from interacting with the community in general.

- **Procedural and Rule Adaptations**

Most games or activities contain a standard set of rules. If an individual's physical, mental, or social condition makes following a particular rule difficult, it may result in a potential participant becoming a mere spectator. Rules may be modified or simplified to make participation possible. They may also be altered when teaching a game, and then later shaped to conform to the rules that nonhandicapped peers follow. For example, basketball requires a player to bounce or dribble the ball every time a step is taken down the court. A change which permits one dribble for several steps down the court may permit an individual with difficulty in eye-hand-foot coordination to become an active member of the team. Or, the individual could learn to bounce and catch the ball instead of using the more difficult, standard dribble. With practice, coordination may improve and the regular rules can be used.

Rule changes in card games may also be made. For example, the game, "Concentration," requires players to draw two cards consecutively, with the object being to draw the greatest number of matched pairs. In order to decrease the difficulty of discriminating between number and picture cards, all "picture cards" (i.e., jacks, queens, kings) could be assigned the same value. Another modification of the game would be to use two photographs of the player and all of his or her friends and family as playing cards. This not only simplifies the game, but can make it more educative, motivating, and cooperative.

Modifications in procedures and rules can turn a seemingly impossible task into an enjoyable pursuit. Changing the rules of a complex task may allow a person to participate in an age-appropriate activity, rather than forcing him or her to resort to playing with young children.

- **Skill Sequence Adaptations**

One of the most effective ways to teach any individual an activity is to break the skill down into smaller, component steps. These steps are identified through an analysis of the task itself and subsequently sequenced in a logical order (see *Task Analysis Guidelines* on page 39). However, often times a sequence of steps applicable to a nondisabled individual may prove too difficult or impractical for a person with a

Modifications in procedures and rules can turn a seemingly impossible task into an enjoyable recreational pursuit.

disability. A hobby such as cooking provides a clear illustration of the problem. When boiling an egg, a nondisabled person may place the egg into a saucepan of boiling water. It is obvious that this could be hazardous (i.e., resulting in a scalded hand) to an individual with physical and/or intellectual disabilities. A remedy to this problem could be to rearrange the sequence of the component steps of the skill by training the participant to initially place the egg into the saucepan and then proceed to fill the saucepan with cold water. The saucepan is then placed onto the stovetop burner and the water brought to a boil. This procedure does not alter the final results (i.e., boiling an egg) when several minutes are added to the cooking time, but facilitates a safe and practical method of performing this worthwhile pursuit. A long-handled, slotted spoon could also be used to place or remove the egg from the boiling water as an additional material adaptation.

A modified skill sequence applicable to the manipulation of a camera can also be implemented. Typically, a photographer will first raise the camera to eye level and then place his or her index finger on the shutter release button. However, an individual lacking sufficient fine motor coordination could initially be trained to position his or her finger on the shutter release button prior to lifting the camera to eye level. In this way, the individual would merely have to depress the button once the camera was appropriately positioned. The use of a task analysis for training in the use of a camera — the activity just mentioned — is illustrated in the case study of Roseyln that is presented later in this chapter. Notice, too, that modifications in materials and in rules/procedures are introduced in the activity analysis sequencing.

- **Facility Adaptations**

The community offers many age-appropriate recreation, social, and educational opportunities. A local swimming pool, museum, restaurant, library, and church/synagogue are all public facilities available to people with disabilities. Unfortunately, many individuals are denied access to these environments. This problem is most evident for individuals who are not ambulatory and are unable to enter and use public buildings because of narrow doorways, inadequate toileting facilities, and imposing staircases. In addition, transportation to many sites is inadequate. However, many of these architectural barriers are being overcome by the installation of wheelchair ramps leading into buildings, enlarged doorknobs, extended handles on drinking fountains, and other adaptations that promote full utilization by all individuals.

While physical modifications are reducing barriers, one principle must be emphasized in using these modifications in an activity: The person using the equipment or facility must not, at the same time, be separated from interacting with the community in general. Modifications should blend in with standard equipment so as not to make any person stand out as being too different from his or her peer group.

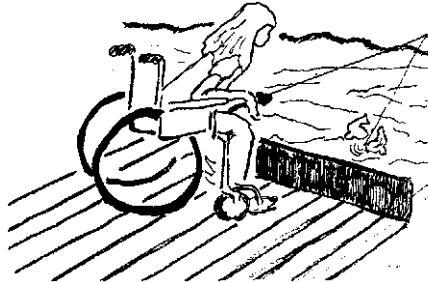
For example, the following could make pier fishing accessible to persons with physical disabilities while retaining normal qualities:



- An access walk to the pier at least 5 feet wide to allow for turning of a wheelchair.
- A handrail around the entire pier 36" high with a sloping top at a 30 degree angle for arm and pole rest.

- A kick-plate to prevent foot pedals of wheelchair from falling off the pier.

- A smooth, nonslip surface on the access walk as well as on the pier.



It is certain that without these described adaptations, recreational involvement by many individuals would be nonexistent, or minimal at best.

• **Lead-Up Activity Adaptations**

A lead-up activity is a simplified version of a traditional activity, or an exercise that allows practice in some component skill of an activity. The sole purpose of a lead-up activity is to prepare the individual for full participation in the targeted activity. Often times, several lead-up activities may be chained together to teach specific skills necessary for successful engagement in a more complex activity. For example, a player can learn many of the skills involved in volleyball by participating in the game of newcomb, which requires participants to catch and throw a ball over a net. The concepts of returning the ball over the net, scoring team points, and rotating players can all be learned during the adapted newcomb activity. An additional lead-up activity may have to be implemented to develop the skills necessary for tapping the ball over the net. This can be accomplished by having the players form a circle while taking turns tapping the ball to the player in the circle's center. Thus, by learning a more complex activity in small steps, full participation can be shaped and possibly accomplished eventually. Nevertheless, some individuals with disabilities may never be capable of mastering all the skills necessary for engaging in the original activity. In this case, the lead-up activity itself may become a rewarding experience.

These five types of adaptations represent the primary ways in which a creative program leader can reduce failure and frustration for participants. In developing adaptations, it is important that activity leaders, parents, and the participants themselves discuss potential barriers and adaptations. Many of the most creative and effective ideas come from parents and consumers.

Case Studies¹

Case Studies

- **George: A Youth With a Visual Impairment**
Page 26
- **Pat: A Youth With a Hearing Impairment**
Page 27
- **Jean: A Youth With Mental Retardation**
Page 29
- **Susan: A Youth With a Physical Disability**
Page 29
- **Carl: A Youth With Social Maladjustment**
Page 30
- **Roselyn: An Adult With Severe Multiple Disabilities**
Page 31

This section presents several illustrations of how systematic instructional principles -- in conjunction with material, procedural and skill sequence adaptations and lead-up activities— can be applied to develop age-appropriate recreational skills for six individuals with different types of disabilities.

• ***George: A Youth With a Visual Impairment***

Blindness is defined for legal purposes as visual acuity of 20/200 or less in the better eye (with compensating lenses) or a restriction of field of vision to 20 degrees or less. Many people who meet the legal definition of blindness get along very well in their daily lives. They may move about independently, some using canes or guide dogs, and they may have no other physical or intellectual impairments. For some, their greatest need may be for sighted people to act as guides for them in various situations. Personal experience on the part of sighted people can be helpful in developing tact, good judgment, and a sense of humor to handle new or awkward situations as they occur. Too much assistance can be detrimental to the independence of the person who is blind and who can travel partially or totally independently.

George is a 16-year-old youth with a severe visual impairment. He often uses a cane to move from place to place, has no other sensory impairment, and has unimpaired intellectual and physical abilities. George is part of a youth program in which you are a leader. As you interact with George you become aware that he wants to put you at ease. He will often talk with you as both of you encounter awkward situations. Over time you develop the following guidelines to assist other group leaders and members in interacting with George in a comfortable and respectful manner:

- Ask George if he would like assistance in traveling. Show him where your elbow is by touching his arm with it. Don't take his arms and propel him. Let him take your elbow if he chooses to.
- Inform him when you are about to come upon a step or staircase and whether it goes up or down.
- In guiding George to a chair, a good technique is to bring him to a point where he touches the back of the chair. He will be able to determine which direction the chair faces. It will then be a simple matter for him to pull it out from the table.

¹Some ideas in this portion of the chapter are based in part on two excellent 4-H publications: Together-A Leader/Agent Workbook for 4-H Programming to Include Youths with Disabilities, by Patricia Kraal (distributed by National 4-H Council) and Adaptive Methodology, an unpublished paper that comes from Insights-Art in Special Education, Art Education of New Jersey, 445 Wyoming Avenue, Millburn, NJ 07041. The authors wish to thank Drs. Marie Knowlton and Susan Rose, University of Minnesota, for their helpful suggestions in the areas of vision and hearing impairments.

- In entering an automobile, bring George to the automobile and assist him with your voice and hands, placing one of his hands on the door handle. Let him open the door. He may need to disengage from you to use his other hand to locate the top of the auto or door frame.
- In assisting George to enter a building, tell him whether he is entering the front, side, or back door. It is also informative to indicate if the door swings out or in, and on which side it is hinged.
- When introducing him during a social gathering, seat him near other people, perhaps on a sofa, not in a chair off in the corner.
- When working with George in a group, remember that he is similar to any other youth of the same age, except that he depends more on hearing than do other participants. Sometimes tape recording the meeting can be helpful.
- When approaching George give him your name, and let him know when you leave.
- In a small group situation, ask each person to introduce himself or herself so that George can identify voice with positions.
- Prior to a group meeting, remove unneeded objects that might clutter the area. Maintain a consistent room arrangement. Be sure to close all cupboard doors after obtaining necessary materials.
- Have a well-organized working area. Trays that hold all of the needed materials can be especially helpful. Identify items that are not easily recognized by use of rubber bands, magnets, or tape. When you're ready to have George begin a task, orient him to the entire activity area. Keep instructions clear and precise. Use braille instructions if needed and available. If physical contact is needed to demonstrate a task or operation, ask George's permission to help him.

Many people who meet the legal definition of blindness get along very well in their daily lives. They may move about independently, some using canes or guide dogs, and they may have no other physical or intellectual impairments. For some, their greatest need may be for sighted people to act as guides for them in various situations.

• ***Pat: A Youth With a Hearing Impairment***

Hearing losses can vary from mild (when a person has difficulty hearing faint or distant speech), to severe (when a person only feels vibrations). Deafness is defined as a hearing loss in both ears severe enough to prevent effective communication by sound alone, even with amplification. Ninety-five percent of school-age deaf children become deaf before learning speech or their native language. Few persons deafened before learning language develop speech that can be understood easily in most social situations. People who are deaf understand only about 20 percent of what is said by reading lips, so it is unrealistic to rely solely on this mode of communication. Thirty percent of children with a hearing impairment have difficulty learning written/spoken language. Thus, communication by reading and writing may be of limited use. Most children and adults with profound deafness cannot understand speech even with the aid of a hearing device. What is the

When working with Pat, a 12-year-old girl who has a severe hearing impairment, communication is the main challenge. She is eager to communicate and knows her best ways to succeed at it.

preferred method of communication among people who are deaf? There is increasing support for total communication where finger-spelling and sign language are used along with speech, lip reading, and writing. You, as the hearing partner, should accept the communication choice of the person with the hearing impairment.

When working with Pat, a 12-year-old girl who has a severe hearing impairment, communication is the main challenge. She is eager to communicate and knows her best ways to succeed at it. She communicates fluently through sign language with her peers who also have hearing impairments, and with hearing persons who know manual communication. You, as a group leader, are facilitating Pat's involvement in the group by implementing a program teaching basic signs to the other children. You are going to set up a "buddy system" so that a child with normal hearing can help Pat pick up missed pieces of information.

Including Pat in your recreation or social group has not been difficult from a specific task standpoint. Some general adaptations you are following that facilitate her participation are:

- Use visual aids, role playing, and gestures as much as possible.
- Use a large easel at meetings and write business items on it with a water color felt-tip pen. Use a dark color. Have a pad and pencil at your meetings for her to write messages to you and vice versa.
- If necessary, select project materials that have simplified reading levels, but avoid materials that are not age-appropriate, such as young children's storybooks for use with adolescents or adults.
- During instruction, seat Pat so that she is facing you, the activity leader. Use simple words and learn signs for key words you plan to use in a demonstration.
- Know how to get Pat's attention in a group situation. One attention-getting action is to blink the room lights.
- Make use of the many board and table games that require little or no talking for enjoyable use. Chess, checkers, and various card games are but a few examples of games with modest verbalization demands.
- Make use of outdoor activities such as tennis, jogging, bocce, horse-shoes, and many others that can be done effectively without talking.
- Think of other activities that can be enjoyed without talking and therefore require no special adaptations, such as gardening which offers the pleasures of seeing, moving, touching, and smelling.

- ***Jean: A Youth With Mental Retardation***

An individual with mental retardation will develop intellectually at a slower rate than his/her peers and will be unlikely to reach a normal level of intelligence. However, he or she will accomplish many tasks that nondisabled people achieve, though it may require skillful instruction to assist him or her to do so. The diagnosis of mental retardation is based on two criteria: (1) an IQ of 70 or less on a standardized intelligence test, and (2) a significant impairment in adaptive behavior. Unless both of these conditions are met, the diagnosis is not valid. (An impairment in adaptive behavior is a significant delay or deficit in performing early developmental tasks, learning during school years, or socialization during adulthood).

Jean is a 10-year-old girl with mental retardation who is a new and enthusiastic member of your club. Her parents have provided you with the following suggestions, developed by the leader of her former club, that will facilitate her involvement:

- Focus on one task operation at a time, and keep instructions uncomplicated. Make certain that directions have been understood.
- Repeat directions and provide practice opportunities as many times as necessary to ensure adequate learning.
- Continue to encourage Jean.
- Develop a routine for meetings.
- On occasion, let Jean help others. She doesn't have that exciting opportunity very often.

- ***Susan: A Youth With a Physical Disability***

Physical disabilities can result from illness or accident, occurring before, during, or after birth, and can affect any part of the body. Thus, different adaptations may be necessary depending on the nature of the activity and the type of physical disability. Your best guide to specific adaptations for each individual with physical disabilities is advice from parents, teachers, therapeutic recreation specialists, occupational therapists, and other adults who work and play with him or her.

Susan is a 16-year-old with cerebral palsy, which causes loss of control over one or more areas of the body. She is quite helpful in identifying activity adaptations that work best for her. In a discussion of the needs of persons with physical disabilities, she shares the following suggestions to help group leaders and members make meetings a positive experience for any person with a physical disability:

- Be sure that your meeting place is accessible. Remove all barriers.

An individual with mental retardation will develop intellectually at a slower rate than his/her peers and will be unlikely to reach a normal level of intelligence. However, he or she will accomplish many tasks that nondisabled people achieve, though it may require skillful instruction to assist him /her to do so.

- Provide convenient and accessible spaces for use of wheelchairs or crutches.
- Ask the person's advice as to the best method for assisting him or her to accomplish a specific task.
- Don't assume that someone with a physical disability has mental impairments.
- Don't feed a person who has eating or drinking difficulties. The person may choke and be unable to clear his or her airway. Let a parent or group home care provider do the feeding, when necessary.

• ***Carl: A Youth With Social Maladjustment***

Social maladjustment problems will provide the greatest programming challenge to group leaders because of the stress resulting from dealing with behaviors such as temper tantrums. Therefore, it will be essential to have another adult present, one who genuinely likes the person with a social problem and who also knows how to set and maintain behavioral limits fairly and firmly.

Social maladjustment problems will provide the greatest programming challenge to group leaders because of the stress resulting from dealing with behaviors such as temper tantrums. Therefore, it will be essential to have another adult present, one who genuinely likes the person with a social problem and who also knows how to set and maintain behavioral limits fairly and firmly.

Carl is a 13-year-old who has difficulty attending to tasks. He often leaves his chair without warning to roam the room. This distracts others, who then become irritated. Sandy, an adult volunteer, works well with Carl and helps him maintain appropriate behavior in the group. Sandy has developed the following guidelines to assist you and other group leaders in working with Carl and other youth with socially maladaptive behaviors:

- Bring the youth into the integrated program gradually. Perhaps he or she can only handle 10 minutes of an hour program initially (this could be the first or final 10 minutes of the program). That's OK! Your objective is to promote positive interactions. That may take a long time to achieve.
- Establish and teach the rules that are necessary for participation in a particular environment, such as during 4-H meetings in your home.
- Prevent the individual from taking advantage of other participants, particularly those with more severe disabilities than he or she. The adult will need to stay very close to the person until he or she demonstrates the ability to behave properly with lessened control.
- When the person is behaving appropriately, reward him or her with a smile, a good word, or a bit more freedom. When he or she misbehaves, intervene quickly and consistently, with a consequence that matches the misbehavior.
- Never strike a person who has behavior problems, but do use passive restraint if needed.

• ***Roselyn: An Adult With Severe Multiple Disabilities***

The term *severe multiple disability* refers to the condition of those individuals who have a disability or combination of disabilities that limit their daily activities to such a degree that they require services and programming more innovative, extensive, and intensive than the programming common for other individuals with disabilities. Conditions often include a lack of ability to be independently mobile, the need for assistance in feeding and toileting, and the need for communication skills training.

Roselyn is 23 years old and has severe multiple disabilities. She is paralyzed from the waist down, uses a wheelchair, and has difficulty holding her head erect. Her arm movements are limited due to stiffness at her elbows. Roselyn is functioning in the severe range of mental retardation. With much prompting, Roselyn can complete several basic tasks. She is currently attending a day activity center that offers self-help, social/communication, recreation, and prevocational training.

You are working with Roselyn in a photography program. The objective of this program is to teach her to take photographs using a *One-Step Polaroid* camera. This activity was selected because: (a) Roselyn expressed an interest in the activity; (b) it is chronologically age-appropriate; (c) it may facilitate social interactions with peers; (d) it provides immediate feedback (a developed photograph within 60 seconds); and (e) the activity requires manipulation of the camera at midline, which is commensurate with Roselyn's physical abilities. A 12-step task analysis for the operation of a *One-Step Polaroid* camera provides the steps that you teach Roselyn. To construct an accurate analysis of the task, you watch several persons owning a *One-Step Polaroid* camera perform the steps required to operate one. You also add some steps that are customized for Roselyn. The result is as follows:

1. Ask another person, "Can I take a picture of you?"
2. If the reply is "yes", point to or suggest where the person should sit or stand (not more than 12 feet away).
3. Ask the person to smile.
4. Grasp opposite sides of the camera with both hands (lens facing away from body and toward subject).
5. Raise camera until you can see through viewfinder.
6. Center the person in viewfinder to complete preparation.
7. Position index finger directly in front of shutter release button.
8. Apply pressure of the index finger onto button to push button in until completely depressed.
9. Wait for photograph to descend from camera base.
10. Remove the photograph from camera.
11. Attend to the photograph until it develops fully.
12. Share the photograph with others and, perhaps, place it in an album.

The term *severe multiple disability* refers to the condition of those individuals who have a profound disability or combination of disabilities that limits their daily activities to such a degree that they require services and programming more innovative, extensive, and intensive than the programming common for other individuals with disabilities.

NOTE: See page 39 for tips on developing a task analysis.

Prior to the start of instruction, Roselyn's preinstruction skill level is determined by discovering which steps of the task analysis she can perform without any assistance. The verbal cue, "Roselyn, take a picture of (name of person being photographed)", is given, and her response recorded. A plus (+) is used to indicate a step of the task analysis performed correctly and without assistance. A minus (-) is recorded for each step performed incorrectly or with assistance.

Instruction begins in the second session, and continues in blocks of 15 minutes once per week. A series of three prompts are used to teach her the steps she is unable to perform correctly. Prompts range from least to most intrusive. They are:

1. First provide the verbal cue (e.g. "Roselyn, take a picture of (other person's name).") Give praise (e.g., "Roselyn, that's terrific!") for a correct response.
2. If the response is incorrect, repeat the verbal cue and model the correct behavior for her. Then provide praise for a correct response.
3. If her response is still incorrect, once again repeat the verbal cue and gently physically guide Roselyn through the behavior, giving praise for a correct response.

Adaptations may be needed to enable Roselyn to successfully carry out the activity. For instance, a material adaptation might be used during the program to simplify the task. A one-half inch piece of wax crayon can be attached to the shutter release button to extend it following unsuccessful attempts to depress the button during the initial assessment. The adapted camera should be used in the final assessment session and during all of instruction. A modification of the skill sequence could also be introduced. The initial task analysis was based on a nondisabled individual's performance of the task. Because of Roselyn's poor eye-hand coordination, the step requiring her to position her index finger over the shutter release button may have to occur before raising the camera to eye level. In this fashion, she is able to center the subject in the viewfinder and immediately take the photograph, while maintaining adequate control of the camera. In addition, this adaptation eliminates the need to search for the shutter release button once the camera is raised to eye level.

Instruction continues until Roselyn masters all 12 steps. She will then be given an opportunity to take photographs in several different locations to demonstrate her newly acquired photography skills.

Chapter 3: Appendix A

Adaptation Tips for Common Activities

For five common types of activities - sewing, woodworking, horticulture, creative arts, and cooking - the following adaptations will be useful for individuals who have problems seeing, thinking, and/or moving. The specific category of problem addressed is listed at the side of the page. Additional adaptation tips are found in a series of 4-H leader guides called, *Common Ground* (see resource list on page 40).

• Sewing Adaptations

- To begin using a sewing machine, a person must learn how to thread the machine and needle, prepare the bobbin, and set the seam gauge accurately. Review the sequence of these tasks with him or her until the skills have been mastered. Provide assistance as needed, but not more than is absolutely necessary.

- It may be helpful to use a heavier weight paper to make pattern pieces. Contacting a company that supplies patterns for persons with vision impairments can be helpful. If you make patterns yourself, use heavy-weight wrapping paper.

- For measuring, a tactile tape measure may be purchased, or a regular one adapted by inserting a staple to mark each inch and two staples to mark every foot.

- To help an individual thread a needle, poke the point of the needle into a cork so that the needle is secure and erect. Assist him or her to place the thumb and finger of one hand near the eye of the needle as a guide. Using a wire needle threader, pass it through the eye as far as possible and draw the thread through, or use a self-threading needle.

- If the participant has difficulty using scissors to cut fabric, let him or her practice by snipping off bits of coiled clay. Then try paper. Once these are mastered, move to fabric. Make sure scissors are sharp.

- Mark patterns to guide participants. Draw cutting lines on patterns. Put red X's on the patterns to show where pins go. In the beginning, mark the seam line for the person, but let him or her hand-baste the seams with long running stitches.

- If participant has little or no impairment in the upper body, and has little or no disabling intellectual or sensory condition, basic use of a sewing machine can often be readily mastered. The sewing machine can also be made accessible for wheelchair use.

- Sewing operations not requiring precise small muscle use, such as rug hooking, can be useful for beginners.

Type of Disability Addressed by the Adaptation

- Seeing
- Thinking
- Moving

- Seeing
- Moving

- Seeing
- Thinking

- Seeing
- Moving

- Moving

- Seeing
- Thinking

- Moving

- Moving

• Woodworking Adaptations

- Seeing
- Thinking
- Moving

- In beginning to hammer a nail, shorten person's grip on the handle of the hammer. Have person position index finger along hammer shaft pointing toward the hammer head. Keep wrist as close to nailing plane as possible. When necessary, use needle-nose pliers to position and hold nail. Encourage him or her to gently begin tapping the nail into the wood. After the nail is started, remove the pliers (if used) and ask person to take fuller swings. Allow the hammer to bounce on the nail between strokes. Begin the task of learning to hammer by using shingle nails and by pre-punching a hole for the nail point.

- Seeing
- Thinking
- Moving

- To saw across a board, modify the task in one of three ways: use a miter box, a saw guide (a narrow board held in place with C-clamps), or cut a beginning line in the board with your saw. Always clamp object to be cut, preferably in bench vise.

- Thinking
- Moving

- Use clear, soft, straight grain wood for projects. Pre-cut, pre-drill, and pre-route project components that are difficult or dangerous.

- Thinking
- Moving

- Use jigs to reduce the chance of making errors. For example, templates can help to position a stool surface for drilling holes to receive the legs; a doweling jig will help position the drill bit so that dowels fit properly, etc.

- Seeing
- Thinking
- Moving

- For gluing wood, carpenter's glue is convenient to use because it comes in a squeeze bottle and washes off with water. It is similar to the familiar white glue, but is much stronger for bonding wood. It dries faster than white glue, though, so be sure to "dry fit" pieces of a project, have clamps ready to apply if they will be needed, and have a damp cloth handy to wipe up excess glue. Note: Even when removed quickly and thoroughly, glue will seal the wood surface so that stain will not penetrate, leaving a light spot on the wood's surface. Stain pieces before gluing them together.

- Seeing
- Thinking
- Moving

- Staining should be done with an oil-based stain because it is much more "forgiving" than water-based stain, which streaks and shows fingerprints if not wiped off quickly and skillfully. This is especially important if participants are young or have severe cognitive and movement disabilities.

- Moving

- For a participant with no impairments in the upper limbs and no intellectual or sensory limitations, machine tools can often be made accessible for use from a wheelchair. Similarly, workbench surfaces can be adapted for wheelchair-height use. Note: Don't forget to provide direct adult supervision when machine tools are being used.

- Moving

- If a participant has vision problems or involuntary arm and hand movements, use extreme caution around machine tools. Similarly, a person with epilepsy who is not under complete seizure control with medications will need to be protected from dangerous machine tools.

• Horticulture Adaptations

• Numerous gardening operations can be enjoyed without eyesight. Sifting soil, filling pots, cleaning vegetables, and planting seeds can all be done well without vision.

■ **Seeing**

• For the beginner, choose plants that are touch-tolerant, not those which are very fragile.

■ **Moving**

• Many gardening operations, such as watering, mulching, spading, and picking, are tolerant of minor mistakes. Even planting small seeds can be done effectively by using seed tapes.

■ **Thinking**

■ **Moving**

• Seedlings can be produced easily by using pre-seeded containers that are available commercially.

■ **Thinking**

■ **Moving**

• Gardening at table-top height can produce a considerable variety of flowers and vegetables for a person using a wheelchair who has full use of upper limbs. Furthermore, a regular garden can be adapted for wheelchair access by creating garden paths for wheels instead of feet, and by raising the garden bed's height.

■ **Moving**

• Creative Arts Adaptations

• To show where to apply paste, draw a heavy line around the outside perimeter of the shape and a large "X" in the middle. This will identify specific pasting areas. Eventually, the lines can be faded out and excluded. If an individual is unable to identify pasting areas, even with heavy lines around the area, apply a small amount of white glue around the perimeter and in the middle. When it hardens, he or she can feel where the paste is to be applied.

■ **Seeing**

■ **Thinking**

• Tempera paint thickened with soap powder or sand hardens and leaves a raised texture which can be felt when dry. More experienced participants working with acrylics applied with a palette knife can have a "touch" painting experience when the paint is dry.

■ **Seeing**

• If participant needs more working space, a large 18" x 24" painting paper surface can be helpful.

■ **Seeing**

■ **Moving**

• If the glare of white paper is distracting, use a neutral gray or beige.

■ **Seeing**

• When an individual cannot identify individual warp lines and confuses "over and under," identify every other line with a colored marker. For example, row 1 — white threads over and red threads under; row 2 — white threads under and red threads over.

■ **Seeing**

■ **Thinking**

• Huck weaving, if patterns are not too complicated, can be a very rewarding project. Choose loosely woven fabrics and use small portions (of a large piece) in the beginning since it will fill up quickly.

■ **Thinking**

■ **Moving**

■ **Seeing**
■ **Thinking**

■ **Thinking**

■ **Thinking**

■ **Seeing**
■ **Thinking**
■ **Moving**

■ **Thinking**
■ **Moving**

■ **Thinking**
■ **Moving**

■ **Moving**

■ **Seeing**
■ **Moving**

■ **Thinking**
■ **Moving**

■ **Moving**

- A needle with a fairly wide and long eye will be easier to thread.
- Some beginners do not understand how to put paste on their finger and will frequently smear paste all over their hands. To avoid this, cut a small hole at the toe of a sock, place the sock over the person's hand and have the person put his or her forefinger through this hole.
- Sometimes the color, odor, and coldness of wheat paste, used for paper-mache, upsets stomachs. If this occurs, use warm water and add a drop of vanilla extract and a drop of food coloring to change the feel, color, and odor. Similarly, for those who will not fingerpaint because they dislike its color or texture, try using shaving cream or liquid starch mixed with food coloring or powdered tempera. And, for those who do not like the feel of cold clay, try adding warm water to powdered clay or using rubber gloves.
- Some handicraft operations may need to be demonstrated by standing behind the person, letting his or her hands rest on yours as you demonstrate the task.
- Participants with mental retardation are often able to tear paper if they cannot cut it with a pair of scissors. Use double-ring (four-hole) training scissors for beginners. Note: It is easier for beginners to hold the paper vertically, cutting from bottom to top.
- Some overly timid participants who "work small" and seldom finish a picture may feel threatened by a large piece of paper. Have the participant start with a small piece of paper until he or she fills the paper and develops self-confidence. Slowly enlarge the size of the paper until the participant is working full-scale.
- To help handle scissors, hold the person's wrist with your thumb placed on his or her palm below the thumb, the student's hand is then unable to "flop"; or use squeeze-control or four-hole training scissors.
- When introducing painting, limit the palette to one to three colors. A more extensive color choice confuses some participants. As painting skills increase, gradually add to the palette. Provide one brush for each color and use long-handled brushes because they are easier to use than short-handled ones.
- When learning to paint, students do not always understand the progression of painting routines or brush manipulation—dipping brush into paint, applying brush to paper, and manipulating brush back and forth to cover the paper. This sequence may have to be demonstrated and then practiced several times. Some participants will need assistance holding and manipulating the brush.
- For participants with "grip control" problems, cover handles of brushes with cotton batting and masking tape. This method works with other drawing tools, as well.

- Paintbrushes, palette knives, sponges attached to "clip" clothespins, tongue depressors, cotton swabs, and roll-on deodorant bottles can all be used as paint applicators.

■ **Moving**

- To keep tempera paint from dripping, thicken paint to a creamy consistency with soap powder, extender, or liquid starch and water.

■ **Moving**

- Weaving lines of yarn into bicycle spokes or umbrella frames, or wrapping twine over round objects, are good beginning activities for people with movement control problems.

■ **Moving**

- For individuals who have difficulty putting on a smock, lay the smock flat on the floor. The person picks up the top of the smock, places arms in the sleeves, and lets the rest of the smock fall into place. If a smock has buttons, have the person put it on backwards to avoid buttoning.

■ **Thinking**
■ **Moving**

- For participants with poor muscular control, use C-clamps or a vise to help secure an embroidery hoop or a sculpture project. Wood frames with the fabric attached are useful for stitching projects.

■ **Moving**

- For participants who cannot exert enough downward pressure to draw with "hard" materials (pencil or crayon), lines can be made in soft materials such as clay or with soft-tip watercolor pens. Note: Avoid markers with toxic ink.

■ **Moving**

- For participants who need to develop strong hand and finger movements, working with clay, tearing paper for making paper-mache' projects, and arranging mosaic pieces can be beneficial. If a person's fingers or hand muscles tighten, gently massage the area above the wrists to reduce tension and relax his or her hand.

■ **Moving**

- Sometimes placing physical boundaries, such as a shallow box lid, around a project can be useful.

■ **Seeing**
■ **Moving**

- To avoid scattering, spills, and smudges, fasten water containers, paper, paint containers, etc. to the table with masking tape. Place strips of wood or cardboard around work areas.

■ **Moving**

- For participants who can't squeeze a standard plastic glue bottle, pour glue into a soft plastic bottle with a spout. (Cut the spout to enlarge the hole if necessary.) Hairdressing containers, plastic dye bottles, and plastic paint containers with pouring spouts work well. Glue can also be applied with brushes, cotton swabs, and sponges attached to clothespins.

■ **Moving**

- **Cooking**

- To pour room-temperature liquids into a measuring cup, set the cup on the table and ask the person to curl his or her fingers over the top of the cup. Rest the pouring spout on the cup and pour until liquid reaches the fingertips.

■ **Seeing**
■ **Moving**

■ **Seeing**
■ **Thinking**

- To adjust dials, mark critical settings with small pieces of tape. Set a timer to signal when things are done.

■ **Seeing**
■ **Moving**

- Teach participants with disabilities to guide themselves around the work area by trailing the back of a hand against the front surface of counter tops and appliances. A wooden spoon or spatula can be used to locate a hot burner, hot pan, or other items.

■ **Seeing**

- Pans should always be placed on the burner and centered before turning on the heat. Never place a pan handle so that it protrudes over the front of the stove where it may accidentally be hit or pushed off the stove. The handle should be pointed toward the back of the range.

■ **Seeing**
■ **Moving**

- To cool a hot pan in a safe area on a hot pad, participants can carry the hot pan across the room with one oven mitt on the carrying hand and another oven mitt on the free hand. The free hand should be held in front of the pan like a "bumper" and be used as a guide if necessary. No portion of the hot pan should be exposed enough to touch any person who might be in the path.

■ **Seeing**

- A sharp knife should be carried by the handle in a vertical position, blade down. The handle should be held loosely by the thumb and fingertip and never grasped in a tight fist. The non-carrying hand should be used in front of the knife as a "bumper" guard. Smaller knives can be carried by the blade in a closed fist position. If the other hand, the "bumper" hand, is not free for some reason, the wrist of the carrying hand should lead.

■ **Seeing**
■ **Thinking**

- A sharp knife should never be left in the sink, but should be washed and dried immediately after use and put away. Sharp knives should be kept apart from other utensils, and not be loose in a drawer.

■ **Thinking**

- Drawings to accompany recipes and color-coded measuring spoons and cups will be very helpful.

■ **Seeing**
■ **Thinking**

- When teaching measurement of liquids, use colored water. It's easier to see.

■ **Moving**

- Select kitchen tools with large, easy-to-grip handles that do not conduct heat.

■ **Moving**

- When cutting meats or vegetables, use a cutting board that has stainless steel nails protruding from its top surface to stabilize the food.

Chapter 3: Appendix B

Task Analysis Guidelines

A task analysis is a listing of the steps in an activity, including social demands as well as physical movements. Conducting a task analysis is a good first step in determining the skills needed to participate in an activity, and in identifying specific points at which an adaptation or additional assistance might be needed. The steps in conducting a task analysis are as follows:

1. Observe nondisabled individuals performing the activity.
2. Generate a list of the steps in the activity in a logical sequence. The list must break down the task into small steps that are easily taught and observed. For example, the first five steps in a task analysis for taking a photo might be the following:
 - a. Ask another person, "Can I take a picture of you?"
 - b. If the reply is yes, point to where the person should stand (not more than 12 feet away). If the reply is no, repeat step one with another person.
 - c. Ask the person to smile.
 - d. Grasp opposite sides of the camera with both hands, lens facing away from body and toward subject.
 - e. Raise camera to eye level and look through viewfinder with one eye.
3. The task analysis should cover all phases of the activity, including the introductory steps and final steps.
4. Include social demands as well as physical requirements of the activity.

After doing a task analysis, you will have a framework for instruction. The benefits of conducting a task analysis include:

- It enables you to identify a participant's exact skill level.
- It will strengthen your teaching by providing small steps for participants to carry out (people learn best in small steps) and by giving you a clear and logical outline to follow.
- It makes it easier to individualize instruction for participants at different skill levels.
- It provides a standard for evaluating progress.
- It allows different instructors to teach the same skill in the same manner.

Benefits of a Task Analysis

- **Identifies participant's exact skill level.**
- **Provides small steps for participant to carry out.**
- **Provides clear and logical outline for teaching.**
- **Facilitates individualized instruction for various skill levels.**
- **Provides a standard for evaluation.**
- **Promotes uniformity of instruction.**

Chapter 3: Appendix C

Resources for Further Information

- Bender, M., Brannan S., and Verhoven, P. (1984). Leisure education for the handicapped: Curriculum goals, activities, and resources. San Diego: College-Hill Press.
- 4-H Common Ground Program, 4-H Youth Development, Minnesota Extension Service, University of Minnesota, St. Paul, Minnesota 55108.
- Robb, G., Havens, M., and Witman, J. (1983). Special education ... naturally. Bloomington, IN: Indiana University.
- Schleien, S., and Ray, M.T. (1988). Community recreation and persons with disabilities: Strategies for integration. Baltimore: Paul H. Brookes Publishing Co.
- Wehman, P., and Schleien, S. (1981). Leisure programs for handicapped persons: Adaptations, techniques, and curriculum. Austin, TX: PRO-ED.
- Wilcox, B., and Bellamy, G.T. (1987). The activities catalog: An alternative curriculum for youth and adults with severe disabilities. Baltimore: Paul H. Brookes Publishing Co.
- Wolfensberger, W. (1972). Normalization: The principle of normalization in human services. Toronto: National Institute on Mental Retardation.
- Wuerch, B. and Voeltz, L. (1982). Longitudinal leisure skills for severely handicapped learners: The Ho'onanea curriculum component. Baltimore: Paul H. Brookes Publishing Co.

Chapter 4 How to Integrate Successfully: Activity Plans That Work

This chapter contains 30 activity plans* that are designed to promote cooperative interactions and enjoyable learning experiences for participants with and without disabilities. Each plan contains information the adult leader and nondisabled participants (companions) need to prepare for and carry out the activity, including:

- Introduction
- Resources/Materials
- Preparing the Environment
- Instructions to Group Leaders
- Instructions to Companions
- Expanding the Activity



The Introduction to each activity plan provides an overview of the activity and background information. Group leaders may use this information to orient themselves to the task, and may also share it with the group to set the stage for the activity. The Instructions to Group Leaders contain steps in each activity, actions the group leader should take, and/or special considerations. In activities that are led primarily by companions, the step-by-step directions are omitted from the adult leader section. For some activities, the instructions to group leaders contain the actual words that the adult leader might want to say.

The language and activities in these plans are aimed at the higher end of the intended age range. Adult leaders should use their judgment in adapting activities, information, and language for the particular age and ability levels of their group members. For instance, if the participants without disabilities are proficient readers, they should be able to follow the Instructions to Companions without assistance from the adult leader. If they are too young to read at the level of the instructions, the adult leader can direct the activity vocally one step at a time.

A good starting point for successful integrated activities is the first five activity plans designated as "Ice-Breakers". They are easy to organize and manage, and are written with especially detailed directions on fostering cooperation. After going through the five plans, the adult leader and companions should be accustomed to emphasizing cooperation, therefore the remaining plans omit that extra detail. Additional help in promoting cooperative interactions is found in two lists of tips - one for adult leaders, one for companions - on the next page.

*Activity plan contributors are listed in *Further Acknowledgments* on page 112 of this handbook.

Chapter 4: Contents

- **Tips for Companions and Adult Leaders**
Page 42
- **Ice Breaker Activity Plans**
Page 43
- **Art Activity Plans**
Page 52
- **Craft Activity Plans**
Page 67
- **Game Activity Plans**
Page 88
- **Outdoor Education Activity Plans**
Page 92

Tips for Companions: How to Help Your Partner with a Disability Succeed

Tips for Adult Leaders

- **Read the activity plan prior to the activity and check that all materials and a good working space are available.**
- **Make sure materials and tools are laid out for safe and easy access.**
- **Check that the position of each participant with a disability is close to his/her partner.**
- **Adapt the activity for the ages and ability levels of participants, and particularly for the characteristics of participants with disabilities.**
- **Prompt (cue) cooperative interactions when they are not occurring, e.g., "Mary, I'll bet that Jennifer would like to paint with you."**
- **Reward cooperative interactions when they are occurring, e.g., "Bill and Jim, you did a really nice job with the mural."**
- **Redirect when someone is off task, and step in if a situation is deteriorating.**
- **As a project ends, say something pleasant to participants.**

1. Help your partner get started:
 - Use an attention grabber such as, "Chris, see this nut shell? I can use it to make a picture when I dip it in the paint."
2. Help your partner feel good about doing an activity with you:
 - Encourage your partner by saying things such as, "I'll bet that you can make a red picture with this nut shell."
 - Reward success or partial success by saying something like, "Hey, Chris, that was a good try", or "I like your picture."
3. Help your partner do things as independently as possible:
 - If the steps in a project are obvious and within your partner's capabilities, invite your partner to go ahead on his/her own. Then, if assistance is needed, do the following . . .
 - Verbally instruct your partner, saying something like, "Chris, dip the shell in the paint and press it on the paper." Sometimes your partner at this point won't get into the activity. If this happens, try the following. . .
 - Verbally instruct and demonstrate: "Chris, watch me dip the shell in the paint and press it on the paper. See?" Demonstrate and then reposition the materials for your partner, saying, "Chris, now you do it." If your partner needs more help than this, try the following...
 - Verbally instruct and physically guide: "Chris, let's do this printing together." Gently nudge your partner's arm toward the materials. If your partner doesn't continue the movement on his/her own, take your partner's hand gently and do the complete movement. Then reposition the materials, saying, "Okay, Chris, now you do it by yourself."
4. Help your partner handle frustration and recover from failure:
 - Respond to accidents calmly; reposition materials for another try.
 - Correct your partner gently if he/she misbehaves toward you, saying "no" firmly but calmly. Provide a second chance. If misbehavior continues, ask the adult leader for assistance. Do not try to discipline your partner; that is the role of an adult leader or parent.
5. Help your partner to a good project ending:
 - Say pleasant things about the project and interaction as materials are put away.
 - Share clean-up responsibilities.
 - End the interaction by saying and/or doing something pleasant.

Activity Plans

• Ice Breaker Activities

Drinking in Nature

(for preschool - elementary)



• Introduction:

Sensory activities help us become familiar with and appreciate nature and our own ability to touch, taste, smell, see, and/or hear. Sometimes we can "drink" in nature in a literal way!

• Resources/Materials:

- 1 orange for each participant
- 1 blindfold per person
- 1 piece of paper for each participant
- 1 pencil for each participant

• Instructions to Group Leaders:

1. Distribute the paper and pencils, and say, "Let's focus for a moment on our bodies and how they feel—what the muscles are telling us today about how we use our bodies. There are many things we do automatically, without ever feeling what we're doing."

a. For example, write your name on your paper. Did you feel the weight of the pencil in your hand, or feel the muscles in your fingers, hand, and arm?

b. But switch the pencil to your other hand. Write your name with that hand. Do you feel the weight of the pencil now? Writing is often one of the things we do without thinking because we are so used to it. But, when we do it differently, we can start to notice things like the way our muscles have to work when we write.

2. Distribute the blindfolds, and say, "To help you become more aware of how your body feels, let's try some stretching exercises. First, help your neighbor put on his or her blindfold. Now find your own space. Stretch your arms down and slowly bring them way up over your head and around behind you. Do this a couple of times and think about drawing all the space around you into you and through you with your movements. Feel your muscles stretching, and stretch the way that feels good to your muscles. Now, take off your blindfold."

3. Distribute the oranges and say, "To wake up your senses, and to give some energy to those muscles, I have an orange for each of you. Catch! Now put your blindfold back on. Feel the weight of the orange: is it heavy or light? Feel the shape: is it perfectly round, or are there flat spots and bumps? Smell it: does the smell remind you of anything else? Rub it along your cheek: is it warm or cool, smooth or rough? An orange is really stored sunshine. When we eat it, we get the energy. Now, open your eyes and open your oranges, peeling the sections back like rays of the sun."

Ice Breaker Activities

■ **Drinking in Nature**

(for preschool - elementary)

■ **Leather-Look Vase**

(for preschool - adult)

■ **Name Game**

(for preschool - elementary)

■ **Taco Pizza**

(for elementary - adult)

■ **Shapes (creative movement)**

(for preschool - junior high)

"The sun gives our muscles energy to move. Plants such as orange trees soak in the sun and get energy to make food we can eat. The food we eat is turned into energy by our bodies. What does your body use energy for? At different times of the day we have different amounts of energy. For instance, if we're hiking we may get tired around lunch time and need to eat more food to get more energy. So we take a lunch break, resting in the sun and renewing our bodies' energy. After lunch, we have energy to keep hiking. And, at night, we slow down as our bodies get tired and we go to bed. This cycle repeats itself every day."

"Energy from the sun and plants comes into our bodies and is transformed through us into the hiking and other activities that we do. No energy is lost or gained—just changed, from sunlight and food and water and air into the action of our body."

• **Instructions to Companions:**

1. If your partner needs help tying on the blindfold, offer assistance.
2. If your partner needs help peeling the orange and dividing it into sections, offer to help.
3. When it's time to eat the oranges, exchange slices with your partner.

• **Expanding the Activity:**

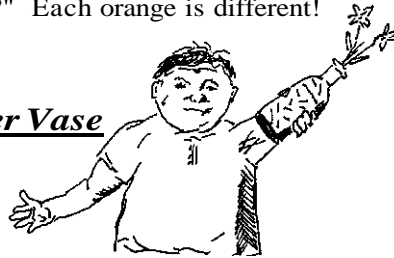
When all have peeled their oranges, tell them to taste one section of their orange. Tell them to chew slowly, savoring each bite. Ask them to trade orange slices with their neighbor, chewing slowly, and really tasting it. Trade again and again. Ask if they notice any difference: "Do all oranges taste alike?" Each orange is different!

■ **Cooperative Interaction**

Reminder: *Structure activities to promote cooperative interactions.*

Leather-Look Flower Vase

(for preschool - adult)



• **Introduction:**

This project offers a chance to make a unique vase that participants can take home with a flower in it and give to someone as a gift or set on the kitchen table where others can admire it.

• **Resources/Materials (Needed for Each Vase):**

- | | |
|---|--|
| - 1 roll of 1/4" masking tape | - Newspaper to cover work area |
| - 1 roll of 3/4" masking tape | - 1 small glass bottle with small opening at the top (squat-shaped soft drink bottles work well) |
| - 1 bottle (with applicator) or spray can of silicone or other water repellent material that will adhere to surface covered with shoe polish (avoid materials that irritate skin, or use them with rubber gloves) | - 1 small can of dark brown paste shoe polish |
| | - 2 pieces of cotton cloth (1 to apply shoe polish, 1 to buff surface) |
| | - Assortment of leather shoelaces, ribbons, smooth stones, shells, etc. |

• **Preparing the Environment:**

Provide an assortment of leather shoelaces, ribbons, etc. to tie around the bottle's neck. Then, to have something interesting to put on the leather lace or ribbon, have an assortment of colorful smooth stones, shells, pieces of ceramic or other materials that will look good hanging on the exterior of a leather-look vase. Lay newspaper over table tops for easy clean up. Participants could wear smocks to protect clothing.

• **Instructions to Group Leaders:**

1. You may wish to demonstrate how to make a leather-look vase to the nondisabled participants, or even have the nondisabled participants make their own vases, before including participants with disabilities in the activity. In this way, nondisabled peers will be able to focus more easily on interacting with their partners during the activity.
2. During a preliminary meeting with nondisabled participants, point out steps that may be a problem for a person with a disability, and suggest ways to facilitate involvement.

• **Instructions to Companions:**

1. Seated beside your partner at a table, tear off about 6 small pieces (about 1" long) of both 1/4" and 3/4" masking tape, showing your partner how to put them on the bottle in an overlapping manner.
2. Tear off 6 more pieces of tape and fasten them at their tips to the edge of the tabletop. Invite your partner to put them on the bottle as you have done. NOTE: Do not put tape inside the lip of the bottle since water added to the vase later will cause tape to come off.
3. Keep tearing off small strips of tape (let your partner tear some off too if he or she can do so) applying them to the outside surface of the bottle—including the bottom—until the entire bottle is covered.
4. Fold one piece of cloth into a small pad, dab it in the can of shoe polish and spread some of the polish on the taped-over surface. Give the cloth to your partner and allow him/her to also apply some polish.
5. Buff part of the surface with the other clean cloth and invite your partner to do the same. Work together until it is all buffed. NOTE: After the meeting is over, you and the adult leader can apply the water repellent finish to the outer surface of the vase.
6. Together you and your partner should choose what to tie around the neck of the vase. You may need to help your partner choose objects that will go together well. For example, fancy ribbon with stones tied to it is not as good a match as stones tied to the leather laces.

NOTE: If you want a vase, too, repeat steps 1-6, letting your partner assist you where appropriate.

■ **Cooperative Interaction**
Reminder: *Emphasize the importance of enjoying an activity with another person rather than the speed or accuracy with which it is done.*

- **Expanding the Activity:**

- When everyone's vase is completed, have a party placing all of the **vases** on the tables, with a flower in each one.
- Vases can be decorated for holidays. For example, for Valentine's Day small ceramic hearts, purchased at a crafts shop, can be tied on it.
- If a participant with a disability wishes to give the vase to someone as a present, their partner can help him or her to gift-wrap it and put a gift tag on it with the name of the person for whom it is intended.
- For a "fancier" vase, use a bottle cutting saw to cut off the neck of the soft drink bottle. It will look less like a bottle that way. Make certain to smooth off sharp edges that can cause injury. A small sharpening stone can be used to round-off edges of glass that can cut a hand.
- To increase tactile stimulation, participants may wear rubber gloves and apply polish with their rubber-covered fingers. This will also eliminate the possibility of lint from a cloth sticking to the vase.

■ **Cooperative Interaction**

Reminder: *If a participant with a disability has a behavior control problem, have him or her become part of a larger group of participants and rotate the interaction responsibilities among members without disabilities. This will take the pressure off a particular nondisabled individual to carry the interaction responsibility alone.*

Name Game

(preschool - elementary)



- **Introduction:**

This game works well for groups of up to about 20. It takes 15-40 minutes, depending on the number of participants. This activity is particularly useful if a group is going to be formed for an outdoor experience (canoe trip, etc.), and its potential members are not acquainted.

- **Resources/Materials:**

- | | |
|--|--|
| - A variety of art materials (acrylic paint, brushes, water containers, colored markers) | - Spar varnish |
| - Small pieces of 1/4" plywood | - Glue gun/stick |
| - Pieces of tagboard | - Scissors |
| - Small pictures from magazines that fit the theme of the activity | - Materials to fasten name tags to clothing (large safety pins, velcro, lanyard) |
| - Strips of leather, string, etc. for decoration | - Newspaper to protect table |

- **Preparing the Environment:**

The first part of this activity (choosing names) may be conducted in an open area, either indoors or outside. To make the name tags, tables and chairs will be needed. Adult leaders should make a few badges before the meeting to show participants the different types that are possible.

• Instructions to Group Leaders:

1. Ask everyone to form a circle. Include parents, teachers, and observers. Tell them that they are going to play a game that will help everyone to remember each person's name.
2. To integrate people of varying abilities, alternate older people with young people, more skilled with less skilled, etc.
3. Designate partners. Tell pairs to help each other decide what animal, plant, or thing to choose as a new first name to go with their regular first name; for example, "Canoe Kate" or "Raccoon Robbie".
4. Explain that these extra first names are like nicknames and that they will be used throughout the trip. Suggest that they help each other choose names that represent things they like especially well. Suggest, too, that they keep them short. NOTE: The adult leader should keep in mind that if the group is going to be together on an ongoing basis, for example as a 4-H Club, names will "stick." Therefore, they should choose new names carefully.
5. After all of the names are selected and everyone shares his or her name, create subgroups (for example, one person with a disability, two without) to make name badges.
6. Lay all materials out on tables.
7. Instruct subgroups to help each other create a name badge for each person in their group, putting a picture or drawing on it that represents their name, and printing the name on the badge. Badges may be decorated as desired. Be creative!
8. Demonstrate application of a varnish to the badge.
9. Help participants "engineer" how to fasten badges to outside clothing (safety pin, lanyard, velcro), so they will stand up to use.

• Instructions to Companions:

1. Seated by your partner in your subgroup, show your partner how to choose a piece of plywood and tagboard for the badge, and encourage him or her to choose one of each.
2. Share a magazine with your partner and help him or her select a picture to cut out and glue onto the badge.
3. Choose the markers, paints, and other materials you need to decorate the name tag, and invite your partner to do likewise. Share materials.
4. Demonstrate how to paint and decorate tagboard. If needed, help your partner paint and decorate his or her piece of tagboard. If your partner is unsure how to write his or her new name, write it out on a piece of scrap paper for him or her to copy.

■ **Cooperative Interaction**
Reminder: *Develop directions for the task in such a way that they require an interdependent (cooperative) effort rather than independent or competitive effort.*

5. Glue tagboard onto plywood, and (if needed) help your partner to do likewise.
6. Apply spar varnish to the entire badge and hand the can and brush to your partner to do likewise.
7. When the varnish is dry select fasteners for your badges.

Taco Pizza

(for elementary - adult)



• Introduction:

Everyone loves to eat and there's no better way for friends to have fun together than making and eating a nutritious snack. Every day our bodies need a variety of food to provide us with all the nutrients we require. Pizza is an example of a combination food since it contains foods from more than one food group. This activity meets two objectives: (1) to prepare a popular, nutritious snack and (2) to identify ingredients in the pizza from each of the five food groups.

• Resources/Materials (For One Pizza):

- | | |
|---|---|
| - 2 cups of biscuit mix (or 2 cups flour and 2 tsp baking powder) | - 2/3 cup water |
| - 1/2 pound hamburger | - 2 tablespoons flour |
| - 1-16 oz. can refried beans | - 1 package taco seasoning (if desired) |
| - 1/2 cup of water | - 1/2 cup onion, chopped |
| - 1 cup cheese, grated | - 1 cup fresh tomatoes, diced, or 1 can tomato pieces (drained) |
| - 2 cups lettuce, chopped | |

• Equipment:

- | | |
|-------------------------------|----------------------|
| - Mixing bowl | - Can opener |
| - Baking sheet (or pizza pan) | - Mixing spoons |
| - Rolling pin | - Graters |
| - 1 liquid measuring cup | - Oven to bake pizza |
| - Forks | - Skillet |
| - Measuring spoons | - Oven mitts |
| - Paper towels | - Dish soap |
| - Paring knife | |

• Preparing the Environment:

Before the activity, obtain and organize the ingredients and cooking equipment for the number of groups needed. Groups can consist of 2-4 persons. Set up each pizza-making area so that people are working closely together, with turn-taking and paired operations maximized. For example, one person may rotate the pizza crust while the other sprinkles cheese on it. Avoid an assembly line set-up or individuals working alone. Preheat oven to 400 degrees.

- **Cooperative Interaction**
Reminder: *Arrange supplies so that everything needed by a group is in one small area rather than scattered around the room. This will help to keep group members interacting.*

• **Instructions to Group Leaders:**

1. Talk with the participants about food preparation safety:
 - tuck long hair under a cap
 - wash hands
 - clean preparation area with a clean, damp sponge or cloth, using a vinegar and water solution or some other mild cleaning agent
 - measure ingredients carefully
 - use oven mitts when you reach inside the oven
 - clean up as you cook
 - turn off oven when done
 - wash all dishes with hot soapy water (wash sharp knives separately)

NOTE: 4-H Youth Development has a pictorial sheet on food preparation safety. For copies contact your local County Extension Office.

2. Discuss key points of pizza nutrition while eating pizza. (See *Expanding the Activity*).

• **Instructions to Companions:**

1. Mix together biscuit mix (or flour and baking powder) and 2/3 cup water with a fork. You may hold the mixing bowl while your partner stirs, or vice versa.
2. Show your partner how to measure one tablespoon of flour, and sprinkle it on a flat surface. Ask your partner to do likewise, sprinkling the flour on the same surface.
3. Demonstrate how to knead the dough 3 or 4 times. Encourage your partner to knead the dough also.
4. Take turns rolling the dough with the rolling pin until it fits a pizza pan or cookie sheet.
5. Assist your partner in putting the dough in the pan. Working together, build up the sides of the crust so it will hold the sauce.
6. While one of you holds the oven door open, the other can slide the pan onto the oven rack. Close the door, and bake the crust at 400 degrees for 10 -12 minutes, or until light brown.
7. While crust is baking, brown hamburger in skillet, taking turns stirring. Drain off fat.
8. While one of you opens the package of taco seasoning, the other can open the can of beans. Add each to the hamburger.
9. Measure 1/2 cup water; give it to your partner to add to the meat.
10. Take turns stirring the mixture until it is thoroughly heated.

■ **Cooperative Interaction**
Reminder: *Prompt cooperative interactions if they are not occurring. If they are occurring, reinforce them in a low-key fashion. Do not prompt (cue) more than is necessary.*

■ **Cooperative Interaction**

Reminder: *A sequence of steps applicable to a non-disabled individual may prove too difficult or impractical for a person with a disability. Skill sequence adaptations may be necessary to enable the person with a disability to participate successfully.*

11. While the crust is still baking, show your partner how to grate the cheese and chop the onion, lettuce and tomatoes. Decide with your partner which of you will complete each of these tasks.

12. After crust has baked 10-12 minutes (step #6), ask your partner to hold the oven door open while you remove the crust. Use oven mitts to handle the pan. Ask your partner to close the door.

13. While one of you scoops the meat and bean mixture onto the crust, the other can spread the mixture over the crust with a knife.

14. One of you can sprinkle cheese on the pizza, while the other sprinkles onion. Bake in oven for 5 minutes at 400 degrees.

15. Remove pizza from oven as in step #12. One of you sprinkles lettuce on the pizza and the other sprinkles tomatoes. Cut and serve.

• **Expanding the Activity:**

1. Discuss with participants key points of pizza nutrition as follows:

- Food is necessary for all living things. It provides material for growth and energy for activities.

- Digestion is the process of breaking down food into nutrients the body can use. Nutrients are in every cell of your body. They are used for different purposes.

- There are more than 50 nutrients and all are necessary for good nutrition. In this activity, ingredients include the following nutrients:

Protein (hamburger, beans, cheese)

Calcium (cheese)

Iron (beans, hamburger)

Vitamin A (tomatoes)

Carbohydrates (crust)

- This pizza contains some food from each of the five food groups:

1. Milk and cheese group (3 needed daily) - cheese

2. Breads and cereal group (4 servings daily) - crust

3. Fruit and vegetable group (4 needed daily) - onion, tomatoes and lettuce

4. Meat, poultry, fish and bean group (2 daily servings) - hamburger and beans

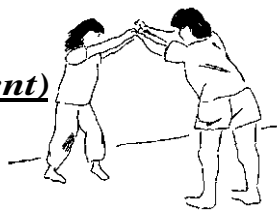
5. Fats and sweets group (not much needed) - oil from meat

2. Other foods that may be added to the pizza include olives, green peppers, and mushrooms.

NOTE: Request "Fit It All Together", 4-H Bulletin FN001, from your County Extension office for other nutritional information and activities.

Shapes (Creative Movement)

(for preschool - junior high)



• Introduction:

On cue from a group leader, each participant, in his or her own unique way, forms a "shape" with his or her body. Shapes may be formed individually, or collectively as a group. The group leader instructs the participants to make a "tall shape", a "crooked shape", a "shape like a bird", or a "shape where you're touching someone's elbow." All momentarily freeze in their shapes to observe their individual formation. This activity provides opportunities for creative movement, and develops awareness of self and others. Note: This entire activity is adult directed.

• Resources/Materials:

- Open area inside or outdoors

• Preparing the Environment:

For participants who use wheelchairs, be sure outdoor environment is free of large rocks, potholes, and other obstructions.

• Instructions to Group Leaders:

1. Pair up participants with and without disabilities, position them randomly in the open space. Companion pairings should stay near each other to increase enjoyment and provide for assistance as necessary.
2. The group leader provides a cue for the pairs to form a "shape." To increase cooperation and socialization, use shapes where the pairs make the shapes together, for example, "A shape where you're touching your partner's elbow (foot, little finger, hair, ear, etc.)."
3. When the participants form their shapes together, they should "freeze" on command from the leader to observe how other pairs look.
4. While the group is still "frozen," provide a new cue.

• Expanding the Activity:

1. Instruct the entire group to work together to form one large shape (e.g., elephant, fire engine, rocket, etc.).
2. Do this activity to music, stopping the music as a cue to "freeze".

Note: Before you continue in this manual, a reminder that the following activity plans omit the detailed directions on facilitating cooperation that have been included in the *Ice Breakers*. Leaders and companions should, however, continue to put the emphasis on cooperation while carrying out the remaining activities.

■ **Cooperative Interaction**
Reminder: Check that the position of each participant with a disability is close to his/her partner.

Art

- **Diazo Prints**
(for preschool - junior high)
- **Let's Face It**
(for preschool - junior high)
- **Fantasy Fishpond**
(for preschool - junior high)
- **Fish Prints**
(for preschool - adult)
- **Laughing Line Mural**
(for preschool - adult)
- **Painting with Straws**
(for preschool - elementary)
- **Rainbow Snowflakes**
(for preschool - junior high)
- **Terrific Tees**
(for preschool - junior high)

• Art

Diazo Prints

(for preschool - junior high)



• Introduction:

Diazo printing uses a light-sensitive paper, along with light and household ammonia, to make an image appear in rich, velvety blue. It has a magical quality that fascinates children and adults. This is a process borrowed from modern technology and adapted for use as a way to appreciate and discover designs found in nature.

• Resources/Materials :

- Blueprint paper available from firms selling architect's supplies. The cost is around \$3.40 per 100 sheets, 9" X 10" each. Industrial arts teachers, draftspeople, and architects can identify a local supplier
- Scissors
- Household ammonia
- Flat dish to hold ammonia (may wish to use two)
- Wire rack fashioned from coat hanger, hardware cloth, or wire screen to hold paper flat above the dish of ammonia
- Objects that block light and can be combined to form pleasing arrangements (ferns, dried flowers, leaves, tools, household objects, shapes cut from paper, string, etc.)
- Covered box: a plastic box such as a sweater box will allow you to watch the developing of the print take place; a covered 9" x 13" cake pan works also
- A strong light source such as a 100 watt bulb in a trouble light works well

• Preparing the Environment:

- Collect many interesting leaves, flowers, small tools, butterflies, grasses, and seed pods. Press plants in heavy books.
- Purchase the diazo paper from firms that sell architectural supplies. The paper is packaged in 250 or 500 sheet packages and is wrapped in heavy black paper to keep the light out. The 250 sheets should be an adequate supply as it loses its sensitivity in six months or less.
- Keep the paper in the package until ready to be exposed. Keep the package shut at all times. NOTE: If working with young children, the adult leader should control the removal of sheets so that the whole package does not become exposed by mistake.
- Although not necessary, you may wish to use a sheet of glass to cover some arrangements to keep them flat and undisturbed during exposure to the light.
- Only one or two persons should work at the actual developing at one time, and the rest can be planning their arrangements.

• **Instructions to Group Leaders:**

1. It is important to move quickly once the paper has been taken out of the package, so have the arrangement of dry materials designed before taking out the paper. Remove only one sheet and quickly arrange the material on the yellow side of the paper.
2. Hold a 100-watt bulb (use a trouble light holder) a few inches from the paper. Move it over the entire surface of the paper until the larger part has turned white (from 4-6 minutes).
3. Quickly shake off the dry materials and place the paper face up in an air-tight box that contains a dish of fresh household ammonia. The print will be developed by the fumes of the ammonia.
4. Remove the paper from the box when the transformation has taken place, usually after 3-4 minutes. NOTE: Change the ammonia when it loses strength (transformation slows visibly).

• **Instructions to Companions:**

1. With your partner, choose the objects with which you both want to create a design. A single dried fern can be beautiful, or you may wish to plan a repeating pattern of dried leaves or combine several materials. Arrange the objects to match the size of the paper you will use.
2. Decide which partner will develop a print first.
3. Together, select a piece of blueprint paper. Do not expose the rest of the supply to light! It's important to move quickly once the paper is out of the package!
4. If you wish the paper to be a certain size or shape, cut the paper accordingly, and return the unused portion to the package. If you desire a shaped paper, one of you can draw or trace the shape onto the paper and the other can cut it out.
5. Working quickly, transfer the arrangement onto the yellow side of the blueprint paper. Assist your partner if he or she needs help grasping small, fragile objects.
6. To expose the paper, take turns holding a bright light 2" or so above the paper for 4-6 minutes and moving the light around the entire surface of the paper.
7. While one of you is holding the light, the other can place a dish in the bottom of the box or cake pan. Fill the dish with ammonia, and cover the dish with the rack. Be careful not to get the ammonia on your skin, and do not put your face near the dish or open bottle (ammonia can burn your skin, eyes, and nose).

■ **Cooperative Interaction**
Reminder: *Adapt the activity for the ages and ability levels of participants, and particularly for the characteristics of the participant(s) with a disability.*

8. After exposing the paper to the light, quickly shake off the dry materials on it and place the paper face up on the rack in the box with the ammonia. One of you can place the paper on the rack. The other can cover the box or pan with its lid.

9. When the paper turns the desired blue color, remove the lid, and take out the paper.

10. Repeat this process for the second print.

• **Expanding the Activity:**

1. These prints can be framed, used for book covers, greeting cards, invitations, or to inspire a design to use with another medium.

2. With a small group of people and a large piece of blueprint paper, create a cooperative print arrangement around a particular theme (leaves, flowers, hardware, etc.). If you have the space and equipment, you can use large pieces of blueprint paper.

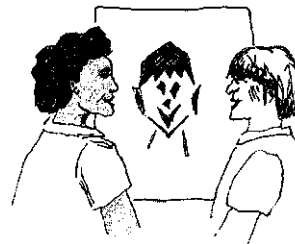
3. Experiment with producing different printing effects by holding the light bulb close to one part, or parts, of the arrangement for a longer period of time.

■ **Cooperative Interaction**

Reminder: Reinforce cooperative interactions when they are occurring.

Let's Face It

(for preschool - junior high)



• **Introduction:**

This activity pairs participants to create a large colorful face using construction paper, scissors, and glue. As they gain experience in the visual arts, they will increase their skills in handling art materials and increase their self-confidence through the completion of the project.

• **Resources/Materials:** (Needed for Each Pair to Produce One Face)

- Scissors
- White glue or glue sticks
- Construction paper, 12" x 18" (at least 12 colors needed)
- Masking tape or pins (for displaying the finished products)
- Sample shapes of a circle, square, triangle and a non-geometric shape (such as the outline of a lake shore)
- Sponges (for clean-up)

• **Instructions to Group Leaders:**

1. To introduce the activity, say: "Art is about ideas. We get ideas from imagination and observation. This activity requires imagination."

2. One at a time, hold up a sample of a circle, square and triangle, and ask, "What is this?"

3. Hold up a non-geometric shape and ask participants to use their imagination to think of what it might be.

4. Return to the geometric shapes and ask if the participants now see imaginative possibilities in the circle, square, or triangle. The circle might be an orange, a pea, a ball, a button, an eye, a cookie, and so on.

5. Explain that, with their partners, they will be creating an imaginary face using cut paper and glue.

• **Instructions to Companions:**

1. Together, choose two different colored sheets of paper. One is for the head, the other is for the background.

2. Discuss with your partner possible head shapes. There is only one rule: No circles!

3. Out of the head paper, cut a large shape. You may need to help your partner use the scissors.

4. Together, glue the head shape onto the background paper. One of you can apply the glue, while the other attaches the head to the paper.

5. Together, choose a third color paper for one eye shape. Explain that you will choose a different color for each part of the face - left eye, right eye, nose, upper lip, lower lip, right eyebrow, left eyebrow, right ear, left ear, and hair.

6. Demonstrate cutting an eye shape; assist your partner in cutting an eye shape, letting him or her do as much as possible independently.

7. Glue an eye to the face and help your partner glue on the second eye.

8. Continue through all the parts of the face, taking turns gluing on the nose, upper lip, lower lip, right eyebrow, left eyebrow, right ear, etc.

9. As you near the end of the project you may continue to decorate the faces with hats, earrings, ties, etc., or you may stop after the hair is applied. The choice depends on your partner's interest level and the time available.

10. If each of you wants a face, repeat the steps to make a second face.

11. Together, clean up work area and return supplies.

12. Display the completed faces in a designated place.

• **Expanding the Activity:**

1. As a group, visit an art museum to see how the shapes you've used can be found in paintings.

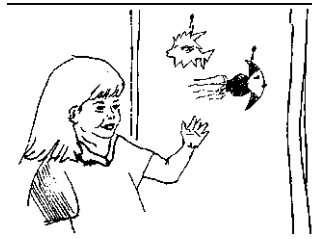
2. Visit an ornate home or building. Stand outside and see if the shapes you've used are found on the exterior. What new shapes can be found?

■ **Cooperative Interaction**

Reminder: *Develop directions for a task in such a way that they require an interdependent (cooperative) effort, rather than independent or competitive effort.*

Fantasy Fishpond

(for preschool - junior high)



• Introduction

Participants will make fantasy fish, creating them as colorfully as possible. Finished fish are taped to a wall or window to create the pond. As part of a group project, participants will receive instruction in art principles regarding shape, pattern and color. They will increase their skills in cutting, gluing, and, if desired, painting.

■ Cooperative Interaction

Reminder: *Seat participants together in small groups to promote interaction.*

• Resources/Materials:

- Construction paper, 9" x 12", multi-colors
- Scissors
- White glue or glue sticks
- Masking tape or pins (for displaying fish later)
- Sponges for clean-up
- Samples of geometric and non-geometric shapes
- Sample fish shapes in different sizes
- Optional: tempera paint, brushes, water containers

• Instructions to Group Leaders:

1. Discuss art as being about ideas. Ask participants to describe what a fish looks like. Tell them they know this from observation.
2. Explain that this project takes what they know about fish from observation and uses that information to create fabulous, fantasy (not real) fish for a big pond.
3. Discuss what kind of a fish could come from imagination? One that could fly? One with wheels? One that lives in a tree?
4. Hold up the circle shape and ask, what is it? Do the same with the square and triangle.
5. Let them know that today they are the artist, so they get to choose the shape of their fish. Hold up the geometric shapes. What else could these be? Could they be scales on a fish? Explain that they will be putting scales onto the fish that they will cut.
6. Cut out one or several possible fish shapes. Encourage them to use a lot of the paper. (We want large fish!!)
7. Demonstrate cutting some fish scales. Squares can be cut from strips of paper, triangles from cutting the squares in half diagonally, and circles by cutting corners off a square.
8. When you have a small quantity of scales, demonstrate how to glue them onto the fish. Scales may be overlapped when glued, or they can be folded in half and glued for a three dimensional effect.
9. Indicate area on wall or window where fish will be displayed.

10. Invite Companions to work with their partners to complete two fish (one for each person).

• **Instructions to Companions:**

1. Assist your partner in choosing construction paper for two fish shapes.
2. Cut your own large fish shape.
3. Assist your partner in cutting a large fish shape.
4. Together, choose construction paper for scales. Use circles, squares, or triangles to represent the fish scales.
5. Decorate the fish shapes with the multicolored scales.
6. Place completed fish in the pond. If you've finished before the others, you can make more fish to add to the pond.
7. Clean up work area and return supplies.

• **Expanding the Activity:**

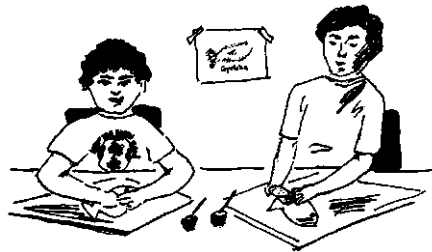
- As a group, discuss positive things about the day's work: Encourage comments about the fish pond that the group has created. If there is time, point out a positive aspect of each fish in the pond (e.g., interesting patterns, shapes, expressions).

- Participants can be encouraged to further decorate their fish with tempera paint.

■ **Cooperative Interaction**
Reminder: *As a project ends, say something pleasant to the participants in each group.*

Fish Prints

(for preschool - adult)



• **Introduction**

Fish printing is the process of coating a fish with ink and using it to print a fish image on paper. Nature printing, using some form of pigment to transfer the image of natural objects, dates back to human's early attempts to record objects around them. Many natural printing experiences are possible including printing with leaves, feathers, weeds, and shells. Fish printing seems to have originated in the Orient in the early 1800's. It is known today in Japan as "Gyotaku."

- **Cooperative Interaction**
Reminder: *It is the adult leader's responsibility to step in if the interaction between a participant with a disability and his/her partner or other group members deteriorates.*

• **Resources/Materials :**

- A fish with prominent sides, freshly caught or one that has been frozen in a flat position and thawed, will be needed. When first making fish prints, choose a fish with a flat body (halibut, sunfish, or sole) to make the printing process easier. Also, beginners will do well to start with a medium-sized fish (6-10 inches long)
- Dish to hold paint
- Pieces of soft white or off-white cotton fabric or newsprint on which to print. (For a more permanent paper print, a pliable and absorbent Japanese painting and sketching paper is preferable).
- Water
- Laundry soap
- Paper towels
- Newspapers
- Modeling clay or piece of styrofoam slightly larger than fish
- Straight pins
- Nontoxic black or brown acrylic paint
- 1" paint brush

• **Instructions to Group Leaders:**

This activity is primarily companion led, so your role will be to introduce the project and then to encourage cooperative interactions and facilitate successful completion of the activity.

• **Instructions to Companions:**

1. With your partner, cover your entire work area with newspaper.
2. Help your partner clean the surface of the fish so it will make a good print. With soapy water and paper towels, wash the fish several times to remove any debris or mucus. Work gently so you do not damage the fins or remove too many scales.
3. Together, rinse the fish well and then dry it with paper towels. Blot carefully around the nostrils, in the mouth, and under the gills.
4. Plug up the mouth and gills with small wads of paper to prevent any moisture from being squeezed out during the printing process. One of you can hold the fish while the other does this.
5. Discard soiled newspaper and put out clean newspaper pages.
6. Place your fish on the table in the position you plan to print.
7. Assist your partner in rolling modeling clay into strips and placing them behind the fins of the fish.
8. Help your partner spread the fins out in a natural position while you pin them to the clay with stick pins. (Optional: Place your fish on a piece of styrofoam and pin fins to small styrofoam pads.)

9. Show your partner how to apply a thin coat of paint to the fish. Take turns applying the paint, working rather quickly before the paint on the fish dries. Decide which direction you will paint, and brush in one direction only. Each direction gives a different result as the paint is deposited in a different part of the scales. NOTE: Paint the fins and tail last because the paint will dry there the fastest.

10. Wipe off excess paint that would spoil the print.

11. Place the cloth or paper to be printed over the painted fish. If using paper, try to avoid wrinkling it.

12. Hold cloth or paper steady while your partner rubs his/her hands over the entire fish to transfer the paint, first rubbing over the mouth, jaw and eye region, then moving toward the tail. Don't press too hard.

13. Ask your partner to carefully peel the fabric or paper away from the fish to reveal the print. Your partner may need help with this.

14. Place the print in a safe place where it can dry thoroughly.

15. Repeat process so you both have a fish print. For multiple prints, it is necessary to re-ink the fish each time. A fresh fish will usually make up to ten prints before its exterior becomes clogged with ink.

16. Together with your partner, clean up your work area and wash brushes in soapy water.

NOTE: Do not eat the fish after it has been unrefrigerated and handled. If possible, cut it into pieces and bury it in the garden to enrich the soil.

• **Expanding the Activity:**

1. This activity could be done in conjunction with fishing.

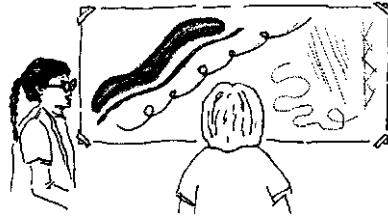
2. Once group members acquire competency in fish printing, introduce them to a more advanced stage of printing with other natural materials: the creation of a print collage. To do this, combine several natural materials, such as the materials that exist with the fish for example, weeds, twigs, stones (choose flat ones), etc., that can be combined pictorially with the fish to create an underwater scene (realistic or imaginary).

NOTE: The fish would also work in the **Diazo Prints** activity.

■ **Cooperative Interaction**
Reminder: *Modify activity plans to match the ages and ability levels of participants.*

Laughing Line Mural

(for preschool - adult)



■ **Cooperative Interaction**

Reminder: *Frequently a disabling condition presents interaction challenges never experienced by peers without disabilities. Companions will need instruction from the adult leader in how to cope with communication, movement, and other types of limitations.*

• **Introduction:**

In this cooperative art project, participants work together to create a vibrantly patterned mural. A large sheet of mural paper is decorated with a variety of "laughing lines," which are either painted or cut from construction paper.

• **Resources/Materials:**

- White mural paper 36" to 48" wide, 6' to 10' long, depending on number of participants (1 person per 1 foot of paper is a good rule of thumb)
- Scissors
- White glue or glue sticks
- Water containers
- Black construction paper
- Red, blue, yellow tempera paint
- Sponges
- Trays for paint supplies
- Painting smock for each person

• **Preparing the Environment:**

Work in a room with a floor that is easily cleaned. With some groups you may want to have participants sit on the floor around the mural paper.

• **Instruction to Group Leaders:**

1. Discuss art as being about ideas. How is a mural different from other types of paintings? It is BIG! The first murals were drawn on the walls of caves. Ask if anyone has seen a mural on the wall of a building. What did it look like?
2. Talk about lines. What kind of lines are there? Lines have size and direction. Lines that stand up straight are awake, at attention, and lively! Lines that lie down are tired, sleepy, and lazy! How can you give a line a feeling? How can you make a line laugh? (Curve it upward? Make it zig zag?) How does it feel when you laugh? What does your body do?
3. Discuss that, as a group, participants will create a mural of laughing lines. They will cut lines of black paper and glue them to the mural. Then they will paint red, blue, and yellow lines around the black lines. The mural will have no "right" side up: participants will work from all sides.
4. Demonstrate cutting different lines from black paper. Use glue to attach several lines to the mural paper.
5. When it is time for the participants to paint, for each three or four people, prepare a tray with three jars of paint (red, yellow, blue), brushes (one for each person), a water container and a sponge. This keeps the paint within easy reach of all.

6. Demonstrate applying the paint. Make several painted lines. Encourage participants to look at the mural before making a line so there is variety in color and style. Stress the thorough washing of the brush before changing colors as an important step.

7. Pass out tray of materials and instruct participants to proceed.

8. If spaces look blank or too crowded with one color you may want to make suggestions about variety and balance. Some participants may want to stand up to get a better view. For some participants it may be helpful for someone to mark their space with a light pencil mark.

8. When completed, instruct participants to clean brushes, return supplies, and wipe up any spills with sponges.

• **Instructions to Companions:**

1. With your partner, get the supplies: scissors, glue, and black paper.

2. Side-by-side, cut some "laughing" lines and glue them to the mural.

3. When the group leader brings the painting tray, encourage your partner to choose his or her favorite color to use for the laughing lines.

4. If needed, show your partner how to use paints, and assist him or her in applying paint to the mural paper. Share materials.

5. When the mural paper is well covered, clean up your working area with your partner and return the scissors and glue.

• **Expanding the Activity:**

1. After clean up, ask group to look at the mural. It will be easier to view if it is hanging up, but that may not be feasible if the paint is drippy. Look for interesting shapes/feelings within the mural.

2. Visit a building where a mural is painted on an outside wall, and discuss colors, shapes, feelings, and the message of the mural.

■ **Cooperative Interaction**

Reminder: *As an activity ends, say something pleasant to participants.*

Painting with Straws

(for preschool - elementary)



• Introduction:

In this activity, pairs of participants create a network of colored lines and interesting shapes by blowing through straws to move water-based ink from one section of watercolor paper to another.

• Resources/Materials:

- Painting smock or old apron for each person
- Heavy water color or drawing paper (approximately 18" x 24")
- Several bottles of nontoxic drawing ink in assorted colors with "squeeze dropper" tops
- Plastic drinking straws
- Plastic sheeting
- Newspapers
- Optional: several 1 inch wide ink brushes and some small paper cups

■ **Cooperative Interaction**
Reminder: *Is an adaptation needed for this activity to enhance the participation, success, and enjoyment on the part of the participants? Are they enjoying interactions and learning important things?*

• Preparing the Environment:

Cover a large table with plastic sheeting, followed with a layer of newspapers. Use raised tables or counters to accommodate people in wheelchairs. If a participant in a wheelchair has limited control of his/her upper body, select a table high enough so that the person does not have to lean forward; or, tape several straws together. If one partner has difficulty closing his/her lips around the straw and blowing through it, provide the person with an ear syringe or kitchen baster for "blowing" the ink around the paper.

• Instructions to Group Leaders:

1. Give each pair of participants a large piece of heavy watercolor paper, several bottles of water-based drawing ink, and drinking straws.
2. Demonstrate how to squeeze droplets of ink onto the paper.
3. Demonstrate how to blow through the straw to move the ink around on the paper.

• Instructions to Companions:

1. With your partner select paper, ink, and straws.
2. Seat yourself next to your partner at a table with a large sheet of paper in front of you.
3. Decide together on colors for your project. Take turns squeezing a drop of ink on a section of paper.
4. Blow through the straws, taking turns blowing ink over the paper. The objective is to blow drops of ink into thin, spidery lines and unusual shapes.

5. As needed, squeeze additional ink onto the paper. Rotate the paper as necessary.

• **Expanding the Activity:**

- When the ink is dry, partners can dip paint brushes into clean water and quickly "wash" their drawing in order to soften harsh lines and blend colors. They should start at one side of the drawing and move their brushes across the sheet of paper, avoiding "scrubbing" movements. Rinsing brushes thoroughly between strokes and dipping into clean water before beginning the next brush stroke is important.

- Partners can either share the finished product by cutting it into two pieces, or make two ink painting(s) so that each person can have one.

- Completed projects can be framed, or cut into notecard-sized pieces.

Rainbow Snowflakes

(for preschool - junior high)



• **Introduction:**

Color surrounds us in our world. Every object has color to which we react. In this activity of paper folding, cutting, and dying, participants learn the principles of mixing colors and enjoying seemingly magical surprises. There are no right or wrong results, just successful results.

• **Resources/Materials (Needed for Each Pair):**

- | | |
|--|--|
| - Moisture absorbent paper: two or three 6-inch squares per person | - Bowls for dye |
| - Yellow, red and blue dye or coloring (Dippity Dye brand paper and dye are recommended for the most brilliant results. This brand is available through art and craft, stationery, and school supply firms. Strong paper toweling and food coloring may be substituted.) | - Scissors |
| | - Newspapers or butcher's paper |
| | - Optional: tagboard for mounting snowflakes, rubber cement, white glue, pen or pencil |
| | - Wastebaskets |

• **Preparing the Environment (for 3 pairs of participants):**

1. Cover 6' - 8' table with a sheet of plastic, followed by newspaper, or butcher's paper.
2. Have at least two wastebaskets available to keep table clear of cuttings and newspaper.
3. In sequential order, from one end of the table to the other, place newspapers, tagboard, glue, and three pairs of scissors.

■ **Cooperative Interaction**

Reminder: *Emphasize the importance of enjoying an activity with another person rather than the speed and/or accuracy with which it is done.*

■ Cooperative Interaction

Reminder: *Modifications in procedures can turn a seemingly impossible task into an enjoyable recreational pursuit.*

4. If space allows, you may use two tables; one with the paper and scissors for the first step of folding and cutting or tearing the snowflakes, the second for the dyes.

• Instructions to Group Leaders:

1. Instruct participants to sit in a circle on the floor, or seat them around the table. If the group is small, they may stand at the activity table by the paper and scissors.
2. Start the instructions by asking questions:
 - What color is a snowflake?
 - Do all snowflakes look the same?
 - What colors are in a rainbow?
 - If we have the three colors, yellow, red, and blue, we can make rainbow snowflakes in which many other colors appear. Does anyone know how this happens?
 - What do we call this group of colors: yellow, red, and blue?
3. Inform participants that they will design snowflakes by folding and cutting paper, and then dyeing the snowflakes. NOTE: For very young participants or those with limited motor skills, notches can be torn rather than cut, and paper folded in quarters rather than more complex folding. Participants with limited motor skills can apply the dyes with squeeze bottles.
4. Pair participants (one with a disability, one without) and let the pair know that they will be making two snowflakes.

• Instructions for Companions:

1. Get a 6-inch paper square and a pair of scissors.
2. Ask your partner to watch closely as you demonstrate what to do.
3. Fold paper in half, then in half again (it is now in quarters).
4. Cut or tear small notches into the sides of the folded paper. The closed point is the center of the design and should not be cut off.
5. Ask your partner to do the same, prompting him or her that the closed point is not to be cut off. NOTE: If your partner has difficulty handling scissors, he or she may tear out the notches.
6. Now move to the bowls of dye. Dip each corner of your snowflake into a dye starting from lightest (yellow) to darkest (blue). Ask your partner to do the same. NOTE: You may have to guide your partner's hands while he/she is dipping the snowflake.
7. Keeping the snowflakes folded, put them between layers of newspaper and press firmly with hands to blend colors and absorb moisture. Remove from newspaper and unfold.

8. When the paper is dry, brush a dab of rubber cement or white glue on the edge of the snowflakes and mount them together on the tagboard. Write both names on back of mounting board. (Snowflakes can also be taped to window or hung with thread when dry.)

• **Expanding the Activity:**

- Large paper banners (approximately 18" x 24") for special celebrations can be done in the same manner with the Dippity Dye paper and dye using larger bowls or shallow buckets. When dry, attach tape to the front and back of two corners, punch a hole in each piece of tape, and attach string or cord to hang.

Terrific Tees

(for preschool - junior high)



• **Introduction:**

This activity combines the ideas of art as self-expression and tee-shirts as a product of self-expression. Paper tee-shirts serve as the basis for expression of ideas about pattern and design, or any theme that the leader wishes to introduce. Participants practice cutting and gluing and learn about the art elements of line, shape, pattern, and color. The Terrific Tee is not an actual tee-shirt, but a sheet of paper cut in the shape of the front of a tee-shirt. After decorating, it can be temporarily taped or pinned to the front of its creator, or it can be hung on the wall.

• **Resources/Materials:**

- 1 piece per person of white paper, such as chart paper, approximately 30" x 30"
- Assorted colors of construction papers
- Scissors and pencils
- White glue
- Masking tape or pins (to display shirts later)
- Sponges (for cleanup)
- Sample cut-out paper tee-shirt
- Optional: clothesline and clothespins to be used to hang tee-shirts

• **Instructions to Group Leaders:**

1. Discuss art as being about ideas. What sort of ideas are seen on tee-shirts? Who has on a tee-shirt today? What is on it? Pictures? Words? Shapes? Colors? Patterns? If you are using a specific personal theme such as peace, now is the time to ask questions about it. What are peaceful lines, colors, or images like? This is a time to use imagination. First we imagine what peace would be like and then we can create it.

2. Explain that they will be creating a design for a tee-shirt. The tee-shirt is made of paper and the design they will be making is also of paper. They are the artist and the tee-shirt should say something about them and who they are.

3. Solicit ideas about what they can show in their design.

■ **Cooperative Interaction**
Reminder: Check that the position of each participant with a disability is close to his/her partner and materials.

4. Show different ways of cutting lines and shapes.
5. Play with creating different designs and/or patterns on the tee-shirt using the lines and shapes.
6. When you have a pleasing design, demonstrate gluing the shapes to the tee-shirt.

■ Cooperative Interaction

Reminder: *Reinforce cooperative interactions when they are occurring.*

• Instructions to Companions:

1. Assist your partner in collecting needed supplies for two tee-shirts: two pieces of white paper, colored construction paper, scissors, glue.
2. Discuss with your partner what the designs can show.
3. Begin cutting a supply of lines and shapes with your partner.
4. Working together, arrange lines and shapes on one of the tee-shirts to form a pleasing design or pattern.
5. Glue shapes in place. One person can apply the glue, and the other can attach the shape onto the tee-shirt.
6. Now, make a second one together.
7. Bring completed tee-shirts to the display area.
8. Working together, clean up work area and return unused materials.

• Expanding the Activity:

- Visit a shop that features commercial stenciling of tee-shirts.
- Use markers or paints to decorate shirts, instead of construction paper.
- Decorate a real, cloth tee-shirt. Participants could bring tee-shirts from home.
- When all of the tee-shirts are done, have a Terrific Tee fashion show.

- **Crafts**

Stitch, Rattle, and Roll

(for preschool)



- **Introduction:**

Art, music and movement can be combined in a group activity. Participants will make a rhythm instrument and perform with others as they create and/or choose song lyrics.

- **Resources/Materials:**

- 2 styrofoam meat trays per person
- Table(s) with a chair for each person
- 1 blunt yarn needle threaded with an 18 inch length of yarn per person
- Transparent tape
- Scissors
- 10 dried beans per person
- Colored non-toxic markers

- **Preparing the Environment:**

Select a room with space to move about as a group. Before participants arrive, put art materials at each person's place at the table.

- **Instructions to Group Leaders:**

1. When participants arrive, ask them to gather in a circle, sitting on the floor or in chairs as appropriate.
2. Invite anyone who knows a song to sing, whistle or hum it.
3. Tell participants that their hands are "percussion" instruments that can change the sound of a song and make it more exciting by clapping. Instruct them to clap on alternate phrases as they sing the song again.
4. Tell them that they are going to make a percussion instrument with a sound different than clapping. Pick up a rattle and shake it.
5. Demonstrate how to make a rattle. Tape two foam trays together on one edge only. Using the needle and yarn, do an overhand stitch through the double layer of trays on the three untaped sides (leave a 3" tail of yarn at your starting point). Do not cut yarn. Remove tape from the trays, pry them apart enough to put in the beans, then stitch that side closed. Tie the two ends of the yarn together into a 3" tail.
6. Invite pairs of participants to sit at a table and make a rattle for each of them. Assist and guide as necessary.
7. When the children have created their rattles, suggest that they decorate them with marking pens.
8. Gather into the circle again with the rattles. Ask for suggestions of songs to sing. Divide the group in half. Tell each half to shake their rattles on every other phrase. Movements may be added such as dancing, shaking the rattles overhead, or tapping them on the knee.

Crafts

- **Stitch, Rattle, and Roll**
(for preschool)

- **Stenciling**
(for junior high - adult)

- **Apple Head Doll**
(for junior high - adult)

- **Candlemaking**
(for elementary - adult)

- **Potpourri and Pomanders**
(for preschool - adult)

- **Hanging Baskets**
(for junior high - adult)

- **Shadowmaking**
(for preschool - junior high)

- **And Serve with Summer Breezes**
(for preschool - junior high)

- **Sky Dragon Kite**
(for preschool - adult)

Stenciling

(for junior high - adult)



• Introduction:

Stenciling, applying paint through a cut-out pattern to the surface beneath, is used when one wishes to repeat a design several times. Although considered a distinctly American art, stenciling has its roots in ancient cultures of Asia and Europe.

As American settlers longed to express their individuality through color and design in home decorating, artists traveled the countryside on horseback, creating stenciled patterns as substitutes for the costly wallpaper from Europe. These roving artists concentrated themselves in New England, the most densely populated part of the country. Most stenciling was done between 1800 and 1840 when prosperity meant more and larger homes could be built, and before the Industrial Revolution when mass produced wallpaper became available.

The artist made stencils from heavy paper that had been soaked in boiled linseed oil, dried, and carefully cut with a very sharp knife. Certain patterns were used repeatedly and had symbolic meaning: the pineapple for hospitality, willow trees for long life and immortality, bells for wedded happiness, and the eagle for patriotism.

Brick red and dark green were the predominant colors, although black and ochre were also used. Red and ochre were made from clay, green from copper, and black from lamp soot mixed into skim milk. Blue, often considered a colonial color, was seldom used as it was difficult to obtain the indigo or lapis lazuli required to make it.

• Resources/Materials (Needed For Two Stenciled Flowerpots):

- | | |
|--|---|
| - 2 clay flowerpots | - Masking tape |
| - Tracing paper (or carbon paper) | - Heavy cardboard (to protect work surface) |
| - Sharp pencil | - Paper plate for paint palette |
| - Stencil paper (or substitute a file folder sprayed with shellac) | - Newspapers to cover work area and to prepare brush for painting |
| - Craft knife or fine decoupage scissors | - Acrylic paints |
| - Stencil brushes | - Paper towels |
| - Water for cleanup | |

• Preparing the Environment:

Before beginning a stenciling project, make certain the surface to be painted is free of dirt, oil, grease, etc. Some participants may prefer to use scissors rather than a craft knife. Also, some may find it easier to apply the paint with a small sponge, using a dabbing motion. Brushes can be made easier to grasp by taping a piece of foam rubber around the handle, or one partner can assist the other in grasping the brush.

• Instructions to Group Leaders:

1. Demonstrate how to trace the stencil pattern onto the stencil paper or how to use carbon paper for this purpose.

■ **Cooperative Interaction**
Reminder: *Select adaptations that help participants with disabilities fit in with peers.*

2. Show the group how to carefully cut out the pattern area with the craft knife. Discuss the proper care and use of the craft knife.
3. Demonstrate how to tape on the stencil and paint the design onto the flowerpot.

• **Instructions to Companions:**

1. Assist your partner in planning the pattern. Simple stencil patterns may be created by tracing around cookie cutters, or copying designs from fabric, wallpaper, or books of stencil patterns. When beginning, everyone should start with a simple design.
2. Place translucent stencil paper over the shape or design and trace its outline with a pencil; or if you prefer, use carbon paper to trace the outlines of the design onto the stencil paper. Your partner can hold the paper in place while you trace the pattern, or you can use masking tape to hold it in place.
3. If you plan to use more than one color, plan the color scheme before cutting the stencil. A separate stencil is needed for each color.
4. Place the stencil paper flat on a piece of heavy cardboard, and cut out the pattern sections with the craft knife. NOTE: Partners with motor control problems will need help with this! Craft knives are dangerous when not used properly.
5. Position the stencil on the flowerpot. While your partner holds the stencil securely in place, tape it to the flowerpot with masking tape making certain not to block the stencil openings with tape.
6. Show your partner how to pick up a little paint on the end of the stenciling brush. Gently bounce the tip of the brush up and down on several layers of newspaper. This removes the excess paint and distributes the paint evenly throughout the bristles.
7. Gently dab the brush bristles in an up-and-down motion through the openings in the stencil to apply a thin and even covering of color. Work from the outside of the design inward, remembering to tap the bristles on the surface head-on rather than in a sweeping motion.
8. When you are finished painting, lift the stencil straight up. If placing the design on the flowerpot another time, let each application dry a few minutes before starting another. If adding another color, allow the first color to dry thoroughly first.
9. Assist your partner (if needed) in stenciling the second flowerpot.
10. With your partner, clean brushes with soap and water immediately after using. Dry brushes with paper towels.
11. Together clean the stencils if a large build-up of paint has occurred, wiping off excess paint.

■ **Cooperative Interaction**
Reminder: Reinforce cooperative interactions when they are occurring. But, do not overdo it so that participants begin to interact for your approval rather than for the enjoyment of the activity and each other.

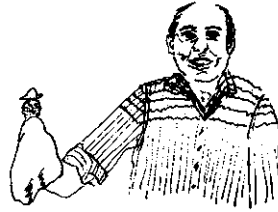
- **Expanding the Activity:**

- Visit a gift store that features folk art.

- Many objects can be chosen for stenciling according to the ability and interest of the participants: wooden plaques, electric light switch plates (available in craft stores), lunch boxes, picture frames, wastebaskets, tee-shirts, tote bags, bricks, window shades, paper bags, placemats, and greeting cards.

Apple Head Doll

(for junior high - adult)



- **Introduction:**

Apple head dolls, long considered a tradition of early New England, were actually developed by the Seneca Indians of the New York area over 500 years ago. Called Loose Feet, the doll represented a very old and wise spirit who was a guardian of children.

The doll of the Seneca Indians was slightly different in both construction and appearance from the dolls we make today. The Seneca method was to core a slightly green apple and mold the face as the apple dried. In the final stages, a wooden plug or corncob, bound with a top knot of feathers, was inserted into the hole where the core had been. The bottom of the apple was fitted with a roughly carved piece of wood representing a neck and shoulders. Cornhusks were bunched together around the front, and legs and feet were formed by binding the cornhusks above and below the knees and at the ankles. A wide husk was tied at the waist to form a kilt-type garment.

This project adapts the Native American craft to create the charming apple head dolls seen today. The intrigue lies in the simplicity of the process which creates apple faces, each different in appearance.

- **Resources/Materials (Needed for Each Pair of Participants):**

- | | |
|---|--|
| - 2 firm, large unbruised apples | - String |
| - Small paring knife | - Batting, cotton, or soft cloth cut into 1-inch wide strips |
| - Teaspoon | - Cotton, yarn, or polyester fiberfill for hair |
| - Lemon juice concentrate (optional) | - White glue |
| - Small bowl | - Fabric for clothing |
| - Whole cloves or round-headed pins for eyes | - Drawing paper |
| - Toothpicks and extra apple for hands (optional) | - Needle and thread |
| - Wire: 16 or 18 gauge | - Masking tape |
| - Scissors | |

- **Preparing the Environment:**

This activity will need to be completed in two stages. Steps 1-11 of "Instructions to Companions" describe how to make the doll's head and hands. Steps 12-19 describe how to make the doll's body. The doll's head and hands will need to dry two to three weeks. It is best to let the

■ **Cooperative Interaction**
Reminder: *Would a material or procedural adaptation enhance the participation, success, and enjoyment of this activity for any participant?*

apple dry naturally, but if you must shorten the drying time, you may dry the carved apple overnight, then submerge it completely in silica gel. Cover tightly for at least 36 hours. Allow to air dry until ready (7-10 days). Make a doll before participants arrive so that you will feel comfortable with the steps and have an example to show.

• **Instructions to Group Leaders:**

1. Explain to Companions that they may need to demonstrate to their partners how to complete the activity steps and should offer assistance as needed.

• **Instructions to Companions:**

To Make Doll's Head and Arms:

1. Assist your partner as you each select a firm, unbruised apple; the bigger the better because the apple will shrink to nearly half size.
2. Peel the apples. A small section of peel may be left at both the stem and blossom end. Do not core apples. Help your partner peel his or her apple as needed (and help probably will be needed because knives can be dangerous and must be handled carefully).
3. About 1/3 of the way down from the stem end, scrape two hollows for eyes, leaving a ridge between the hollows for a nose. Using the knife sparingly or just the tip of a teaspoon, shape indentations where the eyes will be located.
4. On each apple, form a nose by scraping away apple, creating a triangular shape, with the base slightly below the center of the face.
5. On each apple, make a slit with the knife; it will become the mouth as the apple dries.
6. If ear detail is desired, scrape away apple, making a half-moon shape on the side of the head.
7. Apples dry in various shades of brown. If you wish to keep the face a lighter shade, dip the carved apple in lemon juice concentrate.
8. Insert whole cloves or round-headed pins for eyes.
9. If you want to add greater detail to the doll you may make apple hands. From another apple, cut two wedges about 1/4-inch thick. Cut into a mitten shape. Cut slits to form four fingers and put hands on toothpicks to dry. These will later be inserted into the arms of the doll's clothing.
10. For each doll, cut a piece of wire 20 inches long. Fold it in half and insert the bent end into the apple from the bottom to the top of the head.

■ **Cooperative Interaction**
Reminder: *To promote cooperative interactions, seat participants together in small groups.*

11. Insert a string through the loop of each wire. Hang the apples to dry in an airy spot, away from direct sunlight. Features may be emphasized by molding them as the drying process takes place. Continue to push in the eyes. Complete drying takes about 2 to 3 weeks.

To Make Doll's Body:

12. When an apple feels pithy and does not cave in under slight pressure, remove the hanging string and complete the following steps.

13. To shape the body from the wire sticking out of the head, first bend the ends of the wire one inch from the bottom to form feet. Form a small loop in the wire ends for feet.

14. Cut a piece of wire 7 inches long. Form arms by winding this length of wire 1/2-inch below the head. Form small loops in the wire ends for hands.

15. Pad the body by wrapping it with the batting, cotton, or soft cloth cut into 1-inch-wide strips. Hold in place with stitching or tape.

16. Wrap the feet and hands with masking tape or add dried hands.

17. Form hair by gluing on cotton, yarn, or polyester fiber-fill.

18. Bend the doll to form a sitting or standing pose. The knee joint should be about 2 inches from the top of the leg. To make the doll look old, bend the shoulders forward slightly.

19. Dress the doll. With changes in clothing and hair style, the doll can be either male or female. Place dolls on paper and trace around bodies, arms, and legs. Using these shapes as guides, cut out simple patterns for desired garments. Allow a 3/8 inch seam allowance. Stitch main seams and complete stitching right on the doll to achieve a finished look. Aprons, shawls, bonnets, vests, kerchiefs and other accessories can be added if you like.

• Expanding the Activity:

- Visit a museum featuring paintings and models of how Native Americans lived long ago. Notice, particularly, the geometric shapes on the clothing, the materials for which clothing articles were made, and the ornaments that were part of their garments. Decorate apple doll garments accordingly.

- In advance of the activity, visit an apple orchard to collect apples.

■ **Cooperative Interaction**

Reminder: *Redirect*

participants if they get off task.

Candle Making

(for elementary - adult)



• Introduction:

Autumn on the frontier was a time to prepare for the winter ahead. Often, the pioneer women rendered fat from livestock the men had slaughtered, adding it to the supply they had hoarded all year, boiling it down to tallow for use in hand-dipping a supply of candles. After the fat was allowed to cool slightly, cold water was added to force impurities to the bottom and cause the tallow to form a cake at the top of the melting pot. This tallow was then removed and remelted for candle making. Since burning tallow has a strong odor, candle makers sometimes added the juice of bayberries to improve it.

Today's candle makers will gain a greater appreciation of the rigors of pioneer life, and will enjoy creating their own hand-dipped candles and burning them at special times.

• Resources/Materials (Needed For Each Pair of Candle Makers):

- Candle wicking (2 lengths, each about 18" long)
- Scissors
- Candle wax, or paraffin, or reclaimed wax from old candles (not tallow)
- 2 dowels, each about 12" long and 1/2" thick
- A large pan with a lid to create a make-shift double boiler
- Baking soda
- 2 chairs with backs that are flat on top
- 2 long sticks (2x2's about 6' long work very well)
- Masking tape
- 1 three-pound coffee can or large tomato juice can with top removed
- Heat source: range or electric frying pan
- Newspapers to cover work area

• Preparing the Environment:

Although certain safety precautions must be taken, candle making is not hazardous if you follow safe procedures. Do not place the can of wax to be melted directly on the heat source; always use the double-boiler method. Do not overheat the wax. Use hot pads when handling the can of hot wax and never leave melting wax unattended. Keep baking soda and a pan lid handy. In the event that the wax catches fire in the melting can, smother the fire with the lid and remove the pan from the stove. If spilled wax is flaming on a burner, turn off the burner and sprinkle the burning area with baking soda. If hot wax spills on the skin, immerse burned area in cool water immediately. If the burn is serious, do not peel off the wax; quickly get the person to a doctor.

• Instructions to Group Leaders:

1. Discuss with participants the importance of safety when working with hot wax. Demonstrate how to cover the melting can with a lid and how to use baking soda in case of an emergency.
2. Demonstrate how to cut wicking the length of the can, plus six inches, to allow for knots at either end.

■ **Cooperative Interaction**
Reminder: Check that the position of each participant with a disability is close to his/her partner.

■ **Cooperative Interaction**
Reminder: *Make sure that all materials and tools are laid out for safe and easy access.*

3. Demonstrate how to tie one end of the wicking to the tip of a dowel. Tie a knot at the other end of the wicking.

4. Demonstrate how to use a double-boiler method to heat the wax. Boil water in the pot, reduce to a simmer, and gently set the can, containing pieces of wax, into the pot. As the wax melts, add more pieces of wax until the can is nearly full.

5. Demonstrate how to lower the wick into the wax. Emphasize the importance of letting one layer of wax cool before applying the next layer.

6. Demonstrate how to build the cooling rack (see step #1 of *Instructions to Companions*).

• **Instructions to Companions:**

1. Let your partner help you prepare the work area. You can both cover the candle-making area with newspapers and position the two chairs about 6 feet apart, back-to-back. Make a rack for cooling your candles by putting the two 2 x 2 sticks across the chair backs, spacing them about 10 inches apart. Secure the 2 x 2 sticks to the chair backs with masking tape. Your friend can hold the sticks in place while you tape, or vice versa.

2. For each candle, cut wicking to a length as long as the coffee can or juice can is deep, plus allow an extra six inches for making knots.

NOTE: You'll be making two candles: one for each of you.

3. Tie one wick to each of the two dowels, knotting them at the end that is not tied to the dowel.

4. Turn on heat source and bring water to a boil in the large pan.

5. Place a few pieces of wax in the coffee can or juice can and lower the can carefully into the water to form your makeshift double boiler. Lower the heat to simmer.

6. As wax melts, add more wax until the coffee or juice can is nearly full. Encourage your partner to help you to do this, but both of you need to be careful to not drop pieces of unmelted wax in the can because hot wax splashed on skin is very painful.

7. Take your dowel, with the wick attached, and hold it over the can. Lower the wick into the can and then raise it. If the wick floats, wait until it becomes wet with wax and it will sink. After dipping, straighten the wick by tugging it gently at the bottom. Careful: don't burn yourself. Place your dowel on the cooling rack.

8. Now, take the second dowel and ask your partner to hold on to it with you as you both dip his or her wick in the melted wax. Place your

partner's dowel on the drying rack next to yours to cool. It is essential that the candles cool between dippings or the previous layer will melt. Don't crowd your two developing candles as you hang them to cool.

9. When both wicks have been dipped once, dip again, being careful not to hold them in the wax so long that the previous coat melts.

- a. Each time dipping occurs, first dip your wick, and then assist your partner with his/hers.
- b. As your partner becomes more skilled at dipping, reduce the amount of assistance you provide until he or she no longer needs any help at all. Then you should simply encourage him/her and stay close in case help might be needed.
- c. Each dipping step takes about three seconds. It can be done in three 1-second counts: "One, lower the wick." "Two, let its end touch the bottom." "Three, pull it out."
- d. Let candle drip a moment over the can. If wax begins to build up at end of string where the knot is, snip it off to keep the base of the candle flat.

10. Continue dipping and drying until the candles reach the desired thickness.

• **Expanding the Activity:**

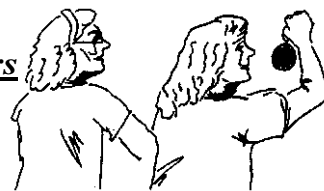
- When each pair has their candles done, have them join with other partners for a "candlelight dinner" that they all prepare together. (The activity, "Taco Pizza," in this handbook might be a good choice for this "dinner").
- Take the group to the beach in the evening. Let them stick the bases of their candles in the sand, light them, and then sit down. Then show them how to make another kind of candle, sand candles, pouring hot wax into a depression you've made in the sand. (Be sure to take along a camp stove and all of the candle making equipment and supplies needed). The adult should stay in charge of the melted wax because it will be relatively dark on the beach and participants may bump into the stove. Having them remain seated during the activity will reduce this risk.
- Multi-layered candles can be made by pouring layers of melted wax, colored with bits of broken crayons, into a glass jar. Be sure to let each layer of wax cool before adding the next. When the jar is full and the candle is completely cooled, an adult leader can gently break the jar by placing the jar in a bag and tapping it with a hammer. Be sure to use a canning jar for this because an ordinary jar may shatter when hot wax is poured into it.

■ **Cooperative Interaction**

Reminder: *Is an adaptation needed for this activity to enhance the participation, success, and enjoyment of a participant?*

Potpourri & Pomanders

(for preschool - adult)



• Introduction:

As early as the 17th and 18th centuries, English families dried and spiced flower petals, sprinkled them with expensive oils and perfumes, and mixed them with sandalwood chips. Stored in tight containers, these mixtures would fill the rooms of their houses with sweet smelling scents when the boxes were opened. We call these mixtures potpourri (po-poo-ree). Colonial families seldom had the expensive oils to create the potpourri of English families, but wanting to keep the scents of summer all year they found that they could gather good smelling garden flowers and hang them upside down from rafters to dry. At harvest time, grains and stalks of plumed grasses were added to form arrangements to "bloom" all year with pleasing aromas.

The original pomander balls were apples covered with mixtures of aromatic substances. Worn originally to prevent body odor and protect against infection, today they are considered a decorating accent. An orange is most commonly used today, but it is possible to use lemons, limes, or kumquats, as well.

■ Cooperative Interaction

Reminder: *If a participant with a disability has a behavior problem, have him or her become part of a larger group of participants and rotate the interaction responsibilities among members without disabilities. This will take the pressure off any one non-disabled individual.*

To Make Potpourri:

• Resources/Materials (Needed for Each Participant's Potpourri):

- 16 large roses (yields 2 cups dried petals)
- 12 other flowers, such as carnations, marigolds, calendulas, clematis (yields 1 1/2 cups dried petals.)
- 6-10 small flower heads, such as bachelor buttons, pansies, apple blossoms, delphiniums, lavender, daisies, and dwarf chrysanthemums (yields 1/4-1/2 cup dried heads).
- Fabric or net
- Bowl
- Wooden spoon
- Ribbon
- Several aromatic leaves, such as rose geranium, lemon verbena, bay, sweet marjoram, rosemary, and lemon thyme
- 1/2 lemon, lime, orange, or tangerine (yields 2 T dried citrus slivers)
- Potato peeler
- Drying rack
- 1 T powdered orrisroot
- Essential oils such as jasmine, attar of roses, or lavender.
- Glass/plastic storage container

• Preparing the Environment:

A local florist may be willing to provide flowers that are past their prime for this project. Participants will dry their own flowers, leaves, and citrus. If there is a reason to hasten the drying process, ingredients may be arranged in a single layer on a cookie sheet and dried in a 100-degree oven for 4 hours, until the petals and leaves became curled and crisp and the flower heads stiffened.

Orrisroot and essential oils are available through pharmacies, health food stores, herb companies, department stores, at art fairs, or through specialty mail order stores.

• **Instructions to Companions:**

1. Working with your partner, prepare a drying rack made from a window screen; or make several separate drying racks from baskets or wicker paper plate holders.
2. Carefully remove the petals from roses and keep separate.
3. Remove the petals from other pleasant-smelling flowers such as carnations, marigolds, calendulas, and clematis. Keep this mixture separate, too.
4. Gather aromatic leaves such as rose geranium, lemon verbena, bay leaves, sweet marjoram, rosemary, or lemon thyme. Keep separate.
5. With a potato peeler, remove a thin layer of peel from lemons, limes, oranges, and/or tangerines. Snip into small pieces. Keep separate.
6. Clip whole flower heads such as bachelor buttons, pansies, apple blossoms, delphiniums, lavender, daisies, dwarf chrysanthemums, rose buds. Keep separate from the rest of the ingredients.
7. Spread petals, flowers, leaves, and citrus peels in a single layer on a drying rack. (Place the whole flower heads face-down on the drying rack). Put in a cool place away from sunlight until they become crisp. This will take at least one week and will vary with the heat, humidity, and plant.
8. After the ingredients are dried, mix the potpourri. The scent and color of each potpourri will be as different as the individual mixing it, depending on the variety and amount of flowers used. A suggested mixture is:
 - 2 cups dried rose petals
 - 1 1/2 cups dried fragrant flower petals
 - 1/4 to 1/2 cup small whole dried flower heads
 - Several aromatic leaves, whole or crumbled
 - 2 tablespoons dried citrus slivers
9. Place mixture in a glass or plastic (not metal) bowl.
10. Mix with fingers or with a wooden spoon.
11. Add 1 tablespoon powdered orrisroot to fix the scent. If desired, vary (and later renew) scent by adding 3 drops of essential oils such as jasmine, attar of roses, lavender, etc.
12. Store the potpourri in a cool, dark place for 4 weeks to allow it to age. The mixture will lose its raw, multiscented odor and turn into a smooth appealing blend.
13. Place potpourri in attractive small baskets, or in glass display dishes to enjoy visual beauty as well as scent; or make sachets. To

■ **Cooperative Interaction**
Reminder: *Arrange supplies so that everything needed by a group is in one small area rather than scattered around the room. This will help to keep group members interacting.*

make simple sachets, spoon mixture into circles cut from attractive fabric or net. Tie with a ribbon. Tuck into drawers or hang in closets and enjoy scents!

To Make Pomanders:

• Resources/Materials (For One Pomander Ball):

- 1 orange
- 2 ounces whole cloves
- 1 ounce powdered orrisroot
- 1 ounce powdered cinnamon
- Mixing bowl
- 1/2 ounce powdered allspice or nutmeg
- Darning needle or ice pick
- 1 yard of 1/4 inch wide cross-grain ribbon

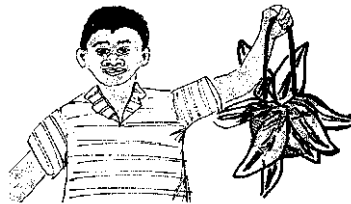
• Instructions to Companions:

1. Choose a firm, thin-skinned orange. Encourage your partner to choose one also.
2. With a darning needle or ice pick punch holes close to one another around the fruit. Be careful not to poke yourself or your partner.
3. Insert whole cloves in the holes over the entire surface of each orange. NOTE: To protect your fingers while putting the cloves in the orange, wear gloves or put adhesive bandages on your thumb and index finger.
4. Mix orrisroot, cinnamon, and allspice or nutmeg in bowl.
5. Place each clove-covered orange in the bowl, rotating the orange to cover it completely with spices. The orange can be left in the bowl for several days and rotated once a day.
6. Place oranges on a paper plate in a cool, dry cupboard for at least 2 weeks, turning every few days. Oranges will shrink and become hard and the cloves will become clamped in place.
7. Tie two ribbons around each pomander ball, knotting them at the top. Knot the loose end to form a 3-inch loop for hanging. Tie remaining ribbon into decorative bow. Hang pomander in a closet.

• Expanding the Activity:

- Visit a gift shop, as a group, where materials for sachets are featured.

Hanging Baskets (for junior high - adult)



• Introduction:

By making stem cuttings, participants will learn how plants grow. They will also explore art materials and techniques as they complete a hanging plant holder that can be used for a gift or place in their home.

■ **Cooperative Interaction**
Reminder: *It is the adult leader's responsibility to step in if the interaction between a participant with a disability and his/her partner or other group members deteriorates.*

• **Resources/Materials (Needed for Each Pair):**

First Session (making plant cuttings)

- Sharp scissors
- Masking tape
- Laundry marker pen
- Two small neck bottles (pop bottles)
- A large plant (Coleus, Swedish Ivy, Philodendron)
- Watering can for house plants
- Newspapers

Second Session (creating pots)

If Kiln Available:

- Clay
- Pencil and paper

For Dough Pot:

- Flour
- Salt
- Water
- Oven
- Shellac(fresh)
- Pencil
- Supply of paper
- Mixing bowl
- Fork
- Brushes and brush cleaner

Recycled or New Pot:

- Clay pot
- Pencil
- Brushes
- Acrylic paint or permanent markers

Third Session (making plant hanger)

- Supply of cord or jute
- Scissors

Fourth Session (Pot into hanger, plant into pot)

- Potting soil
- Watering can
- Spoons

*** Preparing the Environment:**

Set up the tasks so that turn-taking and paired operations are maximized, with needed supplies together in a small area to encourage working together. As success is important to those who have never done a cutting, choose a plant such as Coleus that roots in water quickly and easily. Check the water levels in the bottles between sessions. As the potted plant grows, pinch off the top (leaving buds), to force it to branch out, not up.

• **Instructions for Group Leaders:**

While working on the project, discuss with the participants answers to the following questions:

- Why do we need plants?
- What is needed for plants to grow?
- What is soil made of?
- Besides making stem cuttings, what are other methods of producing plants?
- What are roots for? Leaves?
- What do plants take in and give off?

■ **Cooperative Interaction**
Reminder: *A sequence of steps applicable to a non-disabled individual may prove too difficult or be impractical for a person with a disability. Skill sequence adaptations may be necessary to enable the person with a disability to successfully participate.*

• **Instructions to Companions:**

First Session (making plant cuttings)

1. Spread ~~newspapers on the~~ table with your partner's help. Put a strip of masking tape on the bottom of two bottles. Each partner should print his/her name on the tape. NOTE: Your partner may need help in printing his or her name.
2. Fill bottles with water using a houseplant watering can. Your partner may hold the bottle stable while you pour, or vice versa.
3. With your partner, cut off the top four inches of a healthy stem at an angle. (Cutting at an angle provides more of a rooting area.)
4. Carefully cut or pinch off the bottom leaves of the stem (roots won't grow when leaves are in the water).
5. Carefully pinch off the tiny leaves at the very top of the stem to force the stem cutting to branch out sideways so that it will fill out.
6. Insert stem cutting into filled bottle so the leaves are resting on the top of the bottle mouth.
7. Repeat process so you and your partner each have a stem clipping.

Second Session (creating pots)

1. With your partner, check stem cuttings placed in bottles the week before. Make sure there is enough water, filling bottles using a watering can if necessary.
2. Cover working area with paper.
3. To make a clay pot:
 - a. Ask your partner to watch while you work with a baseball size amount of clay.
 - b. Work clay by tearing it in chunks, flattening and pounding them and pressing them back together again to get out air bubbles.
 - c. Continue working the clay for about 5 minutes. Ask your partner to do the same operations with you, at the same time.NOTE: Clay pots must dry about a week before baking.
 - d. Bake in kiln following clay firing specifications. Once baked, clay pots are ready for decoration (this is called a bisque firing state).
4. For working with a new or used (and cleaned) commercial clay pot:
 - a. Sketch a design with pencil on the pot.
 - b. Paint with acrylic paint, or a permanent marker.
 - c. Mark pot with name on bottom.
5. For making a dough pot:
 - a. With your partner, combine in a mixing bowl 4 parts flour, one part salt, and 1-1/3 parts water.

■ **Cooperative Interaction**

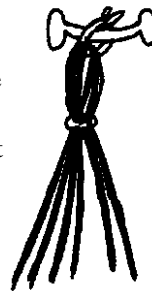
Reminder: Reinforce cooperative interactions when they are occurring.

- b. Mix ingredients thoroughly into a dough.
- c. Pre-measure the above ingredients for your partner as needed. Invite your partner to make a batch of dough, too.
- d. Shape dough into a ball.
- e. Push thumb into middle of ball and push the sides out and up. Leave the sides at least 1/4 inch or more thick to maintain strength.
- f. With a pencil, punch a small drainage hole in the pot bottom.
- g. If desired, etch designs into the sides with a pencil.
- h. Etch name on the bottom or the inside of pot.
- i. Bake in regular home oven at 350 degrees for one hour. Cool,
- j. Shellac well inside and out. Let dry.

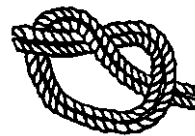
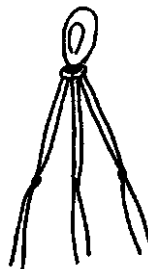
Third Session (making the hanger)

1. Cut three pieces of cord of equal length (between 5 and 6 feet) for each pot. Let your partner assist you in cutting the cord.
2. Put cords together and double them over.

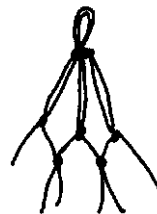
3. Cut two more pieces of cord 3 inches long and tie one about 2 to 3 inches down from bend in the cord. Tie the other piece through the loop you've just created and tie it to something sturdy (i.e., chair arm, desk leg, window handle.) NOTE: The piece through the loop and the sturdy object is temporary, and need not be tied too tightly. The piece which created the loop may be wrapped around several times and tied securely. Trim off excess cord after you tie the knot.



4. Spread the six strands of cord out in front of you and tie the first two strands on your left in a simple knot about 2/3 of the way down. Keep both pieces of cord or jute even. Pull the knot tight. Do the same to next two cords and the last two. Make knots the same distance from the loop.



5. Separate the cords again, 3 to 4 inches below the knots you just tied. Leaving the first one on your left alone, tie the second and third ones together in a knot. Tie the fourth and fifth cords together so the knot is even with your first knot.



6. Now take the sixth cord and bring it over to the first cord. Tie a knot in these two forming a circle.



7. Cut a 6-inch piece of cord. Wrap and tie it tightly about 2 inches from the loose ends of the cords forming a tassel. This will close the bottom of the circle you've made with the knots. Trim the excess cord and the macrame plant holder is completed.



■ **Cooperative Interaction**
Reminder: *Emphasize the importance of enjoying an activity with another person rather than the speed and/or accuracy with which it is done.*

NOTE: Remember to check the water **level** in **the stem** cutting bottles and add water if necessary.

Fourth Session (pot into hanger, plant into pot)

■ **Cooperative Interaction**

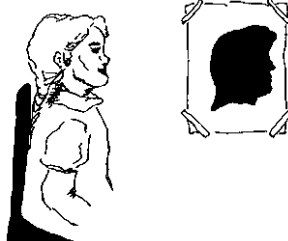
Reminder: *Develop directions for a task in such a way that they require an interdependent (cooperative) effort, rather than independent or competitive effort.*

1. With your partner, place the **pots you made** inside **the** hangers.
2. Working together, cover a table with newspaper.
3. Fill pot about 1/4 full with potting soil using tablespoons.
4. Carefully lift the stem cutting out of the bottle and **set** it in the middle of pot, on top of the soil. Handle the roots very carefully because they are very delicate and will break easily.
5. Continue to spoon soil around the plant until pot is 3/4 full. Lightly pack soil down with spoon. Add more soil until pot is again 3/4 full.
6. Water the soil lightly.
7. Hang the plants where they can receive light, and watch them grow.

• **Expanding the Activity:**

-Visit a greenhouse. Prior to your visit, request that when you arrive someone there will show your group how plants are cared for, how cuttings are made, etc.

Shadow-Making (for preschool - adult)



• **Introduction:**

Cutting silhouettes requires partners to work cooperatively in tracing profiles together. The completed likeness will be a lasting memento of the activity.

• **Resources/Materials:**

- | | |
|---|---------------------------------------|
| - Work table | - Cardboard, tagboard, or file folder |
| - Masking tape | - Scissors |
| - Sharp pencil with soft lead | - Glue |
| - 2 large sheets of paper: 1 black, 1 white | - Frame or colored mat |
| - Good light source | - Chair |

• **Instructions to Group Leaders:**

Provide the following background information to the group: The silhouette, so prized today, was first given that name as a term of derision directed toward Etienne de Silhouette, a French Controller-General under Louis IV, who sought to increase tax revenues by abolishing certain tax privileges. Faced with ridicule, he was forced out of his position after serving only nine months in 1759. His work, until his

death in 1767, was as a craftsman creating the black paper cutouts of people and landscapes that have come to bear his name.

Silhouettes attained their greatest popularity from 1760 to 1860 when everyone from kings to American colonists wanted small inexpensive likenesses of themselves and family members without the price tag of portraits in oil. Unlike oil portraits, which tended to flatter, the silhouette showed even the least attractive physical features, such as sagging chins and crooked noses. The invention in 1839 of the daguerreotype, which led to the development of photography, eventually undercut the demand for silhouettes.

In the 1700's, the shadowmaker, as the artist was often called, had the subject sit between a lighted candle and a piece of translucent paper held in place with a glass and frame arrangement. Carefully tracing the shadowed profile on the paper, the artist reduced it to the appropriate size with a pantograph. Silhouettes were seldom created in life-size; most were reduced to less than three inches in height. These miniature tracings were then inked in, mounted, and framed. Most portraits were black on a white background although sepia, green, or deep red were occasionally chosen.

Later, master silhouettists cut the profiles freehand, some producing the miniature, less than one-half inch high, profiles for mounting in lockets or brooches.

• **Instructions to Companions:**

1. With your partner, tape the large sheet of black paper on the smooth surface of the wall.
2. Prepare the light source. NOTE: A good silhouette depends on a shadow that is crisp enough to be easy to trace. A good way to achieve a sharp image is to use a flashlight that is taped on top of a stack of books. To make the image even sharper, cut a nickel-size hole in a piece of aluminum foil and tape it to the flashlight to provide a denser image. Do not do this with a lamp or lightbulb because it can cause fire.
3. Ask your partner to sit close to the wall, between the paper and light source. Adjust his or her position until the shadow is sharp.
4. Carefully trace around the shadowed profile. To reduce movement, rest your partner's shoulder against the wall and against the back of the chair. Adjust the angle of his or her head to get the best profile.
5. Take the silhouette to a table and adjust any lines needed to improve the hairline, simplify the neckline, or sharpen the image.
6. Cut out the silhouette.
7. Working with your partner, glue silhouette to sheet of white paper. One of you can apply the glue while the other attaches the silhouette to the white paper.
8. Pose for your partner and complete a silhouette of yourself.

■ **Cooperative Interaction**
Reminder: *Would a material or procedural adaptation enhance the participant, success, and enjoyment of a group member with a disability?*

- **Expanding the Activity:**

-If historical accuracy is desired, the silhouette may be miniaturized using grids. (A simple method would be to trace it on white paper and then use the reducing capability of a copy machine.)

-If desired, mat and frame the silhouette.

And Serve with Summer Breezes

(for preschool - junior high)



- **Introduction:**

Old and mismatched flatware can be used to create charming wind chimes. Easy and inexpensive to make, the music they create will be pleasant to hear.

- **Resources/Materials (Needed For Each Pair to Make Two Wind Chimes):**

- Stainless steel spoons, forks, and knives from a thrift store, or mismatched items from the kitchen. (Each wind chime uses ten pieces of flatware for maximum musical quality. Lesser numbers could be used, but the resulting sound will not be as nice. Choose pieces with fairly thin handles for ease in drilling holes through the handles.)
- Four circles cut from pine boards: two 7-1/2 inches in diameter and two 3-1/2 inches in diameter.
- Nylon fish line
- Four small buttons

■ **Cooperative Interaction**

Reminder: *Structure activities to promote cooperative interaction.*

- **Preparing the Environment:**

The wood circles and flatware require preparation in advance. The larger circle will have nine small holes drilled around the edge and one small hole drilled in the exact center. The smaller circle, which is attached to a spoon acting as a clapper, has one hole drilled near the edge. Both circles should be rubbed with oil-based wood stain. Each piece of flatware has a hole drilled through the handle. For drilling ease, however, holes in the knives could be through the blade. The spoon that forms the clapper has a hole in the bowl as well as in the handle.

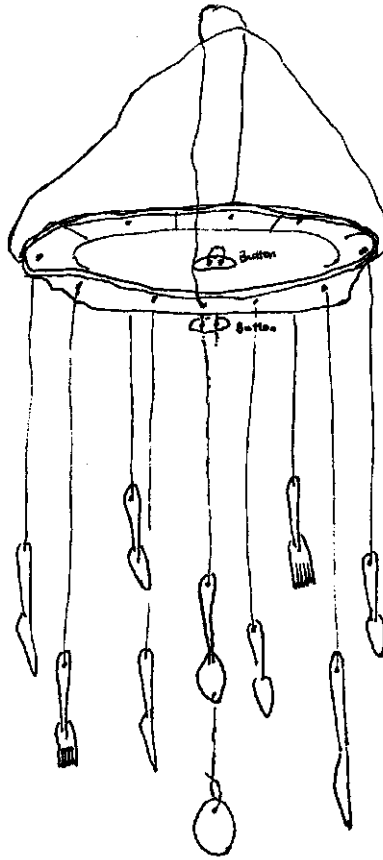
- **Instructions to Group Leaders:**

After the initial explanation of the activity, the steps in this activity are entirely participant led. During the activity, the group leader should focus on facilitating cooperative interactions and successful completion of the project.

- **Instructions to Companions:**

1. With your partner, you will be attaching each of the nine pieces of flatware to the larger wooden circle. Ask your partner to hold the large

wooden circle while you tie each fork, spoon, or knife to the circle with nylon fish line. Try to have each piece hang at a slightly different length, some higher and some lower, to give an interesting look and sound to the finished wind chime. Repeat for the second wind chime.



2. With your partner, tie on the spoon that will serve as the clapper, using the hole in the exact center of the larger wooden circle. Demonstrate to your partner how to run the nylon fish line up through the large wooden circle and through first one hole in one button, then down through the second hole in the button and back through the hole in the large wooden circle. This will anchor the fish line and allow you to tie the spoon through the hole in its handle. Adjust the length so the clapper can hit the flatware. Repeat for the second wind chime, helping your partner as needed.

3. Show your partner how to tie the second wooden circle to the clapper, using the hole in the bowl end of the spoon and the hole in the edge of the smaller wooden circle. The wooden circle should hang below the longest piece of the flatware. Repeat for the second wind chime, encouraging your partner to do as much as possible.

4. Working together, make a loop for hanging the wind chime. Run pieces of the fish line through holes at the outside edge of the larger circle, making several loops of a suitable length for hanging. Repeat for the second wind chime.

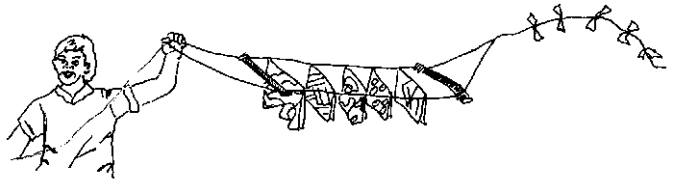
• **Expanding the Activity:**

If participants really enjoy this activity, make a wind chime as an entire group, creating one out of varying lengths of electrical conduit.

■ **Cooperative Interaction**
Reminder: *Prompt cooperative interactions if they are not occurring. But, discontinue prompting when cooperative interactions are occurring naturally.*

Sky Dragon Kite

(for preschool - adult)



• Introduction:

The Sky Dragon is a long kite constructed of string and wooden dowels from which hang bright paper units individually made by participants. The kite is cooperatively made by the participants and assembled by the leader. The project requires cutting and gluing and teaches the art elements of shape and color. Note: The kite is primarily decorative and will probably not fly.

• Resources/Materials:

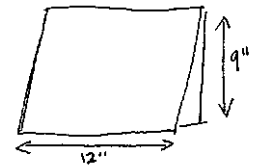
- 1 sheet of paper (12" X 18") per participant, folded in half to make a 12" x 9" rectangle
- One 20" piece of string per participant
- 3 half-inch thick dowels (or similar sticks) each 18 inches long to form kite frame
- Scissors
- White glue or glue stick
- Colored construction or tissue paper
- String
- Sponges for cleanup
- Sample folded paper unit with string glued inside fold

• Instructions to Group Leaders:

1. Discuss art as being about ideas. Ask, what sorts of things do we see in the sky? What shapes are there? What colors? Ask, has anyone flown a kite in the sky? What kind was it? Ask, who has seen a Chinese Dragon Kite? What did it look like? Ask, what is a dragon? Is our knowledge of dragons from observation or imagination?

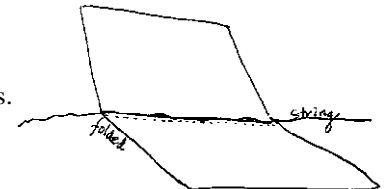
2. Explain that the participants will be making a section, or unit, of the Sky Dragon Kite. Ask them to think about what kind of a dragon they want to create. Suggest that they can use their imagination to create a peaceful or friendly dragon if they wish.

3. Show the folded piece of paper and string.

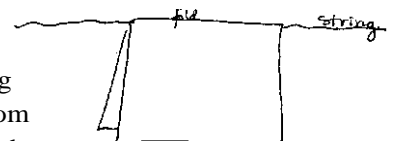


4. Demonstrate squeezing dots of glue along the inside of the fold.

5. Place the string on the dots of glue. Let the string tails hang out evenly on both sides.



6. Fold the paper so the string is contained inside. Explain that this is the unit of the kite that they will design.



7. Demonstrate possible ways of decorating the kite. Paper shapes can be cut or torn from the construction or tissue paper and arranged in a random design or a planned pattern. Encourage them to experiment with different arrangements before they glue anything down.

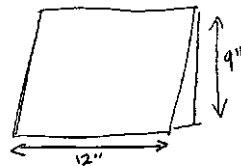
■ **Cooperative Interaction**
Reminder: *Modify activity plans for the ages and ability levels of the participants.*

8. Explain that both sides of the kite unit should be decorated because both sides will be seen.
9. When participants have completed their kite units, set up the kite "frame" at waist height somewhere in the room. For instance, it might be tied (under tension) to a doorknob and a file drawer handle.
10. Assist participants in tying their units to the kite frame, encouraging pairs to work together. Tie one end of the unit string to each side of frame and cut off excess. Stagger units at even intervals.
11. When all units are attached, the Sky Dragon Kite can be suspended from the ceiling (possibly from a light fixture.)

• **Instructions to Companions:**

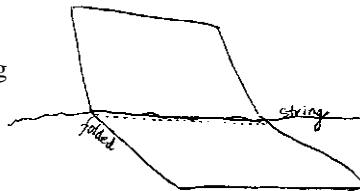
1. With your partner, gather the paper, string, scissors and glue.

2. Fold your paper and apply glue inside the folded line of the paper. Assist your partner to do the same.



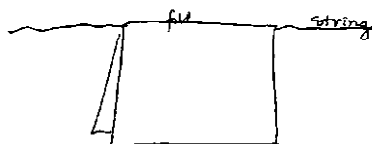
3. Place string on the glued line on your paper.

4. Assist your partner to place string on the glued line, too.



5. Fold your paper unit.

6. Assist your partner to fold his or her paper unit.



7. With your partner, choose colors of paper for decorating your kite units.

8. Demonstrate tearing or cutting paper shapes. Assist your partner in preparing a number of the torn or cut shapes.

9. With your partner, begin to arrange the shapes on one side of each kite unit. When design is the way you want it, glue the pieces down.

10. Repeat, arranging and gluing on the reverse side of the kite unit.

11. Together, clean up the work area and return supplies.

• **Expanding the Activity:**

- Visit a store that sells a variety of kites.
- Take the dragon kite to an open area in a park and "fly it" (it is unlikely that it will actually fly), or perhaps attach it to a tree branch and let it "fly" that way. Participants could bring other kites to fly.

■ **Cooperative Interaction**
Reminder: *As an activity ends, say something positive to each group.*

Games

■ **Group Challenges** (for preschool - junior high)

■ **Israeli Folk Dance** (for preschool - adult)

■ **Parachute Games** (for preschool - adult)

• **Games**

Group Challenges

(for preschool - junior high)

• **Introduction:**

The purpose of this activity is to get a group working together, problem-solving and completing a task cooperatively. The entire group must complete the task as specified. An objective is to be willing to give and accept help. No challenge activity can be done individually.

It's fun to add a "story line," e.g., "We're going on a hike today. We'll pretend to be explorers of this area and we will need to work together." NOTE: These activities are entirely adult led.

• **Resources/Materials:**

"All Aboard"

- one 2 x 2 foot piece of 3/4" plywood

"Electric Fence"

- A sturdy rope is stretched between 2 trees, tied to the trees about 4 ft. from ground level.

"River Crossing"

- Two 2x6 boards, one 3 feet long and one 2 feet long
- A large flat area

- 2 small plywood platforms
- 2 large plywood platforms

"Save the Zucchini"

- Ice cream bucket with handle
- Zucchini or other irregularly shaped vegetable
- Log about 1 foot thick and 5 feet long
- Area with small drop-off

- Forked stick (about 3-4 feet long) and sturdy enough to support vegetable in bucket
- Board (2x10 or 2x12) about 8 feet long

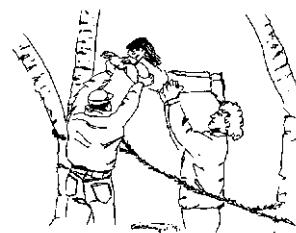
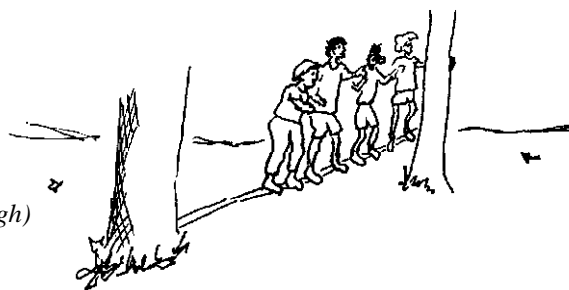
• **Instructions to Group Leaders:**

"All Aboard"

The objective is to have everyone stand together on the plywood for a given amount of time.

"Electric Fence"

The entire group must get over the "fence" (rope) without touching it. "Electricity" extends into trees, rope, and below the rope to the ground. None of these areas can be touched. If anyone touches the "fence", even helpers, all who have gotten over must



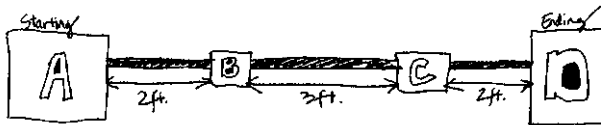
come back and the group begins this challenge again. No jumping over or throwing of a person is permitted. "Electric Fence" can be adapted so that older participants go over the rope, but younger participants can go under.

"River Crossing"

Two participants must get from first large platform to second large platform across the "rushing river," without anyone falling in. They will leap-frog the 2 x 6 boards to bridge the spaces between platforms

A, B, C, and D as

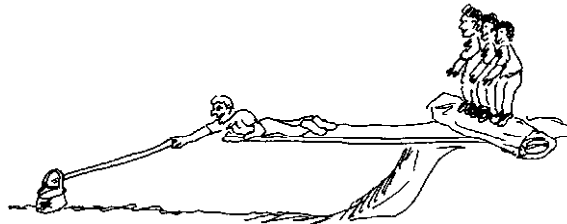
they "cross the river." If either does fall in, both must come back and begin again. So, participants should be asked to think about how help might be needed.



"Save the Zucchini"

This requires an area with a drop off; the ice cream bucket holding zucchini or another vegetable is placed in the drop off. Participants need to figure out, as a group, that a

very light person needs to lie (do not let anyone walk out on the board) on the board positioned like a diving board. The log goes across the end of the board on the ground and other members of the group stand on it. NOTE: Get most participants on the log, with a couple off to steady the rest for balance. Participants may not go down the incline. They can only use board, log, and stick to "save" the zucchini. Do not use a deep drop off, and make certain that the board is well-secured under the log.



Israeli Folk Dance

(for preschool - adult)



• Introduction:

This Israeli folk dance, "Yesh Lano Tayish" or "We have a goat," is performed in pairs, is simple enough for children to follow, yet varied enough for adults to enjoy. It provides opportunities to cooperate with the other dancers and to gain experience with dance movements. NOTE: This activity is entirely adult directed.

• Resources/Materials:

-Large room or open outdoor area.
-Tape or record player

- Tape or record of Israeli folk music in 4/4 time

■ **Cooperative Interaction**
Reminder: *Frequently a disabling condition presents interaction challenges never experienced by peers without disabilities. They will need instruction from the adult leader in how to cope with communication, movement, and other types of limitations.*

■ **Cooperative Interaction**
Reminder: *Modifications
in procedures can turn a
seemingly impossible task
into an enjoyable pursuit.*

• **Preparing the Environment:**

- If any of the dancers uses a wheelchair, the two lines of participants may need to stand **farther** apart to allow **more freedom** of movement.
- If the group is large, two or more sets may be formed.

• **Instructions to Group Leaders:**

1. Everyone finds a partner (pair people with and without disabilities).
2. Dancers form two lines (the "set"), with partners facing each other:

X X X X X X
X X X X X X

The head couple is at the right (note bold X's).

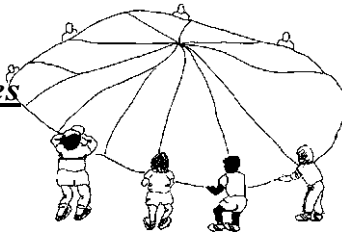
3. The two lines should stand 5-6 feet apart.
4. The head couple joins their hands and sashays (galloping side-step) down and between the two lines to the last couple.
5. When the head couple reaches the last couple, they sashay back up between the two lines to their original positions.
6. When the head couple reaches its original position, they release their joined hands and each dancer walks/dances individually along the outside of his or her respective line toward the bottom of the set.
7. As the head couple releases its hands, all the other dancers turn a 1/4 turn to face the direction of the head couple.
8. As each head dancer proceeds along the outside of the set, the other dancers follow their respective head dancer.
9. When the head couple meets at the bottom of the set, they face each other and join both hands again, raising their arms to form a "bridge."
10. The other couples, who have been following the head dancer in their line, each meet in turn at the bottom of the set. When they reach the bottom of the set, they join inside hands to pass under the bridge formed by the head couple and back up to the top of the set.
11. When all the dancers have passed under the bridge formed by the head couple, they release hands and step back facing their partner to begin the dance again, this time with a new head couple.

• **Expanding the Activity:**

If participants are sufficiently mature, take them to a film such as, "Fiddler on the Roof" to see Israeli dancing, deepening their appreciation for Jewish culture.

Parachute Games

(for preschool - adult)



• Introduction:

Parachute games lend themselves to many forms of creative and cooperative play. For example, participants can lift the edge of the parachute in a sudden upward thrust to cause it to billow in the air like a mushroom. While the parachute is in the air, participants can step under the parachute and sit down, pulling the parachute fabric beneath them. NOTE: This activity is directed entirely by the adult leader.

• Resources/Materials:

- Parachute (available from playground supply stores)
- Large open area

• Preparing the Environment:

1. For participants who have difficulty grasping, elastic straps can be sewn to the edge of the parachute and slipped around their wrists.
2. If needed, nondisabled participants may stand behind participants with disabilities to assist in raising and lowering the parachute.

• Instructions to Group Leaders:

1. Ask players to distribute themselves evenly around the circumference of the parachute, with persons with and without disabilities being interspersed.
2. Tell them to grasp the edge of the parachute, using both hands.
3. Tell them that you will say "lift" and that when you do, all the players should quickly extend their arms, together, upward, causing the parachute to "mushroom" in the air.
4. Explain that when the parachute is extended as high as it will go, each player should take one or two steps toward the center of the circle and sit down, pulling the parachute beneath him or her for an inside view of the parachute.

• Expanding the Activity:

1. While the parachute is mushrooomed in the air, designated participants can cross the circle either individually or in pairs. Two people on opposite sides of the circle could also trade positions.
2. Several balls may be placed on top of the parachute. Everyone works together to keep the balls in the air, and on top of the parachute, without letting any of them escape from the parachute surface.

■ **Cooperative Interaction**
Reminder: *Emphasize the importance of enjoying an activity with another person rather than the speed and/or accuracy with which it is done.*

Outdoor Education

■ **Animal Poetry**

(for elementary - adult)

■ **Identifying and Pressing Wildflowers**

(for preschool - adult)

■ **Life in the Pond**

(for preschool - adult)

■ **Making Plaster Casts of Animal Tracks**

(for junior high - adult)

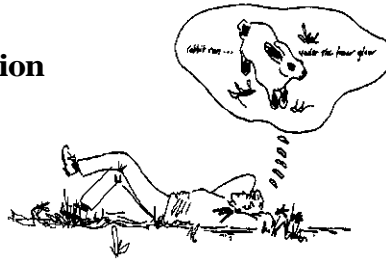
■ **One of a Kind**

(for preschool - adult)

• **Outdoor Education**

Animal Poetry

(for elementary - adult)



• **Introduction:**

Everyone can be a poet, at least to some extent, and yet lots of people think any kind of poetic expression is beyond their capacities. This activity is designed for any participant -- or group of participants -- to create a poem. In doing so, they recognize and experience the inspirational value of wildlife. NOTE: This activity is entirely directed by the adult leader.

• **Resources/Materials:**

- Park, wooded area, or other natural environment
- Paper
- Pencils or pens

• **Instructions to Group Leaders:**

1. Explain to the group that poetry is an art form, accessible to everyone in some way. A poem is an organized way of expressing thoughts through language.
2. While sitting in a natural environment, ask everyone to pick an animal to think about, either wild or domesticated.
3. Ask everyone to close their eyes and imagine they are the animal, living in its natural environment. If you choose, guide the participants through the imagining process while their eyes are closed. They can imagine how the animal looks, where it travels, how long it lives, what it eats, and how other plants and animals look from its perspective.
4. Ask the participants to write a short poem about their animals. Poems can be free verse or rhyming. Companions can pair up with their partners to write down the poem of their friend, or create a poem together. As a group, share poems.
5. A group poem may also be cooperatively created. Everyone thinks of one animal. Each person contributes one word. One or more participants or the group leader can put all the words together to form a poem while the others discuss their experiences "becoming" the animal.

• **Expanding the Activity:**

- Have the participants write "Haiku", a poetry form originated by the Japanese. Haiku consists of three lines of five, seven, and five syllables each. The emphasis is on the syllables, not on rhyming.

This activity taken from: Western Association of Fish and Wildlife Agencies and the Western Regional Environmental Education Council. (1985) Project Wild: Secondary Activity Guide. Western Regional Environmental Education Council: USA.

Identifying and Pressing Wildflowers

(for preschool - adult)



• Introduction:

Using a plant identification guide, partners can learn to identify wildflowers and appreciate their worth. They will cut two samples of the flowers, squeezing them between several sheets of facial tissue and pressing them between the pages of a thick catalog. Dried flowers can be preserved by mounting them on sheets of tagboard and covering them with clear contact paper, or framing them under glass. Preserved, mounted flowers can be used as bookmarks, displayed on a wall, or placed in an album. They make excellent gifts.

• Resources/Materials:

- Wooded area or field
- Large catalog
- Pencils, pens, scissors
- White glue
- Clear adhesive plastic (shelf paper works well)
- Plant identification guides
- Notecards
- Tagboard
- Toothpicks
- Frame with glass
- Photo album with magnetic pages

• Preparing the Environment:

Teach participants to use a plant identification guide to identify wildflowers. If rare or protected species grow in the area, show participants pictures of the plants they are not to cut. Suggest that partners pick flowers and weeds that are relatively small and flat, since they tend to dry more quickly.

• Instructions to Group Leaders:

After the initial explanation of the activity, the participants will proceed on their own. The adult leader should focus on facilitating cooperative interactions and successful completion of the activity.

• Instructions to Companions:

For a floral arrangement covered with adhesive plastic:

1. With your partner, take the supplies for this activity: a plant identification guide, a large catalog, a stack of notecards, a pen or pencil, a scissors, and a box of facial tissues.
2. Go into a wooded area or field. Find interesting wildflowers using the guide to identify them.
3. Taking turns with your partner, cut several blossoms of each flower. Place them between sheets of tissue and insert them into the catalog. Write the name of each plant, the date it was cut, and the location it was found on a notecard. Your partner may need help with writing.

■ **Cooperative Interaction**
Reminder: *Is an adaptation needed for this activity to enhance the participation, success, and enjoyment on the part of a participant with a disability? And, don't forget that the enjoyment and learning opportunities of nondisabled participants are important, too.*

- **Cooperative Interaction**
Reminder: *Develop directions for the task in such a way that they require an interdependent (cooperative) effort rather than independent or competitive efforts.*

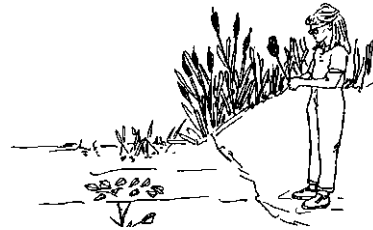
4. Allow plants to dry for at least two weeks.
5. After they are dry, help your partner choose a piece of tagboard that goes well with the flowers you wish to mount. Choose one for yourself, too.
6. Plan your designs.
7. Show your partner how to apply glue onto the flowers using a toothpick. Dab a very small amount of white glue on your dried flowers with the toothpick. Encourage your partner to try it.
8. Lay the flowers gently on the tagboard. Move them around with the toothpick to position them as desired. When the design is what you want, press the flowers in place. NOTE: A pair of tweezers is useful in placing flowers on tagboard. If your partner has difficulty moving, he or she may need assistance using tweezers.
9. Put clear adhesive plastic over the design. Cut the plastic a little larger than the tagboard. Press into place. Trim off the extra plastic. (To make bookmarks, cover both sides with plastic).

• **Expanding the Activity:**

- Instead of picking and drying flowers, partners could use a 35mm camera with a close-up lens to photograph specimens. Request duplicate prints when the film is developed so that each person has a set of photographs. Partners could then create photo albums with their prints.
- Participants can also investigate folklore concerning the medicinal properties of various plants, and their use as fabric dyes.

Life in the Pond

(for preschool - adult)



• **Introduction:**

In this activity, participants discover that there is a great variety of living organisms in a pond or lake. A single drop of pond water is full of an unbelievable number of different creatures. Zooplankton, one type of animal living in ponds and lakes, are very small. Many lakes house literally trillions of them during the summer. They eat algae (the Greek word for "plant"), and they are in turn eaten by many kinds of fish, including bluegills and sunfish.

• **Resources/Materials:**

- White or light colored shallow wash basins, dishpans, or similar containers (not buckets): one for each 3-5 participants
- Pond study nets (1 per group)
- Cups or small containers
- Magnifying glass: 1 per group

• **Instructions to Group Leaders:**

1. Emphasize to the group that zooplankton, though small, are living creatures and need to be handled very gently. Also, tell the participants, that, as much as possible, they should avoid disturbing the zooplankton's home environment while collecting specimens.
2. Ask the participants to watch as you demonstrate how to collect specimens.
3. Fill pan with water (to 1/2" from top).
4. Move net through water, low enough to brush through weeds, but not on the bottom.
5. Bring up net and quickly turn inside-out over pan, dipping it into the water in the pan so as to release any small creature clinging to the bottom of the net.
6. Tell participants to be sure to keep the creatures in water. When they have completed their observations, they should gently return the creatures to the pond.

• **Instructions for Companions:**

1. With your partner, fill the shallow pan with water up to 1/2 inch from the top.
2. While your partner holds the pan, gently move the net through the water to collect specimens, taking turns holding the pan and collecting specimens.
3. Together, look carefully in the pan for moving creatures.
4. Capture some creatures with a cup and view closely with a hand lens or magnifying glass. With your partner, take turns holding the cup and observing the specimens. NOTE: Be sure to handle creatures with care! It's easy to injure or kill such small creatures.
5. When you're done observing the creatures, return them to the pond. Keeping the edge of the pan or cup near the surface of the pond, slowly pour the creatures back into the pond.

• **Expanding the Activity:**

- Note which creatures are active on the surface and which move about beneath it.
- Determine, if you can, whether the animal composition varies with water depth, bottom type, exposure to light, water temperature, vegetative cover, time of day and season of the year.

■ **Cooperative Interaction**
Reminder: *Prompt cooperative interactions if they are not occurring. If they are occurring, reinforce them in a low-key manner.*

Thanks to the Bell Museum of Natural History, Imprint, Vol III #2, Spring 1986 for some of the content in this activity plan.

Making Plaster Casts of Animal Tracks

(for junior high - adult)



• **Introduction:**

In this activity, partners work together to create lasting mementos of wildlife experiences. Additionally, they learn to increase their observation skills by exploring their surrounding environment.

• **Resources/Materials:**

- | | |
|--|------------------------------|
| - Spray shellac or plastic | - Water |
| - 2-inch wide strips of cardboard or tin | - Knife or scraping material |
| - 2 cups dry plaster of Paris for each track | - Petroleum jelly |
| - Mixing cans | - Masking tape |
| | - India ink or black paint |
| | - Paint brushes |

• **Preparing the Environment:**

This activity will need to take place over a day's time and in an area wild enough for tracks to be found. In advance of the activity, make an example of an animal track plaster cast to show to the group.

• **Instructions to Group Leaders:**

1. Describe how to make plaster casts of animal tracks (as detailed in "Instructions to Companions"). Show sample to the group.
2. Assist participants in locating good, clearly defined animal tracks.
3. Emphasize the importance of safety precautions when using the knife blade and clear plastic.

• **Instructions to Companions:**

1. Working with your partner, locate two sets of tracks, so you can make two plaster casts side-by-side.
2. With your partner, clean tracks of loose particles of soil, twigs, leaves, or other litter.
3. Spray your track with shellac or plastic. Assist your partner in spraying his or her track, if necessary.
4. Form a ring around your track using the 2-inch wide strip of cardboard or tin. Press the ring approximately one inch into the ground. (The remaining inch forms an edge for the plaster mold.) Encourage your partner to do the same for her or his track.
5. Put about 2 cups of water in a tin can, stirring in dry plaster of Paris slowly until mixture is about as thick as heavy cream. Encourage your partner to do the same. NOTE: Be sure to add the plaster to the water, not the other way around - the plaster will not harden correctly if you do it backwards.

■ **Cooperative Interaction**

Reminder: Reinforce cooperative interactions when they are occurring.

6. Pour mixture carefully into the mold until the plaster nearly reaches the top. Assist your partner in pouring his or her plaster into the mold, if necessary.
7. Let plaster harden at least 15 minutes. If soil is damp, hardening may take longer.
8. When plaster is hardened, lift cast out, remove ring, and clean the cast by scraping with a knife blade and washing. Assist your partner with his or her track as needed.
9. Working with your partner, apply a thin coat of petroleum jelly to track and surface of the cast.
10. Place cast on a flat surface, track side up, and surround casting with a 2-inch strip of cardboard or tin as before. Tape ring securely around cast.
11. With your partner, mix plaster of Paris and pour into mold, making certain that top surface of casting is smooth and level with the mold. Allow two hours for plaster to harden.
12. When the plaster is dry, show your partner how to carefully remove the mold. Separate the two layers and wipe excess petroleum jelly from face of cast. Scrape rough places with knife blade (Be careful!).
13. When cast is completely dry, paint inside of track with India ink or black paint. Label with name of track. If desired, apply a coat of clear shellac or plastic to protect and preserve the cast.

• **Expanding the Activity:**

- To hang the cast as a wall plaque, place a loop of wire in back of casting while it is still soft (step #11 of instructions).
- Visit an interpretive center to learn about and identify other animal tracks.

This activity taken from: Ford, P.M. (1983). Eco-Acts: A manual of ecological activities. University of Oregon: Eugene.

One of a Kind

(for preschool - adult)



• **Introduction:**

This activity teaches how people learn about themselves and about their environment. Each person is given a leaf from the same tree. Tell them to examine it so carefully that they will be able to pick it out of a whole pile of such leaves. During the next five minutes, they should look at it, feel it, hold it at different angles, etc. Then put all the leaves together—along with some leaves that no one has explored—and have them find theirs. It's one of a kind! When everyone has found his/her

■ **Cooperative Interaction**
Reminder: *Emphasize the importance of enjoying an activity with another person rather than the speed or accuracy with which it is done.*

unique leaf, the participants will make leaf prints. NOTE: This activity is entirely adult led.

• **Resources/Materials:**

- Leaves—from different types of trees and/or plants
- Blindfold (a piece of cardboard with a piece of cloth glued to the bottom works well. It's like a Halloween mask but without eye holes).
- Tempera paint or ink for paper; textile paint for cloth (good to practice on paper first).
- Artist brushes (waterpaint brushes)
- White and colored copy paper and/or construction paper
- Drawing paper or paper towels for blotting; rollers can be used, also.
- Newspapers

■ **Cooperative Interaction**

Reminder: *Structure an activity to promote cooperative interactions.*

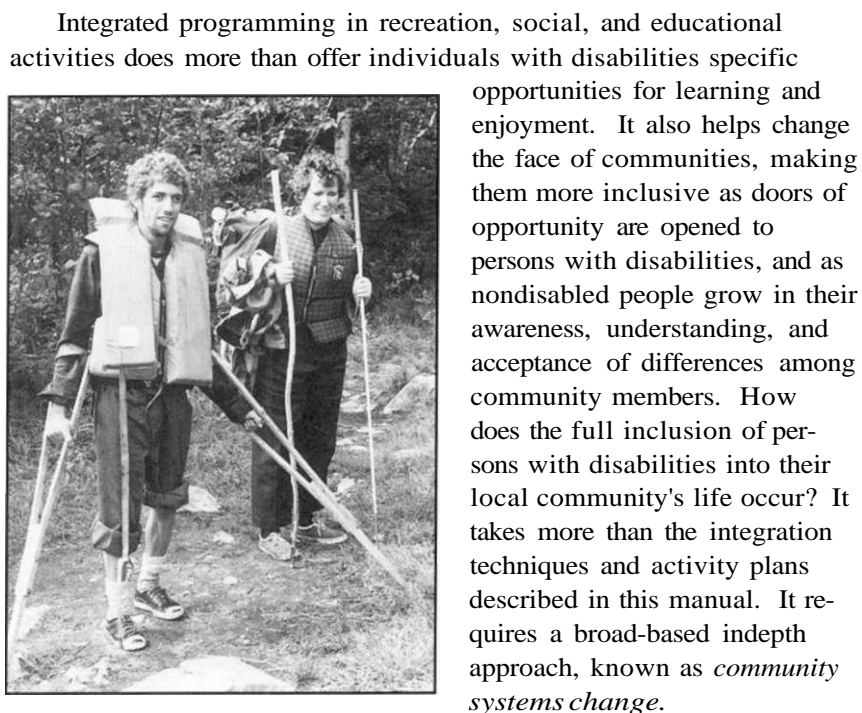
• **Instructions to Group Leaders:**

1. Cover a large table with several thicknesses of newspaper.
2. Distribute paint and brushes.
3. Each person paints the back of a leaf.
4. Distribute paper that is letter-size. NOTE: 8 1/2" x 11" paper will be better if prints are to be large.
5. Each person lays a painted leaf (paint side down) on paper in the desired position.
6. Distribute paper towels.
7. Each person lays a paper towel carefully on top of the leaf and presses in one direction only, out from stem of leaf.
8. Remove paper towel and leaf.

• **Expanding the Activity:**

- Repeat process using cloth. Plain dish towels can be used as a vehicle for printing. Make certain that ink is waterproof if it is to be used to dry dishes later.
- Copy paper can become stationery when a leaf print is applied; note cards can be made from folded construction paper.

Chapter 5 How to Integrate Successfully: Programs That Change Lives and Communities



Integrated programming in recreation, social, and educational activities does more than offer individuals with disabilities specific opportunities for learning and enjoyment. It also helps change the face of communities, making them more inclusive as doors of opportunity are opened to persons with disabilities, and as nondisabled people grow in their awareness, understanding, and acceptance of differences among community members. How does the full inclusion of persons with disabilities into their local community's life occur? It takes more than the integration techniques and activity plans described in this manual. It requires a broad-based indepth approach, known as *community systems change*.

Community systems change is a process that involves thoughtful action on different levels. It may begin with parents and individuals with disabilities learning the skills needed to bring about inclusion in a specific school setting or community activity. As they advocate for change, they may educate and challenge organization personnel, educators, and others who then start reshaping all their programs to facilitate the full inclusion of persons with disabilities. This grassroots process of bringing about change can grow — and indeed has grown --beyond the community into a national movement to change laws and policies.

This chapter profiles successful integrated programming that illustrates the process and outcomes of systems change at two levels: the program development level, and the agency-wide level. These profiles may provide ideas for your program. In addition, by offering illustrations of successful approaches to integrated programming, the profiles can provide support for those who are advocating for inclusion.

The chapter includes two additional pieces of information useful to those establishing and/or evaluating integrated programs: a list of indicators of quality in integrated programming and suggestions for promoting involvement in integrated programs (see next page).

Chapter 5: Contents

- **Traits of a Quality Integrated Program**
Page 100
- **Promoting Involvement in Integrated Programs**
Page 101
- **Program Profiles**
Page 102
- **Resources for Further Information**
Page 111

Traits of a Quality Integrated Program

What constitutes a quality integrated recreation program for a person with a disability? Are there signs for which a parent, careprovider, or consumer can look? Are there traits that service providers can strive to include in their programs? Through research at the University of Minnesota we have developed the following list of indicators of quality in community recreation services, focusing on the level of commitment to integration:

What constitutes a quality recreation program for a person with a disability?

- Administration
 - Statement of mission/philosophy reflects belief in integration.
 - Staff hiring criteria give credit for education and/or experience reflecting integration.
 - Adherence to laws and legislation pertaining to serving persons with disabilities in least restrictive environments.
 - Staff training priorities emphasize continuing education in topical areas such as innovations and techniques in integration, use of community-based consultants, etc.
 - Documentation of integrated services/interventions is provided and the effects on participants is emphasized.
- Nature of Program
 - Features integrated programs, but could provide segregated-integrated programs, too (allows for choice).
 - Provides flexible programs that allow for ongoing modifications and adaptations (allows for partial participation, if needed).
 - Program goals reflect an integration emphasis, for example, interdependent activity provisions, friend-oriented interaction modes, etc.
- Activities
 - Are chronologically age-appropriate, functional, and have lifelong learning potential.
 - Are generalizable across time and environments.
 - Allow for personal challenge (dignity of risk) and participant choice.
- Environmental/Logistical Considerations
 - Physically accessible and easily modifiable.
 - Offered at a convenient and appropriate time for participants.
 - Cost is reasonable and sponsorships are available.
- Techniques and Methods
 - Ongoing assessment and evaluation of participants' recreation needs, preferences, skills, and enjoyment levels are undertaken.
 - Parents/careproviders and consumers are included in assessments and evaluations.
 - Integration techniques such as task analysis, environmental analysis, partial participation, and companionship training are utilized regularly.
 - Ongoing program evaluation conducted to make adaptations as needed.
 - Appropriate involvement of unpaid or paid partners is available.

From "Integrated Community Recreation: A Search for Quality," by Kirsten M. Kuhnly, published in IMPACT: Feature Issue on Integrated Leisure and Recreation, Fall 1989, Institute on Community Integration, University of Minnesota.

Promoting Involvement in Integrated Programs

How can you facilitate the involvement of persons with disabilities in an integrated program? The Community Leisure Integration Program (C.L.I.P.) in Madison, Wisconsin, approaches the task by training its staff to activate the following guidelines:

- Build a program concentrating on neighborhood-based activities first, but use a variety of environments and activities.
- Promote potential friendship relationships by choosing environments and activities that offer a chance for people to share quality time with the same people on a consistent basis (e.g., memberships in a YMCA or neighborhood center, or activities that occur in the same place and time on a regular basis).
- Accept partial participation. A person doesn't need to "wait to participate" until he or she has the "necessary prerequisite skills."
- Adapt activity rules only when necessary.
- Sensitize consumers and the general public. Visit an activity site beforehand to assess a person's potential involvement there.
- Encourage consumers to bring a friend or family member to an activity with them, if that will help increase their comfort level or develop their social or friendship skills.
- Encourage other concerned people to get more involved in the person's life. Don't allow people to become reliant on one or two people in their lives. Develop a "circle of friends."
- Fade out active involvement as a staff member once participants with disabilities have become comfortable and able to be involved in an activity on a semi-independent or independent basis.
- Select chronologically age-appropriate activities, but be aware that some activities transcend age.
- Select some activities that can be engaged in year-round and throughout one's life (e.g., museum visitations).
- Don't "drag out" activities unnecessarily. Be aware of participants' energy and attention levels.
- Be a good role model and community builder (get others involved).

How can you facilitate the involvement of persons with disabilities in an integrated program?

Contributed by Chad Thom, School-Community Recreation, Madison Metropolitan School District, Madison, Wisconsin.

Program Profiles

Profiles of Successful Integrated Programs

- **An Experience With a "Kick": 4-H Horseback Riding**
Page 102
- **An Electrifying Experience: Meadowlake Elementary School**
Page 103
- **Integration on the Mississippi River: Dowling School**
Page 104
- **The Art of Integration: KIDSPACE Gallery**
Page 105
- **Wheelchairs, Dogsleds, and Canoes: Wilderness Inquiry**
Page 106
- **Accessible to All: The Jewish Community Center of the Greater St. Paul Area**
Page 107
- **Companions and Challenges: Howard County Recreation and Parks Department**
Page 108
- **Building Bridges to the Mainstream: Chapel Hill Parks and Recreation Department**
Page 110

• An Experience With a "Kick": 4-H Horseback Riding

It all started about 14 years ago when a group of teachers and parents wanted to offer children with disabilities opportunities to experience the feeling of belonging, the pride of accomplishment, the empowerment of decision-making, and the rewards of socializing with a



variety of people. They approached the Ramsey County (St. Paul, Minnesota) Extension Service's 4-H program with their ideas. The result was a 4-H program that pairs teens without disabilities with teens who have disabilities in a supportive learning relationship

built around horseback riding. Riders with disabilities learn basic riding skills while their peers without disabilities learn how to lead the horses and assist their partners as needed. Specially trained horses accustomed to wheelchairs, crutches, and a special mounting ramp are used.

Several benefits of the experience have become evident. In addition to offering physical exercise to the riders, the activity also offers them the exhilaration of being astride a large, powerful animal and controlling its movements. Through the program, participants experience growth in self-concept, social competence, and mutual liking.

The rewards of the program for the participants with disabilities are perhaps most clearly presented in the words and accomplishments of riders such as Kari Sheldon. Kari is a 13-year-old who has a spinal disease that requires her to use a wheelchair; but that doesn't keep her from riding. "I really like riding horses," she says. "It feels good to set my mind to it and be able to do it. And it's fun to be able to do something that people didn't think I could do." Kari has ridden in demonstration horse shows for riders with disabilities and won a ribbon in one of them. She says she likes trotting best. "Sometimes I feel like I'm going to fall off when I trot, but I don't. Knowing I can do this makes me feel like I can do other things too."

Parents of children with disabilities comment frequently that they have never seen their child as animated as when she or he is on a horse and riding as independently as possible. This is an extra "kick" for the parents and children...and perhaps even for the horses, too.

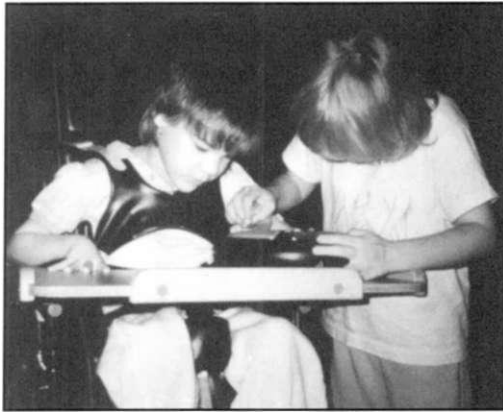
Reprinted from "An Experience with an Extra 'Kick'", by Caye Nelson, published in IMPACT: Feature Issue on Integrated Leisure and Recreation, Fall 1989, Institute on Community Integration, University of Minnesota.

- An Electrifying Experience: Meadowlake Elementary School

Meadowlake Elementary School in suburban Minneapolis is a regular public school with two classes for children with severe cognitive, physical, and sensory disabilities. It has a tradition of creating programs that pair children with and without disabilities for recreation activities. One such program introduced electronic games as a vehicle to promote interaction between the children. The goals of the program were to teach age-appropriate leisure skills to two students with severe multiple disabilities, and to promote social and cooperative play skills between students with and without disabilities. Both of the students with disabilities were nonverbal, nonambulatory, and functioned in the severe range of mental retardation.

As a result of this program's success with its first students, those involved are eager to find other ways to bring children with and without disabilities together for mutual benefit.

The integrated recreation program was a success. The students with disabilities increased their skills on three electronic games (Toss



Across, Flash, and Simon) and also learned to play more appropriately during the games. Furthermore, social interactions between students with and without disabilities became more frequent, both during the instructional period of the program and during the free play period in the classroom. Following

program sessions, the children without disabilities were given a choice to return to their regularly scheduled program (recess), or to remain with their new friends. Consistently, they chose to remain and play with their friends. In fact, both of the students without disabilities asked the special education teacher where their new friends lived, expressing a desire to play with them after school.

The program's success can be attributed to the integration strategies that were implemented, which included the use of task analyses; an error correction procedure; behavior-specific positive feedback; and networking between the therapeutic recreation specialist, classroom teachers, and parents/careproviders. In addition, the children with disabilities received extra training on the games from their parents at home to encourage generalization and skill maintenance. They also were given opportunities to try their new skills at local community centers.

As a result of this program's success with its first students, those involved are eager to find other ways to bring children with and without disabilities together for mutual benefit.

Reprinted from, "An 'Electrifying' Experience", by Jenny Cameron, published in IMPACT: Feature Issue on Integrated Leisure and Recreation, Fall 1989, Institute on Community Integration, University of Minnesota.

- Integration on the Mississippi River: Dowling School

Michael Dowling School, named after a man who became disabled in a blizzard in the late 1800's, was started in 1920 to serve children with physical and developmental disabilities. Located on the banks of the Mississippi River in Minneapolis, it has a long history of innovative integrated programming beginning with its "reverse mainstreaming" efforts in the 1960's and continuing to its present integrated environmental education program.

In 1987, Dowling Urban Environmental Learning Center came into existence as a totally integrated environmentally-based elementary school program within the Minneapolis Public Schools.

Environmental education and integration were identified as major, dual areas of emphasis. During the first year of the program, administrative staff began preparing teachers and students for integration. Regular education students were taught how to communicate and be friends with students with disabilities through use of the *Special Friends* program (Voeltz et al., 1983. See resource list on page 111). Teachers received instruction on making integration work in their classrooms. Following these initial activities, each special education class was paired with a regular education classroom. This is when integrated participation became part of the routine at Dowling School.



Michael Dowling's legacy has served students with disabilities well throughout the 20th century, adapting to changing perceptions of their needs and abilities.

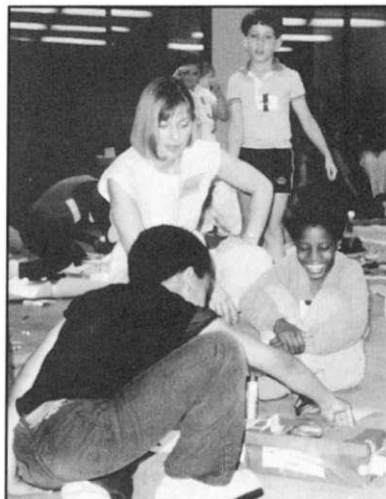
Having made connections with area nature centers and other sites appropriate to the curriculum, Dowling School staff coordinated field trips and occasional overnight camping trips to these area sites for students in grades three through six. Although a considerable amount of staff assistance is required for out-of-school events, Dowling students with disabilities have become an integral part of the regular program, and every effort is made to include them in these activities. Ongoing integration efforts include developing instructional units related to environmental education for each grade level in each curriculum area; the units are designed to accommodate students of varying abilities.

The Dowling School program has been very successful in facilitating cooperative interactions between students with and without disabilities, in providing special education students with appropriate peer models, and in promoting environmental learning. Michael Dowling's legacy has served students with disabilities well throughout the 20th century, adapting to changing perceptions of their needs and abilities. It is now preparing them for life in the communities of the 21st century.

Taken from, "Integration on the Banks of the Mississippi River" by Cheryl Light, Laurelle Pearson, Colleen Baumtrog, and Howard Miller, published in IMPACT: Feature Issue on Integrated Leisure and Recreation, Fall 1989, Institute on Community Integration, University of Minnesota.

- The Art of Integration: KIDSPACE Gallery

The KIDSPACE Gallery in the Minnesota Museum of Art, St. Paul, was the site of several integrated art programs conducted over a 3-year period. The programs were part of a study of the effectiveness of such approaches in promoting social interaction between children with and without disabilities. Each group of participants with disabilities (which included children with disabilities such as autism and moderate to severe mental retardation) was matched with a group of same-age nondisabled students from the same school. Students made monthly visits to KIDSPACE, participating in activities structured to encourage cooperative social interactions such as painting a picture together or creating a sculpture as a group. Nondisabled students attended several informational sessions in which they were taught ways to involve their peers with disabilities in the art activities, as well as ways to communicate with students who had little or no spoken language. Program staff reinforced children with and without disabilities for interacting during the activities.



The integrated art project was successful in increasing social interactions between students with and without disabilities.

In addition to monthly trips to KIDSPACE Gallery, one program added integrated art classes conducted at the students' school. The students with severe handicaps attended an art class with their nondisabled companions, receiving instruction in basic art skills from their own teachers, and working on projects similar to the ones their nondisabled peers were assigned to complete.

The integrated art project was successful in increasing social interactions between students with and without disabilities. Two strategies helped facilitate that interaction, especially as the program began. First, in order to encourage students with and without disabilities to begin to interact in the initial stages of the art program, adult leaders occasionally prompted participants to cooperate (e.g., share materials, assist one another), and to interact by encouraging each other, complimenting each other's work, and conversing about their favorite activities. In addition, participants were reinforced regularly when the program leader observed them cooperating or interacting. Later in the program, it became less necessary to prompt and reinforce. At that point, teachers were instructed to be more "laid back", intervening only when interactions came to a halt or became unproductive.

The beauty of the KIDSPACE Gallery program and others like it is its potential to foster many levels of creativity, including visual, tactile, intellectual, and social creativity.

Contributed by Kathy MacMahon, Program Leader, KIDSPACE Gallery, Minnesota Museum of Art, St. Paul.

• Wheelchairs, Dogsleds, Canoes: Wilderness Inquiry



The relatively new field of integrated wilderness programming/travel holds great promise as a means to effect personal growth and positive change in lifestyles for anyone, but especially for people with disabilities.

Wheelchairs, dogsleds, and canoes may seem to have little in common, but they are seen together with increasing frequency throughout the wild areas of North America. The relatively new field of integrated wilderness programming/travel holds great promise as a means to effect personal growth and positive change in lifestyle for anyone, but especially for people with disabilities. One of the leading organizations in the field of integrated outdoor adventures is a Minneapolis-based non-profit group called Wilderness Inquiry. Founded in 1978, Wilderness Inquiry conducts canoe, kayak, and dogsled trips with

persons of varying abilities, including people with serious physical, cognitive, or emotional disabilities.

Two features distinguish integrated wilderness programs from other types of adventure programs. First, they use wilderness as a medium to effect change in personal characteristics such as self-esteem, independent living skills, attitudes toward risk, and perceived level of capability. These overall goals are not unlike those of many conventional therapeutic programs. Second, these programs include a heterogeneous mix of people. For example, a typical Wilderness Inquiry group includes two people who use wheelchairs, one who uses crutches, two people with sensory impairments or other disabilities, as well as people without disabilities. Instead of segregating people according to type of disability or age, these groups include a broad mix.

Water-based activities (canoeing, kayaking) are ideally suited for persons with mobility impairments since those who push their own wheelchairs generally have enough upper body strength to paddle one of these craft. Even if they cannot paddle, they can still participate by riding in the canoe or kayak. The greatest physical challenge facing most participants with disabilities in these activities is balance. Usually, balance problems can be remedied with simple adaptations, such as a backboard or other specially adapted gear. Securing a mix in the abilities of participants can also offer solutions to balance and certain logistical problems. For example, people with balance problems often team up with others who are using wheelchairs in crossing trails and portages. The wheelchair provides a stable base of support for persons with balance problems while they, in turn, provide an extra boost of physical power to get over rough terrain. These symbiotic helping relationships are continuously encouraged on our trips. The key ingredients to success are cooperation, trust, and allowing enough time for a task.

Reprinted from "Wilderness Inquiry: Integration Through Adventure", by Greg Lais, published in IMPACT: Feature Issue on Integrated Leisure and Recreation, Fall 1989, Institute on Community Integration, University of Minnesota.

- Accessible to All: The Jewish Community Center of the Greater St. Paul Area

In the spring of 1984, the Jewish Community Center of the Greater St. Paul Area called an open meeting of parents of children with disabilities to determine the recreational needs of their children and how the Center might best respond to them. At that meeting, parents agreed that there were opportunities in the community for their children to participate in segregated recreational programs. What parents wanted for their children were integrated options. Now, five years later, the Center annually serves 45 children and youth with disabilities between the ages of 6 months and 21 years in a variety of integrated social and recreational programs.



After years of "knocking on doors" to fight for services for their children with disabilities, parents express their delight in being able to come to the Center and find all the supports that their children need.

All age-appropriate Center programs are open for integration. These include aquatics, gymnastics, after-school daycare, theatre productions, dance classes, woodworking, summer day camp, and many others. For youngsters with disabilities, integration at the Center offers opportunities to develop friendships with children who don't have disabilities, to learn new recreation skills, to increase independence, and to build motor coordination and physical fitness. Through meaningful participation in activities, the children with disabilities gain confidence and a greater sense of self-worth. They learn what it is like to belong to a larger whole. The Center has become their place to come to recreate with their friends. The children without disabilities also benefit from integration. They learn about handicapping conditions, gain regular exposure to persons with disabilities, and have ongoing opportunities to interact with children who have disabilities.

Integration is facilitated through parent-child intake interviews, staff training, one-to-one assistance from advocates, sensitization orientations for the peers without disabilities, and close monitoring throughout programs. Parents welcome the careful attention their children receive through integrated programming, particularly in light of the growth and learning they observe.

After years of "knocking on doors" to fight for services for their children with disabilities, parents express their delight in being able to come to the Center and find all the supports that their children need.

Reprinted from "Accessible to All: The St. Paul Jewish Community Center", by Linda Heyne, published in IMPACT: Feature Issue on Integrated Leisure and Recreation, Fall 1989, Institute on Community Integration, University of Minnesota.

- **Companions and Challenges: Howard County Recreation and Parks Department**

The program has grown dramatically since its establishment in 1988, demonstrating that this approach is one means to successful integrated activities.

The Howard County (Maryland) Recreation and Parks Department has a two-fold approach to integration: it incorporates integration companions to offer individual support and the Challenge Level program structure to fit activities to individuals. The program has grown dramatically since its establishment in 1988, demonstrating that this approach is one means to achieving successful integrated activities.

One key to that success is the *integration companion*. The purpose of an integration companion is to supply support for the individual with a disability and to eliminate barriers. This happens in the following ways:

- The companion has the opportunity to act as an ever-present advocate to highlight the individual's abilities, underscore his or her similarities to peers, diffuse subtle attitude barriers, and develop a climate of acceptance.
- The companion has the opportunity to dismantle the intrinsic barriers within the individual who is being integrated and replace them with healthier, more open attitudes.
- The companion provides one-to-one assistance so that the regular recreation staff are not monopolized unfairly. This extra assistance allows the normal rhythms of the program to remain undisturbed.

Because the role of the integration companion is so vital to the success of many integration situations, the Howard County Recreation and Parks Department has placed a great deal of emphasis on matching a companion to an individual wishing to be integrated. As much as possible a companion is a "behind-the-scenes" person who is "making it happen" for the individual with a disability without taking away the glory of participation and involvement.

The second key to success is the department's Challenge Level concept. It is designed to be dynamic in that an individual is not labeled as functioning at a particular level. Rather, the idea of challenge levels allows specific accommodations to occur dependent on the abilities of an individual in given situations or activities. For example, a particular activity such as karate might be described as a Challenge Level I for an individual and another activity, such as stained glass painting, could be a Challenge Level II for the same individual. The label is on the activity rather than the individual. There is also no continuum of progression inferred in the process where an individual is "prepared" for the next level of activity. Activity or program participation remains the choice of the individual. The Challenge Level is outlined as follows:

- **Challenge Level I: Independent Integration**

- No accommodations needed
- Self-initiated
- One-time informational phone consultations

- **Challenge Level 2: Complete Integration**

- Limited accommodations
- Interpreter for sign language
- Training staff and non-disabled participant
- Adaptive devices
- Mobility assistance
- Accessibility of facilities
- Transportation assistance
- Financial assistance

Challenge, with personal support to meet the challenge, is the "glue" that holds this program together.

- **Challenge Level 3: Partial Integration**

- Substantial accommodations required
- Community recreation companions needed
- Includes recruiting, training, and coordinating a companion to assist an individual with a disability to access a program

- **Challenge Level 4: Foundational Integration**

- Therapeutic recreation programs are refocused to encourage integration experience. Programs include swimming instruction classes, aquatic recreation swims in therapy tank, adult clubs and community outings, creative art classes, instructional sports skill classes, leisure education classes, outdoor recreation, after-school teen club, and pre-school leisure drop-in program.
- Therapeutic recreation camps
- Special events such as Holiday Hop, fishing tournament, camp fires

Challenge, with personal support to meet the challenge, is the "glue" that holds this program together. So far, consumers with and without disabilities say that it is a success.

Contributed by Laura Wetherald, Integration Facilitator, Howard County Recreation and Parks Department, Ellicott City, Maryland.

- **Building Bridges to the Mainstream: Chapel Hill Parks and Recreation Department**

The Chapel Hill Parks and Recreation Department no longer creates separate programs for persons who have disabilities.

The Chapel Hill (North Carolina) Parks and Recreation Department no longer creates separate programs for persons who have disabilities. Instead, every effort is made to provide support services and resources so that a person with a disability can take part in a general recreation program. Separate programs are planned and available only upon request.

The department formerly employed a "Special Populations Specialist". This position has been replaced by the "Mainstream Coordinator." The Mainstream Coordinator is responsible for gathering the resources needed to make recreation programs accessible to persons with disabilities and serves as the staff liaison and community contact. Part of this individual's job is to form and maintain an Access Committee to assist, support, and guide the department toward its goal of full accessibility. The committee is comprised of persons with disabilities and advocates who are a link between the department and the community. The Mainstream Coordinator has made changes in registration procedures and brochures to facilitate accessibility. Programs that were traditionally listed on the Special Populations page are now found under other headings throughout the brochure. For example, Adapted Aquatics programs are listed under the Swimming heading.

The Mainstream Coordinator's most important responsibility is to facilitate integration in whatever way possible as an ombudsperson. For instance, Shirley, a woman with a visual impairment, particularly liked to swim, but had not participated in swimming since losing her sight. She was not getting any physical exercise. From the Mainstream Coordinator, she learned about Aquacise, a program of water exercise for older adults, and decided to register for the class. The Mainstream Coordinator conducted a brief training session on visual impairment for the Aquacise instructor, offering helpful hints for making the experience a positive one. The Mainstream Coordinator also recruited a person who had previously taken Aquacise to serve as Shirley's volunteer partner for the class. Since Shirley had not been to the pool before and was not familiar with the physical environment, the partner went with her to visit the pool prior to class. The partner acted as her sight guide throughout the program, helping her to physically move through the exercises and talking her through the movements. Shirley enjoyed the class and has indicated interest in taking future classes. All the class members viewed her as an equal member of the group and their social interactions included her.

Contributed by Wendy Trueblood, Mainstream Coordinator, Chapel Hill Parks and Recreation Department, Chapel Hill, North Carolina.

Chapter 5: Appendix A

Resources for Further Information

- Bender, M., Brannan, S., and Verhoven, P. (1984). Leisure education for the handicapped: Curriculum goals, activities, and resources. San Diego: College-Hill Press.
- 4-H Common Ground Program, 4-H Youth Development, Minnesota Extension Service, University of Minnesota, St. Paul, MN 55108.
- Musselwhite, C.R. (1986). Adaptive play for special needs children: Strategies to enhance communication and learning. San Diego: College-Hill Press.
- Robb, G., Havens, M., and Witman, J. (1983) Special education ... naturally. Bloomington, IN: Indiana University.
- Rynders, J., Schleien, S., & Mustonen, T. (1990). Integrating children with severe disabilities for intensified outdoor education: Focus on feasibility. Mental Retardation. 28 (1). 7-14.
- Schleien, S., Rynders, J., & Gaylord, V. (Eds.). (1989). Feature Issue on Integrated Leisure and Recreation. IMPACT. 2 (3). Institute on Community Integration, University of Minnesota. 109 Pattee Hall, 150 Pillsbury Drive SE, Minneapolis, MN 55455.
- Schleien, S. and Ray, M.T. (1988). Community recreation and persons with disabilities: Strategies for integration. Baltimore: Paul H. Brookes Publishing Co.
- Schleien, S.L., & Meyer, L. (1988). Community-based recreation programs for persons with severe developmental disabilities. In M. Powers(Ed-), Expanding systems of service delivery for persons with developmental disabilities (pp 93-112). Baltimore: Paul H. Brookes.
- Schleien, S., Rynders, J., & Mustonen, T. (1988). Art and integration: What can we create? Therapeutic Recreation Journal. 22(4), 18-29.
- Voeltz, L., Hemphill, H.J., Brown, S., Kishi, G., Klein, R., Fruehling, R., Collie, J., Levy, G., & Kube, C. (1983). The special friends program: A trainer's manual for integrated school settings (rev. ed.). Honolulu: University of Hawaii Department of Special Education.
- Wehman, P., and Schleien, S. (1981). Leisure programs for handicapped persons: Adaptations, techniques, and curriculum. Austin, TX: PRO-ED.
- Wilcox, B., and Bellamy, G.T. (1987). The activities catalog: An alternative curriculum for youth and adults with severe disabilities. Baltimore: Paul H. Brookes Publishing Co.
- Wuerch, B., and Voeltz, L. (1982). Longitudinal leisure skills for severely handicapped learners: The Ho'onanea curriculum component. Baltimore: Paul H. Brookes Publishing Co.

Together Successfully:

Further Acknowledgments

We wish to acknowledge the exceptional contributions to this manual by the following individuals and organizations:

- **Activity Plan Contributors (Chapter 4)**

- Linda Heyne, Project Coordinator, Therapeutic Recreation Grant Project, University of Minnesota.
- Leo McAvoy, Professor, University of Minnesota, School of Physical Education and Recreation.
- Katherine McMahon, Program Leader, KIDSPACE Gallery, Minnesota Museum of Art, St. Paul, Minnesota.
- Theresa Mustonen, Doctoral Student, University of Minnesota, Special Education Programs.
- Caye Nelson, Professor (Emeritus), Former County Extension Director and County Extension Agent.
- John E. Rynders, Professor, University of Minnesota, Department of Educational Psychology.
- Stuart J. Schleien, Associate Professor, University of Minnesota, School of Kinesiology and Leisure Studies.
- Char Shaffer, Recreation Specialist, Ramsey County Tamarack Nature Center, St. Paul, Minnesota.

- Carol Shields, Extension Specialist, University of Minnesota, 4-H Youth Development.
- Marlene Stoehr, Art Consultant, Ramsey County 4-H, St. Paul, Minnesota.

- **Minnesota Reviewers**

- Sue Abderholden, Executive Director, ARC Minnesota.
- Colleen Baumtrog, Assistant Principal, Lincoln School and Science Center, Minneapolis.
- Dick Byrne, Assistant Director, Minnesota Extension Service and 4-H Director, University of Minnesota.
- Marty Cushing, Executive Director, Vinland National Center.
- Bernard Daley, Director of Special Education, St. Paul Schools.
- Mo Fahnestock, Integration Facilitator, Bloomington Park and Recreation Department.
- Marge Goldberg, Director, PACER Center, Minneapolis.
- Norena Hale, Director of Special Education Services, Minnesota State Department of Education.
- Kim Keprios, Executive Director, ARC Hennepin County.
- Nancy Latini, Director of Special Education, Minneapolis Public Schools.
- Paul Lee, Communications Specialist, Minnesota Extension Service.

- Jim Lewis, 4-H Foundation Director, Minnesota Extension Service, University of Minnesota.

- M. Tipton Ray, Integration Facilitator, ARC St. Paul.
- Dorothy Skarnulis, Executive Director, ARC St. Paul.
- Roger Strand, Human Services Planner, Minnesota Governor's Planning Council on Developmental Disabilities.
- Gail Tischler, Educational Development System, Minnesota Extension Service, University of Minnesota.
- Colleen Wieck, Executive Director, Minnesota Governor's Planning Council on Developmental Disabilities.

- **ARC Reviewers**

- Lee Lancy, ARC-Butte County, Chico, California.
- Laurel Ross, ARC-Greenwich, Greenwich, Connecticut.
- Dr. James Michael, ARC-Grant/Blackford Development Services, Marion, Indiana.
- Ken Caputo, ARC-Greater Boston.
- Arlene Williams, ARC-Ogemaw, West Branch, Michigan.
- Dr. Michael Grimes, ARC-Contra Costa, Martinez, California.
- LaDell Cress, ARC-Iroquois, Watseka, Illinois.

- Luann Phelps, Woodlawn Center, Logansport, Indiana.
- Laura Wetherald, ARC-Howard County, Maryland.
- Sylvia Kroc, ARC-Northwest Communities, Redford, Michigan.
- Wendy Trueblood, Chapel Hill Parks and Recreation Department, Chapel Hill, North Carolina.
- Ted Vanderlip, ARC-Marion County, Salem, Oregon.
- Norman Tanenbaum, ARC-Davidson County, Nashville, Tennessee.
- Charlene Comstock-Gaddgan, ARC-Texas, Austin, Texas.
- Cecilia Gaddy, ARC-Dorchester County, Summerville, South Carolina.
- Gail Tate, ARC-Dallas, Dallas, Texas.
- Pat Spencer, ARC-Clark County, Vancouver, Washington.
- **Page 7:** Bill Waring, Wilderness Inquiry, Minneapolis.
- **Page 19:** Caye Nelson, Ramsey County (Minnesota) 4-H.
- **Page 41:** Drew Dixon, ARC-Dallas.
- **Page 99:** Bill Waring, Wilderness Inquiry, Minneapolis.
- **Page 102:** Caye Nelson, Ramsey County (Minnesota) 4-H.
- **Page 103:** Stuart Schleien, School of Kinesiology and Leisure Studies, University of Minnesota.
- **Page 104:** Leo McAvoy, School of Physical Education and Recreation, University of Minnesota.
- **Page 105:** Stuart Schleien, School of Kinesiology and Leisure Studies, University of Minnesota.
- **Page 106:** Greg Lais, Wilderness Inquiry, Minneapolis.
- **Page 107:** Linda Heyne, Therapeutic Recreation Program, University of Minnesota.

• **Photographs**

• **Cover**

- Left: Bill Waring, Wilderness Inquiry.
- Right top: Cheryl Light, Special Education Programs, University of Minnesota.
- Right bottom: Drew Dixon, ARC-Dallas.
- **Page 1:** Stuart Schleien, School of Kinesiology and Leisure Studies, University of Minnesota.
- **Page 3:** Angela Larson, Minneapolis Parks and Recreation Department.

Association for Retarded Citizens of the United States
Publications Department
P.O. Box 1047
Arlington, TX 76004