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ABSTRACT

The "Making Special Friends Project" of the Burlington, Vermont public school system resulted in a series of six manuals: (1) A Review of the Literature; (2) Model Overview; (3) Implementation Guidelines and Inservice Training Manual; (4) Strategies for Implementing Model Components; (5) Developing Community Resource and Accessibility Guides; (6) Sample Forms. Volumes 2-5 have been obtained by ERIC (see Note); volumes 1 and 6 could not be obtained. The project was designed to increase social integration and interactions among school aged severely handicapped students, peers, and community members. Following a brief review of the city's Special Education organization, the rationale for the project is given, citing the need for structured opportunities for social interactions and the part that social interaction plays in all learning tasks. The project features an ecological analysis of environments and subenvironments, development of prioritized objectives, normal developmental and cumulative skill building approaches, and an in-school social integration component which formulates strategies to increase social interaction opportunities. Strategies include providing social interaction training to nonhandicapped peers, severely handicapped learners, and regular teachers, and arranging environments to facilitate social interactions. Community integration and parent involvement are also emphases of the project. (CL)

BURLINGTON'S MAKING SPECIAL FRIENDS PROJECT: MODEL OVERVIEW

Volume II*

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1.0 FORWARD

The intent of this manual is to provide a description of Burlington's Making Special Friends Project for increasing social integration and interactions among school-age severely handicapped students, their peers and the general community. The model described herein was developed and implemented in Burlington, Vermont. This section of the manual provides a profile of the community in which the model was developed and implemented.

1.1 State of the Art in Vermont

Vermont is sparsely populated with approximately 500,000 citizens. The largest city in Vermont (Burlington) has a population of 37,737 (1980 census) and is twice the size of the second largest city. Service delivery in Vermont is hampered by its sparse population, poor roads, mountainous terrain, rough winters and poverty level. Ten of Vermont's 14 counties are designated poverty areas.

Nonetheless, the State of Vermont has historically made a strong commitment to the education of severely handicapped children and youth in integrated public school settings. More than ninety-five percent of the educational programs for severely handicapped students are provided in public schools with nonhandicapped learners. Of the few severely handicapped learners who are not in public school settings, most receive educational programs at home or in nursing homes due to fragile medical conditions.

Ninety percent of Vermont's 252 school districts have fewer than 500 school-age children. These rural school districts often have only a few moderately to severely handicapped learners. In areas of Vermont where geography and demography permit, educational services are provided on a regional basis with programs located in the population centers of the state. However, only one or two severely handicapped learners may reside in a region. Consequently, a special education class may serve both moderately and severely handicapped learners. In regions of the state where there are no special education classes, severely handicapped learners are placed in regular classrooms with special services designed to meet their individual needs.

Due to Vermont's rural nature, poverty, and sparse population, there are gaps in the availability of interdisciplinary specialists (e.g., medical doctors, communication specialists, physical therapists, occupational therapists) with the knowledge and skills needed to develop, implement and evaluate educational services for severely handicapped learners. In some regions of the state, specialists are either unavailable or lack the experience, knowledge and skills necessary for working with the severely handicapped. To partially remediate this problem, the Department of Special Education and Pupil Personnel Services funds the State Interdisciplinary Team for Intensive Special Education (I-Team) which fills in service gaps for severely handicapped learners.

The I-Team has two components, the Regional Educational Specialists and the Core I-Team. The State of Vermont is divided into five regions, each served by a master's level Educational Specialist with expertise in educational programming for severely handicapped learners. Referrals are made to the Regional Educational Specialist by persons involved in the education of severely handicapped learners (e.g., teachers, parents, speech therapists, etc.) who would like assistance in developing, implementing or evaluating individual educational programs.

When the expertise does not exist at the local or regional level to develop, implement and monitor appropriate educational services, the Educational Specialist refers the learner to the Core I-Team. The Core I-Team, located at the Center for Developmental Disabilities - University of Vermont, is composed of physicians, a communication specialist, physical therapists, an occupational therapist, and special educators with expertise in programming for severely handicapped learners. Depending upon the needs of the referred learner, one or more members of the Core I-Team may provide technical assistance to the Educational Specialist. Inservice training may also be provided by the Core I-Team to facilitate more independent remediation of future problems by Educational Specialists, teachers, or parents.

The Intensive Special Education (ISE) Masters Program at the University of Vermont also provides inservice and preservice training to educators of severely handicapped learners. A significant majority of Vermont's educators of the severely handicapped have already been introduced to such educational "best practices" as ecological analysis, integration strategies and community-based training through courses and workshops offered by the ISE Program.

In addition to the inservice training, technical assistance, and other services provided by the I-Team and ISE Program, Vermont has a University Affiliated Facility Satellite (UAFS) at the University of Vermont which is funded by the Administration for Developmental Disabilities. The UAFS has analyzed the needs of nurses, speech pathologists, vocational service providers and physical educators for providing appropriate community services to severely handicapped individuals. On the basis of these needs analyses, courses, workshops and technical assistance have been provided to these groups. Due in part to the efforts of the State I-Team, the ISE Program and the UAFS, the rudiments of a model for providing community-based, socially-integrated services for severely handicapped persons were in place throughout Vermont prior to Burlington's Making Special Friends Project. However, the extent of social interaction between severely handicapped learners and nonhandicapped persons varied within the state. One intent of this project was to provide a model for increasing and maintaining social interactions in integrated school and community settings.

1.2 State of the Art in Burlington

Burlington is located in northwestern Vermont, overlooking Lake Champlain and the Adirondack Mountains in New York State. A population of 37,737 makes Burlington the largest city in Vermont. Burlington lies in Chittenden County, which contains almost one-fourth (115,598) of Vermont's population. The Medical Center Hospital of Vermont provides medical services to Burlington residents. Burlington is blessed with an adequate public transportation system that is used in lieu of school busing programs.

There are 4,016 school-age (5-21) children and youth attending Burlington Public Schools (BPS). One hundred sixty-four of that number are considered eligible for special education services. There are approximately 2,134 elementary, 660 junior high and 1,222 high school students.

The Burlington Public School Special Education Program for moderately and severely handicapped learners is regional in nature, serving Burlington, nearby cities and surrounding towns and villages. Classes for moderately handicapped learners (labeled trainable mentally retarded in Vermont) usually serve severely handicapped learners as well. However, the most severely handicapped (i.e., learners who function at or below a two-year developmental level in communication skills) are being served in classes for the multihandicapped. The severely handicapped students in the Burlington school system are served in five classrooms which are located in four different schools.

Two multihandicapped classrooms are assigned to Edmunds School, which houses both an elementary and a junior high school. These two self-contained classes serve a total of nine students ranging in age from 6-21 years. The classrooms are located in a three-room suite, with the middle room being designated as a common area. Edmunds School is located near downtown Burlington and is within walking distance of major shopping areas.

One self-contained class is based at Champlain Elementary School and serves six severely handicapped children between 6 and 11 years of age. The students assigned to this class are

designated by the state as TMR Level I and II. The classroom has its own bathroom; however, the students eat in the lunchroom and have access to the gymnasium and library. Champlain School is within close proximity of two neighborhood stores, and public transportation is available when access to additional community environments is desired.

The TMR III program is located at Lyman C. Hunt Middle School which is fully accessible. Seven of the eight students enrolled in the program are severely handicapped and their ages range from 12-15 years. Although the classroom is self-contained, the students utilize common school areas such as the cafeteria. Many community services are within walking distance from the school, and the public transportation system provides easy access to downtown Burlington.

The TMR IV class located at Burlington High School serves 12 students, six of whom are severely handicapped. The students range in age from 16-21 years. The TMR IV program is located near the Diversified Occupations (EMR) Program in the vocational area of the building. Although the high school is not within walking distance of community services, public transportation is readily available and accessible to these handicapped students. Further demographic information regarding all the classroom services can be found in Table 1.

TABLE 1

Demographic Information

SCHOOL INFORMATION		PROGRAM INFORMATION					INSTRUCTIONAL STAFF		
SCHOOL	TOTAL ENROLLMENT	ACCESSIBILITY	PROGRAM LEVEL	CLASS SIZE	NUMBER OF SEVERELY HANDICAPPED STUDENTS	AGE RANGE OF STUDENTS	YEARS OF TEACHERS EXPERIENCE	TEACHERS HIGHEST DEGREE	NUMBER OF AIDES
CHAMPLAIN	257	FULL	TMR I & II	6	6	6-11	3	B.S.	2
EDMUNDS	359	PARTIAL	MH	6	6	6-12	5	M.Ed.	2
EDMUNDS	359	PARTIAL	MH	3	3	18-21	4	B.S.+	1
HUNT	301	FULL	TMR III	8	7	12-15	3	M.Ed.	2
B.H.S.	1428	PARTIAL	TMR IV	12	6	16-21	3	M.Ed.	1

1.2.1 Description of the Severely Handicapped Population

When the project was initiated (Spring, 1982), there were 35 school-age moderately and severely handicapped learners in the Burlington Public Schools receiving services in the TMR and multihandicapped classrooms. The TARC assessment scale and AAMD adaptive behavior scale were administered to each of the 35 students. On the basis of these tests, it was determined that 28 of the students were severely handicapped and eligible for the project, and that seven were moderately handicapped and ineligible for the project.

As indicated by the Severely Handicapped Learner Profile in Table 2, the 28 severely handicapped learners represent a very heterogeneous population. They demonstrate a wide range of ability in areas such as toileting, mobility, self-care skills and communication skills. In order to accomodate such a wide range of skill levels, handicaps, learning styles and needs, all curricula, including social interaction curricula, must be extremely flexible so that it may be tailored to meet individual needs.

TABLE 2

Severely Handicapped Learner Profile

EATING	MUST BE FED	4	MESSY EATER	13	EATS INDEPENDENTLY	13
TOILETING	NOT TOILET TRAINED	4	HAS ACCIDENTS	14	NO TOILETING ACCIDENTS	6
DRESSING	MUST BE DRESSED	8	ASSISTS WITH DRESSING	10	DRESSES INDEPENDENTLY	2
MOBILITY	CONFINED TO WHEELCHAIR	7	WALKS ALONE	13	GOES ABOUT SCHOOL GROUNDS WITHOUT GETTING LOST	8
VISION	NO VISION	0	VISUALLY IMPAIRED	10	NO VISUAL PROBLEMS	18
HEARING	NO HEARING	0	HEARING IMPAIRED	6	NO HEARING PROBLEMS	22
EXPRESSIVE COMMUNICATION	NO FORMAL EXPRESSIVE COMMUNICATION	18	IS ABLE TO TALK, SIGN, OR USE COMMUNICATION BOARD	3	COMMUNICATES IN SIMPLE SENTENCES	7
RECEPTIVE COMMUNICATION	DOES NOT UNDERSTAND SPOKEN WORDS	6	UNDERSTANDS AND RESPONDS TO SOME SPOKEN WORD	8	UNDERSTANDS AND USUALLY RESPONDS WHEN SPOKEN TO	14

1.2.2 Support Services

As indicated in Table 3, the Burlington Public School Special Education Program provides the following support services: job development, community-based training, speech therapy, physical therapy, occupational therapy and adaptive physical education. In addition to these services, public school personnel have access to the State Interdisciplinary Team for Intensive Special Education.

TABLE 3

District Instructional Support Staff

POSITION	PROGRAM LEVEL	F.T.E.	YEARS OF EXPERIENCE	HIGHEST DEGREE/ CERTIFICATE
Job Developer	TMR IV	1.0	5	M.Ed.
Community Trainer	TMR III & IV	1.0	3	B.S.+
Speech Therapist	All	.8	3	M.S.
Physical Therapist	All	As needed (contracted services)	---	RPT
Occupational Therapist	All	As needed (contracted services)	---	OTR
Adapted Physical Educator	All	1.0	4	B.S.+

A speech pathologist and an adaptive physical education teacher are employed by the public schools to serve the moderately and severely handicapped learners. The speech pathologist provides consultation and technical assistance to teachers and parents on communication assessment, program development, implementation and evaluation. The adaptive physical education teacher provides direct instruction to students on motor, recreation and leisure activities. The public schools contract with the Associates in Physical Therapy, a private firm which provides physical and occupational therapy services. Similar to speech therapy, these services are provided on a consultation basis.

The Burlington Public School System employs personnel to provide in-school and out-of-school vocational placement and training for the Diversified Occupations and TMR students in the high school. The high school also employs a teacher who provides community-based training to these students.

1.2.3 Context of the Model

Prior to the initiation of Burlington's Making Special Friends Project, the Burlington Public Schools had initiated State of the Art practices in providing educational services to severely handicapped learners. These practices include:

a. provision of educational services in integrated schools with the majority of school placements being chronologically age-appropriate;

b. provision of community-referenced and/or community-based training to handicapped learners;

c. use of ecological analysis as a curriculum basis for older severely handicapped learners;

d. provision of therapy services through a consultative model;

e. use of community-based training and in-school social integration opportunities to facilitate social interaction; and

f. working cooperatively with parents in the development of educational programs.

In summary, Burlington's Making Special Friends Project was incorporated into a service delivery system which was already providing a free, appropriate education to severely handicapped learners. The goal of the project was to work within the framework and resources of the existing service delivery system to institutionalize a model for increasing and maintaining social integration and interactions.

2.0 RATIONALE FOR BURLINGTON'S MAKING SPECIAL FRIENDS MODEL

Burlington's Making Special Friends Model is based on the assumption that appropriate social interactions between severely handicapped and nonhandicapped persons depend on the following conditions: a) severely handicapped persons must be in integrated environments with nonhandicapped persons so that there are opportunities for interactions to occur; b) opportunities for social interactions should be carefully structured to enhance the frequency and quality of interactions; and c) structured interactions should take place over extended periods of time so that meaningful and enduring changes occur in the way that handicapped and nonhandicapped persons interact.

It is essential that both nonhandicapped and handicapped persons acquire the skills, knowledge, attitudes and experiences that would facilitate appropriate social interactions with each other. Public schools provide a ready vehicle for facilitating social interactions. In the school setting, opportunities for social interactions can be easily provided and structured throughout the learners' school years. Increasing opportunities for social interactions during the school years should facilitate social interactions during post-school years.

2.1 Challenges in Social Interaction Training

Public schools often limit opportunities for social interactions among nonhandicapped students during the school day in order to avoid behavior problems. Short lunch periods and minimal time between classes are methods used to prevent such

problems. Opportunities for social interactions are also minimized within the classroom. Seating is often arranged to minimize interactions, and rules prohibiting interactions are enforced. This structure also limits the opportunities for nonhandicapped students to interact with handicapped students. In addition to the basic structure of the school day, social interactions between severely handicapped and nonhandicapped peers may be limited by a number of other barriers. These barriers are discussed in the following sections.

2.1.1 Segregation of Severely Handicapped Learners

The most obvious form of segregation is housing classrooms for severely handicapped learners in segregated buildings or in segregated wings of buildings. Even when severely handicapped learners are in integrated settings, they are often segregated from nonhandicapped learners. Some forms of segregation which take place within integrated settings are:

a. severely handicapped learners eating lunch in the classroom instead of the lunchroom;

b. severely handicapped learners eating together in a separate area of the lunchroom;

c. segregated buses;

d. segregated bathrooms;

e. segregated extra-curricular activities such as dances and parties;

f. severely handicapped learners changing classes at different times than nonhandicapped learners; and

g. exclusion of severely handicapped learners from school activities such as assemblies.

As indicated earlier, simply including severely handicapped students in the limited opportunities presented by many schools is insufficient to improve handicapped/nonhandicapped student interactions. Consequently, it is often necessary to create new opportunities in the current public school structure. Once opportunities for interaction have been established, they must be structured to maximize their frequency and duration. One assumption of this model is that interaction opportunities should occur frequently and be of a relatively long duration in order to improve the quality of interactions.

2.1.2 Definition and Measurement of Social Interactions

Social interaction may be defined as a sensory exchange between two people. The exchange can be auditory (e.g., speaking, making sounds), visual (e.g., eye contact, gestures) and/or tactile (e.g., touching, handshake). Although such a definition appears to be straightforward, reliable methods for measuring the frequency and quality of social interactions are limited. While it is easy to assess such skills as eating and dressing, behaviors involving interactions between two or more people are more difficult to measure.

The challenge of defining and measuring social interactions may be one reason schools fail to emphasize social interaction skills training. Traditionally, such training has been limited to severely handicapped persons and confined to language and recreational/leisure programs. This model advocates the inclusion of social interaction skills training in all activities of daily living.

2.1.3 Equating Language Training With Social Skills Training

There are at least two problems with equating social interaction skills to language training. First, severely handicapped learners may acquire language skills which are typically nonfunctional when interactions with nonhandicapped individuals. For example, signing is a functional vehicle for communicating with people who know signs. However, nonhandicapped people such as peers, clerks and bus drivers typically do not know signs. Signs should be augmented by another communication modality, such as picture cards, to provide a vehicle for communicating with people who do not know signs. When selecting modes of communication for severely handicapped learners, one consideration should be the usefulness of the modes for interacting with nonhandicapped people in integrated settings.

Secondly, social interactions are often equated with making conversation. Although severely handicapped persons may acquire language skills, they will often continue to have major language deficits which prevent them from engaging in extensive conversation with nonhandicapped persons. However, making conversation is only one type of social interaction, and there are a wide variety of social interactions which need not entail conversation.

As previously defined, social interactions involve a sensory exchange between at least two people. Facial expressions (e.g., smiles, frowns), gestures (e.g., raising shoulders to indicate "I don't know", shaking head "yes" or "no"), maintaining and terminating eye contact or actively participating in a game or activity with someone else are all means of socially interacting.

Severely handicapped learners who currently do not communicate through a formal symbolic language system can be taught and encouraged to interact through eye contact facial expression, active participation in activities, and natural gestures while simultaneously being taught language.

Language does not become truly functional until it can be used in social interactions. Few language programs for severely handicapped learners emphasize training the application of the skills to social interactions. For example, the skills of pointing to and/or labeling objects on request at a classroom worktable are far removed from using the skills in social interactions. Unless learners are taught to communicate in social interaction situations, the skills will not be functional. The content and context of language training programs must be structured so that students are not learning language in isolation, but are acquiring language skills and practicing them in social interaction situations which occur throughout the day.

2.1.4 Equating Recreation/Leisure Training With Social Skills Training

Frequently, programs to teach and assess social interaction skills are structured around play or recreation/leisure activities. For instance, at recess or break time, students may be taught to play cooperatively. Although recreation/leisure programs provide an excellent vehicle for facilitating social interactions, social interaction training should not be limited to such activities. It cannot be assumed that the social interaction skills severely handicapped learners acquire through a recreation/leisure activity will generalize or be useful in other

activities, such as riding a bus and using a restaurant.

2.1.5 Limiting Social Skills Training to Severely Handicapped Persons

Another factor which has limited the frequency and quality of social interactions has been the assumption that severely handicapped learners should be the only focus of social skills training. This assumption can lead to the false premise that severely handicapped learners must acquire an extensive repertoire of social skills before they will be able to interact with their nonhandicapped peers. Social interactions may occur in spite of these social skill limitations by teaching nonhandicapped learners how to interact with their severely handicapped peers. This can help to prevent the unnecessary exclusion of severely handicapped learners from social interaction activities due to their inability to participate independently.

In summary, social skills are integral components of almost all activities of daily living and should not be limited to language training or recreation/leisure activities. Social interaction training for the severely handicapped should be individualized, and should focus on teaching appropriate social interactions through activities of daily living (e.g., recreation/leisure, domestic, vocational and general community skills). Many severely handicapped learners may never become highly competent at socially interacting. Social interactions can be facilitated, however, by teaching severely handicapped learners to interact through such behaviors as making eye contact and body gestures, and by teaching nonhandicapped learners to interpret and respond to these behaviors.

2.2 Social Skills as Integral Components of All Functional Activities

Activities of daily living are typically taught through a task analysis approach, in which the activities are analyzed into component skills. This provides a basis for the assessment and training of learners to perform the component skills correctly and in sequence. A major problem with most task analyses is that they do not include the social skills integral to the tasks. Unless the social skills involved in a task are delineated for assessment and instruction, it is likely that learners will acquire the skills to perform the task but will lack the necessary social skills to engage in the task independently.

Social interactions can be conceptualized as having five basic components: a) recognition of the appropriate time and place for an interaction; b) initiating interactions; c) responding to requests for interactions; d) sustaining interactions; and e) terminating interactions. Task analyzed skill sequences should be further analyzed based on these five components of social interactions. Table 4 depicts typical task analyses for playing picture lotto, drying dishes, and using a school cafeteria. The following examples illustrate how social skills may be conceptualized for each activity.

TABLE 4

Example Task Anal

Picture Lotto

Objective:

Given a picture lotto game the learner will correctly match picture cards to pictures on his/her game board until game is complete 80% of the time.

Task Analysis

1. Pick up top picture card from the stack of cards
2. Look at picture on card
3. Match picture card to pictures on the gameboard
4. If there is a match, place picture card on game board picture
5. If there is no match, place picture card in discard pile
6. Wait for next turn
7. Repeat steps 1 through 6 until gameboard is complete or another player has a complete gameboard

Drying Dishes

Objective:

Given wet clean dishes in a dish rack and a towel, the learner will correctly dry all the dishes within 15 minutes for two consecutive days.

Task Analysis:

1. Pick up towel
2. Unfold towel
3. Hold towel in one hand
4. Hold dish in opposite hand
5. Dry all surfaces of dish with towel
6. Place dry dish on counter
7. Repeat steps 3-6 until all dishes are dried

Using School Cafeteria

Objective:

Given it is time for lunch, the learner will correctly obtain and pay for food, eat food, and dispose of tray and trash.

Task Analysis:

1. Go to cafeteria
2. Stand in line
3. Pick up tray, napkin and utensils
4. Go through line stopping at appropriate places to obtain food items
5. Pay cashier
6. Take tray to table
7. Eat food
8. Dispose of tray, utensils and napkin

Social skills needed to play picture lotto may include:

a. Recognition of the appropriate time and place to play picture lotto.

b. Initiation of the activity by inviting someone else to play. Knowing how to respond when others accept or reject the invitation.

c. Reception. Knowing how to accept or reject the invitation if asked to play picture lotto.

d. Sustaining. Continuing to play picture lotto with other persons as delineated in the task analysis.

e. Terminating. Appropriately indicating that they do not want to play anymore, or appropriately ending the activity when other people indicate they do not want to continue playing.

When two or more people participate in tasks such as washing and drying dishes, setting the table and cooking a meal, excellent opportunities for teaching and practicing social skills are provided. The social interaction skills involved in drying dishes can also be conceptualized in terms of the five-component model.

a. Recognition. Knowing the appropriate time and place to dry dishes.

b. Initiation. Requesting help from another person and responding appropriately when others accept or reject the request.

c. Reception. Appropriately accepting or rejecting a request for help in drying the dishes.

d. Sustaining. Carrying through the dish-drying task as specified in the task analysis.

e. Termination. Appropriately terminating the task at completion.

Using public facilities such as bowling alleys, restaurants, school cafeterias, grocery stores, or buses can involve numerous social interaction skills. The use of a school cafeteria with a

friend is analyzed using the five-component social interaction model below.

a. Recognition. Knowing the appropriate time to go to the cafeteria.

b. Initiation. Requesting another person to come along and appropriately responding when the other person accepts or rejects the request.

c. Reception. Appropriately accepting or rejecting requests by others to accompany them to the cafeteria.

d. Sustaining. Continuing the activity as specified in the task analysis.

e. Terminating. Indicating that they are finished and ready to leave or appropriately responding when someone else indicates that they are finished.

In the examples provided, the type of expressive mode (e.g., sign, communication board, speech, body gesture, eye contact) was deliberately left out. This was done to illustrate that the expressive mode can be tailored to suit the individual learner.

The five-component social interaction model provides the teacher with a simple framework for viewing social behavior. It does not account for all types of social interactions which may take place, and does not indicate which social interaction skills need to be taught. Prior to teaching someone to participate in an activity, observations should be made of nonhandicapped people participating in that activity. For instance, some of the other social interactions which may take place in the school cafeteria include greeting aquaintances, excusing oneself after bumping into someone in the cafeteria line, making eye contact with people serving the food, and engaging in social interactions while eating. In addition to observing nonhandicapped persons, it is

also necessary to observe the severely handicapped person to determine which social interaction skills have already been acquired and which ones need to be taught.

A basic assumption of Burlington's Making Special Friends Model is that social interactions should not be taught as a separate curricular domain but should be an integral part of all curricular areas. An individual cannot be taught social interaction skills in isolation and be expected to generalize these skills to social settings. For example, when communication skills are taught, learners must be trained to use them in social interactions. Since virtually all activities of daily living may involve social interactions to some extent, special care should be taken to emphasize social interaction training throughout each learner's educational program.

2.3 Three-Component Process for Facilitating Social Interactions

Social interactions may occur in the learner's home and neighborhood, in the public school and in general community settings (i.e., grocery stores, vocational settings, buses and libraries). To address social interactions in each of these environments, Burlington's Making Special Friends Model has been divided into the following three components: the In-School Social Integration, the Community Integration, and the Parent Involvement components.

These three components encompass developing social interaction opportunities, structuring the opportunities to facilitate interactions and providing social interaction training

to handicapped and nonhandicapped individuals. The primary function of the In-School Social Integration component is to increase social interactions within the school setting. The Community Integration component functions to facilitate social interactions in general community settings. The Parent Involvement component helps parents identify and develop social interaction opportunities in the learner's home and neighborhood. Although these components are discussed separately, each is dependent upon the functions of the others in order to achieve optimal results.

3.0 BURLINGTON'S MAKING SPECIAL FRIENDS MODEL OVERVIEW

The goal of Burlington's Making Special Friends Project was to increase and maintain social interactions between severely handicapped learners and nonhandicapped persons in school, home and other community settings. The achievement of this goal was believed to be dependent on input from teachers, administrators, parents and others in the school system. To obtain this input, task forces of parents, educational personnel, and project staff were formed to generate guidelines for implementing the model.

One objective of the project was to develop and implement the model within the current resources of the Burlington Public Schools so that it could be maintained after project staff were faded out. Project staff included a half-time project director who also coordinates the In-School Social Integration component, a 40%-time community integration specialist, a 40%-time parent services specialist and a full-time community resource specialist. The responsibilities of these staff members included working with teachers and task forces to generate the model components, providing technical assistance and inservi training, and writing the project manuals. The community resource specialist worked directly in the classroom with the teachers to provide technical assistance on implementing the model and designing individualized programs for severely handicapped learners.

The project staff followed the process outlined below in developing and implementing Burlington's Making Special Friends Model.

1. Meetings were held with the Director of Special Education to explain the project and receive administrative support.

2. Meetings were held with the teachers of the severely handicapped learners in the Burlington Public Schools to explain the goals of the project and to receive their support.

3. In-School Social Integration, Parent Involvement and Community Integration Task Forces were formed to discuss and review the model. Task forces were made up of district administrators, teachers of severely handicapped students, teachers of nonhandicapped students, parents and interested community members. Task force meetings were chaired by the project staff. Changes and adaptations of the model were made based upon task force input.

4. Weekly two-hour inservice training was provided by project staff to teachers of severely handicapped learners. This training focused on the basic assumptions of the model and the procedures that teachers could use in their classrooms.

5. Each teacher of severely handicapped learners developed an In-School Social Integration Plan for their own school. To accomplish this, the teacher recruited the school principal, teachers of nonhandicapped learners and interested others to form a Social Integration Task Force. The purpose of the task force was to generate strategies and procedures for increasing and maintaining social interactions within their school.

6. Each teacher of severely handicapped learners selected at least one pilot student with whom they would implement each model component.

7. Each teacher implemented the model with the pilot learner(s) for a period of two and one-half months. Inservice training and on-site technical assistance from the project's community resource specialist were provided.

8. The model was revised and more fully articulated based upon experiences with the pilot learners and input from teachers, parents and administrators.

9. The teachers and project staff implemented the model with all severely handicapped learners in the Burlington Public Schools.

3.1 Basic Assumptions of Burlington's Making Special Friends Model

Prior to describing the model components, the basic assumptions underlying the model will be delineated. The following basic assumptions were developed through a review of the literature, deliberations of project staff, and contributions from parents, teachers and administrators.

1. Severely Handicapped Learners Should Attend Integrated Public Schools. Social interactions between severely handicapped and nonhandicapped learners are more likely to occur when learners are in close proximity to one another. Integrated public school settings, therefore, increase opportunities for longitudinal social interactions.

2. Severely Handicapped Learners Should Attend Chronological Age-Appropriate Public Schools. To facilitate the development of chronological age-appropriate social interaction skills, severely handicapped learners must have the opportunity to participate in appropriate social interactions with peers of similar chronological age.

3. Social Interactions Should Be An Integral Component Of All Training Provided To Severely Handicapped Learners. Social interaction should not be a separate curricular domain that is taught in isolation. Instead, social interaction activities should be incorporated into the entire curriculum throughout the day.

4. Nonhandicapped Learners Should Receive Training On How To Interact With Severely Handicapped Learners. Although severely handicapped learners can become more competent in social interaction activities, not all will become socially astute. When nonhandicapped peers have been taught to socially interact with them, they can at least partially participate in social interaction activities.

5. Social Interaction Training Should Be Conducted At Home And In Community Environments To Ensure The Generalization Of Skills. Because severely handicapped persons have difficulty generalizing behaviors, training should take place in as many natural environments as possible.

6. The Ecological Analysis Strategy Should Be Employed To Determine What Social Interaction Skills And Activities Should Be Taught. Instead of progressing through a lock-step social skills curriculum, severely handicapped learners should be taught social interaction skills and activities based upon their individual needs. The ecological analysis strategy provides a vehicle for determining high priority individual needs.

7. Parents Should Have Extensive Input And Involvement In Their Child's Individualized Educational Plan. Increased participation in social activities is facilitated when parents and teachers work as partners to identify high priority activities and to teach learners to perform skills in home and community environments.

8. Social Interaction Training Should Become A Regular Component Of Education For Severely Handicapped And Nonhandicapped Learners. Parents, teachers, and administrators should provide for social interaction programming as an ongoing component of education.

3.2 Curriculum Development Strategies of Burlington's Making Special Friends Model

Appropriate social interaction training depends upon the utilization of curricula that assess and teach skills which increase independence in current and future community environments. The following three approaches may be used alone or in combination to determine what to teach learners with severe handicaps: 1) the ecological analysis approach; 2) the normal developmental or cumulative skill building approaches; and 3) curriculum guidelines. The Burlington Model used a combination of these approaches.

3.2.1 Ecological Analysis Approach

The ecological analysis approach can be used to generate

age-appropriate curricular content which is designed to increase independent participation by severely handicapped learners in current and future environments. This approach has been used to develop curricula in the areas of domestic living, vocational, recreation/leisure and general community functioning (e.g., Brown, Falvey, Baumgart, Pumpian, Schroeder and Gruenewald, 1980).

The ecological analysis approach first involves identifying the severely handicapped learner's current and potential future environments. Five types of environments can usually be identified: 1) educational environments (e.g., public school, adult education); 2) vocational environments (e.g., in-school work stations, competitive employment opportunities, structured work opportunities); 3) domestic living environments (e.g., parent's home, group home, supervised apartment); 4) recreational/leisure environments (e.g, library, bowling alley, park); and 5) general community environments (e.g., grocery stores, fast food restaurants, shopping malls, public buses). Each type of environment can be considered a curricular domain. The content of each domain is then determined by delineating specific current and future environments and analyzing the activities required to participate in those environments. Social interaction skills must be included in this analysis. This approach directly links curricular content to skills and activities needed to participate in integrated community environments. Four basic assumptions of the ecological analysis approach are described below.

1. Severely handicapped learners should be taught chronological age-appropriate skills. It must be emphasized that settings, tasks and materials that are isolated, contrived, or age-inappropriate do not prepare severely handicapped individuals to function with "real" materials within "real" environments. To

increase the independence and acceptance of severely handicapped learners, they must learn to interact with everyday materials, situations, and people.

2. Severely handicapped learners should be prepared to participate more independently in least restrictive settings. Curricula are typically divided into skill domains such as motor, communication, social and self-care. However, if curricula are to prepare learners to function in the community, they should be organized into curricular domains that represent current and future community environments in which learners will participate.

3. The curriculum should include procedures for skill maintenance and generalization in environments in which the skill will ultimately be performed. It cannot be assumed that skills taught in isolated classroom environments will generalize to the "real" world. Programs for severely handicapped learners should be structured to teach activities in the actual environments where the activities are to be performed. For example, a severely handicapped learner is more apt to be able to shop in a grocery store if training is provided in a grocery store rather than in a simulated classroom environment. Teaching skills in actual environments may also point out the social competencies needed which may not become evident in a simulated classroom environment.

4. Severely handicapped learners should at least partially participate in community activities. Lack of complete independence in an activity should not exclude severely handicapped learners from that activity. Partial participation assures that learners have the opportunity and training to participate in all activities as independently as possible. Severely handicapped learners should be allowed to engage in all community activities even if they cannot participate independently.

As delineated by Brown, Branston, Baumgart, Vincent, Falvey and Schroeder (1979), partial participation can be achieved by providing personal assistance, and/or adapting activities, skill sequences or rules. Personal assistance involves providing assistance on only those parts of an activity which the learner cannot perform. For instance, if a learner can select food items and pay a cashier but cannot carry a food tray, the learner would

be able to participate in using a cafeteria if someone else carried the tray.

Adapting activities involves changing the activity to allow for more independence. For example, when making waffles, the learner may need assistance in measuring out the ingredients. However, if toaster waffles and a toaster are provided, the learner may be able to acquire the skills to complete the activity independently.

Adapting skill sequences involves changing the order in which skills are performed. For example, purchasing foods in a fast food restaurant typically involves the following sequence of skills: waiting in line, placing an order, taking money out of the wallet, paying the cashier and taking the food to a table. A learner who has difficulty taking out a wallet and securing money from it may perform these skills at a slow rate which is not acceptable to either the cashier or other customers waiting in line. The learner could be taught to take out the wallet and money while waiting in line to alleviate this problem.

Adapting rules involves changing the rules of activities so that learners can participate in them. Examples include changing the distance between stakes in a game of horseshoes, lowering the net in volley ball, and giving points for hitting the volley ball rather than requiring that the ball travel over the net.

Many skills needed to participate in community activities are difficult to teach and/or take a long time to learn (e.g., counting out the correct amount of money, telling time, reading menus, verbally placing an order for merchandise, planning a menu and generating a shopping list). Many older severely handicapped

learners do not have enough instructional time left to make teaching such skills a practical reality. By translating skills into functions, it is often possible to devise alternative ways learners can carry out the functions. Table 5 provides examples of skills, the functions, and functional alternatives which may enable a learner to perform the activity.

TABLE 5

Functional Alternatives

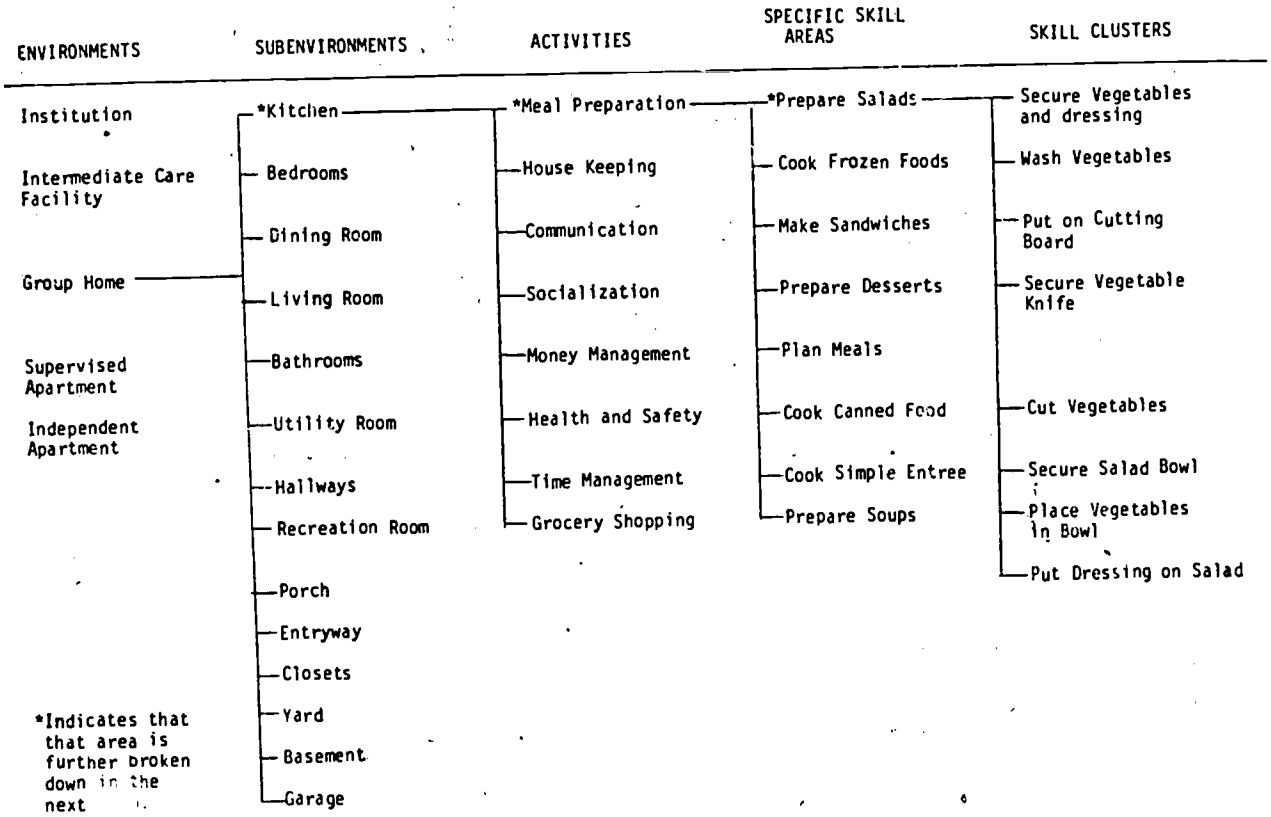
Skills	Functions	Alternatives
Counting out the correct amount of money when making a purchase	Providing the clerk with an amount of money equal to or greater than the purchase	Teach learners to always give a dollar amount more than the purchase price and wait for change. For example, if an item is $1.62, give $2.00
Read restaurant menu and verbally give an order	Select and order food items	Prepare a picture menu and teach learner to order food by pointing to the picture
Walking	Mobility through space	Wheelchair, crutches
Talking	Communication	Sign language, communication board
Brush teeth	Oral hygiene	Use a water pic, electric toothbrush

It must be emphasized that teaching learners to use functional alternatives does not rule out teaching them to perform the functions as they are typically performed by nonhandicapped individuals. For example, learners could be taught to use a communication board while they were concurrently learning to speak. Similarly, learners could be taught to put on loafers while concurrently learning to tie their shoes.

3.2.1.1 Conducting an Ecological Analysis. A simplified example of an ecological analysis is depicted in Table 6.

TABLE 6

Sample Ecological Analysis of the Domestic Domain



The basic steps involved in performing an ecological analysis are discussed below.

1. List the specific environment being analyzed along with pertinent general information, such as address and phone number.

2. List the subenvironments in which one would be expected to function. At McDonald's the subenvironments are listed as the entry, counter, dining area, restrooms, and kitchen.

3. For each subenvironment, list the activities in which one must engage in order to participate independentiy. This is done based on interviews, previous records, and direct observations of individuals actually using the subenvironments. In the example, only the activities one must perform in the counter area are listed. In order to complete the ecological analysis, the activities required in each of the remaining subenvironments must also be delineated.

4. Delineate the skills required to perform each activity listed. Observing nonhandicapped people functioning in the subenvironments may be helpful in completing this step.

Once the ecological analysis is complete, a discrepancy assessment can be conducted to determine which activities and skills the severely handicapped student can and cannot perform. A more detailed explanation of how to conduct ecological analyses and discrepancy assessments, suggested formats and examples are presented in Volume IV.

Parents or guardians, advocates, community service providers and other community members should be involved to the greatest extent possible in delineating the community environments and subenvironments in which severely handicapped learners might participate. It is essential that parents or guardians provide continuous input into the ecological analysis process by

identifying environments in which they want their children to participate, prioritizing activities and skills, and delineating partial participation strategies to be employed. Further descriptions of how to perform an ecological analysis and more samples can be found in Brown, et al. (1980).

3.2.2 Prioritizing Objectives

Prioritizing activities and skills is a logistical challenge of the ecological analysis approach. Brown, Falvey, Vincent, Kaye, Johnson, Ferrara-Parrish & Gruenewald (1980) offered the following considerations for developing priority curricular objectives: preferences of parents or guardians, teachers, administrators, ancillary staff and students; unique learner characteristics; presumed logistical and practical realities; number of environments in which the skill can be performed; the number of times the skill will be performed; social significance of this skill; probability of acquisition; minimization of physical harm; functional nature of skills; chronological age-appropriate nature of skills; and relevant research. Additional considerations for prioritizing objectives for the severely handicapped population, which are particularly learner and independence oriented, are presented below.

3.2.2.1 Specific Environmental Considerations. If specific community environments in which an individual learner will function are known to the teacher, analyses of only these settings need to be performed. If this information is not known, however, environments which serve the same general functions (e.g., group

homes and apartments within the domestic living domain) should be analyzed. Programs may then be instituted to teach skills common to those environments.

3.2.2.2 Transition. The acquisition of skills which could increase a learner's chances of moving to a less restrictive setting are high priority. For example, if potential openings within a community living environment require the ability to toilet, shower, and dress independently, then those skills should become priority objectives.

3.2.2.3 Necessity to Maintain Present Settings. Severely handicapped learners occasionally face the possibility of losing their present placements and moving to more restrictive settings. Educators should be alert to potential changes in placement and give high priority to teaching severely handicapped learners skills which will ensure maintenance of current settings.

3.2.2.4 Present Life Activities. The frequency with which a learner participates in an activity should be considered when prioritizing objectives. Activities in which the learner requires extensive supervision and assistance may be examined to determine if any can be performed more independently. While it is appropriate to increase participation by providing assistance, it is also important to demonstrate that severely handicapped learners can participate in selected activities independently. Acquisition of one skill, previously considered too difficult for that learner, can often have a profound effect upon other service

providers and encourage them to teach the learner additional independent skills.

3.2.2.5 Functional Nature of the Skill. Generally, a skill should not be given priority unless it can become a functional component of the learner's behavioral repertoire. The functional nature of a skill can usually be determined by examining how frequently it will be used in present or subsequent environments. Exceptions include skills that may be performed very infrequently but are still considered high priority objectives for safety reasons (e.g., applying simple first aid and demonstrating what to do in an emergency). If the acquisition of such skills is a prerequisite for admission to a community living environment, they may take precedence over more frequently used skills to ensure the learner's inclusion in less restrictive environments.

3.2.2.6 Unique Learner Characteristics. An individual's unique characteristics will dictate some priorities. For example, an individual who is confined to a wheelchair and lives in a community that has no sidewalk ramps may need to learn how to ask for assistance to move over curbs. Learners who are hard of hearing or visually impaired may require special adaptations for present and subsequent environments.

3.2.2.7 Parent or Guardian Preference. It is essential that parents be involved in the process of selecting objectives for their severely handicapped children. It is not unusual for protective parents to be concerned about increasing their severely

handicapped child's independence, especially when risks may be involved. Parents who object to instructional programs involving street crossing and bus riding might be interested in having their children learn to shop more independently, even if they have to be assisted with transportation to and from the store. Once parents observe their child being independent in some activities, they may feel more comfortable with objectives involving more potential risk.

3.2.3 The Normal Development and Cumulative Skill Building Approaches

The normal developmental and cumulative skill building approaches are perhaps the most commonly employed methods for assessing severely handicapped learners and for determining the sequence of skills which progress from a learner's current level of performance to acquisition of the skill. The normal developmental approach theorizes that all learners move through the same developmental levels, and that each level is a prerequisite for the achievement of skills at the next level. This normal developmental approach assumes that the best way to order instruction for severely handicapped learners is to use the sequences in which nonhandicapped children are believed to learn skills in such areas as motor, communication, cognition, self-care and socialization.

The cumulative skill building approach sequences the instruction of simple skills such that when the simple skills are combined, they result in complex skill performance. However, the sequence of simple skills is not necessarily based on a "normal" developmental skill sequence. For example, when combined, the

simple skills of inserting a coin in a slot, selecting a beverage and pushing a button can result in the complex skill of using a vending machine. Both normal developmental and cumulative skill building can form the basis for curriculum in such areas as change-making (e.g., progressing from discriminating coins, counting by ones, counting by fives and so on to making change) and reading (e.g., progressing from labeling objects and actions to discriminating between printed words and so on to reading a simple recipe).

Shortcomings of the normal developmental and cumulative skill building approaches to curriculum include the following: a) curricula based upon these approaches typically do not provide for assessment and instruction on functional alternatives such as the use of wheelchairs and communication boards; b) such curricula do not necessarily teach skills through age-appropriate, functional tasks; and c) they do not consider partial participation in current and future environments.

Table 7 depicts selected skills which may be found in normal developmental and cumulative skill building sequences. The second and third columns illustrate tasks and settings that the curriculum may suggest for teaching each skill. The tasks and settings suggested by the curriculum are selected arbitrarily and may not be age-appropriate or particularly functional. An ecological analysis was used to generate the fourth and fifth columns, resulting in the identification of more functional tasks and settings to teach the same skills. When a normal developmental and cumulative skill building approach is used to assess skills in such areas as motor, cognition, communication,

and functional academics, emphasis should be placed on teaching these skills through activities of daily living which occur at school, home and other community settings. The ecological analysis approach can be used to identify the functional activities and settings in which to teach the skills. The ecological analysis approach can also serve to identify skills in the curriculum which should not be taught because they are not particularly functional for severely handicapped students.

TABLE 7

Tasks and Settings for Selected Skills

SKILL	CURRICULUM		ECOLOGICAL ANALYSIS	
	TASK	SETTING	TASK	SETTING
SORTING	BLOCKS & BEARS	CLASSROOM	CLOTHING/SILVERWARE	SCHOOL/HOME
NOUN COMPREHENSION	BALL/BALLOON/WAGON (PICTURES)	CLASSROOM	(ACTUAL OBJECTS) CUP/PLATE/SPOON	SCHOOL/HOME RESTAURANT
PINCER GRASP	PICK UP RAISINS	CLASSROOM	PICK UP COINS	SCHOOL/HOME RESTAURANT
INDICATE WANTS MORE	SMALL DRINKS OF JUICE IN A 1-1 SETTING	CLASSROOM	ROCKING/RIDE/MUSIC	SCHOOL/HOME
ALIGNING OBJECTS IN ONE-TO-ONE CORRESPONDENCE	BLOCKS & BEARS	CLASSROOM	PLATES TO PLACE SETTINGS WHEN SETTING THE TABLE	SCHOOL/HOME

The Burlington Public Schools use the normal developmental and cumulative skill building approaches with young severely handicapped learners while teaching the skills through chronologically age-appropriate, functional tasks. The selection of skills for older severely handicapped learners is based on

ecological analysis and partial participation. If it becomes apparent that a severely handicapped learner will not be able to obtain a specific skill before leaving school, then functional alternatives are considered. For example, if it is evident that the learner will not master the change-making sequence, the "next dollar" approach could be taught.

Two of the specific curricula used in the severely handicapped classroom in Burlington are the "Minimum Objective System for Learners with Severe Handicaps" (Williams & Fox, 1980) and the "Vermont Comprehensive Communication Curriculum" (Keogh & Reichle, 1981).

3.2.4 The Curriculum Guideline Approach

The ecological analysis, normal developmental and cumulative skill building approaches provide a basis for determining what to teach and in what sequence skills should be taught. In order for a curriculum to be cogent, coherent and comprehensive, curriculum guidelines are needed. Curriculum guidelines do not provide a cookbook on what to teach severely handicapped learners. They provide a basic philosophical framework for educational programming which should enhance longitudinal skill development from the elementary school level through high school. Skills taught at the elementary level should be derived from and directly related to skills taught at the secondary level. In addition, the guidelines should differentiate between the educational needs of younger and older severely handicapped learners. Teachers can use the curriculum guidelines as a resource for developing individual education plans in addition to ecological analyses, normal

developmental and cumulative skill building approaches, to insure that functional age-appropriate skills are not overlooked. Specific goals and objectives for learners are selected on the basis of individual needs.

The Burlington classrooms for severely handicapped learners have adopted a slightly modified version of the curriculum guidelines developed by teachers and parents of moderately and severely handicapped learners in Madison, Wisconsin ("A Longitudinal Listing of Chronological Age-Appropriate and Functional Activities for School-Age Moderately and Severely Handicapped Students" by Ford, Johnson, Pumpian, Stengart and Wheeler, 1980). These curriculum guidelines were organized around the domestic, recreational, community and vocational domains. Each domain has a general philosophical statement of what should be taught at the elementary, middle and high school levels, followed by listings of specific skills which should be considered for assessment and instruction at each level.

Burlington teachers, parents and administrators reviewed the Madison Curriculum Guidelines, and a task force is currently modifying the guidelines to meet the needs of the Burlington Program. The underlying philosophical assumptions of Burlington's Curriculum Guidelines are delineated below.

a. Individual Education Plans for severely handicapped learners should prepare them to participate as independently as possible in integrated community, domestic, recreation/leisure and vocational environments.

b. To facilitate independent participation in integrated community environments, the curricular domains for severely handicapped learners should be organized around the major environments in which learners currently participate and/or will potentially participate. The major environmental domains include domestic, recreation/leisure, vocational, general community and education.

c. Skills should be ultimately assessed and taught in the nonschool environments in which they will be used.

d. The ecological analysis approach should be used to determine the demands of individual learners' current and future environments. This information should be used to prioritize the skills to be taught.

e. Tasks and activities used in instruction should be chronologically age-appropriate and functional.

f. Social skills instruction should be an integral component of domestic living, recreation/leisure, vocational and general community instruction.

g. Severely handicapped learners should not be excluded from participating in domestic, recreation/leisure, vocational and general community activities because they may never achieve independent participation. Adaptations in procedures, materials and/or tasks should be considered to allow learners to participate to the maximum extent possible.

h. There should be close coordination between parents and teachers in selecting high priority skills to increase participation in the home and other community settings.

i. A combination of the ecological analysis and normal developmental cumulative skill building approaches should be used to select and sequence objectives.

j. When normal developmental and cumulative skill building approaches are used as a partial basis for selecting objectives and sequencing skills, functional, age-appropriate tasks should be used in instruction. Learners should be taught to perform the skills in naturally occurring tasks of daily living which occur in school and nonschool settings.

k. Transitions of severely handicapped learners between classroom placements (e.g., from an elementary to a middle school placement) and from secondary school to adult services should be carefully planned to enhance continuity of programs across placements and to provide learners with training on skills which will facilitate success in the next placement.

In addition to the skills suggested by the Madison Guidelines, teachers, parents and administrators identified a general set of guidelines for what should be emphasized at the elementary, middle and high school levels. The guidelines are articulated below.

Elementary School

1. Appropriate behavior in school, home and a variety of community settings to facilitate community-based training at the middle and high school levels.
2. Instructional control (eye contact, attending to task, following directions) in one-to-one and group instructional arrangements in school and non-school settings to facilitate acquisition of more complex skills at the middle and high school levels.
3. Acquisition of functional academics such as reading, math, time-telling and language arts with demonstrated application to activities of daily living which naturally occur in school and nonschool settings.
4. Acquisition of communication and motor skills with demonstrated application in activities of daily living which occur in school and nonschool settings.
5. Development of primary modes of communication (e.g., speech, signing, communication aides) to be used with friends and strangers in school, home and other community settings.
6. Exposure to a variety of community environments for the purpose of learning and demonstrating appropriate behaviors, instructional control, functional academics and developmental skills in environments in which they naturally occur.
7. Self-initiated skill performance and taking care of personal needs (e.g., medical, personal equipment, special diets).
8. Acquisition of basic domestic living skills (e.g., self-care), recreation/leisure skills, community survival skills and vocational skills (e.g., working independently for increasing periods of tme).
9. Close coordination with parents to select activities which will increase functioning in current home neighborhood and community settings.

Middle School

1. Continuation of programming indicated at the elementary school level.
2. Increased time in community instruction.
3. Close coordination with parents to increase independent functioning in current settings.
4. Independent performance of in-school job tasks (e.g., cleaning up, setting up activities).
5. Independent and continuous performance of a sequence of tasks for increasing periods of time.
6. Working cooperatively with others in task completion.
7. Increased emphasis on ecological analysis and partial participation for selecting and prioritizing skills.

High School

1. Continuation of domestic living, recreational/leisure and community survival training begun at the middle school level.
2. Application of communication, motor, social/adaptive and functional academic skills in a variety of work and independent living activities.
3. Planning, with parents of transition to adult domestic, recreation/leisure, vocational and educational services.
4. Emphasis on teaching domestic, recreation/leisure, vocational and general community survival activities demanded in future environments with increased time in community instruction.
5. Increased time in vocational training with work experience available to all learners in school and/or community settings.

It must be emphasized that acquisition of the skills delineated for each level are not prerequisites to moving to the next level. In Burlington, learners move from level to level on the basis of chronological age. However, acquisition of the

skills at one level should facilitate performance and learning at the next level.

In summary, a combination of ecological analysis, normal developmental cumulative skill building approaches and curriculum guidelines are used in Burlington as the basis for each severely handicapped learner's Individualized Education Plan. An integral part of the curriculum is teaching skills through functional activities which occur in learners' current and future environments. Social interaction skills are taught as integral parts of these activities. The following sections describe more specifically the In-School Social Integration, Community Integration and Parent Involvement components.

4.0 IN-SCHOOL SOCIAL INTEGRATION COMPONENT

4.1 Overview of the In-School Social Integration Component

The goal of the In-School Social Integration Component is to improve the frequency and quality of social interactions between severely handicapped and nonhandicapped learners in school settings so that they may become "special friends". The model has three subgoals: 1) increasing opportunities for social interactions; 2) enhancing social interactions within the established opportunities; and 3) maintaining the opportunities. Strategies for increasing, enhancing and maintaining social interaction opportunities will be addressed separately, although they are all interrelated.

The Burlington model suggests that specific strategies used to increase, enhance and maintain social interactions should be individualized to meet the particular needs and characteristics of individual schools. However, even though the strategies should vary, the process for deriving the strategies can be the same across schools. All teachers of severely handicapped learners may follow a similar process to identify strategies for: obtaining administrative and parent support; identifying and creating social interaction opportunities; recruiting nonhandicapped students to interact with severely handicapped students; and promoting positive attitudes toward integration. The Burlington model developed a Social Integration Plan to assist teachers of the severely handicapped in identifying and implementing strategies for their own school.

The initial step in formulating a Social Integration Plan is for teachers of severely handicapped learners to delineate strategies for soliciting administrative, teacher and parent support. The teachers may then meet with a school administrator to discuss the need for social integration within the school and request assistance in formulating a Social Integration Plan. Building principals play a key role in promoting social integration and interactions. It is essential that they be involved in planning the project so that they will view the effort as a school project and not merely a special education project. Building principals can provide valuable suggestions for involving regular classroom teachers, determining types of social integration activities that can be promoted within the school, and encouraging nonhandicapped students to participate. In addition, the building principal can set a positive tone for social integration within the school and sanction the involvement of all staff.

Within the Burlington model, the teachers of the severely handicapped worked with their school principals to develop social integration task forces which consisted of administrators, regular classroom teachers, teachers of severely handicapped learners and other interested school personnel. Task force members were asked to provide continued guidance and suggestions regarding: activities and school environments in which social interactions could be facilitated; strategies for encouraging and recruiting nonhandicapped learners; strategies for providing regular teachers with information on social integration, handicapping conditions and the project; strategies for including information on handicaps

and social integration within the regular curriculum; and recommendations for modifying and continuing the project. Each task force developed a Social Integration Plan. After formulating the plan, the task force met periodically to review progress on its implementation.

The following sections describe specific strategies for promoting social integration within school settings. As previously discussed, these strategies should be selected and modified on the basis of individual school needs and characteristics.

4.2 Strategies to Increase In-school Social Interaction Opportunities

An initial step is to identify social interaction opportunities. As previously discussed, public schools are often structured to minimize social interaction opportunities, so there will typically be a need to create new opportunities within the school. Methods and strategies for increasing opportunities include: soliciting school-wide support; identifying and creating social interaction opportunities and activities; and recruiting nonhandicapped peers.

4.2.1 Soliciting Support

Prior to soliciting support, a strategy must be devised for approaching administrators, regular teachers and parents. A simple, nontechnical presentation of the rationale for increasing social interactions should be prepared. The presentation should emphasize the benefits of the project for nonhandicapped as well as for severely handicapped learners. For example, the

presentation should explain that the project is for nonhandicapped and handicapped students to become "special friends". This is beneficial to handicapped students because it provides a vehicle for teaching them social interaction skills. It is of value to nonhandicapped students because they can learn how to interact with persons who have individual differences and improve their social interaction skills in general. Nonhandicapped students who participate as peer tutors can learn how to teach others, explore a potential vocation, and learn responsibility. The presentation should point out that these social interaction activities generally receive very positive feedback from nonhandicapped students and their parents.

Administrative support should be solicited from at least the local director of special education and the school principals. Support should also be solicited from regular educators and parents of both severely handicapped and nonhandicapped learners. The people who are most likely to be supportive should be approached first. When parents, administrators and other school personnel support the project, improving interactions among the students is relatively easy.

Once general support has been obtained, a Social Integration Task Force can be formed. The task force is used to generate specific strategies for eliciting support from additional teachers, administrators and parents and for identifying and creating social interaction opportunities.

When support from key persons such as administrators cannot be obtained, social interaction activities can be planned with regular teachers who express interest. This is not optimal

because only students of interested teachers may be able to participate and the social interaction activities are less likely to become a regular part of the school program. However, when key people see the success of a small project they may be more likely to support an expanded future effort.

Strategies that can be used to enhance future support include: having regular classroom teachers, nonhandicapped students and parents of nonhandicapped students provide positive feedback on the project to the school; developing a closer working relationship with other educators in the school through more personal involvement in school and nonschool activities (e.g., staff meetings; socializing with regular education teachers in the teachers' lounge, participating in social activities with regular teachers after work); and inviting teachers and other school personnel to observe social integration activities.

4.2.2 Identifying and Creating Social Interaction Opportunities

Initially, the Social Interaction Task Force should identify the naturally occurring opportunities that already exist in the school for interactions between handicapped and nonhandicapped students. These opportunities may include:

a. riding the bus to and from school together;

b. walking to and from school together;

c. congregating in the school yard before and after school;

d. recess;

e. lunch;

f. assemblies and other school activities;

g. congregating in the hallway;

h. school clubs; and

i. waiting for the bus to go home.

In many schools, the opportunities for social interactions within the school day are quite limited or very regimented. For example, in many school cafeterias movement during lunch is not allowed and classes are required to sit together. Middle and high school levels typically do not have recess periods and provide short periods between classes. However, all opportunities that do exist should be identified.

Severely handicapped learners frequently do not attend public schools in their local communities, and consequently they may not ride the same buses or wait for buses in the same place or at the same time as nonhandicapped peers. In addition, the time spent in busing handicapped learners long distances may limit their ability to participate in before and after school activities. These problems can be resolved by providing educational services to severely handicapped learners in their local public schools.

Once settings have been identified in which social interaction activities naturally occur, ecological analyses can be conducted to determine what activities and skills must be performed in order to participate in the environment. The ecological analysis process involves the direct observation of nonhandicapped learners engaging in the activities in order to identify requisite skills and social interactions which occur. This process provides a functional information base for assessing the performances of severely handicapped learners. Following the assessment, activities should be delineated in which severely

handicapped learners need instruction, and partial participation strategies may need to be developed. Strategies for promoting participation include mainstreaming, reverse mainstreaming, and peer tutoring.

Mainstreaming as used herein involves the participation of severely handicapped learners in selected classes or activities designated for nonhandicapped learners. For example: severely handicapped learners may attend a regular classroom on an ongoing basis to participate in selected activities (e.g., gym, music, art); severely handicapped learners may participate in such activities as recess, lunch and library with nonhandicapped learners; and severely handicapped learners can wait for the bus with nonhandicapped learners.

Reverse mainstreaming involves integrating nonhandicapped learners into classroom activities for the severely handicapped. Examples of reverse mainstreaming include having nonhandicapped learners participate in recreation/leisure, art, and music activities in the severely handicapped classroom on a regular basis.

Nonhandicapped learners can participate in activities with severely handicapped learners as peer buddies or peer tutors. Peer buddies socially interact with severely handicapped learners without playing an instructional role. They can be employed in both mainstreaming and reversed mainstreaming situations. Nonhandicapped learners can be on a volunteer basis to participate in activities and to socially interact with severely handicapped learners. For example, nonhandicapped learners may volunteer to eat lunch with "special friends".

Peer tutors are recruited on a voluntary basis to function in the role of classroom aides and are assigned to specific learners for the purpose of providing instruction. For example, peer tutors may implement instructional programs which the teacher has developed with severely handicapped learners. The teacher of the severely handicapped recruits peer tutors, provides them with a specific assignment (job description), trains them to carry out the assignment, supervises them and provides them with feedback on their performance. It must be emphasized that peer tutoring should be a pleasant experience. Peer tutors should not be assigned to tasks which may be aversive, such as changing diapers and cleaning up after snack. It is very necessary that the teacher provide positive feedback to the peer tutor because positive feedback may not initially be forthcoming from severely handicapped learners. After the social interaction activities have been delineated and the roles of nonhandicapped peers have been articulated, peer buddies and tutors may be recruited.

4.2.3 Strategies for Recruiting Nonhandicapped Peers

Recruiting peer buddies and tutors is relatively easy. Frequently more nonhandicapped peers volunteer to participate in the activities than can be accomodated. However, scheduling recruitment activities and nonhandicapped peer participation while maintaining interest can be a real challenge. One goal in scheduling should be to maximize the number of nonhandicapped peers who can participate in the project.

Prior to recruiting volunteers, the schedule for the interaction activities should be delineated. The Social

Integration Task Force should be involved in ironing out scheduling problems. The schedule of social interaction activities must coincide with times when nonhandicapped peers can be free to participate.

Peer tutors and buddies should always be volunteers. However, the arrangement may be informal or formal. In an informal arrangement, peers may volunteer to participate during their free time. This can result in severe attrition if nonhandicapped peers feel they are giving up their recess or free period every day. It may be advantageous to initially schedule nonhandicapped peers to participate only one or two times a week and increase the amount of participation when they request it. By limiting the amount of time each peer can participate, the number of peers involved can be increased.

A more formal arrangement is to offer credit and grades for participating in the program. This arrangement is particularly appropriate for peer tutors. For example, at Edmunds Middle School in Burlington, students take home economics and industrial arts on a nine-week rotation. They can substitute peer tutoring for either class. Burlington High School has a specific program to train peer tutors. Through this program, nonhandicapped students can receive credit for working as peer tutors. Similarly, nonhandicapped students at the elementary level may be able to substitute peer tutoring for selected classes such as art, music and so on. A formal arrangement has the following advantages: 1) peer tutors are not required to give up free time to participate; 2) more structure is provided to the program; and 3) peer tutors receive feedback and motivation in the form of

grades and/or credit.

Whether an informal or formal arrangement is used, each peer tutor should have a job description which specifies duty and schedule. For tutors earning credit, a specific grading system should be designed. Peer tutors at Edmunds School were graded along such dimensions as punctuality, preparing materials prior to instruction, appropriately implementing instruction, collecting data, cleaning up after instruction and developing an appropriate rapport with their "special friend".

Recruiting nonhandicapped peers is frequently a logistical challenge. Recruitment typically involves the teachers of the severely handicapped making short presentations (15 or 20 minutes) to groups of nonhandicapped students. At the elementary level, presentations can be made in each class. At the junior high and high school levels presentations may be made in homerooms or classes that all students are required to take. Presentations do not have to be made to all classes every year. Instead, they can be made to entering classes of the school (e.g., kindergarten for elementary, fourth graders for middle school and ninth graders for high school), while newsletters and recruitment forms can be used for upper grades who have seen the presentation and may have participated in the project in previous years.

Slide presentations have been an effective recruitment vehicle. With parental permission, slides are prepared of severely handicapped learners which depict what they are learning and in what types of activities they participate. When peer tutors and buddies have been involved previously, slides may be presented of them engaged in activities with severely handicapped

learners. In this case, permission from the parents of the nonhandicapped student is also necessary. During the presentation, the severely handicapped learners can be described along with the types of activities in which nonhandicapped peers may participate. Care should be taken to emphasize positive attributes of the severely handicapped students rather than their handicaps and limitations. The job description of a peer tutor should be discussed at this time. Subsequent to the presentation, nonhandicapped students who wish to participate in the project can fill out forms providing their names, ages and times they could participate.

A pleasant challenge experienced by the Burlington project is that far more peers typically volunteer than can be handled by the project. A goal should be to maximize the number who can participate. This may be accomplished by limiting the amount of time individuals can participate. Groups of peers can then be rotated though the project. Since teachers of the severely handicapped are not always knowledgeable about the nonhandicapped peer volunteers, principles, teachers and others who are familiar with them should be involved in the selection process. Once the social interaction activities and participating nonhandicapped peers have been identified, the quality of interactions which occur during the activities can be enhanced.

4.3 Strategies for Enhancing the Quality of Social Interactions

The primary focus of the Burlington model is to increase the frequency and quality of social interactions between severely handicapped learners and their nonhandicapped peers. Basic

strategies which can be employed to enhance the quality of social interactions include: providing social interaction training to nonhandicapped peers; providing social interaction training to severely handicapped learners; providing social interaction training to regular teachers and interested others; and arranging environments to facilitate social interactions.

4.3.1 Provision of Social Interaction Training to Nonhandicapped Peers

A key element to increasing the frequency and quality of social interactions is teaching nonhandicapped learners how to interact with their severely handicapped peers. As previously described, when nonhandicapped peers learn how to interact with severely handicapped peers, even the most handicapped learners can at least partially participate in social interaction activities.

A basic technique for teaching social interaction skills and partial participation strategies to nonhandicapped peers is modeling. Nonhandicapped peers can acquire social interaction skills by observing how teachers and paraprofessionals interact with severely handicapped learners. It must be emphasized that it is crucial for teachers and paraprofessionals to model appropriate behaviors, since it is these behaviors that nonhandicapped peers will imitate. Appropriate behaviors that should be modeled include: a) talking to severely handicapped learners in an age-appropriate fashion; b) communicating with the learners through signs, communication board speech, eye contact, body gestures, etc.; c) encouraging the severely handicapped learners to at least partially participate in activities with the least amount of assistance possible; d) praising or reinforcing

appropriate behaviors; and e) always acknowledging the presence of severely handicapped learners and talking with them, not about them. This last point is extremely important. When instructing nonhandicapped peers in the presence of severely handicapped students, teachers should take care not to talk about the severely handicapped students as if they were not present or could not hear. One way to avoid this problem is to do the instruction away from the severely handicapped student. Another way is to talk "through" the severely handicapped student using such phrases as "shall we tell John how to...". This terminology acknowledges that the severely handicapped person is present and conveys the necessary information to the nonhandicapped peer while still preserving the dignity of the severely handicapped person.

Basic steps which can be employed to teach nonhandicapped peers to socially interact with severely handicapped learners are delineated below.

1. Introduce the nonhandicapped peers to the severely handicapped learners with whom they will be interacting.

2. Discuss the social interaction activities in which they will be involved. Describe how to interact with the severely handicapped learners and articulate what the severely handicapped students should be learning through the activities (e.g., using the lunchroom more independently, learning a recreation/leisure skill, using a communication mode in interacting with others).

3. Model how to interact with the severely handicapped learners in the activities and then discuss the techniques demonstrated. Be sure to encourage questions from the nonhandicapped peers.

4. Have the nonhandicapped peers participate in the activities with severely handicapped learners with supervision. Provide the nonhandicapped peers with praise and feedback on their interactions. Allow

time for questions and discussion during and after the activities.

5. As the nonhandicapaped peers demonstrate appropriate interaction skills, gradually reduce supervision. Stand back and observe the interactions, getting involved as little as possible. Do not make the nonhandicapped peers feel that you are always looking over their shoulders.

The procedures described above are applicable to training both peer buddies and peer tutors. However, peer tutors typically need additional training on how to conduct specific instructional programs. Training can be provided on securing the necessary materials for conducting the lesson, appropriately cueing the skills being taught, appropriately consequating correct and incorrect responses, managing inappropriate behavior, recording data, graphing data and putting away materials at the end of the lesson.

4.3.2 Provision of Social Interaction Training to Regular Classroom Teachers and Interested Others

When integration occurs at lunch, recess, in regular classrooms and in other activities, severely handicapped learners should be interacting with cafeteria staff, regular classroom teachers, and other school personnel in addition to their nonhandicapped peers. It may be necessary to teach regular classroom teachers and other staff involved in the activities how to interact with severely handicapped learners. This training can be informal and occur within the content of the activities. The basic procedures described above (e.g., modeling, discussions and feedback) can be employed.

When severely handicapped learners are in integrated settings, other teachers and staff typically depend upon the

teacher of the severely handicapped to handle any situations that arise. Instead of appropriately dealing with a situation, they will usually ask for help and assume that it is not their responsibility to consequate the behavior or remedy the situation. Provision of training to regular teachers and other staff and positive feedback when they initiate involvement should help to reduce this dependency.

4.3.3 Provision of Social Interaction Training to Severely Handicapped Learners

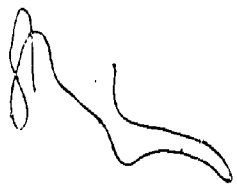
As previously described, an ecological analysis approach should be employed to determine the social interaction skills to be taught. Severely handicapped learners should then be assessed to determine their present levels of performance, and ways to modify the activities and skill requirements to allow for partial participation should be delineated. The teaching/learning principles derived from applied behavior analysis can then be used to design, implement, evaluate and modify instructional procedures. The teacher, aide, or a peer tutor can then be employed to teach the skills.

4.3.4 Arranging Environments to Facilitate Social Interactions

Environmental arrangements can facilitate or inhibit social interactions. For example, if severely handicapped learners are integrated into the lunchroom with nonhandicapped peers but sit at a separate table, there will likely be few or no interactions. Two basic strategies for arranging environments to encourage social interactions include grouping and cooperative goal structuring.

Dividing the participants of social interaction activities into small heterogeneous groups should generally facilitate interactions between handicapped and nonhandicapped learners. For example, when severely handicapped learners go to a regular classroom to participate in an activity, the class could be divided into small groups with one or two severely handicapped learners in each group.

The structuring of goals in small heterogeneous groups also can inhibit or facilitate social interactions. As delineated by Johnson and Johnson (1980), there are at least three ways to structure goals for small groups - competitively, individually, and cooperatively. In competitive goal structuring, each member of the group may compete to produce the best art project or attain the highest score in a game. Individual goal structuring does not involve competition between members of the group. Instead, each member works to improve upon his/her own previous performances. For example, members could try to beat their previous high score in a game. Cooperative goal structuring requires the whole group to work together to complete an art project or to achieve a group score in a game. Cooperative goal structuring best facilitates handicapped and nonhandicapped group members interacting and working together to meet a goal. Group members are encouraged to assist severely handicapped learners who can partially participate in an activity. Cooperative goal structuring should be employed whenever possible, whether a handicapped learner is working with one or several nonhandicapped learners. Another consideration when arranging the environment is that tasks, materials and activities should be age-appropriate.



4.4 Strategies to Maintain the In-School Social Integration Component

In order for the In-School Social Integration Model to be maintained over time, it should become a regular part of the school program. The strategies delineated for increasing and enhancing social interactions will facilitate maintenance of the model. To further facilitate the maintenance of the model in Burlington, the Director of Special Education and teachers of the severely handicapped have adopted guidelines for promoting social interactions. The guidelines legitimize social interaction programming and provide some assurance that the program will remain a part of the curriculum despite changes in teachers and administrators. The following guidelines were adopted.

1. Inclusion of IEP objectives for each student related to increasing and maintaining the frequency and quality of interactions with nonhandicapped persons.
2. Provision of regularly scheduled times for social interaction activities.
3. Participation of all severely handicapped learners in social interaction activities.
4. Provision of systems and strategies to promote working relationships between teachers of severely handicapped, regular classroom teachers and administrators (e.g., the Social Integration Plan).
5. Provision of training to nonhandicapped students, regular classroom teachers and administrators on interacting with the handicapped.

5.0 THE COMMUNITY INTEGRATION COMPONENT

The overall goal of the Community Integration Component is to improve the frequency and quality of social interactions between severely handicapped students and nonhandicapped persons in general community settings, such as stores, restaurants, and public buses. Methods for achieving this goal include: 1) teaching severely handicapped learners to participate more independently in community environments; 2) teaching social interaction skills as integral components of all activities of daily living; 3) using the community-referenced and community-based training approaches to teach the skills; and 4) providing information to community members on how to interact with severely handicapped individuals.

5.1 Community-Referenced and Community-Based Training

Community-referenced training as used herein, refers to training on skills required in natural community settings which takes place in classrooms and simulated settings. Training does not take place in actual environments but does emphasize teaching skills to be used in those environments. An example would be training purchasing skills in the classroom under conditions which simulate purchasing in an actual store. Advantages of the community-referenced approach include the following: a) distractions can be minimized during skill acquisition; b) repeated practice can be readily provided on difficult-to-teach skills; and c) such procedures as match-to-sample and errorless

learning can be easily employed to establish stimulus control.

It cannot be assumed that because severely handicapped students demonstrate skills in classrooms and in simulated instruction they will be able to perform them in ultimate environments. For this reason, the community-based training approach must be used in conjunction with community-referenced training. As used herein, community-based training refers to the assessment and training of skills in the environments in which they will ultimately be performed. This approach has the advantage of facilitating the performance of skills under conditions and at the criteria required by the natural environments.

Another advantage of community-based training is that it facilitates the delineation, assessment and teaching of collateral skills, or related skills which supplement a task. For example, if a student was receiving instruction on grocery shopping in a supermarket, collateral skills could include riding a bus, street crossing, locating the store, preparing a shopping list, preparing money, maintaining an acceptable appearance and demonstrating appropriate social behaviors. Collateral skills for bus riding may include such skills as dressing for the weather, getting to and from the bus stop, problem solving (e.g., what to do when there are no empty seats), and demonstrating appropriate social behavior on the bus.

Social skills are essential collateral skills for all community instruction (e.g., street crossing, bus riding, restaurant use). Community-referenced training alone does not insure that these skills will be adequately addressed. It is

recommended that community-based training be conducted in addition to community-referenced training so that all essential collateral skills will be considered.

Provision of community-referenced and community-based training used in combination is somewhat analogous to a driver education program. Through community-referenced training, driver education students may practice on simulated driving machines, and may pass written tests on rules of the road. However, they do not receive a driver's license until they have practiced driving on the road under supervision, and have passed a road test. It is not assumed that students will generalize skills acquired through classroom instruction and simulated driving to driving on the road. Skills are assessed and trained in the environment in which they are ultimately to be performed.

5.2 Relationship of the Community Integration Component to Functional Curricular Guidelines

As previously described, functional curricular guidelines provide a basic philosophical framework for structuring longitudinal educatonal programming and should be organized around the four environmental domains: domestic, community, recreation/leisure and vocational. They list specific skills in each domain which should be considered for assessment and instruction at the elementary, middle and high school levels. In Burlington, the focus and emphasis on community-based and community-referenced training are different for younger and older learners.

For young severely handicapped learners, the focus of training is to increase participation in current environments, emphasizing the domestic, recreational/leisure and general community domains. The purpose of such training is to provide community exposure, encourage functional applications of skills that they are acquiring in school, and increase their abilities to participate in community activities with parents and siblings. Teaching appropriate behavior may be a major emphasis at this level.

For older severely handicapped learners, community-based training is emphasized to increase self-initiated, more independent participation in future post school environments. A major focus is on the vocational domain in an attempt to prepare them for employment upon leaving school, and on cooperation with agencies to ease transitions to adult services.

5.3 Strategies for Increasing Interaction Opportunities in Community Settings

Although community-based training is educationally advantageous for severely handicapped learners, attitudinal and logistical barriers frequently must be overcome before it can be provided extensively. Attitudinal and logistical barriers included the following:

1. Concern for learner safety within community environments makes some administrators, educators, and parents reluctant to teach certain skills such as street crossing and bus riding.
2. Fear on the part of educators and parents that learners will engage in embarrassing behaviors in community environments.

3. Concern on the part of educators and parents about liability in nonschool environments.

4. Concern that services which are provided in a variety of locations are less efficient than those provided in a centralized location.

5. Concern that nonhandicapped people in community training environments will not be accepting of severely handicapped learners.

6. Concern that community-based instruction disturbs the status quo, may require additional instructional resources, interferes with existing schedules and may require additional transportation.

One strategy which can be employed to reduce safety concerns and fear of embarrassing situations is to provide community-referenced training, which simulates natural environmental conditions, prior to or concurrently with implementing community-based training. This practice points out potential problems and allows for remediation before they occur in risky or potentially embarrassing situations. Another strategy is to assure administrators and parents that appropriate supervision and all reasonable safeguards will be employed. For example, during initial instruction on street crossing, the instructor should always be close enough to prevent learners from stepping off the curb at a dangerous or illegal time.

Administrators and educators are typically concerned about liability if an accident or injury occurs off the school grounds. However, providing training off school grounds is not new to public schools. Work study and work experience programs for high school students traditionally use community vocational placements. Driver education programs take students off school grounds. Field trips into the community are frequent public school activities. Most school systems do have policies covering educational

activities off school grounds, which should also cover severely handicapped students. Typically, if the trip off schoool grounds is part of the learner's educational program and appropriate supervision is provided, liability should not present a barrier.

Additional strategies for increasing social interactions in community settings include employment of the ecological analysis approach, establishment of frequent contacts and a close working relationship with parents, establishment of a working relationship with the community and reallocation of resources.

5.3.1 Ecological Analysis Approach

Prior to implementing community-referenced or community-based training, current and potential community environments for severely handicapped learners should be delineated, major activities typically performed in those environments should be articulated, specific skills needed for participation in the activities should be listed, and a discrepancy assessment should be performed comparing the skills learners can perform to the skills needed for the activities. High priority environments, activities and skills should be selected for training, and adaptations to allow severely handicapped learners to at least partially participate in activities should be devised as necessary. The ecological analysis approach provides a framework for determining what environments, activities and skills should be emphasized in community-referenced and community-based training.

5.3.2 Close Working Relationships with Parents

Parents play a crucial role in determining high priority

environments, activities and skills. They may also be able to assist in developing adaptations to increase severely handicapped learners' active participation in these activities. The Burlington Model uses tools for soliciting parental input and maintaining close contacts with parents. These tools are the Parent Inventory and the Parent/Teacher Communication System.

The teacher and the parents complete the Parent Inventory together, preferably in the parents' home, since parents may be more at ease there. Conducting the interview in the home also has the advantage of allowing the teacher to see the student's domestic environment and any adaptations that have been or could be made to increase independent functioning. The Parent Inventory consists of questions pertaining to the learner's current environment and performance level; prioritization of environments, activities and skills; and transition planning.

The questions regarding the learner's current performance level are divided into community, domestic and vocational domains. Recreation/leisure activities are divided between the community and domestic domains depending on where the activity is performed. In each domain there is a listing of skills and questions concerning the types of activities in which the learner currently participates and those in which the parents would like their child to participate in the future. The parents and teacher review the activity and skill listings together, noting parental perceptions of current and desired future performances. After completing the first phase, the parents and teacher prioritize the most important environments, activities and skills for each domain. The parents and teacher then complete the transition questions. The

elementary teacher and parents discuss when the transition from one classroom to another will take place and begin planning. For the high school age severely handicapped learner, the parent and teacher discuss possible post-school vocational, domestic, recreational/leisure and general community placements and begin planning for this transition. Finally, a system for maintaining communication between the parents and teacher is discussed and a method and schedule agreed upon. The Parent Inventory is conducted prior to designing the IEP, allowing high priority training environments, objectives and activities to be discussed in a more relaxed atmosphere outside of the IEP meeting. The teacher can then synthesize the information from the ecological analyses, parent inventory and other assessments to design the IEP.

Through more extensive contact with and input from parents, it should be possible to implement more appropriate community-based training objectives and secure greater parental support. In addition, the parents and teacher can coordinate social interaction activities between school and home.

5.3.3 Working Relationship with the Community

The provision of community-based training demands that the program maintain a good working relationship with the community. Sites such as the library, fast food restaurants, public buses, grocery stores and bowling alleys may be used as community-based training sites. Employers and employees at training sites (e.g., bus drivers and clerks) should be apprised of the nature and rationale for the program, and should be familiarized with any

adaptations, such as use of communication boards to order food. When many classrooms are providing community-based training, it is advantageous to have one person coordinate communication with the training sites.

The area of vocational training represents a different challenge. Employers may have requests from several agencies (e.g., Vocational Rehabilitation Projects with Industry, structured work programs for adults) to use their business as a work experience and employment site. Coordination with these agencies can ease the tension which may exist when several agencies are competing for a few job sites. In Burlington, the Vocational placement specialist at the high school is responsible for developing community vocational training and employment sites and maintaining working relationships with the personnel. The vocational placement specialist is an active member of the Human Services Provider Committee, which is composed of members of all agencies in the Burlington area involved in job development, training and placement. The purpose of this committee is to share information in an attempt to coordinate efforts and maintain a working relationship with the business community.

5.3.4 Reallocation of Resources

Use of the ecological analysis approach, working closely with parents, and developing a working relationship with the community will facilitate increased community interaction activities only if sufficient time and resources can be allocated to community-referenced and community-based training. Since adding new resources to programs may not be feasible, the provision of

community-referenced and community-based training will, in many cases, have to be accomplished through the reallocation of existing resources. Resources can be reallocated by combining resources from different programs to eliminate duplications of effort, redesigning the roles of existing staff, and making use of all available instructional resources.

One task which must be accomplished is the development of community-based vocational training sites. The selection of personnel for these tasks will depend on the characteristics of individual special education service delivery systems. For example, in rural Vermont where only one or two classrooms for severely handicapped learners serve an entire region, the classroom teacher may develop and implement all of the community-based vocational training. In more urban areas where the number of learners served is greater, one staff member may be assigned exclusively to the role of selecting sites and providing vocational training in the community.

Community-based vocational training is a generic service which is needed by mildly, moderately and severely handicapped learners. When the number of learners to be served is small, staff members can be assigned to provide such training to all handicapped learners. For instance, in Burlington, the high school classroom for severely handicapped learners is located in close proximity to the program for mildly and moderately handicapped learners. The programs now share a Vocational Placement Specialist. By reallocating staff in this way, resources can be combined to meet generic needs.

Often the system for managing individual classrooms inhibits

the provision of community-based training. When the organization demands that the teachers provide constant direct instruction, there is no time allocated to training and supervising aides, talking to parents when they visit the class, conducting ecological analyses, and arranging and supervising community-based training. It may be preferable for the teachers to engage in less direct instruction and use the remaining time to develop instructional programs, train and supervise aides, and trouble-shoot programs. They may also use this time to recruit, train and supervise peer tutors and university students for use as additional resources. Finally, release from direct instruction provides time for the teacher to develop and implement the Making Special Friends Model. Teachers who release themselves from total direct instruction will not necessarily have more tasks, but will have different tasks and play a different role.

5.4 Strategies for Enhancing Social Interactions in the Community

Two basic strategies for enhancing interactions in community settings are providing training to severely handicapped learners in integrated community settings and trainer advocacy. When designing and implementing community-based training, consideration should be given to differences in the focus of community-based training for younger and older learners; coordination of community-referenced and community-based training; and coordination of developmental and cumulative skill sequences with community-based training.

As previously described, curriculum for young severely

handicapped learners may be based upon a combination of ecological analysis, normal developmental and cumulative skill building sequences, and functional curriculum guidelines. Ecological analysis should provide the basis for determining what skills will increase participation in home and community environments. These skills can be taught and practiced in activities of daily living which occur in school. Community-based training at this level involves going to various community environments (e.g., restaurants, swimming, shopping malls) and teaching or practicing the targeted skills. It is also necessary to work with the parents to facilitate skill performance at home and in community environments.

Skills may also be selected on the basis of the normal developmental and cumulative skill building approaches which may overlap with skills identified through the ecological analysis approach. For example, if motor imitation is selected as a skill, the motor imitation skills should be related to tasks identified through ecological analysis, so that the skills can be practiced and taught during eating, dressing, recreation/leisure, etc.

Curriculum for older severely handicapped learners should also be based upon a combination of ecological analysis, normal developmental and cumulative skill building sequences and functional curriculum guidelines, but there should be a difference in emphasis. Ecological analysis and preparation for post-school (future) environments should be emphasized and there should be more community-based training. The focus at the high school level shifts from exposing learners to various community environments to teaching maximal independence in such activities as grocery

shopping, bus riding, street crossing, and so on. In addition, vocational training and structured employment opportunities should be provided.

As with the younger learners, there must be close coordination between what is taught in school and what is practiced in community environments. Community-referenced and community-based training must be closely coordinated. For example, in-school jobs should be similar to potential job opportunities in the community.

It cannot be too strongly emphasized that for both younger and older severely handicapped learners there should be a direct relationship between skills taught in school and skills needed in current and future environments. Through working closely with parents and providing community-based training, a systematic process should be developed for transferring skill performance from school to home and other community environments.

Another goal of the Community Integration component is to enhance social interaction skills which will increase participation in integrated community environments. Training should also focus on teaching nonhandicapped persons to socially interact with severely handicapped persons. This can be accomplished through trainer advocacy.

5.4.1 Trainer Advocacy

A trainer advocate informs people in the community about community-based training programs and provides them with practical information on how to interact with severely handicapped individuals. A general curiosity may exist as to what severely

handicapped learners and their teachers are doing in the community. For example, when severely handicapped learners use picture books to order food in a restaurant or route cards to check the bus route, nonhandicapped persons may not understand why or how such devices are used. Curiosity can be somewhat lessened by not going into the community in large groups which draw attention.

Trainer advocacy is especially important in vocational settings since coworkers' attitudes, interaction styles and support can make or break a [illegible] success at a work experience site or on a job placement. Maintaining good public relations and providing information to nonhandicapped persons is crucial to the participation of severely handicapped persons in community settings.

5.5 Strategies for Maintaining Community Interaction Opportunities

The strategies delineated for increasing community interaction opportunities will also enhance the long-term maintenance of community-based training. Resource reallocation, parental support and input, and functional curriculum guidelines are all strategies for making community-based training an ongoing part of the school program.

In addition, specific guidelines for community-referenced and community-based training can be adopted and implemented. Administrators, teachers and parents in Burlington adopted the following guidelines for providing community-referenced and community-based training to severely handicapped learners.

1. Inclusion of community-referenced and community-based training objectives in IEPs.

2. Use of the parent inventory and ecological analysis to determine the types and frequency of community-based training activities.

3. A system for coordinating and directly relating school and community-based training activities.

4. A system for planning transitions from secondary to adult services.

5. A system for soliciting community support for and cooperation with individuals involved in community-based training.

6. Provision of regularly scheduled times for community-based training during the school day.

6.0 PARENT INVOLVEMENT COMPONENT

Parental input and support are crucial to the development, implementation and maintenance of Burlington's Making Special Friends Model. The Parent Involvement component was developed to provide a means of including parents in all aspects of the project. The following goals were defined for this component:

1. To solicit parental input into Burlington's Making Special Friends Project.

2. To increase and maintain parental involvement in their children's educational programs.

3. To increase and maintain ongoing communication between parents and teachers.

4. To assist parents in obtaining desired information and support.

The Parent Involvement Component is described in detail in Volume IV. A brief overview will be provided below.

Since severely handicapped students who attend the Burlington schools live in a variety of settings (e.g., natural homes, group homes, foster homes, staffed apartments and nursing homes), efforts were made to include all primary caregivers in all project-related activities. The term parent is used herein to refer to all primary caregivers.

6.1 Strategies for Enhancing Social Interactions Through Parental Involvement

Strategies for increasing social interactions include parental involvement in task forces; systematic assessment of parents' priorities and expectations for their children; systematic ongoing contacts between parents and teachers; and

involvement of parents in developing systems and strategies for increasing social interaction in homes and neighborhoods. Because of the interrelatedness of the three components of the Burlington Model, many of these strategies have previously been discussed. Those strategies not discussed under the Social Integration or Community Integration components are articulated below.

Parental involvement in Burlington's Making Special Friends Project was initially secured through the development of task forces. At the beginning of the project, task forces consisting of parents, teachers and administrators were formed to provide input into the conceptualization and implementation of each component of the model. Task force members provided continued guidance and suggestions regarding strategies for promoting all aspects of the model, and participated in field testing and revising the tools developed to implement the model. Parents were particularly active on the task force for the Parent Involvement Component and were invaluable in assisting the teachers and project staff in developing the most effective and convenient methods for achieving the project's goals.

The strategy developed to invite parental input into their children's educational programs is the parent interview. These interviews are conducted annually by the teacher and serve as vehicles for informing parents of the nature of the program as well as for soliciting their ideas regarding their child's educational needs. The parent inventory was devised as a tool for assisting teachers in organizing the interviews. The information gained from the parent interview should facilitate coordination between the needs of families and the curriculum, resulting in

more independent functioning by the severely handicapped individual in family activities.

Parents and teachers in Burlington have worked together to develop and field test a variety of systems for maintaining ongoing contact. Such communication is essential for coordinating efforts to promote the generalization of skills learned in school to home and community settings. Regular contacts may also serve to keep parents and teachers informed of medical, behavioral, and physical concerns for the child as well as any other information deemed valuable. It is recommended that during the parent interview, the parents and teacher review the systems available and agree upon at least one that will suit their needs and preferences. It would certainly be advisable to tailor an existing system to better accommodate a parent or to create an entirely new method if the need arises. A schedule for communicating should also be discussed along with the types of information they wish to share.

The method developed by Burlington's Making Special Friends Project to identify parental information and support needs is a survey format which may be conducted during the parent interview. By completing the survey, parents are assisted in identifying their priority needs related to advocating and caring for their child and determining strategies for meeting these needs. The survey addresses such areas as behavior management, medical services, community services, educational services and post-school services.

The school district should not attempt to meet all of these needs alone. The information gained from this inventory should be

used to put parents in contact with appropriate community agencies (e.g., Association for Retarded Citizens, United Cerebral Palsy, public service agencies, legal service agencies and medical service agencies). Information from this questionnaire should be shared with these agencies to help them to better serve the needs of the population. Many of these organizations and agencies provide workshops and conferences which address general informational needs. Parents should be informed about these workshops and conferences and the topics to be covered. For example, parents of severely handicapped learners in Vermont receive newsletters from the Vermont Association for Retarded Citizens and the State Interdisciplinary Team for Intensive Special Education which provide such information. Through cooperation with community agencies, school districts can avoid duplication of services and more efficiently allocate their resources.

Parents also may need information on available services such as respite care, psychological counseling, group homes, vocational training and placement, recreation and adult educational programs for severely handicapped persons. Such services are provided by a multitude of different agencies such as Community Mental Health Centers, Vocational Rehabilitation Services and private nonprofit groups. In order to provide this information to parents, a Resource Guide of Community Services was developed by the staff of the Burlington Model.

Opportunities for participation in integrated community activities can also be enhanced by providing parents with information on wheelchair accessibility. Parents who want to take

their children into the community often need information on the accessibility of buidlings so that they can choose accessible sites. Burlington's Church Street Marketplace Accessibility Guide provides physical descriptions of many buildings in Burlington so that parents can determine if a building is accessible to their child. Other information, such as nonpeak traffic hours, may also help parents to determine optimal times for outings.

In addition to the actual production of the Burlington Accessibility and Resource Guides, a procedures guide has been written for dissemination to other cities who may wish to produce similar guides for parents. Refer to Volume V, Developing Community Resource and Accessibility Guides.

6.2 Maintaining Parental Involvement

Primary vehicles for maintaining parental involvement are parent task forces and teacher commitment to parental communication. In the Director of Special Education, teachers and parents in Burlington developed the following set of guidelines to be used by teachers when working with parents

1. Use of Parent Inventories to assess parents' priorities and expectations for their children.
2. Use of the Survey of Parent Information and Support
3. A system for ongoing contacts and reporting between parent and teacher.
4. Use of parent inventories, ecological analysis and frequent parent contacts to coordinate what is taught in school with increasing social interaction in learners' homes and neighborhoods.

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