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ABSTRACT

Intended for teachers of severely and profoundly retarded children, the text presents guidelines for designing individualized programs for these children and specific teaching techniques which the authors have found successful with children having a mental age of from 0 to 36 months. An introduction defines severely and profoundly retarded and lists characteristics of the population. Covered in the section on the systems approach are definitions of program areas, initial preparation for programming and scheduling (including descriptions of equipment needed), components of the educational program, and home follow-up. The specific teaching techniques are presented in several sections covering such areas as body image, gross motor skills, fine motor skills, visual skill development, auditory training, activities of daily living, communication skills, and personal-social skills. Each specific task is covered on a separate page and includes general objective, task, materials, procedures, rationale, and adaptations. A special "card system" for tracking individualized program objectives and tasks is explained. (IM)

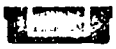
Cover

special techniques

for

teaching the severely and profoundly retarded

ALLEGHENY INTERMEDIATE UNIT



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Special Techniques For Teaching The Severely And Profoundly Retarded

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Second Edition
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THANK YOU ALL !!!!

DEDICATION

To: Ann M. Ronayne, Supervisor

In appreciation . . .
for your knowledge
when we had so little,
for your guidance
as we struggled,
for your patience
as we grew,
for your inspiration
as we continue,
for the joy you have brought to our work.

A Message . . . from the Executive Director

of the Allegheny Intermediate Unit

This useful compendium of special techniques for teaching severely and profoundly retarded youngsters is based on sound knowledge about what it takes for the teacher to teach and the child to learn. It is not a collection of gimmicks or magical formulas which promise success. The staff who developed this guide has given serious attention to the characteristics of the child, priority areas for learning, good class room management and sound evaluation procedures. Its use by teachers should have a significant effect on learning by severely and profoundly retarded youngsters.

Harold E. Oyer

Dr. Harold E. Oyer
Executive Director
Allegheny Intermediate Unit

A Message . . . from the Director of Special Education

The unique characteristics of the severely and profoundly retarded children present complex educational problems for public school teachers. Public education has only recently become involved with devising educational programs for the severely and profoundly retarded students.

It is hoped that this text, developed by dedicated teachers to assist new dedicated teachers, will be helpful and lead the way toward sound educational programming for children who very much need all the help that we can provide for them.

D. Roger Meehan

Dr. D. Roger Meehan
Director of Special Education
Allegheny Intermediate Unit

A Message . . . from the Chairpersons

The intensity and multiplicity of the physical, mental and emotional problems of severely and profoundly retarded children necessitates guidelines for their education and/or training. The teachers of the profoundly mentally retarded classes of the Allegheny Intermediate Unit have compiled, primarily from their own experiences and from the references available, guidelines for designing a program for these multiply handicapped children. Those guidelines constitute this text.

As chairpersons, we must remind the reader that a guide of this sort will never be complete. Our professional responsibility as teachers and our personal commitment to these children can be purposeful only by keeping ourselves aware of current and ongoing research. In this way, we can continue our efforts to enhance the education and/or training of these severely and profoundly retarded children.

We congratulate the committee for their untiring efforts in producing this text. We hope it will prove helpful to other teachers who, through their own creative input, endeavor to enlarge the horizons of the children in their care.

Ann M. Ronayne, Supervisor

Mary Lou F. Bensy, Chairperson
August, 1976

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Chapter 1

INTRODUCTION

Definition of Child

"Mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period."[1] For years educators considered most of the severely/profoundly retarded individuals as uneducable and untrainable. For that reason, they were deprived of an educational program in the public school setting.

This text is primarily concerned with those children who have been classified profoundly mentally retarded. However, it is the opinion of the authors that the information and specific tasks and techniques included are also appropriate for children labeled severely retarded who are functioning at an I.Q. of approximately 25.

Presently, the classification of severely/profoundly retarded individuals is defined by the American Association of Mental Deficiency as determined by the following test scores.[2]

	Stanford Binet & Catell	Weschsler
Severe	35 – 20	39 – 25
Profound	19 & below	24 & below

Characteristics

The severely/profoundly mentally retarded child cannot be described merely by I.Q. scores. No two children are the same. To better perceive the wide range of differences found in this group, the authors offer the following list of characteristics which they may exhibit:

1. Require total care
2. Extreme, obvious developmental lags
3. Poor motor development
4. Minimal sensori-motor skill development
5. Little or no communication skills
6. Numerous and/or severe physical defects

7. Lack of basic feeding and toileting skills
8. Self-abusive and/or self-stimulating behaviors
9. Little or no awareness of environment
10. Non mobile and/or non-ambulatory
11. Extreme infantile behavior
12. Inability to guard themselves against most common physical dangers

The list is not exhaustive, nor is it meant to imply that all severely/profoundly retarded children possess all of these characteristics. Many of these children are ambulatory and have some feeding and toileting skills. The authors have observed that often a child may have a wide range of levels of functioning in various areas, i.e. a child may be ambulatory and quite proficient in gross motor skills but lack sensori-motor skills, or a child may be functionally proficient in fine motor skills but have very little verbal or non-verbal communication skills.

Purpose

Through the Right to Education Consent Agreement of 1972 in Pennsylvania, all mentally retarded children are entitled to receive appropriate educational instruction, regardless of the severity of his/her handicap. Severely and profoundly retarded children have been enrolled in Pennsylvania public school systems for the past three years (since September, 1972), receiving educational programming, intensive stimulation, and training in the areas of body image, positioning and gross motor development, fine motor development, visual training, auditory training, activities of daily living, communication skills and personal- social skills.

The purpose of this handbook is two-fold: first, to provide a systematic approach for planning individualized programs for these children and, second, to provide specific teaching techniques which the authors have found to be successful as a result of experience gained from working with these children. The techniques included are to be utilized with children having a mental age from zero to approximately thirty-six months. It is the authors' hope that through such a well organized educational program, these children will develop the skills necessary for more independent functioning in their every day lives.

Chapter 2

SYSTEMS APPROACH TO EDUCATIONAL PROGRAMMING

Program Areas & Definitions

The basic educational program for severely/profoundly retarded children should be directed toward developing skills in basic sensori-motor, self help and language areas.[3] Such skills are prerequisite to further sequential programming. Extending somewhat beyond, and in keeping with the purpose of this handbook, the authors have chosen to include the following program areas:

Body Image
Positioning
Gross Motor
Fine Motor
Visual Skill Development
  a. Visual Training
  b. Eye Hand Coordination
Auditory Training
Activities of Daily Living
  a. Feeding and Drinking
  b. Toileting
  c. Dressing and Undressing
  d. Washing, Bathing and Grooming
Communication Skills
Personal Social Skills

The following terms have been operationally defined, for purposes of use in this handbook, as indicated:

Body Image – refers to the child's ability to assess his/her own body and his/her body parts. These skills are necessary for effective, purposeful movements, locomotive skill development and management of one's own body in space.

Positioning – a certain arrangement of body position for a specific developmental purpose, i.e. manipulating a child's body parts into a more normal body alignment.[4]

Gross Motor – refers to and is primarily concerned with strength, flexibility, endurance, and coordinated movement of the large muscles of the body. Gross motor behaviors of children provide a means of exploring and developing body parts, of locomotion, and of expressing other developmental skills.

Fine Motor – refers to the coordinated movements of the small muscles of the body (primarily those of the arms and hands) to perform everyday life functions.

Visual Skill Development –

a. Visual Training – refers to the adequate and efficient use of vision for purposes of focusing on and tracking visual stimuli, attending to and discriminating visual stimuli, and making meaningful visual associations.

b. Eye-Hand Coordination – refers to the coordinated use of the eyes and hands (visually steering arm and hand movements in space) to perform everyday life functions.

Auditory Training – refers to the adequate and efficient use of the auditory mode to show awareness of sounds, to attend to and discriminate sounds, and to make meaningful word associations.

Activities of Daily Living – refers to and is primarily concerned with the activities which enable the child to care for himself/herself in areas of feeding and drinking, toileting, dressing and undressing, washing, bathing, and grooming.

Communication Skills – refers to activities which enable the child to communicate his needs or desires (verbally or nonverbally) and to receive and understand information.

Personal-Social Skills – refer to those appropriate personal and social behaviors that involve living and interacting with other people.

Initial Preparation For Programming, Classroom, And Scheduling

Preparation for admission of a child to a class, whether to an already existing class, or to a class being newly-established, begins prior to the arrival of a single child or a new group of children. Initial preparations must be made for educational programming, classroom set-up, and scheduling of the school day.

Since the Right to Education Consent Agreement was mandated in 1972, many new classes have been established in various educational settings to serve the needs of severely/profoundly retarded children. Prior to the establishment of a new class much preparation is needed; preparation for receiving the children and for establishing the entire educational program.

In order to prepare for receiving a new group of children and establishing a new class, the authors propose the following three-day in-service training session. The components that make up the entire three days include all of the essential considerations and preparations that must be made. The three-day session described below has been implemented in the authors' own educational system and has proven to be essential, feasible, and extremely advantageous.

The morning of the first day consists of visitations, made by the teacher, to already established classes for the severely/profoundly retarded children. This is especially helpful for the newly-hired teacher. This experience affords the teacher the opportunity to view other programs and to get ideas concerning such issues as classroom set-up, variety of the types of children that make up this severely/profoundly retarded group and scheduling considerations.

During the afternoon of the first day of in-service, the teacher should have the opportunity to review the records of the in coming children. It is essential that the teacher obtain and review the psychological and school records prior to the child's admission. Medical and health history information can be obtained from the school nurse. These records provide information concerning past and present psychological needs and concerns, past educational goals and achievements as well as implications for future education or training follow up. The information available in these records provides the basis for initial plan

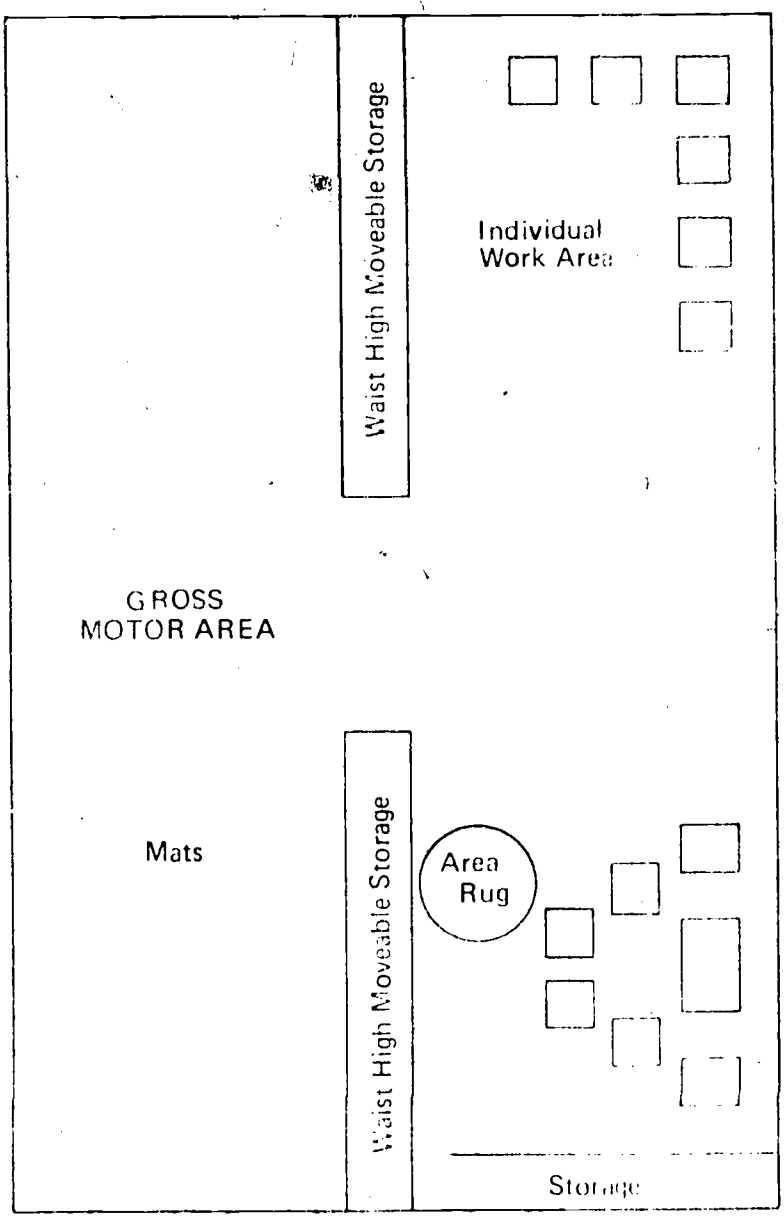
ning and preparation for the child's entrance into the program. NOTE: This review of records would also occur if a new child was being admitted to an already existing program.

The entire second day of this three-day session consists of a New Admissions Conference with individual parents and other professionals (i.e. occupational therapist, physical therapist, nurse, etc.) on a scheduled basis. The value of this conference cannot be overemphasized. It, too, provides the basis for initial planning and preparation for the child's entrance into the program. This conference (referred to as the New Admissions Conference) not only occurs if and when a new class for severely/profoundly retarded children is established, but whenever a new child is admitted to a program. During this conference, much emphasis is placed on the parent, not only as a source of information, but as an essential part of the projected educational program. Therefore, this conference is described specifically in depth later in this chapter, where discussion of parental involvement appears.

The teacher's preparatory functions throughout the third day of the in-service session include: 1.)review of catalogs to select materials which may be required and need to be purchased. 2.) layout of classroom with what is presently available to the teacher, and 3.)planning for initial schedule and program.

Although each teacher must design his/her classroom with the needs of his/her students in mind, the authors propose the following guidelines for classroom design. These guidelines have proven workable in the average classroom.

The lay-out, or floor plan, of the classroom is based on the following areas of activity: 1.)a GROUP WORK AREA, 2.)an INDIVIDUAL WORK AREA, and 3.)a GROSS MOTOR AREA. (See illustration, page 16).


Waist High Moveable Storage
Individual
Work Area
GROSS
MOTOR AREA
Mats
Waist High Moveable Storage
Area
Rug
Storage

18

As indicated in the illustration, half of the classroom should serve as the gross motor area. One remaining quarter serves as the individual work area and the other quarter as the group work area. Mats should be located in the gross motor area. In the individual work area, desks should be arranged in such a manner that the children can work in near proximity to other individual workers but as free from distraction by them as possible. Screens may be set-up between desks to further eliminate distraction. Chairs or desks in the group-work area are so arranged to accomodate that type of activity. A semi-circle with the teacher in the center facing the children is usually appropriate for most group-work activities. A circular rug in the group work area provides a psychological and visual boundary for the children when participating in group activities (i.e. storytelling).

No specific area is established in this plan for feeding or rest-time. Each should be set up in an area which best accomodates the activity. For example, the feeding area should be located near the sink, if there is one in the room, for easy clean-up. If there is no sink in the room, feeding can take place in the group work area. The gross motor area can accommodate rest-time, as mats are already set up there.

Provisions must be made for storage of a variety of equipment. As indicated by the illustration, ideally, movable storage cabinets (approximately waist high) can serve as area dividers. If such cabinets are not available, some method of storage must be improvised in each area of the room. Good housekeeping is important. Whatever is not being used at the time should be out of sight as much as possible for safety reasons as well as to eliminate distractions. The equipment that is utilized in each of the three activity areas should be available in that area. This avoids wasted time and steps.

Provisions in the classroom design may be necessary for a mixed class of mobile and non-ambulatory children. The non-ambulatory children must have a protected area, one physically separated by cabinets or other physical devices. Over sized equipment, too large to store (i.e. rolled up mats, inclined mat) may be left out, rather than stored, and utilized to create a safety barrier. The illustrated plan, with slight adaptations, can accommodate a mixed group

In organizing or scheduling the activities that are to make up the school day, there are certain educational criteria that must be considered:

1. Structure and Routine – Refers to 'sameness' in daily actitivities. Low level children require this sameness in order to feel secure in their environment. The known expectancy of what is coming provides this feeling of security.
2. Consistency of Routine – As the teacher moves through the daily routine in the classroom, it is important that he/she be consistent in his/her language usage, expectations, discipline procedures, reward and behavior management system. This consistency not only aids in the actual learning process, but eliminates unnecessary confusion for the child.
3. Repetition – Repetition of an activity reinforces the concept or task to be learned, and is necessary if the concept or task is to become established in the child's repertoire. A single successful performance of a task does not indicate that the task has been mastered. In most cases, with severely/profoundly retarded children, much repetition of a task is required for mastery. Repetition with variety (i.e. repeating the task but varying the type of stimulus cues) is necessary due to the number of repetitions that usually must occur.
4. Short Time Period Activities – The characteristic short attention span and distractibility of severely/profoundly retarded children necessitate this consideration. Since the attention span is so brief, time allotted for activiti should be short. At the same time, very gradual increasing of attention span must be a major focus.
5. Flexibility of Implementor or Teacher – Because of the variety of types of children in this group and of the handicapping conditions involved, many quick adjustments become necessary – even in a well planned day. Extenuating circumstances (i.e. seizures, temper outbursts, illnesses, accidents, transportation problems) often make it necessary for the teacher to adjust his/her day in such a manner that he/she can accommodate on-the spot problems and changes. Also, he/she must be 'on the top of the situation' in order to have the children accept the change when it occurs.

With the above educational considerations in mind, the teacher is ready to

arrange a schedule for the school day. As with classroom design, schedules need to be individualized for a particular group, considering such variables as class size, mobility of the children, and the needs of individual students. Below are listed and described three different types of scheduling:

1. Individual Child Scheduling
2. Time Block Scheduling
3. Positioning Scheduling

In each type of scheduling, a wall chart can be utilized to provide the educational information (i.e. objectives, procedures).

The wall chart is one that:

1. Lists the children's names vertically down the left side
2. Has either time-block periods (i.e. 9:30 – 10:00), program area periods (i.e. gross motor), or program area/time block periods (Gross Motor/9:30 -- 10:00) across the top
3. Paper pockets across from each child's name under each area. (See illustration. NOTE: Illustration has program area/time block periods across the horizontal.)

	Self Care [illegible]	Individual Instruction 9:15–9:45	Gross Motor [illegible]	Individual Instruction 10:30–11:05	Individual Instruction 1:00–1:40
MARY					
JOHN					
SUE					
JIM					
JOE					

Use of the chart is described below with specific reference to each type of scheduling:

1. Individual Child Scheduling – This type of scheduling is done for an individual child. If the teacher were to utilize this scheduling procedure, an individual schedule would be written for each child in the classroom. With regard to use of the wall chart: a chart with time slots (blocks) horizontally at the top would be most appropriate. The objective that had been established for the child for the first time slot (i.e. 8:45 - 9:15) would be written on a task card and inserted in the pocket across from his name and under the time-slot. If objectives were established in every program area for all of the children, program areas would appear at the top. Program areas, time-slotted (i.e. Gross Motor/9:30 – 10:00), could also be used at the top if time slot periods were approximately the same for each child. A slight adaptation to the wall chart: Program areas could be color coded and the coded cards for each area placed in a pocket chart on the teacher's desk.
2. Time-Block Scheduling – This type of scheduling is organized and constructed according to designated time-block periods of the day. For example:

8:30 - 8:45	Arrival of Students
8:45 - 9:00	Self-Care Instruction (toileting and washing hands, hanging coats, etc.)
9:00 - 9:15	Opening Exercises
9:15 - 9:45	Individual Instruction
9:45 - 10:00	Snack
10:00 - 10:30	Gross Motor Activities
10:30 - 11:05	Individual Instruction
11:05 - 11:15	Preparation for lunch (toileting, washing hands, etc.)
11:15 - 12:15	Lunch
12:15 - 12:30	Self-Care Instruction (toileting, washing hands, etc.)
12:30 - 1:00	Rest Time
1:00 - 1:40	Individual Instruction
1:40 - 2:05	Group Activity

2:05 - 2:15	Snack Time
2:15 - 2:30	Preparation for Dismissal (toileting and washing hands, obtaining wraps, etc.)

(NOTE: The example time-block schedule is extremely simplified. Each teacher must construct his/her schedule according to the particular needs of his/her group of children.)

The listing of the time-block periods should be posted in addition to the wall chart. The wall chart can be utilized for individual program areas. Program Areas would appear across the top. Individual task cards would be filed in the pockets of the chart as described earlier. In the case that a particular child has not been programmed (no objective has been assigned) in a particular program area (i.e. no visual training objective for a blind child), whatever objective is assigned for the child during that time-block appears in that pocket. Color coding can also be adopted for this type of scheduling

3. Positioning Scheduling – This type of scheduling is organized and constructed around the positioning needs of the children. Because it is necessary that certain children be positioned, very specifically, for designated time periods, the teacher must schedule to accommodate these requirements. A chart (other than the wall chart) should be constructed which indicates the position that the child is to be in, for what length of time, and what if any, program area objective can be worked on while the child is in that position. If the positioning chart indicates, for example, that Pat should be up in the standing table from 9:30 - 9:50, and that at this time, fine motor work can be done, reference should then be made to the wall chart (program areas at the top) to find the specific objective (task card). NOTE: This type of scheduling would be most appropriate for a class with immobile or non-ambulatory children, since children of this type have positioning prescriptions.

The wall chart system described above has been used by the authors and has proven to be an efficient technique. Through its use, the behavioral objectives, tasks, or techniques, which have been prescribed for the child and written on cards that insert into the wall chart, are easily located and the

information clearly conveyed to an aide, volunteer or any person involved with implementation of the task.

As with any part of this systematic approach to teaching severely/profoundly retarded children, scheduling techniques must be adapted for a particular class or a particular child. Some practical considerations for scheduling, in addition to those educational criteria already discussed follow:

1. It has been the authors' experience that the children 'work better' in the morning than after lunch. Therefore, scheduling individual work for the morning hours and group work during afternoon hours may be a general guideline.
2. Remember that many of these children become fatigued quite easily, even when the activities are active on the instructor's part, and passive on the child's part. Scheduling short time-slots, then, becomes a physical as well as an educational consideration.

In order to establish a workable classroom, certain specialized equipment will be needed to adequately accommodate the classroom activities. The equipment should be chosen with the following concerns in mind: the needs of children, size of the room, and funds available. Since funds may be limited, plan the orders so that the most necessary equipment is received first. Some equipment can be substituted, adapted, or teacher-made.

The following is a partial list of equipment commonly used in a classroom for severely/profoundly retarded classroom:

1. Mats – These can either be wrestling or specially purchased fold-out mats. They provide a soft surface for positioning and relaxation, and some gross motor activities.
2. Wedge – A triangular shaped pillow primarily used to position children for the development of head control.
3. Incline Mat – Similar in shape to the wedge, but much larger. It is used to develop body control through rolling and large muscle movements.
4. Standing table – An enclosed cut-out table that enables the non-ambulatory child to stand without assistance and to strengthen the child's leg muscles. The built-in tray allows the child to work with objects in front of him while standing.

5. Mancino Chair – (Adaptive Therapeutic Systems) – Highly specialized chair which adjusts to the specific physical needs of a child. Specialized accessories assist with head control and arm and hand motion necessary for eating and writing.
6. Hogg Chair – (See illustration) This is a rear-wheeled, high-backed, webbed chair, with straps. The chair may be purchased with either a straight or reclined back. The rear wheels are set back to minimize the possibility of tipping while the child is sitting. This wheel design allows for easy relocation of the chair.
7. Relaxation Chair – (See illustration) This is an adjustable wooden chair. The seat tilts to a full jack-knife position. A tray in front of the child and attached to the chair can be adjusted to be level with child's position regardless of the degree of incline of the chair.
8. Potty Chair – There are a variety of types of these chairs. Each child's toileting needs must be carefully considered prior to purchasing a potty chair for him/her. Considerations are:
   a. Size – The child's feet should comfortably touch the floor while sitting.
   b. The containers should be deep enough so that the child cannot remove the fecal material.
   c. Straps or bars may be necessary.
   d. A headrest may be necessary.
9. Corner Seat – (See illustration) This is a small wedge-shaped chair. It may have high thigh dividers, trays, straps, headrests, or casters. Most corner seats are custom made for the needs of a particular child. They may be secured to a regular chair and used like a booster chair.
10. Prone Scooters – The scooters are used to develop head control, arm and leg muscle strength, reciprocal limb movement and mobility. There are many different types varying in shapes, i.e. round, square or oblong, and those molded to the child's body. Straps, sides, and leg spreaders are special adaptations made for individual requirements.

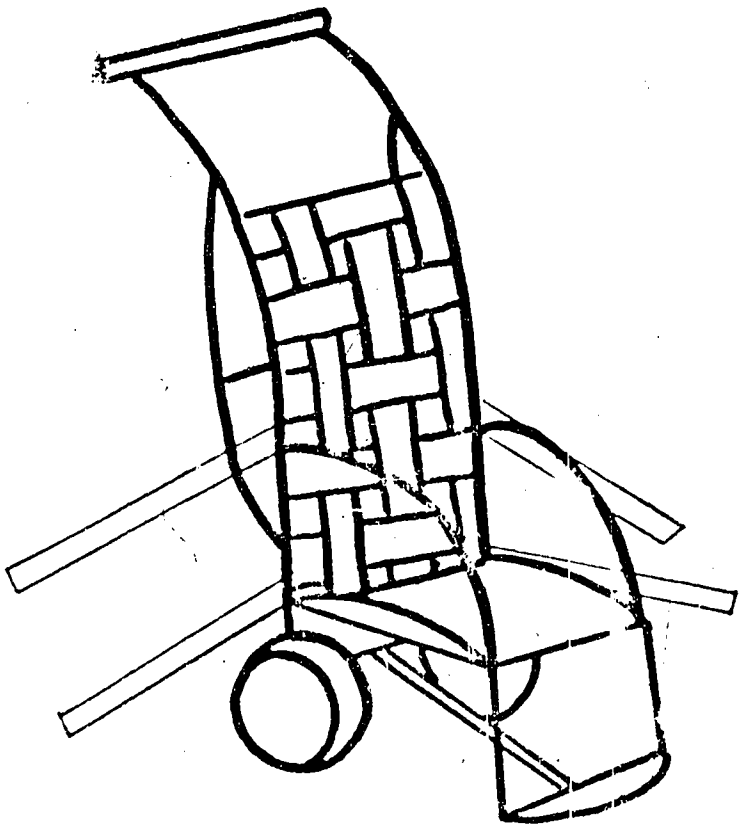
11. Prone Board – (See illustration) This is an adaptation of a large rectangular scooter. In addition to the wheels, one end of the board has a rubber-coated stopper which enables the board to tilt against the wall or table. This allows a child who cannot stand independently to be strapped in an inclined or upright position. With the more physically involved children, the prone board is used instead of the standing table.
12. Cage Ball – A large inflated ball (36" diameter) used for developing head control, the protective reflex and large muscle control. A large beach ball can be used in the same manner as the cage ball, but it is not as durable.
13. Sand-bag Weights – (See illustration) These are used for maintaining positioning and for developing large muscles through exercise. This product is one that can be teacher made.
14. Walkers – These are used to encourage independent mobility. There are many different types. A physical therapist should be consulted for use of a walker prior to its being made or purchased.
15. Vestibular Board – A rocking device: long rectangular board on a half-arc. Activities on the board include: balancing while lying prone or supine, balancing while rocking on the knees, balancing while rocking in a standing position, and rocking for purposes of movement of the non ambulatory child. Covering the board with a carpet adds the dimension of texture to the activities done on the board. For a child who is non-mobile, a general objective could be any independent movement which causes the board to rock. Another similar device is the rocking boat in which the child sits and rocks.
16. Bean Bag Chair – The most appropriate size for classroom use is the adult size. Important uses of this type of chair are for positioning severely involved children in an upright sit and for relaxation purposes.
17. Mirror – There are a variety of types and sizes of mirrors which can be used in numerous ways. For example, a long movable mirror (which is usually unbreakable, easy to clean, and easily moved about the room from child to child) can be used for body concept and self image activities, for gross motor activities, (i.e. placing the mirror in front of the cage ball or inclined mat), and for positioning activities. Large wall

mirrors can be used for the same purposes. These are better in some respects because of the larger size. However, the disadvantage of the permanently installed mirror is that it cannot be moved about the room.

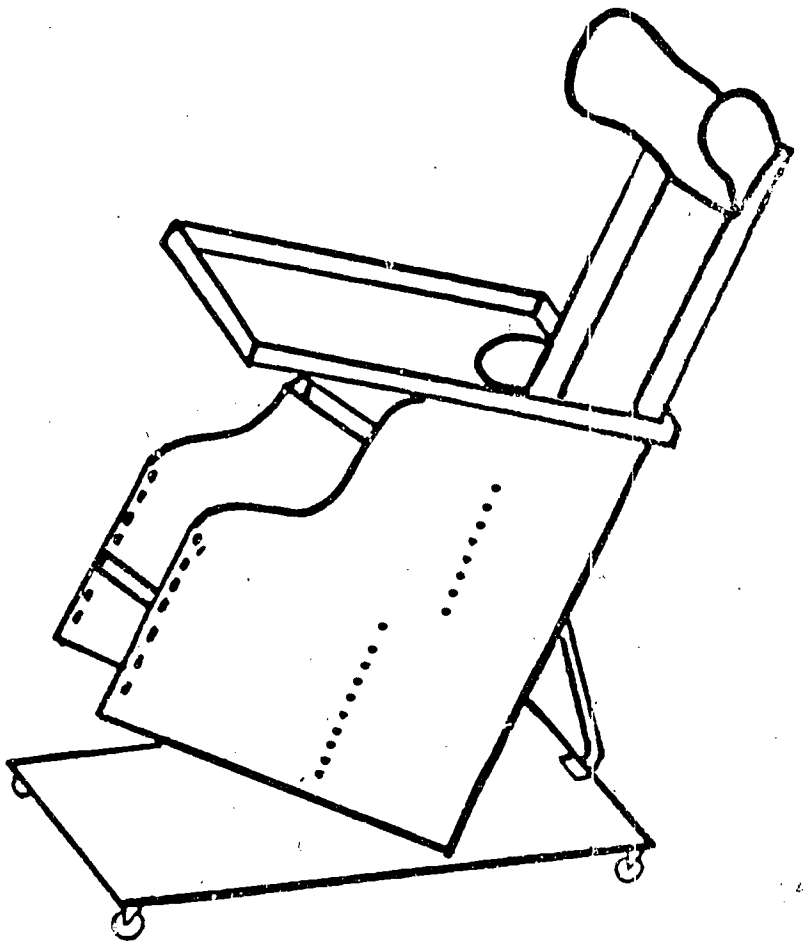
18. Screens – Since it is often necessary to separate the children, due to a high level of distractability, screens are necessary. Screens can be purchased in various sizes, i.e. large (approximately 5 feet tall), and small desk sizes.
19. Straps – Since many of these children are physically and multiply handicapped, straps are a necessity. They are used for positioning children in chairs, on prone tables, scooters, and standing tables, as well as securing children to prevent falling.
20. Specialized Feeding Equipment – Because most children require individual teacher attention and adapted equipment during feeding, the feeding equipment must be ordered or teacher-made with the particular child in mind. Examples of specialized feeding equipment include:
    a. Plastic coated spoons
    b. Built-up spoons (the handle of spoon is built up) – (See illustration)
    c. Curved spoons – (See illustration)
    d. High-rise handled spoon with velcro strip to secure y attach to child's hand and encourage grasping
    e. Scoop dish – (See illustration)
    f. Cut-out cups – (See illustration)
    g. Two-handled cups
    h. Straws

21. Bib Restrainers – (See illustration) To comfortably secure the child in chair or other special equipment.

As the year progresses and the teacher becomes increasingly aware of each child's abilities and limitations, it will become evident that this list is incomplete and in need of revision and additions. Teacher creativity will contribute to the above list and encourage discovery and experimentation with new activities and materials.



HOGG CHAIR



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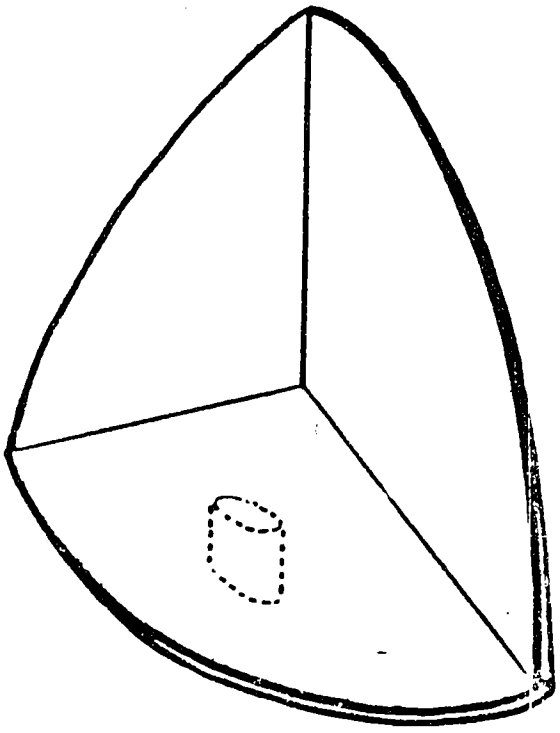
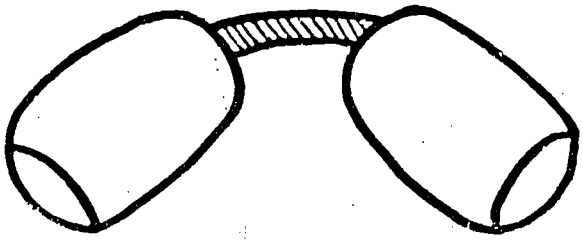
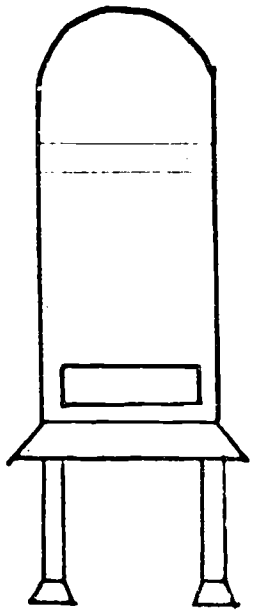


CORNER SEAT

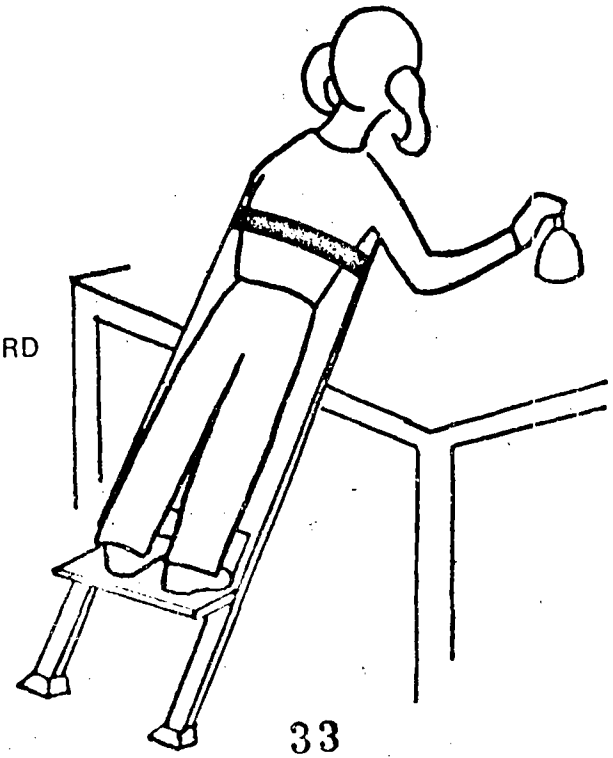


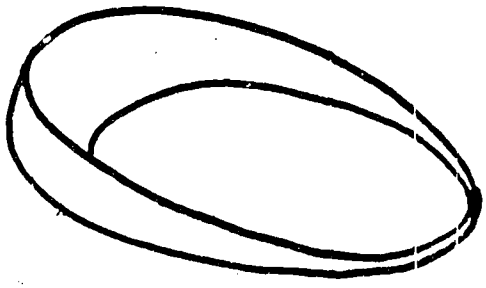
SAND-BAG WEIGHTS

PRONE BOARD
(Front View)



PRONE BOARD





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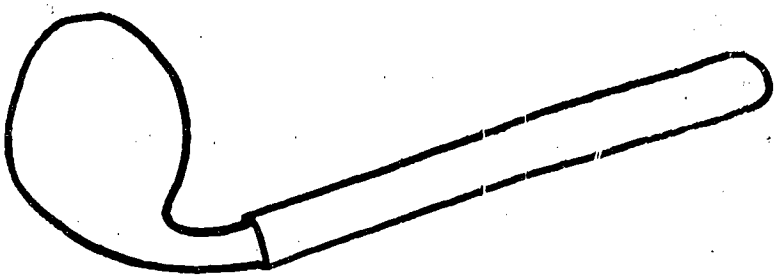
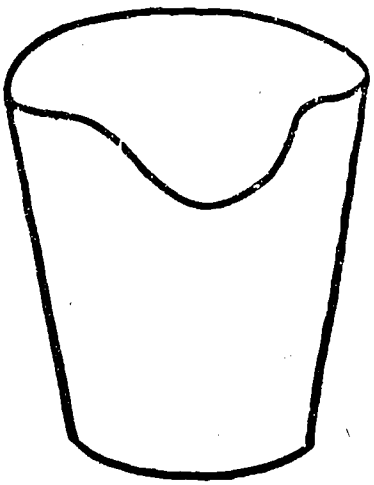
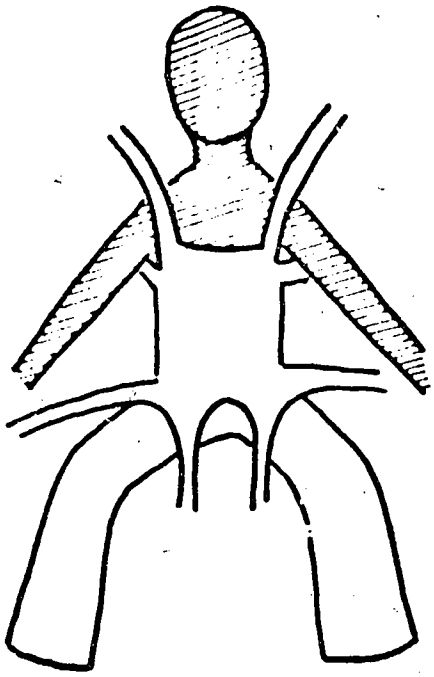


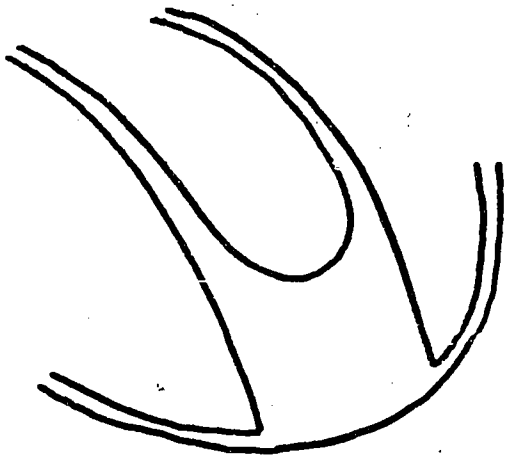
CURVED SPOON



CUT-OUT CUP



BIB RESTRAINERS



Components of the Educational Program

The authors' approach to programming for severely/profoundly retarded children, as well as the approach outlined in the handbook, is a systematic one; systematic in that there is a specific goal in mind and a specifically prescribed system to the entire programming procedure - from making the general assessment of the child, to choosing appropriate instructional objectives, to implementing specific procedures to develop a particular skill or task. Other essential components of this systematic approach are the reinforcement system utilized throughout, the evaluative procedures, the behavior management system for dealing with inappropriate behaviors, and the parental involvement procedures which encourage consistency and follow-up in programming. Specificity, in this systematic approach, is essential for successful programming for these special children.

Therein, the approach is a developmental one. The normal development of children occurs in a sequential, hierarchical fashion. Although, occasionally discrepancies occur, we must assume that the development of severely/profoundly retarded children occurs in a sequential, orderly fashion. (Obviously, the sequence may also be affected by physical and/or sensory limitations placed upon the child by his handicapping condition). For that reason, we make extensive reference to, and use of, developmental scales to give direction for programming.

A developmental scale lists behaviors as they occur in a sequential fashion. Several developmental scales have been devised (i.e. Denver, Bayley, Cattell). The various scales are organized differently. For example, one scale may include several types of tasks, inclusive of several different areas of development, under one heading. Another may categorize the tasks according to motor behaviors, language skills, self help skills, etc. All, however, list the tasks sequentially and hierarchically, and usually indicate at what age, in years and months, the particular task is accomplished by a normal child.

In programming for severely/profoundly retarded children, the use of developmental scales affords the implementor the following information:

1. where the child is presently functioning in a particular area of development, and
2. what task follows sequentially, and is therefore appropriate as an immediate learning task for the child. This immediate appropriate learning task is referred to as a TARGET BEHAVIOR. Use of the developmental scales affords the implementor the opportunity to make general assessment of the child in each of the areas included in the scale, as well as to determine the appropriate target behavior.

After the general assessment has been made, and the target behavior determined, it is necessary to state the target behavior in behavioral terms. The target behavior then appears as a behavioral objective.

In a statement of a behavioral objective is included

1. the LEARNER,
2. the ACTION to be performed,
3. the CONDITIONS that are to be placed upon the action, and
4. a CRITERION of acceptable performance. Examples:

   The child (LEARNER) will hold the head erect on the shoulders (ACTION and CONDITION) for eight seconds (CRITERION).

   The child (LEARNER) will, unassisted, perform a cross-lateral crawl (ACTION and CONDITION) for a distance of 15 feet (CRITERION).

A criterion of acceptable performance is essential for evaluation purposes. When a criterion is clearly established by the implementor and subsequently accomplished by the learner, the implementor knows that the child is ready for a new target behavior, one higher in the developmental sequence.

Occasionally, a target behavior has been chosen and appears appropriate and yet the child is unable to accomplish the task. Failure occurs. One reason for the failure may be that there is a component part of the task which the child is unable to perform. Should this occur, a TASK ANALYSIS of the

particular task should be performed.

Task analysis refers to the procedure of breaking down a task into its various sequential component parts. By doing so, the teacher can determine what component (or components) is responsible for a child's failure to master the task. After isolating the component of the task that is responsible for the failure, the teacher can concentrate on developing that particular component.

TASK ANALYSIS

Area: GROSS MOTOR

Task: Child will perform a CROSS-LATERAL CRAWL.

Task Analysis

1. Head control (strength, endurance and balance to maintain head erect).
2. Upper arm strength to support upper body weight.
3. Upper leg strength to support upper body weight.
4. Flexibility at shoulder joint to accommodate full extension and partial flexion at the joint.
5. Flexibility at elbow joint to accommodate extension and flexion at that joint.
6. Flexibility at the shoulder joint to accommodate abduction at that joint.
7. Flexibility at the wrist joint to accommodate full flexion.
8. Flexibility at the finger joints to accommodate full extension (so palm can lay flat on floor).
9. Flexibility at the hip joint to accommodate full flexion and partial extension at that joint.
10. Flexibility at the knee joint to accommodate full flexion and partial extension at that joint.
11. Plantar flexion of the ankle joint to allow the top surface of foot to lay flat on floor.
12. Ability to maintain balance in a four-point crawl position on floor.

13. Ability to maintain balance in a two-point (one arm and opposite leg) on floor in crawl position.

TASK ANALYSIS
Area: FINE MOTOR
Task: Child will, from a sitting position, reach out and PALMER GRASP an object.

Task Analysis

1. Head control (strength, endurance and balance to maintain head erect).
2. Ability to maintain balance in an upright sitting position.
3. Ability to visually locate an object.
4. Ability to visually fixate on an object.
5. Flexibility at the shoulder joint to accommodate extension away from body.
6. Flexibility at the elbow joint to accommodate extension away from body.
7. Flexibility at the wrist joint to accommodate extension at that joint.
8. Flexibility at the finger joints to accommodate extension at those joints.
9. Ability to steer, in space, movements of arm and hand to make tactual contact with the object.
10. Flexibility at the finger joints to accommodate flexion at that joint.
11. Flexion of fingers on object to perform the palmer grasp.

TASK ANALYSIS
Area: ACTIVITIES OF DAILY LIVING
Task: Child will, from upright sitting position, grasp food, bring it to mouth and insert (FINGER FEEDING).

Task Analysis

1. Head control (strength, endurance, and balance to maintain head erect).
2. Ability to maintain balance in a sitting position
3. Ability to visually locate the food on the tray.
4. Ability to visually fixate on the food on the tray.

5. Flexibility at the shoulder joint to accommodate extension out from body.
6. Flexibility at the elbow joint to accommodate extension away from body.
7. Flexibility at the wrist joint to accommodate extension at the joint.
8. Flexibility at the finger joints to accommodate extension at those joints.
9. Ability to steer, in space, movements of arm and hand to contact the food.
10. Flexion of fingers on object to perform a grasp of a piece of food.
11. Strength of arm muscles to lift arm and hand from tray.
12. Inward rotation of wrist as hand begins to move towards mouth.
13. Flexibility of elbow joint to accommodate flexion at that joint (movement toward the body).
14. Flexibility at the shoulder joint to accommodate flexion at that joint (movement toward the body).
15. Ability to steer grasped food (in hand) to mouth.
16. Ability to open mouth to receive food.
17. Ability to release the object (food) in the mouth.

It should be noted that a task analysis should be written for use with a particular child and a particular situation. The task analysis of the cross-lateral crawl, for example, may be appropriate for one child, but not for another. It may require a further, more minute breakdown to accommodate an extremely low-functioning child.

To this point, in the systematic programming procedure, a general assessment has been made, a target behavior defined, and, where and when necessary the target behavior has been task-analyzed. Now the implementor must plan specific activities and tasks to develop the target behaviors. In addition to this text, curriculum guides may be utilized as sources to locate tasks that develop a particular target behavior. Many educational units have recently published guides which provide activities for use with the severely/profoundly mentally retarded children:

Allegheny Intermediate Unit. Perceptual Motor Development Curriculum Guide.

Pennhurst State School. APT – A Training Program for Citizens With Severely or Profoundly Retarded Behavior.

Hart, Verna. Beginning With The Handicapped.

Myers, Donald G., Sinco, Michael E., and Stelma, Ellen Somerton. The Right To Education Child.

PA Department of Education. Compet.

Shearer, David. The Portage Project.

Smith, D. K. M–A–P Project: Motor–Academic–Perceptual Curriculum Guide.

Wabash Center for the Mentally Retarded, Inc. Guide to Early Developmental Training.

When a child is learning a new task, it is essential that a consistent behavior management system be instituted. "Behavior modification is a means of teaching and reinforcing (rewarding) certain desired behaviors in children. The theory behind behavior modification is simply that a child will tend to repeat that type of behavior which is reinforced."[5] When a child exhibits a desired behavior, approval and reward must be given to the child immediately and consistently to establish a relationship between the behavior and the reinforcing consequence.

One aspect of a behavior modification system makes use of a variety of types of positive reinforcers (rewards) to increase the frequency of an appropriate behavior. Such rewards include favorite food items (primary reward), social-verbal praise, affection and physical contact, items that the child prefers to play with or use, activities the child likes to perform, and special privileges. Not all children prefer the same item or type of award. The teacher or implementor must carefully observe the child's likes and dislikes and then choose a reward that is, in fact, rewarding! Often it may be the case that something that is normally a punishment for one child, may be rewarding to another. Therefore, careful observation must be made of each individual child.

The principle of rewarding the child with positive reinforcers immediately following the desired behavior cannot be over-emphasized. It is the basis of the development of many complex behaviors. In many cases, with children functioning at the severely/profoundly retarded level, the implementor must reward more than merely the final behavior. He/she must reward small approximations of the complex behavior. In this manner, there is a slow sequential build up to the correct complex response. This procedure is referred to as shaping. Many complex behaviors can be broken down and subsequently developed in this manner.

Another aspect of behavior modification system is that of managing inappropriate behaviors. Often, these children display behaviors that interfere with readiness and/or the learning process. These behaviors must be extinguished or controlled. One very common and effective technique of extinguishing a behavior is ignoring. This method is especially appropriate if the child is displaying the negative behavior as a means of getting attention. By not giving attention to the negative behavior, the child is not getting what he wants (attention) and the behavior should gradually decrease. It should be noted, however, that at the same time the inappropriate behavior (i.e., screaming) is being ignored, every effort should be made to positively reinforce the appropriate behavior (non-screaming) when it occurs.

Another less desirable, but sometimes necessary, method of managing inappropriate behavior is through the use of negative reinforcement or punishment. These methods should be utilized only if it has become quite evident that use of positive reinforcement or ignoring the behavior has not been effective.

The above is not meant to be a complete review of the implementation of a behavior modification system. There are many and varied factors that must be considered (i.e. immediacy of reward, appropriateness of type and amount of reward) prior to the implementation of the system. Much research and literature has been published on the principles and implementation of a behavior management system. The authors encourage the reader to become familiar

with the procedures and therefore recommend the following:

Hall, H. V. Managing Behavior Series

Thompson, J. Behavior Modification of the Mentally Retarded

Chalfant, J. C. and Silihovitz, R. G. Illinois Program: Systematic Instruction for the Retarded

Watson, Luke. Child Behavior Modification: A Manual for Teachers, Nurses and Parents

To this point in the programming procedure, the implementor has, in a systematic fashion, proceeded from making a gross assessment of the child, through prescribing a target behavior, to implementing specific procedures (stated in behavioral terms), to developing a specific task. The reinforcement system has been applied throughout. After procedures for implementation of the target behavior have been prescribed and trialed with the child, an evaluation of the appropriateness of the procedures must be made. Is the target behavior being achieved or not, and why?

When the target behavior is achieved, the implementor chooses a new target behavior using the procedure previously mentioned. A change of reinforcement may be required from time to time to prevent satiation of one type of reinforcer, i.e. popcorn, candy, etc.

If the target behavior is not met over a reasonable period of time, there are several factors which may be contributing to the lack of success:

1. The implementor may have set the goal too high and must reassess the appropriateness of the target behavior.
2. The procedure being used may not be suitable to the child, i.e. the increment step sizes in the task analysis may be too large or the reinforcement system may not be actually reinforcing to the child
3. The child's responses may be hindered by environmental influences such as extraneous noises and classroom interferences, particularly if the child is highly distractable.
4. The student's mental set may not be up to par, i.e. he/she may not have slept well or he/she may lack other physical requisites.

5. Another factor to be considered is the implementor's personal behaviors, i.e. Is he/she distracting the child by his/her movements or is he/she unconsciously rushing the child through the task because it is time to toilet another child?

The importance of parental involvement and home follow-up to assure consistency in programming, cannot be overemphasized. A program, so constructed, can be accommodated and reinforced in the home. For this reason it is necessary that the parents be well informed and familiar with the educational objectives and procedures. Parental cooperation in the home lends much to the child's achievements at school.

By no means negating the importance of parental involvement and for purposes of continuity of text, the authors have chosen to postpone, briefly, the discussion of the parent's role. First there is a need to discuss the role of the professional persons, other than the teacher, who are directly and indirectly involved in the prescription of the components of the educational program.

Prior to communicating the child's education program to his/her parents, the teacher relies on professionals of other disciplines for assistance in prescribing specific objectives and activities. The construction of the entire school program is a team effort, one that is representative of all the necessary disciplines, to appropriately program for the child. Physical therapists, occupational therapists, vision and hearing specialists and the school nurse contribute to the child's programming. In many cases they are not only directly involved with the initial assessment of the child, but they may also work directly with the child in the school.

Although not a professional team member, the teacher's aide plays a valuable assistive role in implementing the specific tasks of a child's educational program. His/her varied responsibilities include carrying out the teacher's recommendations and instructions for a specific child and recording the response by the child, as directed by the teacher.

Other professional personnel, who are not directly involved with assessment and/or actual implementation of tasks with the child, but who have responsibilities concerning the educational program available for the severely/profoundly retarded child, are the supervisor, school principal, guidance counselor, psychologist and social worker.

The supervisor of the classes for severely/profoundly retarded children establishes the philosophy of the overall program, and the program goals. As supervisor, he/she is responsible for developrnent of the overall curriculum and assessing the appropriate materials to be utilized in carrying out a program which covers all aspects of the curriculum. The role of the school principal is to coordinate the programs of the interdisciplinary team working in his/her school. A school psychologist, guidance counselor, and social worker are also available and serve as consultants to parents and teachers.

Now–back to the parents!! Prior to the admission of the child, the parents may have many questions concerning such matters as the child's placement, content of the child's proposed educational and/or training program, transportation of the child, and the realistic short and long range goals for the child. There may be some apprehension on the part of the parents as this may be their first experience in dealing with a professional person who will design and implement an educational program for their child. The classroom teacher should understand and accept this apprehension.

As mentioned briefly very early in this chapter, an initial conference is necessary to deal with all the matters concerning initial admission of a child into a program. This conference is referred to, for purposes of this text, as the New Admissions Conference. The reader should recall that New Admissions Conferences were scheduled for the entire third day of the three day training session.

In addition, a New Admission Conference MUST occur prior to the admission of ANY new child to ANY existing program (class) at ANY time during the school year. If the parental conference cannot be scheduled for after school, a substitute should be engaged to free the teacher of her

teaching responsibilities. It may be that the teacher need only be freed for the morning or the afternoon session. However, in some cases, he/she may require a full day for the conference. The need for this type of conference, prior to receiving a new child in the classroom CANNOT be over emphasized. It is a very trying experience for the teacher and the new child if the proper and complete preparations are not made for his/her arrival.

Both parents, if possible, should be in attendance at this conference. Ideally the occupational therapist and/or physical therapist, the school nurse, the teacher's aide and the child should also be in attendance. However, if it is not feasible for all of the mentioned to attend, it is most important that the nurse, teacher and a parent be there.

The nurse assumes an important role at the conference and with the overall care of the child in the school. With severely/profoundly retarded children, medical problems abound. The nurse often must administer medication while the child is at school and therefore must become and remain well informed about any changes in the child's medication, family physician or any ongoing clinical notes and other health related problems.

It is important to have the child present at this conference. Written school, clinical or medical records and parental observation reports do not always provide an accurate indication of the child's abilities and limitations. If the teacher's aide is in attendance at the conference, it would be his/her responsibility to 'mind' the child as the conference is going on, either in the same room or in a separate room, bringing the child into the conference room for brief periods of time. Having the child there affords the teacher and all other persons in attendance the opportunity to make an informal observation assessment of:

1. level of awareness
2. present level of functioning
3. where the child may fit in with his classroom peers
4. the overt behavioral mannerisms of the child

If the child and the parent are both in attendance the following factors concerning the parent/child relationship may also be observed

1. the manner in which the parent assists the child

2. the manner in which the parent speaks to the child

3. the child's response to his parents' presence, when he/she is in the same room with them, or to their absence, if he/she is taken from their presence,
4. the amount of open-affection displayed between child and parent.

The topics discussed in the conference should include:

1. Child's present level of functioning
2. Parental expectations – what the parents feel are the most appropriate goals for the child (short and long range goals). The need to be realistic should be emphasized. NOTE: Some parents may experience much doubt when confronted concerning long range goals for their child. Therefore, short range goals, carefully monitored, are the most appropriate and should be of the most immediate concern. Harsh, professional realism should not be emphasized but note should be made of the need for further counseling. The parent may need long range guidance. The school social worker can be of assistance to the parents in this regard
3. Specialized classroom equipment which may be required
4. Special medical information from the family physician (i.e. medication, therapy)
5. Child's self-help habits and/or needs:
   a. toileting schedule – any noted problems or special concerns, terminology used in the home (i.e. "potty")
   b. eating and feeding habits, special needs (special equipment), allergies and 'helpful hints' from the parents own experience
6. Unique behavior problems (i.e. tantruming, biting) – how they are dealt with in the home
7. Child's obvious likes and dislikes. (What rewards him/her, punishes him/her?)

8. Transportation considerations
9. School-day needs (i.e. extra set of clothing in case of accident, supply of diapers, if applicable)

The above list is by no means exhaustive. There is much information that must be exchanged between all of those people directly and indirectly involved with the child's educational program. It is the teacher's responsibility to arrange for meaningful dialogue between the interdisciplinary specialists (i.e. occupational therapist, physical therapist, speech and hearing specialists) and the parents of the child. The initial educational program proposed for the child, as dictated by all those directly involved with assessment, must be communicated to the parent.

After the New Admissions Conference has taken place, the teacher should know what accommodations must be made to serve the child in his/her classroom, and construct the initial educational program. Keeping in mind the individual differences between the children in the class, and the changes that occur with time in an individual child, the initial plan for receiving the child will be revised as the need arises.

During the school year, there should be frequent informal exchanges of information between the school and the parent or the school and the responsible person from the institution where a child resides. All inquiries concerning classroom management, the individual child's behavior in the classroom, or program entries should be directed to the teacher.

Events occur at home, or in the residential setting which may adversely affect the child's performance in school on a particular day. Likewise, events may occur at school which affect his/her behavior at home that evening. For example, if the child did not sleep well the night before, this will affect his/her behavior in school. Knowledge of this should alter the teacher's expectations for that day. A major upset in the home or family situation (i.e. death of one parent, divorce resulting in a relocation of the child and one parent) realistically interferes with the child's behavior and achievement for more than a one day period of time. It would be to the teacher's advantage, as well as to the child's, if he/she were aware of this type of family occurrence. Or, the

school day may have been especially invigorating and the child may still be excitable when he/she arrives at home. These frequent and brief exchanges of information in written notes or telephone calls, provide feedback from and to both the parents and the teacher.

When a child accomplishes a new task, or has mastered a new skill, the parent should be informed so that he/she is always aware of what the child can do. This lends consistency in the program. If Pat has mastered the zippering skill and is required to zip his/her coat unassisted at school now, the parent should know so that is not done for him/her at home. The parents enjoy and appreciate receiving positive reports about their child. The nicest note of all, simply reads: "Pat had a good day!"

In addition to this frequent and brief informal reporting, there is also a need for formal conferences occurring at designated times during the school year These conferences, referred to as the Ongoing Conferences, usually occur at report-card time, but may occur up to five to six times in one school year. Only parent(s) and the teacher are in attendance at this session, the general purpose of which is to report the child's behavior and/or progress periodically during the school year. This conference is an integral part of the child's programming and should be ongoing not only within one school year, but throughout the child's entire school career.

More specifically, the purposes of this Ongoing Conference are:

1. To exchange information about observed behavior and to consider the possible causes of the observed behavior.
2. To discuss present level of functioning and current goals.
3. To convey to the parent: 'helpful hints' that the teacher has found to be successful at school, the reinforcement system he/she is utilizing and has found workable, any specific procedures that he/she is utilizing and wishes the parent to carry out in the home.
4. To discuss how any behavior problems are being controlled at school.
5. To discuss parental expectations and the need to be realistic.

Finally, there is a need for formal reporting. If the parents have been kept well informed and have contributed to the implementation of the educational program in the home, the formal report will not be overwhelming.

The authors have devised and adopted the following formal reporting system. The report was designed specifically for their own severely/profoundly retarded classes, and utilized twice a year; once at mid-year (first semester), and once at the school year's completion (second semester). Those specific program areas that make up the overall educational program are listed. Within each area, the teacher:

1. reports the present objective(s) of that area, and
2. gives suggestions for home follow-up activities.

See following page for sample of Evaluation Report To Parents.

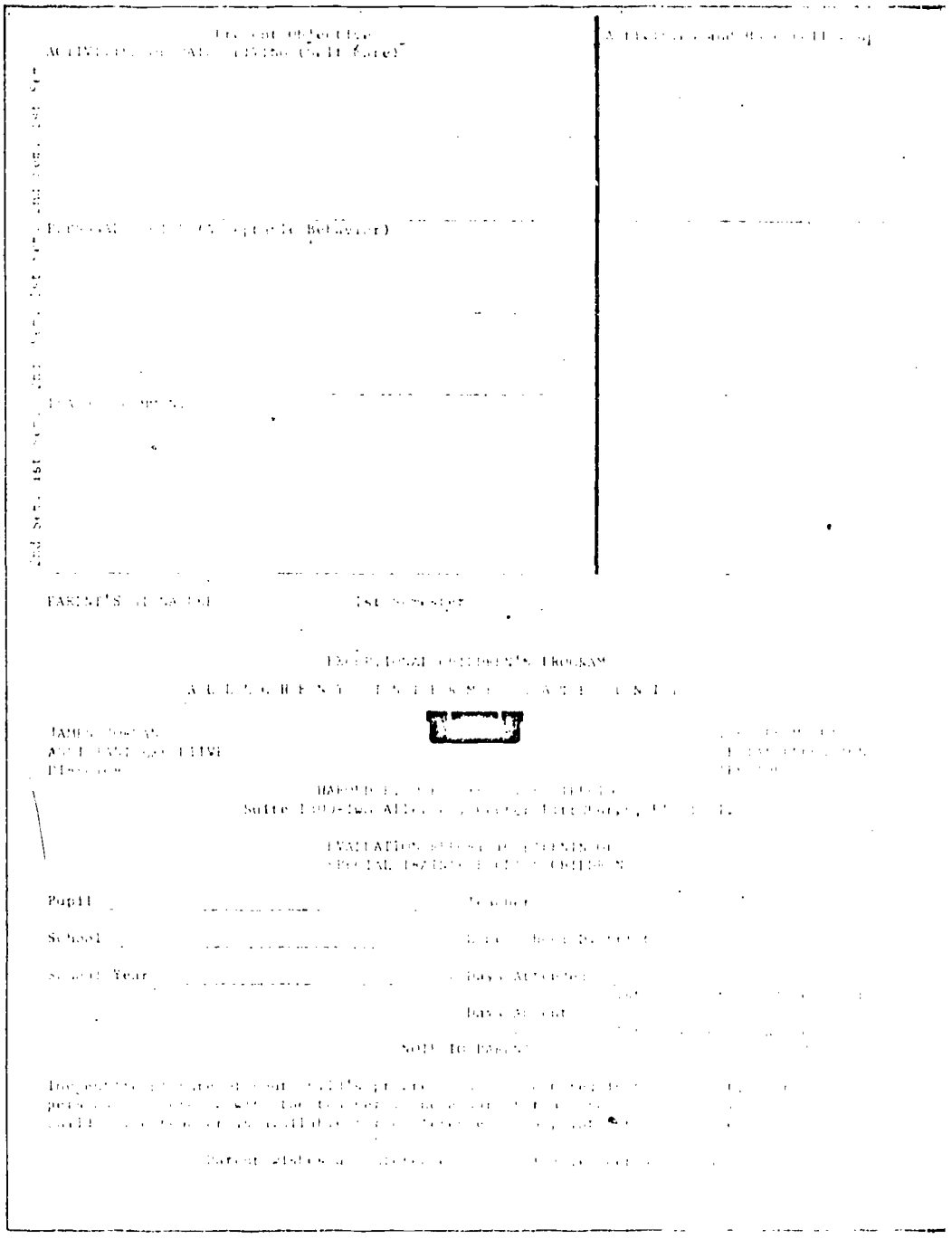
NOTE: The author's recommend that an Ongoing Conference be scheduled at formal reporting time ('report card' time) and that the formal report be given to the parent during that conference. That way the objectives can be discussed specifically and the suggested activities for home follow up demonstrated.

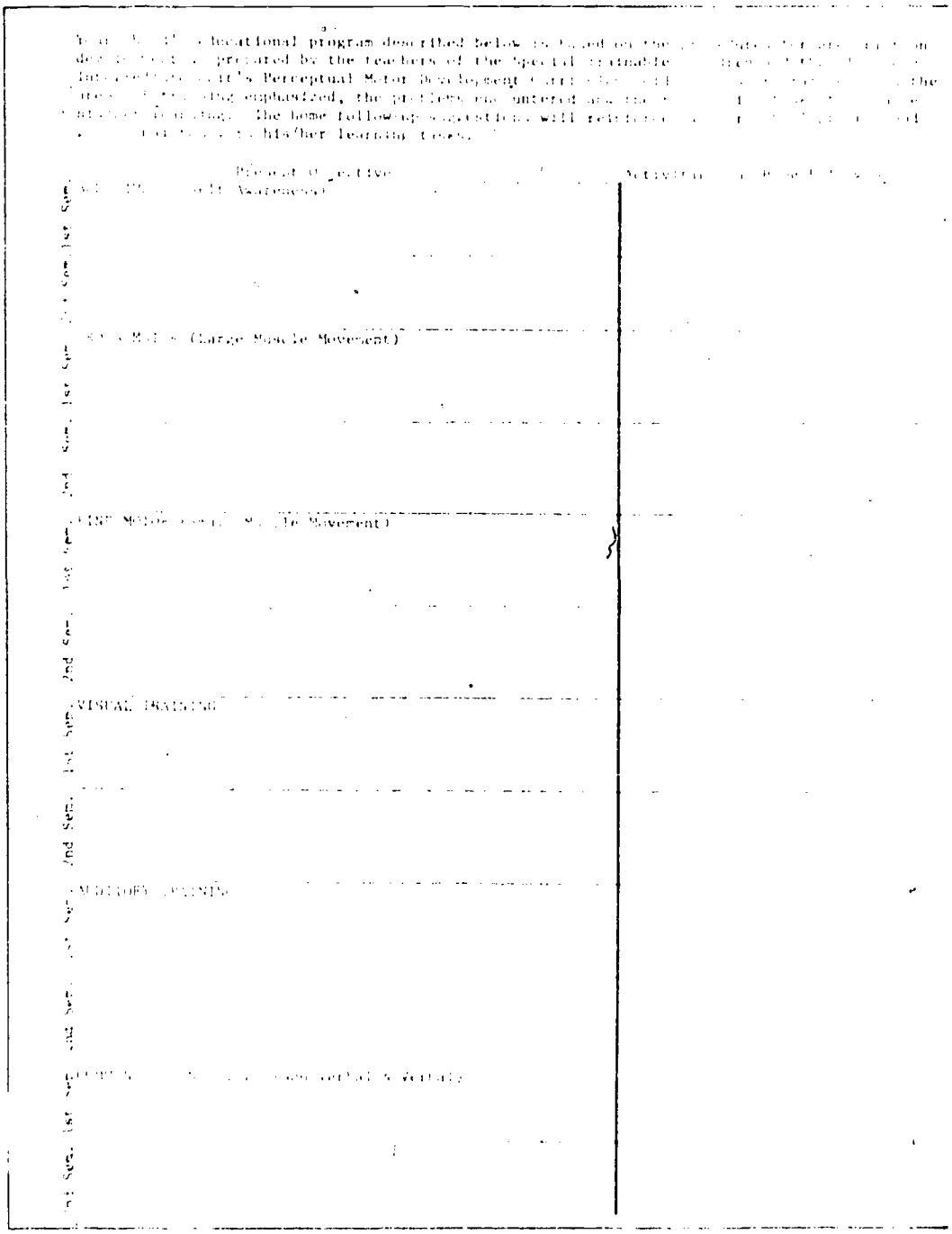
The sample report card is just that; a sample. It was quite difficult to design a report card that could accommodate the wide variety of children that make up the severely/profoundly retarded group. Each teacher must utilize a formal reporting system that is appropriate for the needs of his/her group.

New Admission Conference, Ongoing Conference, frequent informal written and phone messages, and formal report . . . Much exchange of information, yes! It is this continuous exchange of information, between all concerned persons, that results in purposeful and appropriate programming for severely/profoundly retarded children.

Home Follow-Up

The teacher is responsible for the implementation of the child's program at school and also for relaying information to the parents so that the school





program can be 'followed up' in the home setting. The formal and frequent informal exchanges of information between the teacher and the parent help to insure that the follow-up will occur in the home.

In planning for the implementation of the program at school and in the home, both the teacher and the parent must be realistic about the amount of time each can devote to the child. In the classroom, the child may be one of nine or ten, at home, one of three or four children. NOTE: If the child is a resident of a public or private institution, the counselors act as parents in absentia and assume the same role in follow-up as the parents.

In the exchange of information from teacher to parent(s), the teacher should be sure that the messages she/he conveys are free of technical jargon. The information and suggestions must be practical, easily understood, and concrete.

Consistency between the school and the home or institutional setting must be emphasized. Consistency of terminology, procedures, reinforcement and equipment used is essential to the successful implementation of the program in both settings. For example, the teacher and the parent must agree upon the exact phrasing of a command, the appropriateness of specific reinforcers, the behaviors that are to be reinforced and those that are to be ignored, reinforcers or rewards, and specific terminology to be utilized (i.e. "potty" vs. "toilet"). These details are necessary to maintain consistency in the program.

There are certain activities that are performed routinely in the home (i.e. bathing) which provide practical opportunities for learning experiences for the child. These experiences can also reinforce the school program. For example, during bathing, tactile stimulation can be performed by the person bathing the child. He/she can rub the child's body parts with the washcloth and name the body parts being tactually stimulated.

To further enhance the necessary communication between the home and the school, the teacher can send home specific charts on which the parent can record the frequency of a particular response. For example, if the teacher is maintaining a toileting schedule on the child at school to determine when he

voids or how frequently, the same chart can be adapted for use in the home. (Sample chart appears in Chapter 3). In this manner, the parents can record the same information during the child's hours at home. Other charts may be sent home which require that the parent record the frequency of a particular response in order that a reinforcement schedule can be determined or kept up to date.

To this point, little mention has been made of how the principles of parental involvement apply to the institutional or residential child situation. In regards to this, the question arises, "Who is the parent and how is the essential communication carried out?"

It has been previously mentioned that counselors and/or child-care workers may serve as the parents in absentia in the institution. However, there is a need for further discussion here regarding communication and consistency of programming between the educational and the institutional staff.

The same principles outlined for communication between the parent and the teacher (formal, informal and ongoing exchange) can be utilized to communicate information to the institution staff persons responsible for the care and welfare of the child. The institutional staff person with whom the teacher should initially communicate is the person who:

1. has a workable knowledge of the child's history/background (records), and
2. has the authority to program for the child in the institutional setting.

This person may be the Unit Coordinator or the Group Counselor. From him/her the necessary information should be conveyed to those persons directly involved with the care of the child on the ward.

The importance of an information exchange between the institutional staff and the educational staff cannot be overemphasized. (At least half of the severely/profoundly retarded children are housed in residential and/or institutional facilities). This information exchange is surely as important as is the communication and information exchange between the educational staff and the parent of the child living at home.

Chapter 3

TEACHING TECHNIQUES

As described in Chapter 1, the approach to programming for severely/profoundly retarded children is a systematic one. Initially, developmental scales are utilized to make gross assessments of the child in the areas included. The scales are further utilized to assist the teacher in choosing an appropriate behavioral objective for the child's educational program. The instructional objective represents the target behavior. In order to develop the target behavior, specific individualized procedures and techniques need to be established.

This chapter is particularly concerned with conveying to the reader specific procedures and teaching techniques which the authors have found to be successful as a result of experience gained from working with these special children. As indicated earlier, the techniques included are to be utilized with children having a mental age from zero months to approximately thirty six months.

Card System

The authors have devised a system of communicating, to any implementor the technique and procedure to develop a particular task. A system that clearly conveys the program information and permits efficient use of the implementor's time is a card system, whereby each student's individual objectives and task's are noted on large index cards (preferably 6 " x 9"). Following is an example of the format for preparing a card for this system. The same system has been utilized as the format for the task and technique 'cards' that appear later in this chapter.

The areas that the authors have chosen to include in basic programming for severely/profoundly retarded children include: Body Image, Positioning and Gross Motor, Fine Motor, Visual Skill Development, Auditory Training, Activities of Daily Living (sub areas: feeding and drinking, toileting, dressing washing/bathing and grooming), Communication Skills, and the area of Personal Social Skills. Likewise, the same areas are dealt with in regards to specific tasks and techniques that appear later in this chapter.

The general objective states the global goal that the teacher has established for the child. For example, a general objective in the area of Fine Motor is: 'to develop a pincer grasp.'

The task is the activity prescribed by the teacher, performed by the child, enroute to the accomplishment of the general objective. The task, then, is an activity that the student will perform; one that is behaviorally observable by the implementor. For example, a fine motor task prescribed to accomplish the general objective of developing a pincer grasp is for the child to pick up an object so small (a piece of cereal) that it requires the use of the pincer grasp. Performance of a task can be scheduled for a particular time during the day.

A technique is a specialized method performed by the teacher or implementor to:

1. eliminate (or control) a particular child's inappropriate behavior or
2. to develop a particular skill.

For example, a technique in the area of Fine Motor prescribed to accomplish the general objective of developing a pincer grasp is to tape the child's third, fourth, and fifth fingers of the dominant hand together and then down to the palm of the hand. This leaves only the thumb and index finger free. This technique affords the child no other alternative but to utilize the pincer grasp when picking up an object.

An example of a technique used to eliminate an inappropriate behavior is to immobilize the elbows of a child who sucks his thumbs by sliding cardboard tubes over the elbows and securing them with an ace badage. This technique frees the child's hands to be used in a more appropriate manner.

A technique, the purpose of which is to eliminate or control an inappropriate behavior, is usually not scheduled for a particular time during the day. Keeping in mind its purpose, this type of technique is on-going and may occur at any time during the day that the particular behavior occurs. In this case it is not, therefore, a specific activity. A technique utilized to develop a skill (i.e. taping fingers for pincer), however, can be scheduled for a particular time of the day, as a specific activity.

Materials refers to the equipment or materials that need be used for performance of the task or technique.

Procedure refers to the step-by-step analysis of the procedure followed to develop a particular task or carry out a particular technique.

Rationale refers to the reasoning behind why the teacher has chosen a particular task or technique to achieve the general objective.

Adaptations list other materials or conditions that may be employed to accomplish the same task or technique.

It should be noted that criterion of acceptable performance (refer to Chapter 2) has not been mentioned in this discussion of the card system. This does not mean to negate its importance. In fact, it is an essential part of all systematic programming. However, each child's educational program is individual and unique and, therefore, requires that criterion be established specifically for an individual child and/or individual task. It is assumed that the teacher or implementor will establish an appropriate criterion for each task.

Following is an example of a completed task card:

Area Fine Motor

General Objective: To develop a pincer grasp.

Task: Picking up a one-inch cube.

Materials: One-inch cube, one pound coffee can, clay.

Procedure:
1. Position child such that hands are free.
2. Secure can to flat surface with clay.
3. Place a one-inch cube in can.
4. Say "Give it to me."

Rationale: To retrieve the cube from the can, the child has no other alternative but to utilize a pincer grasp.

Adaptations: Use small pieces of food, other small manipulative items. Place can on child's lap, place can horizontally or vertically on desk or floor in front of wedge.

Following is an example of a completed technique card describing a technique to develop a particular skill:

Area: Fine Motor

General Objective: To develop pincer grasp.

Technique: Immobilizing last three fingers to encourage the use of the pincer grasp.

Materials: Masking Tape.

Procedure:
1. Tape child's last three fingers together (tape should be placed between first and second knuckle).
2. Flex the taped fingers down toward palm and tape the fingers (place second strip of tape over the fingers, between the thumb and index fingers, around front of hand and back to fingers resting in palm).
3. Have the child perform activities which normally require a pincer grasp (i.e. picking up a piece of cereal). This technique must be repeated daily for several weeks.
4. Gradually fade the tape which circles the hand and use only the tape that holds the three fingers together.

Rationale: This technique requires the child to utilize the pincer grasp and helps improve the child's gesture of pointing.

Adaptations: Use beautician's hair tape if child's skin is sensitive to masking tape.

It must also be noted that a contingency management system, designed for a particular child, is ongoing in all of the program areas. The application of positive reinforcement has not been mentioned on the sample cards that appear here or on the actual task and technique cards that appear later in the chapter. The behavior modification system must be individualized for a particular child and/or a particular task. It must be realized by the reader that

some type of behavior modification system must be utilized when programming any of these tasks.

Utilization of System

The major emphasis of this text is to convey to the reader, specific instructional procedures, tasks and techniques to be implemented in teaching the severely/profoundly retarded child. The remainder of this chapter is particularly concerned with that information. Included are various activities and techniques that the authors, all teachers of the severely/profoundly retarded, have implemented in their own classrooms. The list is not meant to be exhaustive. Rather than attempting to provide a complete list of all activities which can be performed or implemented in each program area, the authors have included those that have proven to be successful, practical and feasible to implement in an educational setting. Many represent the 'little tricks' that the authors have found really do work!!

An attempt has been made to categorize the tasks and techniques into the program areas emphasized in this handbook. That was a difficult and cumbersome feat, as few of the tasks exist in one isolated area. Although realizing that many of the activities may be appropriately categorized in two, or in some cases three, different program areas, the authors have attempted to categorize the tasks according to the most obvious program area.

The tasks of each particular program area are sequenced within. Although the list is not complete in each program area, the tasks that are included in each area appear in a hierarchical fashion.

As indicated earlier, the write-up of tasks and techniques that appear later in this chapter does not include mention of criterion of acceptable performance or the contingency management system utilized. Both are essential parts of programming but need to be individualized for a specific child and/or task and therefore cannot be generalized. The reader must, however, consider both of these components in depth when programming for a severely/profoundly retarded child.

Although these tasks have been derived from the authors' own experiences working with severely/profoundly retarded children, and have proven successful and feasible, they cannot be received as 'cookbook', nor expected to work with every child in every situation. The children that make up this group are so diverse in terms of abilities, limitations and characteristics that no 'cookbook' could ever be developed. The reader may find it necessary to adapt the tasks and techniques that follow to his/her particular children and/or learning situation.

BODY IMAGE

Definition — refers to the child's ability to assess his/her own body and his/her body parts. These skills are necessary for effective, purposeful movements, locomotive skill development and management of one's own body in space.

INTRODUCTION

Having an awareness of one's body, and an image of it, is prerequisite to purposeful movement and subsequent development. The child's awareness of his/her body and body parts provides him/her with a sound base from which to manipulate and/or move about his/her environment. A sound body image and awareness of specific body parts is prerequisite to many of the activities of daily living which are greatly emphasized in programming for severely/profoundly retarded children. As well, a sound body image helps to facilitate the development of a self-concept.

CONSIDERATIONS

1. Initially the child should be given the opportunity to become aware of and investigate each body part, gradually leading to awareness of the movement of each part.
2. After facilitating awareness and expioration of single body parts, several body-part movements can be combined.
3. Reference can be made to body parts and body part movement during many activities of the normal school day. When the child is washing his/her hands, or having them washed, after toileting, the implementor can verbally emphasize the word "hand," and tactually stimulate it at the same time. This can also be readily done in the home setting and should be encouraged.

Area Body Image

General Objective: To stimulate self-awareness.

Task: Stroking child's own shoulders, chest and face.

Materials: Mat.

Procedure:
1. Place child in supine position on mat.
2. Sit in front of child.
3. Grip child's wrists.
4. Cross the child's arms so his/her arms touch his/her body at his/her shoulders.
5. Child is then guided to stroke the rest of the body parts.

Rationale: This exercise may provide the only opportunity for the child to touch these body parts and provides a relaxing experience.

Adaptations:

Area Body Image

General Objective: To provide stimulation through the tactile mode.

Task: Experiencing various textures on specific body parts.

Materials: Sand, gravel, rice, grass, sawdust, marble, concrete, carpet, silk, wool, fur, a container such as a plastic basin.

Procedure:
1. Place textured material in basin.
2. Place basin in front of child whose hands are free to play in basin.
3. If child does not initiate play, implementor can scoop texture over his/her hands.

Rationale: Stimulation through the tactile mode is necessary to develop body awareness.

Adaptations: Use various parts of body.

Area Body Image

General Objective: To develop self-awareness.

Task: Looking at own image (in mirror).

Materials: Full-length mirror, blanket.

Procedure: 1. Position child in front of mirror.
2. Cover child's head with blanket.
3. Quickly remove the blanket and say, "Look at Pat!"

Rationale: The sudden exposure to image causes the child to attend.

Adaptations:

Area Body Image

General Objective: To promote awareness of body parts.

Task: Shining flashlight on specific body parts.

Materials: Darkened room, flashlight.

Procedure: 1. Shine a light on child's arm in darkened room.
2. Say, "arm."
3. Continue with other body parts.

Rationale: The light shines brighter in the darkened room as other stimuli is excluded.

Adaptations: Have child shine flashlight on others' body parts.

Area Body Image

General Objective: To develop awareness of hands.

Task: Holding ice cube with and without mitten on hand.

Materials: Ice cubes, mittens.

Procedure:
1. Place ice cube in child's hand.
2. Say, "It is cold."
3. Remove ice cube from child's hand.
4. Place mitten on child's hand.
5. Place ice cube in hand with mitten.
6. Say, "It does not feel cold. You are wearing a mitten, so your hand does not feel cold."
7. Remove ice cube and mitten.
8. Place ice cube in child's hand again and say, "Now your hand feels cold. You are not wearing a mitten, so you can feel the cold ice cube."

Rationale: Kinesthetic stimulation to the hand heightens awareness of the body part.

Adaptation: Use snow.

Area Body Image

General Objective: To develop awareness of fingers and hands.

Task: Moving hands in shaving cream.

Materials: Shaving cream, towels, water for rinsing, small toys.

Procedure: 1. Position child so hands are free to move in shaving cream.
2. Have child find toys in shaving cream.

Rationale: Feeling soft texture helps child become more aware of hands.

Adaptations: Use warm and cold water, sand (wet or dry), corn meal, rice (wet or dry).

Area Body Image

General Objective: To promote awareness of hands and feet.

Task: Stimulation to hands and feet.

Materials: Warm water, cold water, two basins, turkish towel.

Procedure:
1. Remove child's shoes and socks.
2. Partially fill one basin with warm water and one with cold water.
3. Submerge one foot first in warm water; hold in if necessary.
4. Immediately submerge same foot into cold water.
5. Repeat with other foot.
6. Dry feet with towel, rubbing firmly.
7. Do task with hands.

Rationale: This exercise helps stimulate sensory stimulation via contrast of temperatures.

Adaptations: Use sand and water, shave cream and pebbles.

Area Body Image

General Objective: To promote awareness of hands and feet.

Task: Making hand and foot prints.

Materials: Finger paint, paper, smock.

Procedure: 1. Place child's hand in paint.
2. Place hands on clean paper.
3. Continue several times for each hand and foot.
4. Talk to child about "hands" and "feet."

Rationale: Stimulation to hands and feet heightens awareness of these body parts.

Additions: Add sand or sawdust to paint to provide a texture.

Area Body Image

General Objective: To promote self-awareness of own body.

Task: Tracing child's body on large piece of paper.

Materials: Large paper, magic marker.

Procedure:
1. Show child paper.
2. Lay child on paper.
3. While tracing child's body, name the specific body parts.
4. Hold up for child to see.

Rationale: The child has tactile sensation as body parts are traced, plus the visual sensation of a life-size picture of self.

Adaptations: Use yarn, paint traced picture.

Area Body Image

General Objective: To move specific body parts.

Task: Recognizing shadow of self and observing movements of body parts in the shadow.

Materials: Sunlight, smooth pavement or concrete.

Procedure:
1. Position child so that sunlight casts his/her shadow on pavement.
2. Direct child to "look at your shadow."
3. Direct child to raise his her arm over head and observe the movement.
4. Repeat, using other arm and leg.

Rationale: Child will observe own body movements by observing the shadow and coordinate specific body movements.

Adaptations: Use [illegible] indoor room.

Area Body Image

General Objective: To promote self-awareness and awareness of others.

Task: Touching another person.

Materials: Mat.

Procedure: 1. Hold the child on your lap.
2. Stroke the child gently and have him touch you. Say the body parts you are touching.
3. Rub child's entire body while singing to the child.

Rationale: Stimulation of all modalities is necessary to develop body awareness.

Adaptations:

Area Body Image

General Objective: To respond to one's name being called.

Technique: Pairing calling of child's name with physical contact.

Materials: Child, Implementor.

Procedure: 1. Sit facing child.
2. Call child's name while placing hands firmly on child's shoulder or face.
3. Gradually fade the intensity of the phsycial contact, as more of the child's response is noted.

Rationale. Pairing the physical contact with calling the child's name helps the child learn his/her name using the auditory and tactile sensory modes.

Adaptations:

Area Body Image

General Objective: To respond to own name.

Task: Wearing mirror-image name card while looking at own image in a mirror.

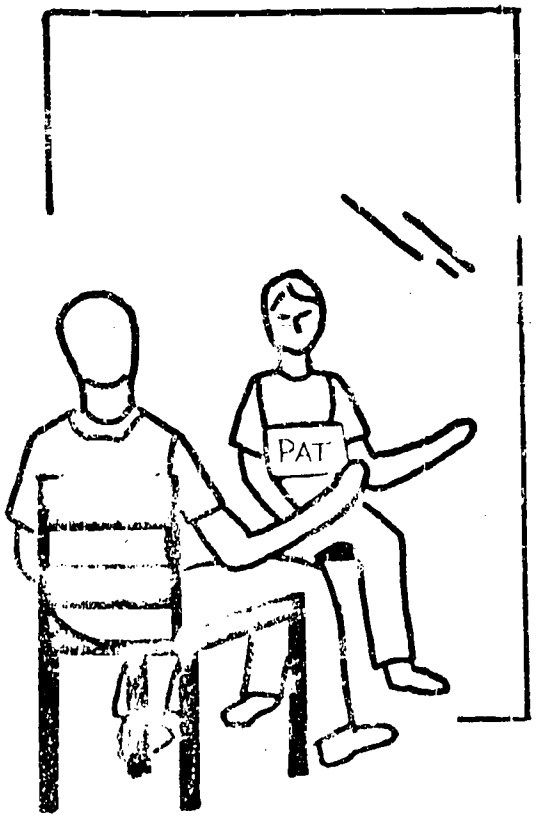
Materials: Full-length mirror, name card with mirror-image printing and string attached.

Procedure: 1. Position child facing mirror wearing own mirror-image name card.
2. Touch card and say, "This is Pat's name."
3. Touch child and say, ". . . and this is Pat."

Rationale: Mirror-image name cards make pairing name cards with image possible.

Adaptation:


PAT


PAT

Area Body Image

General Objective: To identify self.

Task: Responding to own name as a part of a musical game.

Materials: Song, "What Will You Do Now?" (Music Activities for Retarded Children, Ginglend and Stiles, pg. 106), tire.

Procedure:
1. Place tire in horizontal position on floor.
2. Position children facing tire.
3. Call one child's name and tell him to step into the tire.
4. Say, "Let's sing to Pat." Sing verse and encourage child to make a rhythmic motion in response to the words, "What will you do now?"

Rationale: Child will develop self-awareness through individual attention in a group situation. Standing within a confined area gives the child a sense of his/her position in space.

Adaptations: Place rhythm instruments on edge of tire and encourage child to respond by playing the instrument he chooses. Use a piece of carpet or shallow block to provide a specific place for child to stand.

Area Body Image

General Objective: To recognize basic body parts.

Task: Shaking or moving specific body parts.

Materials: Implementor, child.

Procedure: 1. Touch a specific body part; say, "Head; shake your head; shake Pat's head."
2. If the child does not respond physically, move child's head.
3. The implementor shakes his/her head, "I am shaking my head."
4. Continue.

Rationale: The child must physically move body part as the name is being used.

Adaptations: Use a mirror.

Area Body Image

General Objective: To recognize basic body parts.

Task: Pointing to specific body parts.

Materials: Puppet, mirror.

Procedure: 1. Position child in front of mirror.
2. Say, "Touch Pat's head."
3. Say, "The puppet is touching Pat's head."
4. Repeat until child can accomplish the task on his/her own.

Rationale: Because children are attracted to puppets, they attend to the task involved.

Adaptations: Have the puppet move fast, then slo . . have the child hold the puppet.

Area Body Image

General Objective: To recognize body parts.

Task: Touching specific body parts while looking in mirror.

Materials: Full-length mirror.

Procedures: 1. Position child facing mirror and stand behind child.
2. Touch or stroke specific body part and name body part.
3. Move specific body part and say, "This is your arm."

Rationale: Combining visual and tactile stimuli with verbal labeling helps child recognize specific body parts.

Adaptations: Tell child to touch the mirror with a specific body part, i.e. (hand, foot).

Area Body Image

General Objective: To identify body parts.

Technique: Painting a child's body part.

Materials: Water-base paint, one inch brush.

Procedure:
1. Choose a body part which is to be emphasized.
2. Assist the child in painting this part.
3. During the procedure, emphasize the body part, i.e. what color it is, pointing out the painted part t the other children.
4. Leave the part of the body painted for as long as is feasible. Continue to emphasize the child's pain area bringing the child's attention to it.

Rationale: The uniqueness of the different colored body part in combination with the constant emphasis being pla on it will increase the child's awareness of a specific body part.

Adaptations: Have a "hand day," or a "nose day," use a mirror.

Area Body Image

General Objective: To recognize a body part.

Task: Making correct response to verbal command to touch hair.

Materials: Wig, mirror.

Procedure:
1. Position child in front of mirror.
2. Touch child's hair and say, "Look at your hair."
3. Guide his/her hand to his/her hair and say, "Touch your hair."
4. Put wig on child's head and say, "Look at the hair on your head. Touch the hair."

Rationale: Because a wig makes wearer look different, child will be more aware of the wig than his/her, or another person's own hair.

Adaptations: Try to put wig on another person's head; put wig on doll; do motions to song, "Hair, clap, clap, clap.
Hair, clap, clap, clap.
Hair clap, clap, clap.
Hair and hands." (repe

Area Body Image

General Objective: To identify body parts.

Task: Assembling a life size body parts puzzle.

Materials: Large piece of paper, cardboard, paint, puzzle. (To make the puzzle, lay child down on paper, trace outline on brown paper and cut it out. Paint puzzle appropriate colors.)

Procedure:
1. Remove one part of figure.
2. Place the figure in front of child.
3. Show child how to place the missing piece in appropriate place.
4. As child performs task, implementor emphasizes the name of that body part.

Rationale: A life-size body part puzzle is more realistic.

Adaptations: Puzzle may be given a name, i.e. "Our Pal," continue with other body parts in the same manner.

Area Body Image

General Objective: To recognize facial features.

Task: Constructing a flannel face.

Materials: Flannel board, flannel head, hair, eyes, mouth, magic marker.

Procedure:
1. Outline facial parts with thick magic marker.
2. Position child in front of flannel board, implementor sitting on child's dominant side.
3. Place flannel head on board.
4. Hand child a facial feature and say, "Put it on."
5. Direct child to match parts to outline.

Rationale: Child will become more aware of parts of his/her face and of others.

Adaptations: Use blank side of face once child has mastered above task to transfer learning.

Area Body Image

General Objective: To recognize picture of self.

Task: Pointing to picture of self.

Materials: Picture of child, picture of classmates or family members.

Procedure:
1. Place child's own picture in front of him/her.
2. Say, "Where is Pat?" Point to picture saying, "There you are."
3. Encourage child to point to the picture.
4. When the child has accomplished this, add picture of classmates or family members.

Rationale: This task helps child to differentiate between self and others.

Adaptations: Use a mirror; have the child hand you the picture; if the child is physically involved, have him/her look at the picture.

Area Body Image

General Objective: To recognize specific body parts.

Task: Matching clothing to body parts.

Materials: Hat, pair of mittens.

Procedure:
1. Show hat to the child and say, "This is a hat."
2. Put the hat on the implementor's head and say, "I put the hat on my head."
3. Remove hat from head and lay it in front of child.
4. Tell child to pick up the hat and say, "Put the hat on your head."
5. Remove hat from child's sight.
6. Use same procedure with mittens on hands.
7. Place both items in front of child.
8. Tell child to pick up one item and put it on the appropriate body part.

Rationale: This task provides readiness for dressing skills.

Adaptations: Perform task in front of mirror.

Area Body Image

General Objective: To associate proper item of clothing with specific body part.

Task: Placing clothing on body parts while naming specific body parts.

Materials: Peabody boy or girl, Peabody clothes, under and outer garments.

Procedure:
1. Implementor and child sit at table.
2. Implementor shows item of clothing and where it is worn.
3. Have child place item on Peabody model.
4. Give child help where needed.

Rationale: Familiarization with clothing names and their appropriate placement prepares child for self-dressir

Adaptations: Use a Three-D doll with simple clothing.

POSITIONING

Definition– a certain arrangement of body positions for a specific develo
mental purpose, i.e. manipulating a child's body parts into a
more normal body alignment.[6]

Introduction

Positioning of the child must be considered before planning any learn
task. The extent of the physical handicaps of the children in the classroo
may prevent their participation in independent physical activity. One ch
may not be able to control his head movements; another child may be a
to walk with support but unable to walk independently. One child may
unable to bring his two hands together to play with a toy because his m
have too much tone, while another child may not have enough muscle t
to hold his arm in the air. Many children cannot maintain or assume an
right position.

It is not the responsibility of the teacher to assess the physical handic
of the children in his/her class. A consulting physician, preferably a phy
is best prepared to evaluate the children's physical involvements. After
evaluation by the physician, and acting upon his/her recommendations
physical therapist and occupational therapist describe the appropriate g
motor and sensory motor program to the teacher. This program includ
specific exercises, techniques of handling the child, and sensory simula
tion activities to be performed daily.

The goal of the therapy program is to improve the child's present fu
tioning and to integrate sensory information. The therapy program beg
at the child's present level of development. If the child has an extensor
of his/her life, the physician will prescribe positioning techniques and
cises to permit the child to be placed upright. The upright position is t
first step in providing for humanization of the child. When the child is
upright position his/her previous abnormal position and movement pat
begin to fade. This upright position affords the child the opportunity
velop head control; it helps improve breathing, circulation, and assists
the elimination process. As the child adjusts to the upright position, h
begins to interact with his/her environment through all of his/her sens

modalities. Proper positioning prevents contractures and secondary deformities which in later life would make management of his/her activities of daily living, i.e. dressing, feeding, toileting, very difficult.

The physical and occupational therapists construct and direct all phases of the therapy program. Under the direct supervision of the therapists, the teacher learns how to position and conduct specific exercises prescribed for each child. When therapists are assured that the teacher understands and can correctly position and exercise each child, the gross motor program can begin on a daily basis. The therapists return periodically to discuss and assess the progress of each child with the teacher. As short range goals are met, the program is revised and the revisions explained.

It should be emphasized that placing a child in a particular position satisfies the therapy requirement, and that additional learning tasks occur while the child is in a particular position. For example, a child who is positioned prone over a wedge, may be facing a mirror (body image), manipulating objects (tactile), and listening to music (auditory). A child in a standing table can fingerpaint. The teacher can conduct a visual tracking exercise as a child sits in a corner seat.

Considerations[7]

Relaxation:

A gentle rolling, rotating, rocking movement will help to relax a child prior to working with him/her.

If the implementor feels the child's muscles pulling against him/her, wait until the child relaxes before moving him/her.

If the implementor has difficulty bending an arm or leg, it may be because the arm and the leg on the side to which the child's face is turned tends to be stiffer than the opposite side. If this is the case, the implementor should move the child's head to the midline position or to the other side.

If, when working with the child, he/she is pushing back against the implementor, the implementor should gently push the head forward to release

(break up) the stiffening. If the pushing is done on the back of the child's head, the child will push back with more force.

Dressing:

Moving the arm from the elbow to get the arm overhead, or the leg from the knee to bend the child at the hip or spread his/her legs, is a more effective way of moving the limbs than is pulling from the wrist or ankle respectively.

Having the child seated is the best position for dressing.

Sidelying:

Children who remain on their backs tend to get increasingly rigid. Sidelying is an appropriate position for many children to neutralize the rigidly extended position. It is also a good position for those children who cannot be comfortable lying on their stomach. Sidelying allows the hands to come together. From this position, the child is better able to view his/her environment. To best maintain this position, a sandbag should be placed along the child's back, one along the stomach, and a pillow between the legs.

Lying:

Positioning a child over a wedge or roll enables the child to be on his/her stomach with arms free. This position also assists in the development of head control. For lying, sandbags can be utilized in the following ways:

1. along the child's sides, for those who tend to roll
2. between the legs to break-up the crossing of the legs
3. along the child's side to maintain a more neutral position

NOTE: A scooter board can be used in the same manner as a wedge. When using a scooter, encourage the use of the arms for movement.

Sitting:

Prior to the placement of a child in a chair, the physical handicapping condition of the child must be considered. He/she should be placed in a chair

that has been determined appropriate. When a child is sitting, his/her feet should be flat on the floor or on some other flat surface. This gives the child a feeling of safety and security.

Examples of sitting equipment that are utilized: bean bag chairs, relaxation chairs, corner seats, Hogg chairs, adaptive therapeutic chairs, high backed chairs, chairs with arms, stabilized chair, wheelchairs. NOTE: For a child who requires therapeutic support while sitting in or on a chair, a bib restraint or strap may be utilized.

Standing:

For a child who cannot stand independently, a standing table is useful and appropriate.

To assist the child in standing, splinting is done to maintain extension of the hips and/or knees. Pillows, [illegible] rolled around the legs and braces can all be used for splinting.

Brace Application:

Braces are required for some children. Bracing assists in preventing deformities, controlling involuntary movements, providing support and affording the child the opportunity to walk. A physician dictates the type of braces that are appropriate for a particular child. The demonstration of brace application and future activities to be implemented should be provided by the physical therapist.

New braces must be applied gradually. If no red marks appear on the child's skin after removal of the braces, the wearing time can be gradually increased.

Before applying the braces, the hip and knee joints must be unlocked and bent. The child's feet should be placed in the shoes, with care taken to make sure the toes are not cramped. Pushing down above the knee will

direct the child's foot into the shoe. Knee caps and thigh cuffs should be loose enough that one finger can pass under them.

NOTE: The authors have deliberately not included specific task and technique 'cards' in this Positioning Program Area. A physical therapist's expertise and consultation is essential and required prior to positioning any child. Therefore, the authors felt that they should leave the recommendations of specific activities and techniques to the physical therapists. However, it is our hope that the general points made in the short text that precedes this note are helpful. We encourage the reader to seek out his/her therapist!

GROSS MOTOR

Definition-- refers to and is primarily concerned with strength, flexibility, endurance and coordinated movement of the large muscles of the body. Gross motor behaviors of children provide a means of exploring and developing body parts, of locomotion, and of expressing other developmental skills.

Introduction

Many of the initial responses of an infant are motor responses. As the child grows, he learns much by being able to move through his environment. Movement exercises help the child to orient his/her body in space -- a skill necessary for all activities of daily living.

Time should be set aside each day for gross motor skill development. This time may be spent working individually with each child, or in a group 'play' situation. This play is not merely fun-time. Rather, it is purposeful play through which the children learn.

Considerations

Following are suggestions for working with a child in gross motor skill development:

1. Do not force the child or push him into an activity too much. This could instill fear in the child and rejection of the activity both of which would impede further learning.
2. When working with a child on a motor task, put the child through all of the movements of the task (shaping) even though he is performing very little independently. This not only gives the child a kinesthetic feeling of the movement, but helps him/her to feel secure in moving through the task.
3. When putting the child through the movements of a particular task, always finish the task, even though it may be active on the implementor's part and passive on the child's part. By completing the task, the child gets an idea or feeling for the whole task, rather than fragmented parts.

4. Verbalize with the child about the motor experience in which he/she is about to become involved. Tell that child what you are going to do. This would help to increase his/her receptive language. Merely approaching a child and beginning to manipulate his/her body parts or moving him/her into a motor skill, with no prior verbal or motoric announcement, may frighten the child and therefore, impede learning

Area Gross Motor

General Objective: To develop head and neck control.

Technique: Exercising child's head and neck.

Materials: Mat.

Procedure:
1. Place child in supine position on the floor.
2. Place hands on either side of the child's head behind his/her ears.
3. Turn the child's head from side to side without causing the child discomfort. Do this for a few minutes at a time, three to seven times a day. It is important to start gradually so that the child's muscles do not become sore.
4. Place hands in the same position and guide the child's chin to his/her chest and then back in the opposite direction.
5. Keeping hands in the same position, turn the child's head so his/her ear moves down toward his/her shoulder. Repeat the other side.

Rationale: Strengthening the neck is necessary for the development of head control.

Adaptations:

Area Gross Motor

General Objective: To develop head and neck control.

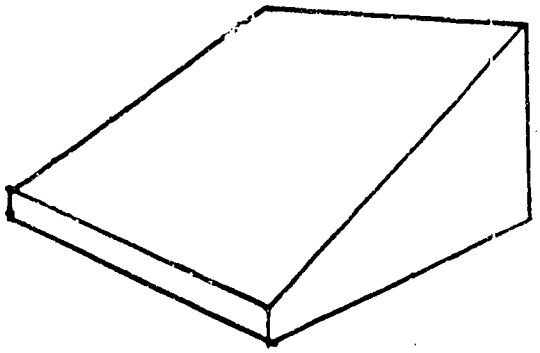
Task: Raising head while in a prone position.

Materials: Wedge.

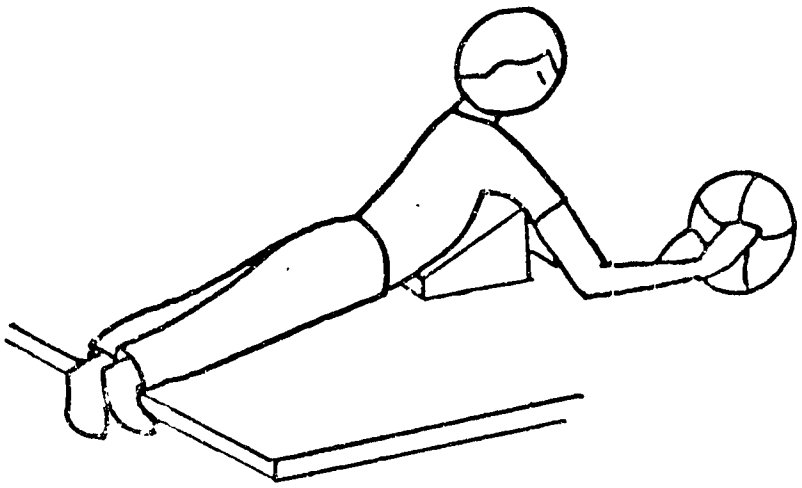
Procedure: 1. Place the child in a prone position over a wedge.
2. Rest child's chest on the wedge and extend his/her arms over the top of wedge.
3. Place a mirror in front of child, encourage child to look in mirror.
4. Talk to child; try to get child to look at implementor.
5. Hold a toy in front of child and encourage child to look and reach.

Rationale: Placing a child over a wedge allows the child to develop head control so he/she can observe his/her environment.

Adaptations: Use a scooter board, prone board, covered rolls, small pillows.



FOAM WEDGE



Area Gross Motor

General Objective: To develop head and neck control.

Task: Lifting head while in a supported sitting position.

Materials: Colorful toys.

Procedure: 1. Seat child in fron of implementor and call his/her name.
2. Hold toys just ou of reach and high enough so child must look up to see or reach for toy.

Rationale: If a child can mainta head control he/she is better able to become aware of his/her environment.

Adaptations:

Area Gross Motor

General Objective: To develop head control.

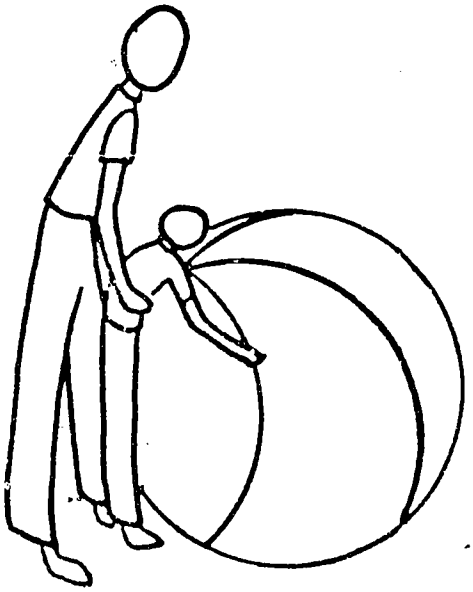
Task: Looking at image in mirror while lying over cage ball.

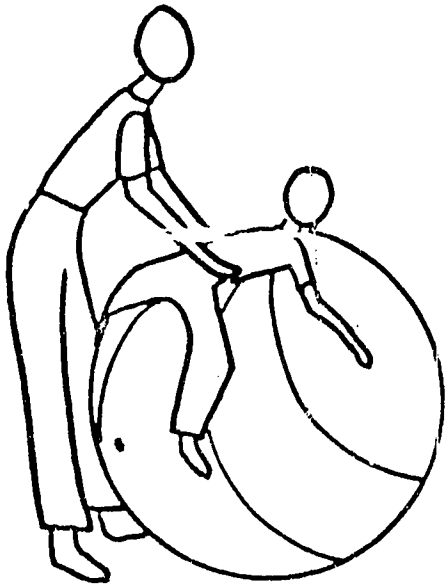
Materials: Full length mirror, cage ball, or vinyl ball (Preston).

Procedure:
1. Place cage ball in front of mirror.
2. If child has minimum head control, start with child's chest on top of ball, so child can see his/her facial
3. Tap on mirror and say, "See Pat."
4. As head control increases, gradually roll ball forward.
5. Guide child's hand to touch mirror and say, "See Pat."

Rationale: Child must lift head to see image in the mirror.

Adaptations: Use shaving cream or pudding on mirror and encourage child to touch mirror with hands; use a mobile ab
child's head.





Area Gross Motor

General Objective: To develop independent rolling from back to stomach.

Technique: Breaking down rolling into small sequential steps.

Materials: Mat, object or stimulus of interest to child.

Procedure:
1. Begin working with last step of the task.
2. Position and hold child on side, at 45 degree angle between stomach and floor
   a. Place desired object so that it will be in child's reach–with bottom arm at side and top leg flexed at knee – when roll has been completed.
   b. Prompt the roll from the 45 degree position (i.e. give child slight push at the back.)
   c. Reinforce appropriately.
   d. Continue procedure until child can roll from 45 degree position independently.
3. Place child on same side, at a 90 degree angle between stomach and floor. Proceed with activities (a-d) mentioned above, until child can independently roll from this 90 degree angle position.
4. Place child on same side at 45 degree angle between back and front.
5. Place child on his back and proceed with activities (a-d) until child can independently roll from back to stomach.

Rationale: By working backwards the child will have completed the end of the task first (backward chaining). Also, by gradually increasing the size of the angle, the child is gradually forced to utilize increased abdominal strength and balance.

Adaptations:

Area Gross Motor

General Objective: To develop a protective reflex.

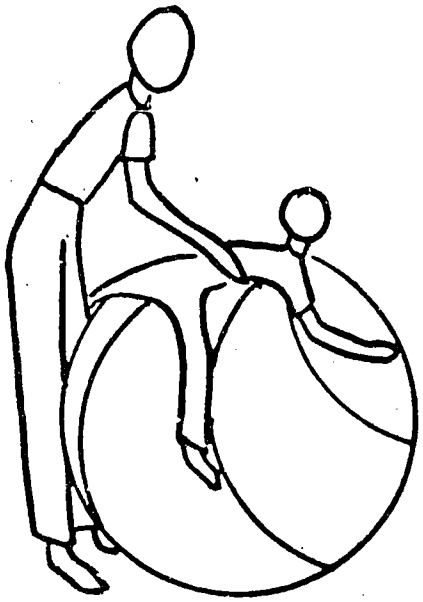
Technique: Rolling child over a ball so that head nears floor.

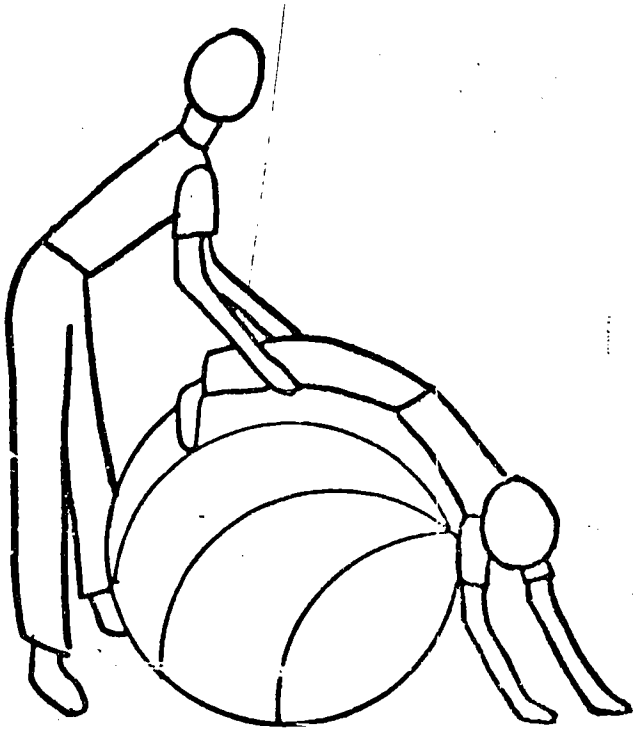
Materials: Cage ball or vinyl ball (Preston), mat.

Procedure:
1. Position child over cage ball in a prone position.
2. Hold child from behind at the hips or ankles.
3. Gently roll child and ball forward so that the head nears the floor.
4. Encourage child to catch himself/herself by extending hands.

Rationale: The child learns to develop reflexes and to protect himself/herself from injury.

Adaptations: Use large beach ball, inflated air pillow, roll; do procedure in front of large mirror so that child can watch the activity.





Area Gross Motor

General Objective: To develop head and trunk control.

Task: Maintaining head and trunk in upright position.

Materials: Cage ball or vinyl ball (Preston).

Procedure:
1. Place child in a sitting position on a cage ball, facing implementor.
2. Hold ball steady.
3. Slowly roll ball to the side so that the child must right trunk to maintain balance.
4. Roll to other side, back, and forward.

Rationale: This exercise develops head and trunk control and balance skills which are prerequisites for standing.

Adaptations: U[illegible]rror, toy above child, vestibular board.

Area Gross Motor

General Objective: To develop rolling movement from supine to prone and back to supine.

Technique: Rolling down an incline mat.

Materials: Incline mat.

Procedure:
1. Place child in supine position at top of the mat with arms above head and legs together.
2. Cross child's left leg over right leg and say, "Roll."
3. Move left buttock, left shoulder, and head off mat to initiate the roll.
4. Reverse procedure to roll from stomach to back. Continue until child reaches bottom of mat.

Rationale: Using the incline mat provides some momentum when child is rolling. This technique helps child use whole body in a coordinated manner.

Adaptations:

Area Gross Motor

General Objective: To develop trunk muscles.

Technique: Stimulating abdominal muscles movement.

Materials: Mat.

Procedure:
1. Place child in supine position on mat.
2. Implementor traces a series of straight lines across child's stomach, i.e. a tickling motion. The child's abdominal muscles should begin to tighten.
3. Let child relax muscles, then repeat.
4. Gently squeeze the child's abdomen.
5. When the child pulls in his/her stomach, release hands.
6. Place the child in supine position.
7. Hold child's legs down with one hand.
8. Put other hand underneath child's neck and raise the child upwards.

Rationale: [illegible] movements helps to develop the strength necessary for muscle control.

Adaptations: [illegible] wrists with implementor's one hand, hold legs down with the other hand, and pull [illegible], then lower gradually.

Area Gross Motor

General Objective: To develop strength in neck, upper trunk, and arms.

Task: Performing sit-ups.

Materials: Mat.

Procedure:
1. Place child in the supine position on mat.
2. Kneel facing child and grasp child's hands. (If child is able to grasp implementor's finger, this is preferred)
3. Help child pull up to the sitting position. Child's head should start forward and his trunk should follow. D not allow child's head to lag.
4. Return to supine position by lowering the child's trunk backward. Child's head should touch mat after th shoulders.
5. Implementor guides child through proper motion if necessary. In this case implementor kneels in a positi to hold child's hands and give support behind his/her head.
6. Repeat several times.

Rationale: This exercise develops strength in the neck, upper trunk, and arms as well as coordinating movement of these body parts.

Adaptation: Use a diaper or towel for child and teacher to grasp.

Area Gross Motor

General Objective: To exercise the upper trunk.

Technique: Raising child from supine to sitting position.

Materials: Cage ball or vinyl ball (Preston).

Procedure:
1. Place child supine over cage ball, holding him/her firmly by thighs.
2. Slightly tip the ball forward.
3. Assist child to raise upper trunk to a sitting position by placing your hand at back of lower neck and lifting firmly.
4. Gradually fade assistance so that child will perform more of the task independently.

Rationale: Upper trunk control is necessary for independent sitting, standing and walking.

Adaptations:

Area Gross Motor

General Objective: To strengthen upper trunk.

Task: Reaching out toward mirror.

Materials: Mat, mirror.

Procedure:
1. Sit on heels on mat facing mirror.
2. Hold child with his/her back against implementor's stomach by placing one arm around the child's a one arm around the child's knees.
3. Position soles of child's feet on implementor's thighs, with knees and hips in full extension.
4. Encourage child to reach out toward the mirror.

Rationale: Upper trunk strength must be developed before the child can sit, stand, or walk, independently.

Adaptations: Use mobile for child to touch or large ball to push against; for older child – sit on low stool, position of child's feet on floor.

Area Gross Motor

General Objective: To develop leg muscles and movement.

Technique: Extending and flexing the legs.

Materials: Mat.

Procedure:
1. Place child supine on mat.
2. Support both legs under the knee joints and bounce them gently up and down.
3. Alternately pat and bounce legs.
4. Move one knee up to the chest and then the other.

Rationale: Leg movements are necessary for creeping and walking.

Adaptations:

Area Gross Motor

General Objective: To develop leg muscles.

Technique: Exercising the thighs.

Materials: Mat.

Procedure:
1. Place child supine on floor or mat.
2. Cup hands behind the child's knees.
3. Bounce legs very slowly and gently.
4. Straighten the legs and spread them apart.
5. Repeat procedure.

Rationale: Leg muscles must be exercised to develop leg strength.

Adaptations: Use this technique while changing diapers.

Area Gross Motor

General Objective: To develop strength in upper trunk and legs.

Task: Pulling trunk forward to maintain balance.

Materials: Foam roll, mat.

Procedure:
1. Place foam roll on mat.
2. Place child in a sitting position on foam roll with both feet on same side. Be sure child's feet are flat on mat.
3. Stand in front of child and hold the child by the thighs.
4. Gently roll child backward until he/she begins to pull forward to maintain balance.
5. Return to starting position. Repeat.

Rationale: As the child pulls forward to maintain the upright sitting position, upper trunk muscles are exercised as well as leg muscles which extend and flex.

Adaptations:

Area Gross Motor

General Objective: To develop leg strength and control.

Technique: Exercising legs using a kickboard.

Materials: Kickboard.

Procedure:
1. Place child in supine position on mat.
2. Suspend a kickboard near child's feet. Grasp child above one knee and under calf.
3. Flex and extend leg so that foot hits board.
4. Do each leg separately and then both legs together.
5. Gradually fade assistance, so child is pushing the board by himself/herself.

Rationale: This exercise develops leg strength and control. Kicking an object makes the activity more interesting.

Adaptations: Sing a rhyme and push board to beat of song; attach noise making object to kickboard.

Area Gross Motor

General Objective: To develop righting balance.

Task: Using feet to maintain sitting balance.

Materials: Roll.

Procedure:
1. Seat child in straddle position over roll with feet flat on floor.
2. Slowly rotate roll to child's right so that left foot leaves floor slightly and child must utilize right foot to stop the falling motion of his body weight.
3. Repeat procedure for left foot by rotating roll to the left.

Rationale: Purposefully using each foot individually to balance body weight is necessary for walking and stepping over objects.

Adaptations: Use large inflatable plastic or cardboard barrel.

Area Gross Motor

General Objective: To develop large muscles of arms and legs.

Technique: Using a blanket harness to support child in position.

Materials: Blanket, carpeted floor.

Procedure: 1. Fold blanket lengthwise to width of child measuring from below armpits to hips.

2. Lay child on stomach over folded blanket.

3. Pick up ends of blanket and hold firmly.

4. Gently lift child to a creeping position, with implementor supporting weight.

Rationale: Self-support is a prerequisite to independent creeping. Support by implementor may be gradually faded to allow child to hold up more body weight.

Adaptations: Perform on a runner carpet, position sideways across scooter board, use creepers with rolls.

Area Gross Motor

General Objective: To increase range of motion in arms.

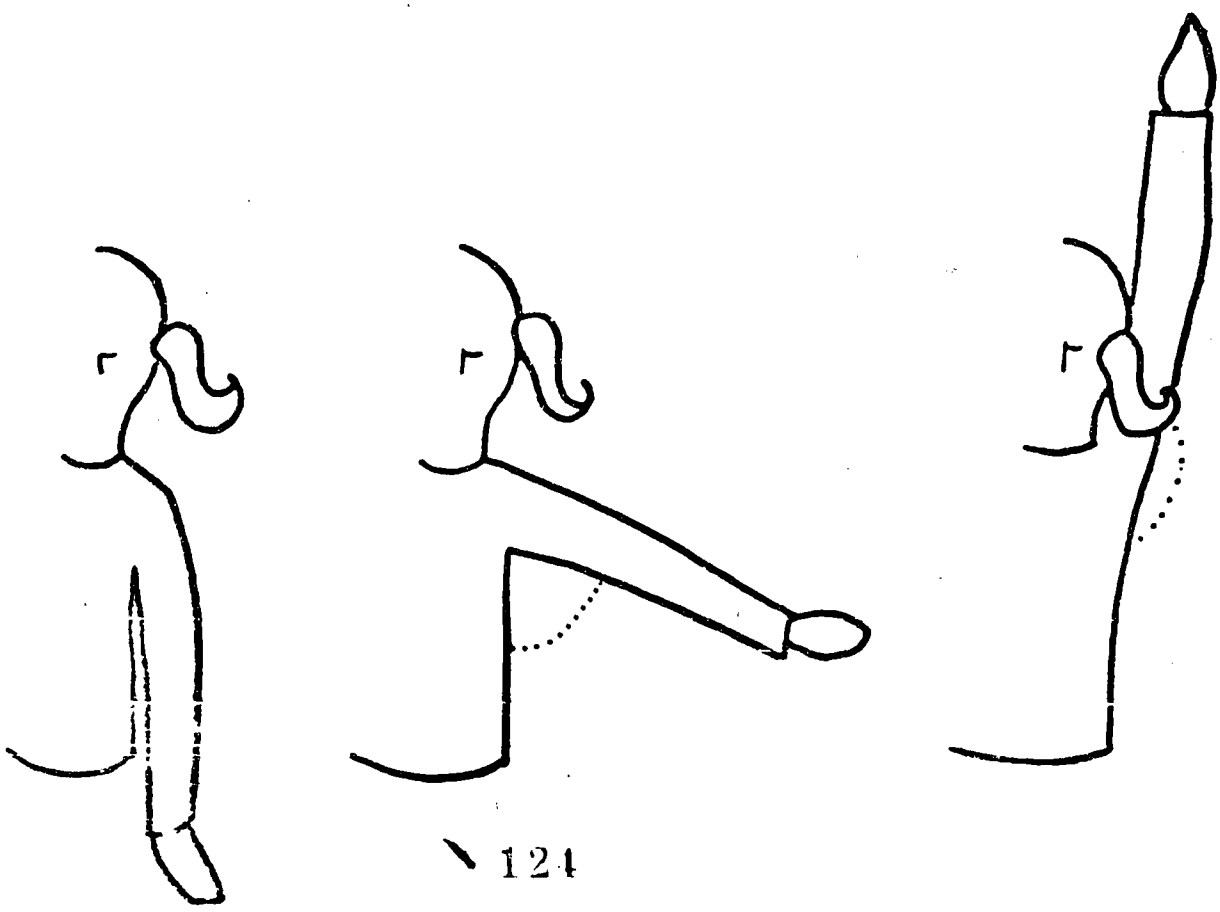
Task: Moving arms.

Materials: Mat.

Procedure: 1. Maneuver arms to determine the child's range of motion in all directions.
2. Measure angles for future evaluation.
3. Maneuver child's arms within his range of motion and slowly begin to increase angle between arm and body.
4. Frequently measure angle to determine any increase in range.

Rationale. A wide range of arm movement is necessary for many activities of daily living. This exercise provides movement for an inactive child.

Adaptations: For young children,



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RANGE OF ARM MOTION

Area Gross Motor

General Objective: To develop finger extension.

Task: Patting arm until child relaxes and opens hand.

Materials: Child, implementor, mat.

Procedure:
1. Lay child in supine position.
2. Pat child's shoulder and progress down the arm to the hand.
3. Bounce the arm gently up and down.
4. When child has opened his/her hand repeat procedure on the other arm and hand.

Rationale: Open hands are necessary for the performance of every-day skills.

Adaptations: Have child stroke his/her body and face.

Area Gross Motor

General Objective: To develop arm control and spatial relationships.

Task: Knocking over a pile of blocks.

Materials: Large building blocks, preferably soft ones.

Procedure:
1. Build a tower in front of child within reaching range.
2. Tell child to "Knock-over" the blocks.
3. Assist child if necessary.
4. Gradually reduce assistance.

Rationale: This activity leads to coordinated arm movements and emphasizes positions in space. This is good for a stiff child whose physical involvement hinders minute finger movement.

Adaptations: Have a race between two children, move blocks farther away.

Area Gross Motor

General Objective: To promote movement of non-ambulatory child.

Technique: Riding down incline on scooter board.

Materials: Scooter board, incline, strap.

Procedure: 1. Place child prone on scooter with strap to secure him/her safely on the scooter.
2. Place scooter at top of incline. Move scooter down the incline, controlling the speed. Repeat a few

Rationale: Task gives a non-ambulatory child a feeling of motion.

Adaptations: Use non-breakable mirror at bottom of mat so child can watch activity.

Area Gross Motor

General Objective: To encourage rolling.

Technique: Force-rolling.

Materials: Mat, folded blanket.

Procedure:
1. Place blanket on large, flat mat.
2. Lay child across the blanket with head extending over the edge of the blanket.
3. Gently roll the child over and tuck the end of the blanket under the child so that he/she will be snu encased by blanket.
4. Continue rolling the child over until the end of blanket is reached.
5. Firmly grasp the end of the blanket.
6. Lift gently until child unrolls with blanket.

Rationale: This technique provides the child with the sensation of rolling and it helps to promote independent rolling.

Adaptations: Use a long runner carpet, industrial barrel with ends removed.

Area Gross Motor

General Objective: To develop rolling movement from supine to prone and back to supine.

Task: Rolling body on a flat surface.

Materials: Mat.

Procedure:
1. Place child in prone position on mat.
2. Turn head to right.
3. Place hands on floor next to child's shoulders.
4. Push against the floor with child's left hand, to start rotation of body to the right.
5. Push child's right shoulder under his/her own body, as implementor pulls child's left shoulder up and then over, so child is in a supine position.
6. In supine position with legs straight, place child's arms at child's side.
7. Turn child's head to left.
8. Push child's right foot against the floor and move child's shoulders and arms to the left, so he/she ro his/her hips to the left side.
9. Upon completion of task, child assumes a supine position.

Rationale: The roll is made possible because of the rotation of the shoulder and the hips.

Adaptations: To roll to the left, turn child's head to left and push right hand to turn to left.

Area Gross Motor

General Objective: To develop pre-crawling skills.

Task: Promoting self-locomotion in a non-ambulatoty child.

Materials: Padded board mounted on four wheels or Crawlagator (Creative Playthings), toy, elevated creeper on wh

Procedure:
1. Place child prone on Crawlagator. Place a toy about two-three feet away from child.
2. Kneel on floor facing child and place both of child's open hands on the floor slightly to the side of the Crawlagator.
3. Move the child's hands up, forward, and dow n on the floor causing the Crawlagator to move forwar
4. Do this until the toy has been reached.
5. Gradually increase the distance the child must cover in order to reach toy.

Rationale: This task provides a means of motion for a non-ambulatory child.

Adaptations: Use scooter board.

Area Gross Motor

General Objective: To develop creeping skills.

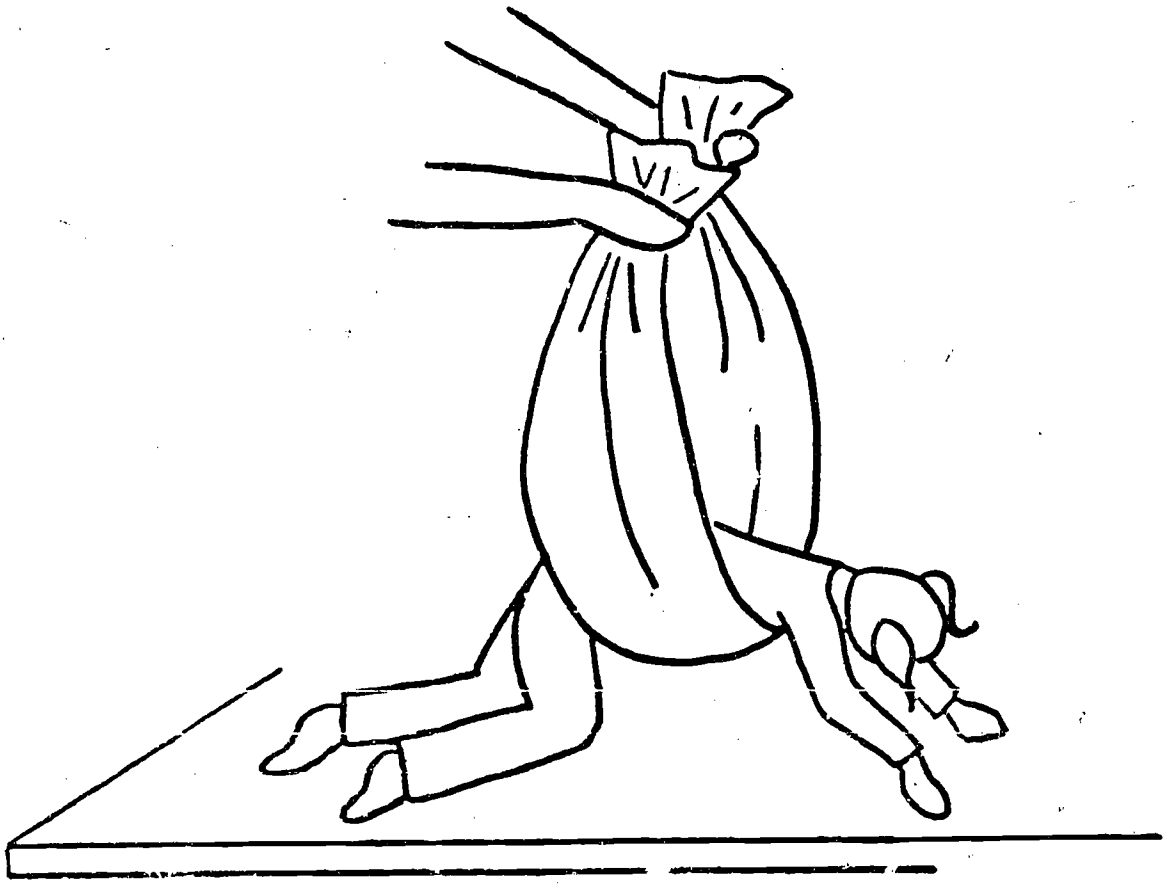
Task: Supporting body weight in creeping position.

Materials: Blanket, mat.

Procedure:
1. Fold blanket to a width equal to the distance between child's armpits and hips.
2. Place child across blanket.
3. Gently lift blanket by the ends, lifting child slightly above mat.
4. Second implementor positions child's hands and knees in the creeping position.
5. Gently lower blanket to allow child to assume his/her own weight on hands and knees.

Rationale: This task gives the child an opportunity to learn to assume his/her body weight in the creeping position, as well as to become oriented in this position. Arms, legs, head, and neck muscles are strengthened.

Adaptations:



Area Gross Motor

General Objective: To further strengthen the arm muscles.

Task: Walking on hands (wheelbarrow).

Materials: Runner rug.

Procedure: 1. Place child in kneeling position at one end of runner.
2. Stand behind child.
3. Hold child's ankles, lift legs from floor. Child's weight is supported by his/her hands.
4. Tell child to move hands forward as implementor slowly guides child.

Rationale: This exercise requires the child to support his/her weight by using arms and hands.

Adaptations: Use mirror in front of child, have child move backward.

Area Gross Motor

General Objective: To develop creeping skills.

Task: Creeping through a circular hole—Snap Walls (Learning Products).

Materials: Snap Wall, reinforcer.

Procedure:
1. Place child in creeping position on floor in front of Snap Wall.
2. Hold reinforcer on other side of Snap Wall. Encourage child to creep through the hole to obtain the object.
3. If the child resists, physically assist by placing the child's one hand and knee through the hole. Chil must complete the task by bringing the other knee through the hole.
4. Give the child the reinforcer, verbaliy praise.

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Rationale: Child must pick hands and knee up higher than in normal creeping thus promoting an increased sense o balance.

Adaptations: Have child follow directions concerning which hole to creep in and out of, use color names of the ho use phrases "in" and "out."

Area Gross Motor

General Objective: To develop sitting balance.

Task: Sitting with support.

Materials: Backless chair or stool, safety helmet.

Procedure: 1. Place stool a few inches from a corner of the room.
2. Position child on stool in proper sitting position and place helmet on child's head.
3. Implementor grasps child's thighs and gives child support.

Rationale: This exercise strengthens the trunk for independent sitting.

Adaptations: Use corner seats. Sit Indian-style on mat.

Area Gross Motor

General Objective: To teach child to sit.

Technique: Conditioning the child to sit.

Materials: Desk, chair.

Procedure:
1. Position child by desk so he can use it for support.
2. Push chair behind child until the chair touches back of child's legs.
3. Tell child to "sit" when he feels the chair. Guide child into the chair at the same time the command is given.
4. Continue until child will sit when he/she feels the chair touch his/her leg behind the knee.

Rationale: Conditioning the child in this way gives the child a sense of security. A child trained to sit in this manne be moved more easily.

Adaptations:

Area Gross Motor

General Objective: To develop standing balance.

Task: Holding onto rod.

Materials: One inch dowel rod, metal or plastic rod approximately 18 inches long.

Procedure:
1. Stand child with back against a wall.
2. Place child's two hands in middle of rod while implementor holds ends of rod. Implementor can fe amount of tensio with which child grips rod.
3. If child begins to fall forward or sideward, adjust child's balance.
4. As child gains confidence and ability, allow child to hold rod independently.

Rationale: Child develops confidence in his ability to stand erect.

Adaptations:

Area Gross Motor

General Objective: To develop independent walking.

Technique: Encouraging child to attempt independent walking.

Materials: Safety strap, safety helmet.

Procedure:
1. Attach safety strap to child's waist and place helmet on child's head.
2. Hold child by the strap at the child's back.
3. Hold child's hand if he/she appears to feel uncomfortable.
4. If child begins to fall, tighten tension on strap to prevent falling.
5. As child gains confidence, discontinue hand holding.
6. As child gains confidence, loosen belt slightly.

Rationale: Child learns to feel confident without depending entirely on an adult for support.

Adaptations: Use whatever harness to give support.

Area Gross Motor

General Objective: To practice walking with weight evenly distributed on both feet.

Task: Pushing a carriage.

Materials: Wooden doll carriage (Childcraft), heavy object.

Procedure: 1. Place a heavy object in carriage for stability.
2. Allow child to push doll carriage.
3. Walk beside the child to give steering assistance and to see that the child keeps an even, slow pace.

Rationale: This exercise gives the child the opportunity to move from one place to another and can be performed e
though child may not have independent standing or walking balance.

Adaptations: Use wh[illegible]hair or chair to push from one place to another.

Area Gross Motor

General Objective: To develop side-step walking.

Task: Cruising along furniture.

Materials: Heavy, stable classroom furniture or equipment, or two Snap Wall Cubes (Learning Products), safety helm

Procedure:
1. Create a chain with the classroom furniture, leaving gaps between each piece of furniture.
2. Place helmet on child's head, if necessary.
3. Position child at the beginning of the chain, supporting self by holding onto the furniture with two h
   Give minimal support if necessary.
4. Encourage child to cruise along the furniture by reinforcing with a preferred food item each time chil
   s a few steps. Praise.
5. When child feels confident at the task, gradually widen the gaps between the furniture. Encourage ch
   to transfer to the next piece of furniture. Reward and praise.

Rationale: This task allows the child the opportunity for self-support and locomotion.

Adaptations: As child's skill increases, encourage cruising along window sills, chalk trays, cabinets.

Area Gross Motor

General Objective: To develop upright balance while in motion.

Task: Stepping through tires, alternating feet.

Materials: Flat surface, three automobile tires.

Procedure: 1. Lay three tires in a line on the floor.
2. Position child in front of first tire.
3. Assist child by holding his/her hand at his/her side.
4. Have child step through tires, alternating feet by telling him/her to "Stretch."

Rationale: Alternating feet requires child to establish balance on one foot.

Adaptations: Use Bases or Grab Walls (Learning Products) on floor, ladder. Arrange the tires in ways that make the task more difficult. Have the children step through the tires backwards.

Area Gross Motor

General Objective: To coordinate body movements when walking.

Task: Walking on a series of footprints placed on the floor.

Materials: Rubber footprints.

Procedure:
1. Place footprints on floor in a pattern to match child's normal walking pattern.
2. Encourage child to "Look" at the footprints as child places foot on first rubber footprint.
3. Guide child to each footprint as child looks at the next footprint.
4. Fade assistance.

Rationale: This task increases the child's awareness of watching where he/she is walking.

Adaptations: Use footprints of felt or cardboard, use strips of masking tape, vary patterns of footprints, i.e., big steps, little steps.

Area Gross Motor

General Objective: To ascend cubes, alternating feet.

Task: Walking up cubes with assistance.

Materials: Play Cubes (Little Tykes).

Procedure:
1. Position blocks in ascending order from small to large.
2. Hold child's hand.
3. Stand at child's side.
4. Tell child to walk up steps.
5. If necessary, lift child's feet onto the blocks, place hand on his/her foot, lifting it and placing it on
6. Give child full support so he/she is not frightened.

Rationale: Child will feel more secure on cubes since they have a larger surface area than do most stairs.

Adap[illegible]ns: Use marching record and "march" up the cubes.

Area Gross Motor

General Objective: To descend stairs, alternating feet.

Technique: Prompting child to make the "alternating" response.

Materials: Stairs.

Procedure:
1. Have child stand at top of stairs, holding the railing.
2. Child takes first step downward.
3. Implementor faces the child and places his/her hand at the back of the child's knee and gently thrust it forward. Tell the child to "Stretch."
4. From behind the child's knee, implementor prompts the leg forward and downward requiring the alternate descending response. Tell child "Step."

Rationale: If a child is unaccustomed to alternating feet while descending the stairs, prompting from behind the knee while facing the child helps to shape this behavior.

Adaptations:

Area Gross Motor

General Objective: To develop jumping.

Task: Jumping on a bouncing tube.

Materials: Bouncing Tube (Preston).

Procedure:
1. Stand child on Bouncing Tube.
2. Hold both of child's hands.
3. Move hands up and down and say, "Jump."
4. If necessary, support under arms or around waist.
5. Gradually fade assistance.

Rationale: This exercise increases body movement and body control.

Adaptations: Hold only one hand, jump on trampoline, use phrase "up and down."

Area Gross Motor

General Objective: To maintain balance while jumping.

Task: Maintaining balance while jumping down from a surface above the floor.

Materials: Wooden board one-inch thick.

Procedure:
1. Position child in standing position on the board.
2. Stand on floor facing child and hold both of his hands.
3. Say, "Jump down."
4. Bend knees, pull child's hands down and say, "Bend."
5. Repeat several times and gradually decrease amount of support given to the child.

Rationale: Child must use same muscle movement to jump from one-inch board that he would use to jump from a [illegible] floor.

Adaptations: [illegible] boxes or gradually increasing the height of the surface from which the child jumps.

Area Gro s Motor

General Objective: To lift large objects.

Task: Stacking one Educube on top of another.

Materials: Two Educubes (Little Tykes).

Procedure:
1. Place Educubes on floor next to eac n other.
2. Position child in front of open side f one Educube.
3. Say, "Pick it up and put it here " a the other Educube is touched.
4. Position child's hands grasping each side of the top surface.
5. Say, "Pick it up."
6. Touch top of other Educube and say, "Put it here."

Rationale: This task helps the child to develop large arm muscles.

Adaptations: Use Stacking Cubes (Little Tykes).

FINE MOTOR

Definition— refers to the coordinated movements of the small muscles of the body (primarily those of the arms and hands) to perform everyday life functions.

Introduction

As mentioned earlier in the text, it is very difficult to isolate skills to one program area. Such is the case with the fine motor skills. There are very few tasks which exist as isolated fine motor tasks, as the visual mechanism becomes combined with fine motor skills early in development. However, prior to the eye hand coordinated and manipulative skills, there is much touching, feeling and exploration done by the child.

Considerations

1. In very early fine motor development, the implementor's emphasis should be placed on tactual stimulation of the child's hands and fingers.
2. Remember that the child must have many opportunities to touch and feel objects before he/she can be expected to use them.
3. Emphasis should be placed not only on use of the hands, but on appropriate and functional use of the hands.

Area Fine Motor

General Objective: To develop reaching motion.

Task: Reaching for overhanging mobile from supine position.

Materials: Bean bag, mat, mobile

Procedures: 1. Place child in supine position with mobile hanging above, within reach.
2. Encourage child to reach for mobile by shaking and turning it.
3. Take child's hand and assist if he/she does not reach for it.

Rationale: This task encourages reaching and grasping of objects to help develop eye-hand coordination.

Adaptations: Place child in supine position on ca[illegible] ball, hold toy above child and encourage him/her to stretch and for it.

Area Fine Motor

General Objective: To develop reaching motion and controlled grasp.

Task: Reaching for and pulling toys from a box.

Materials: Open box, small toys

Procedure
1. Place child in prone position on mat, over wedge, or in prone board.
2. Place open side of box toward child.
3. Show child the toys before they are placed in the box.
4. Encourage child to pull toys from the box.

Rationale: Regardless of handicap, a child can be placed in the correct position to facilitate the reaching, grasping a pulling motions.

Adaptations: Place smaller objects in the box to develop a finer grasp. Placing the box further from the child will involve a stretching motion.

Area Fine Motor

General Objective: To develop controlled grasp.

Task: Squeezing small foam balls (nerf balls) and poly clutch ball

Materials: Nerf ball, clutch ball

Procedure:
1. Demonstrate squeezing these very "squeezable" foam balls, which provide little resistance to the slightest squeeze.
2. Guide the child's hand and help him/her squeeze the ball.
3. After child has demonstrated the ability to grip and squeeze, proceed to clutch ball. This ball provi more resistance and makes a noise when squeezed with more strength.

Rationale: Developing grip strength in the hands is a prerequisite to a controlled grasp and release.

Adaptations: Squeeze busters filled with colored water, squeeze tubes of cheese spread onto bread or crackers, squ dolls which produce a sound when squeezed, squeeze eye droppers filled with water, squeeze play do or clay.

Area Fine Motor

General Objective: To develop ability to grasp and hold objects.

Task: Grasping and holding a vibrating toothbrush.

Materials: Battery-operated toothbrush

Procedure: 1. Let child explore toothbrush without vibrating.
2. Let child explore vibrating toothbrush.

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Rationale: Vibrating objects focus child's attention on the object and provides a haptic experience.

Adaptations: Use vibrator, wind up toys.

Area Fine Motor

General Objective: To develop hand and finger control.

Task: Painting with small sponge.

Materials: Sponge, paint, paper, water, towels, paint shirts, mat or table and chair.

Procedure: 1. Position child in chair, or mat or on prone board.
2. Put paint shirt on child.
3. Have child dip sponge in paint, assist if necessary.
4. Apply sponge to paper.

Rationale: A tactile stimulation exercise that helps develop hand and finger control.

Adaptations: Sponge paint in enclosed area such as a stencil.

Area Fine Motor

General Objective: To develop hand and finger control.

Task: Pushing rods from one side to another.

Materials: Finger "Thing-A-Ma-Jig" (Creative Playthings)

Procedure: 1. Hold article sideways in front of child, say "push."
2. Demonstrate. Have child do it independently.
3. If necessary physically assist child to push rods from side to side.

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Rationale: Child must use fingers to push the rods.

Adaptations: Use Playskool Pounding Bench which has larger rods.

Area Motor

General Objective: To grasp object with two hands and to use object in a coordinated manner.

Task: Moving rolling pin forward and backward.

Materials: Play dough, flour dough, clay.

Procedure: 1. Place the dough or clay on a flat surface.
2. Place child's hands on the rolling pin and flatten the clay by rolling with the rolling pin. Give assis
necessary.

Ration[illegible] This task helps to develop the ability to coordinate both hands to a perform task.

Adaptations: Place dough on a cookie sheet, cut out cookies.

Area Fine Motor

General Objective: To develop palmer grasp, controlled grasp and release.

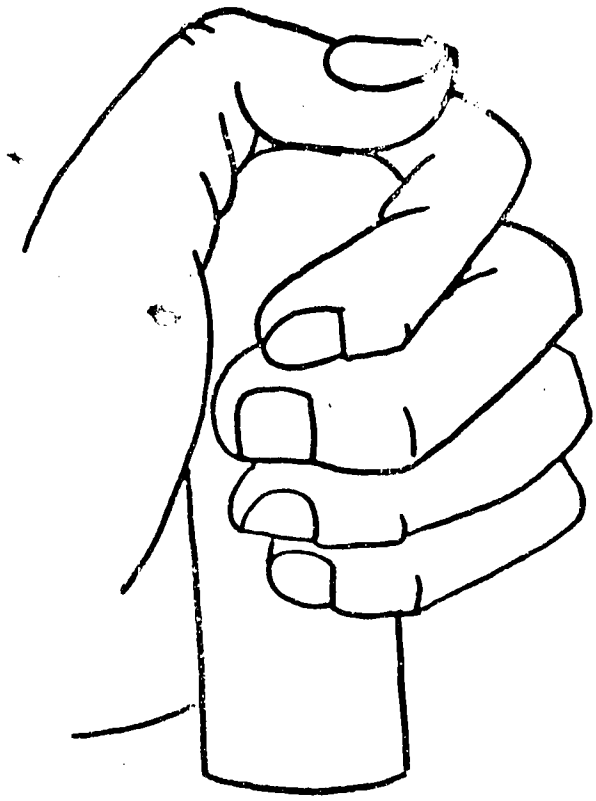
Task: Using pegs and pegboard which require the use of palmer or pincer grasp.

Materials: First Pegboard (Childcraft), preferred food item.

Procedure:
1. Place child's hand around the peg and directly help the child lift peg from board.
2. Say "Give it to me" and direct child's hand to release peg in implementor's hand.
3. Continue with shaping and fading technique.
4. Reward child with food item when peg is removed and placed in implementor's hand.
5. Praise successful attempts.

Rationale: With the First Pegboard, the peg lifts from the board and requires no pulling. Since there is no definite and bottom to the peg it can be placed in the board in either direction.

Adaptations: Use Peg Sandwich (Creative Playthings), Play Bus (Creative Playthings).



PALMER GRASP

PINCER GRASP

Area Fine Motor

General Objective: To develop palmer grasp and controlled grasp and release.

Technique: Using pegs and pegboard.

Materials: Easy grip Pegs and Jumbo Pegboard (Ideal).

Procedure:
1. Place only a few pegs in the board to allow room between pegs for child's hand to grasp peg.
2. Direct child's visual attention to the peg.
3. Use a shaping and fading technique to teach child to grasp and pull out peg.
4. Have child respond to the command "Give it to me" or child can release peg on the table.
5. Reward with food item and praise upon completion.

Rationale: Easy Grip Pegs require a stronger grip and pulling effort to remove peg from the board.

Adaptations:

Area Fine Motor

General Objective: To develop pincer grasp and control of grasp and release.

Technique: Using pegs.

Materials: Peg Sorting Board (Childcraft), preferred food item.

Procedure:
1. Place only a few pegs on the board.
2. Hold the child's hand so that only the index finger and thumb can function in grasping the peg.
3. Have child grasp peg.
4. Say "Give it to me."
5. Increase number of pegs on board.
6. Reward with food and praise.

Rationale: The Peg Sorting Board varies in length and requires no pulling to lift pegs from the board as it develops the pincer grasp.

Adaptations: Wooden pegboard and small "stick" pegs (Childcraft) can be used when child masters the Peg Sorting Board. A sheet of heavy paper over the pegboard covering all but one or two holes will help in cases of poor visual attention. The "taping the fingers" technique (page no. 15) to develop pincer grasp described in this section may be used.

Area Fine Motor

General Objective: To develop pincer grasp.

Task: Using pegs.

Materials: Pegs and pegboard (Developmental Learning Materials), preferred food items.

Procedure:
1. Set pegboard in front of child. Set pegs to the side of the child's dominant hand.
2. Guide child hand and direct his/her visual attention to a peg. Grasp the peg properly with pincer gras
3. Guide child hand and visual attention to a hole in the pegboard. Use a paper to cover all but one or t holes if chil has difficulty performing this.
4. Insert peg in hole and release grip on child's hand.
5. Reward child with food item and praise.

Rationale: This pegboard is smaller and more complicated which requires finer eye-hand ordination.

Adaptations:

Area Fine Motor

eneral Objective: To develop pincer grasp.

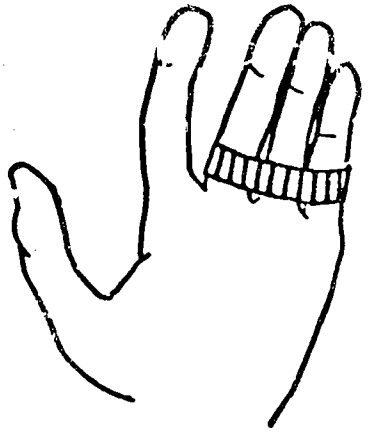
chnique: Immobilizing last three fingers to encourage the use of the pincer grasp.

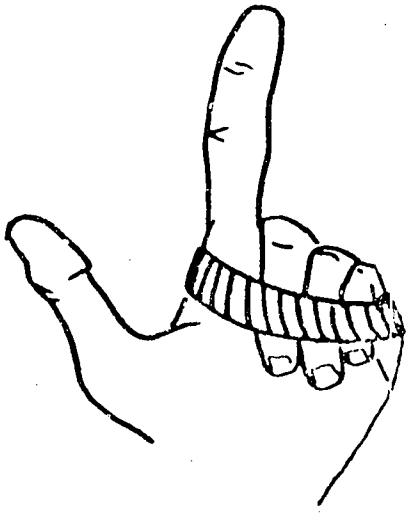
aterials: Masking tape

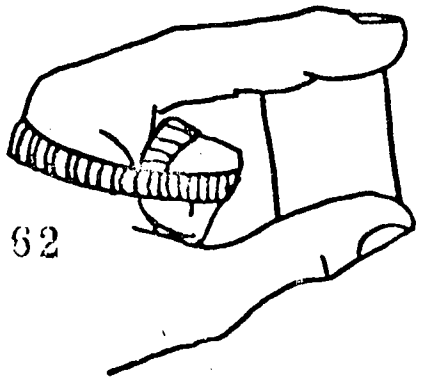
ocedure:
1. Tape child's last three fingers together (tape should be placed between first and second knuckle).
2. Flex the taped fingers down toward palm and tape the fingers (place second strip of tape over the fingers, between the thumb and index fingers, around front of hand and back to fingers resting in palm).
3. Have the child perform activities which normally require a pincer grasp (i.e. picking up a piece of cereal). This technique must be repeated daily for several weeks.
4. Gradually fade the tape which circles the hand and use only the tape that holds the three fingers together.

ationale: This technique requires the child to utilize the pincer grasp and helps improve the child's gesture of pointing.

daptations: Use beautician's hair tape if child's skin is sensitive to masking tape.







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Area Fine Motor

General Objective: To develop pincer grasp.

Task: Picking up blocks that gradually decrease in size.

Materials: Set of blocks containing cubes that vary in size.

Procedure:
1. Position child to work with hands on flat surface.
2. Place largest block on flat surface in front of child.
3. Say, "Pick it up."
4. Remove large block and place next size block in front of child.
5. Say, "Pick it up."
6. Continue procedure gradually offering the child the smaller size of blocks.

Rationale: As blocks become smaller, the child is forced to use [illegible] fingers and gradually develops pincer grasp.

Adaptations:

Area Fine Motor

General Objective: To develop a pincer grasp.

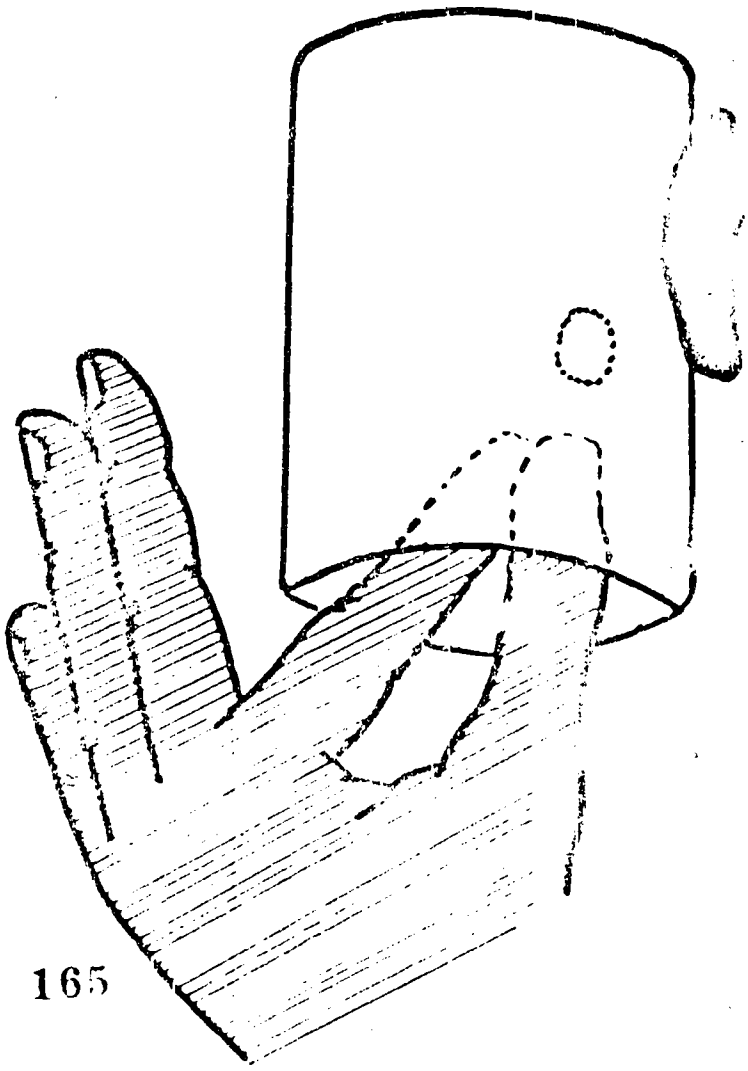
Task: Picking up a one-inch cube.

Materials: One-inch cube, one pound coffee can, clay.

Procedure: 1. Position child such that hands are free.
2. Secure can to flat surface with clay.
3. Place a one-inch cube in can.
4. Say "Give it to me."

Rationale: To retrieve the cube from the can, the child has no other alternative but to utilize a pincer grasp.

Adaptations: Use small pieces of food, other small manipulative items. Place can on child's lap, place can horizontally or vertically on desk or floor in front of wedge.



Area Fine Motor

General Objective: To further develop pincer grasp.

Task: Picking up coins.

Materials: Coins, small bank.

Procedure: 1 Place several coins on the table and have the child pick them up using pincer grasp.
2 Place coins in bank.

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Rationale: Child may accomplish this activity only after he has developed the simple pincer grasp.

Adaptations: Pick up any flat surfaced small objects.

Area Fine Motor

General Objective. To develop opposing movement of hands with pincer grasp.

Task: Tearing paper.

Materials: Tissue paper, construction paper, oak tag – type of paper.

Procedure: 1. Demonstrate the grip of the paper and emphasize the opposite movement of the hands in a tearing motion.
2. Hand child paper.
3. Have child tear paper.
4. Assist if necessary.
5. Use paper in a pasting lesson.

Rationale: Exercises of this type help to develop strength in the grip and coordination in the use of the hands in opposition to [illegible].

Adaptations: [illegible] durable."

Area Fine Motor

General Objective: To develop opposing movement of hands.

Task: Pulling apart plastic eggs to retrieve small food item.

Materials: Pull apart plastic eggs small enough to fit comfortably in child's hand, preferred food item.

Procedure:
1. Place child in front of implementor at a table or on a mat.
2. Show child how egg pulls apart.
3. Have child watch as food is being put inside.
4. Put egg together.
5. Place appropriately in child's hand and help him/her pull it apart to retrieve food.
6. Place another piece of food inside the egg and put egg together.
7. Give egg to child and help him/her pull it apart.
8. Repeat several times in one session.

Rationale: This exercise develops fine motor coordination with a built-in reinforcer.

Adaptations: Use any container which pulls apart and can hold a preferred food item.

Area Fine Motor

neral Objective: To develop spatial relationships and fine motor control.

sk: Building a tower.

terials: Small building blocks.

ocedure: 1. Build tower for child.
2. Hand block to child.
3. Help child place block in position.
4. Hand another block to child.
5. Help child place block on top of previous block.
6. Proceed until appropriate size.

tionale: This task helps develop spatial relationships through manipulation of objects and further develops eye-hand coordination.

daptations: Use small can, bright-colored boxes, etc.

Area Fine Motor

General Objective: To develop independent scribbling.

Task: Grasping a crayon and marking paper with crayon.

Materials: Large crayon, paper.

Procedure:
1. Put crayon on desk in front of child.
2. Say, "Pick it up."
3. Hold hand over the child's hand, make some marks and say, "Color." Praise.
4. Gradually fade assistance until child will pick up the crayon and make marks on the paper independently.

Rationale: The task further develops eye-hand coordination.

Adaptations: Use color name of crayon, have child choose between two colors.

Area Fine Motor

General Objective: To develop wrist rotation.

Task: Unscrewing a lid from a jar to retrieve a preferred food item.

Materials: Plastic jar with screw on lid, preferred food items or small object.

Procedure: 1. Show child preferred food item.
2. Drop it into jar, replacing lid.
3. Guide child's hand to unscrew lid; gradually fade assistance until child is able to complete task independently.

Rationale: Wrist rotation is a necessary skill in performing the activities of daily living.

Adaptations: Use any object which requires child to rotate wrist to accomplish task such as turning door knob, using manual egg beater, turning cranks on toys such as jack-in-the-box.

Area Fine Motor

General Objective: To develop hand and finger control.

Task: Non-directive pasting.

Materials: Paste, paper.

Procedure:
1. Place sheet of large paper in front of child.
2. Have child pick up glue bottle. Physically assist child to squeeze glue on large paper.
3. Put pieces of paper in front of child.
4. Say, "Pick up," if necessary assist.
5. Say, "Put on paper." Guide child to place small piece of paper on glue on large paper.
6. Gradually fade assistance.

Rationale: The child must pick up paper and place it on glue, thus providing readiness for directive pasting.

Adaptations: Use paper the child has cut or torn.

Area Fine Motor

eneral Objective: To develop hand and finger control.

echnique: Cutting with Double-Handed Scissors (DLM).

aterials: Double-Handed Scissors, Paper.

ocedure:
1. Place child's fingers in the inside holes of the scissors.
2. Implementor places his/her hands in outside holes of the scissors.
3. Hold paper in front of child.
4. Cut the paper saying, "Open-Close" as you cut.

ationale: Because the implementor's fingers are in the outside holes of the scissors the child is required to cut paper prior to independent use of scissors.

daptations: Use the [illegible] for art lesson in gluing.

VISUAL SKILL DEVELOPMENT

1. Visual Training
2. Eye-Hand Coordination

Definitions– Visual Training: refers to adequate and efficient use of vision for purposes of focusing on and tracking visual stimuli, attending to and discriminating visual stimuli, and making meaningful visual associations.

Eye-Hand Coordination: refers to the coordinated use of eyes and hands (visually steering arm and hand movements in space) to perform everyday life functions.

Introduction

Once again, it must be reiterated that it is very difficult to isolate tasks to one program area. In this section, the authors have attempted to divide the program area of visual skill development into two sub-areas: visual training and eye-hand coordination. The reason for the division was to point out that visual skill development includes both focusing, tracking, etc., skills as well as skills which call for use of the hands and therefore require coordinated eye-hand movements.

Very early visual training skills are prerequisites to the beginning eye-hand coordination skills. However, this does NOT mean to imply that a child must progress through all of the visual training tasks prior to beginning the eye-hand coordination tasks. In fact, the higher tasks in the sequence of visual training skills are much more difficult than the early eye-hand coordination skills in that sequence.

Considerations

1. Since severely/profoundly retarded children are often unable to have a diagnostic evaluation of the visual mechanism or even a visual examination by a physician, the teacher often does not know, for sure, actually what the child sees or does not see, perceives or does not perceive. The teacher must rely on his/her own observations to determine how and what the child sees. Only from those careful observations, can the teacher assess behaviors and/

or establish expectations and objectives. i.e. – If a teacher observes that a child is near sighted, he/she may assume that the child has difficulty with depth perception. From this observation the teacher might then expect the child to want to 'feel' his way through most activities.

2. Whenever making or utilizing visual materials with a severely/profoundly retarded child:
   a. Make sure materials are large enough and very clear.
   b. Avoid putting too many figures on one page. Many of these children have visual figure-ground problems.
3. If bulletin boards are available, they can be utilized with this group of children. Do not crowd the board. Keep the figures simple and clear and large enough to accommodate the visual levels of the group.

Remember!! The teacher's understanding of how and what the children see helps him/her to help them!!

Area Visual

General Objective: To provide visual stimulation.

Task: Looking through transparent colored surface.

Materials: Colored clear plastic chips, colored lenses (Creative Playthings).

Procedure:
1. Face child.
2. Hold one colored chip in front of child's eyes.
3. Say, "Look at teacher. She looks red."

Rationale: Because common objects will appear to be a different color, this technique may help child attend visually.

Adaptations: Use colored cellophane and hold chip in front of one eye at a time; hold a different colored chip in front of each eye; hold chips in front of child's eyes while he/she looks in mirror. Use sun glasses.

Area Visual

General Objective: To establish eye contact.

Task: Establishing eye contact with another person.

Materials: Snap wall (Learning Products), blanket, flashlight.

Procedure:
1. Form cube with snap walls.
2. Cover cube with blanket to darken area.
3. Place child inside cube.
4. Move flashlight inside cube. Shine light on implementor's face.
5. Tell child to, "Look at me."

Rationale: Light shining on implementor's face in darkened area eliminates external visual stimuli which might be distracting to child.

Adaptations: Perform task in any darkened room.

Area Visual

General Objectives: To visually fixate on an object.

Task: Maintaining visual attention.

Materials: Spinning musical top.

Procedure:
1. Place the musical top on table in front of the child.
2. Stand behind the child and pump the top so it spins and plays music.
3. Gently guide child to look in direction of the spinning top.
4. Gradually fade physical assistance when child fixates head and eyes in the direction of the spinning top.

Rationale: The auditory stimuli will aid the child to attend to a visual stimuli.

Adaptations: Use a bell and gradually reduce the sound, so the child is only aware of the visual stimuli.

Area Visual

General Objective: To develop ability to visually track a moving object.

Task: Visually tracking finger to finger.

Materials: Child and implementor.

Procedure: 1. Sit facing the child.

2. Place implementor's index finger firmly against the child s index finger, holding the child's finger six to ten inches from child's eyes.
3. Move child's finger in an up and down position, from side to side, in a circle, in an x.
4. Use simple, appropriate words.

Rationale: [illegible] develops better eye movements to visually track a moving object.

Adaptations: Follow the same instructions as in the above exercise with a penlight or goose neck flashlight instead of your fingers.

Area Visual

General Objective: To develop ability to visually track a moving light.

Task: Tracking light in an arc.

Materials: Penlight.

Procedure:
1. Sit directly in front of child.
2. Hold penlight approximately six inches in front of child.
3. Move penlight in arc horizontally and then vertically.

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Rationale: Task develops tracking and increases attention span.

Adaptations: Use flashlight with felt over light, to dim light.

Area Visual

General Objective: To develop ability to visually track a moving light.

Task: Looking at circle of light and touching it with hand.

Materials: Flashlight, colored plastic cube large enough to insert flashlight.

Procedure: 1. Seat child on floor or chair.

2. Hold cube so child sees bottom of cube.

3. Turn out overhead light.

4. Shine flashlight into cube so that circle of light shines through bottom of cube facing child.

5. Say, "Touch the light."

6. Move light to different position.

Rationale: This task develops eye-hand coordination.

Adaptations: Reduce size of light by using penlight, have child "follow the light" by keeping hand on light as you move it slowly; place child inside large plastic object, i.e. large ball with two openings, and shine light against outside surface.

Area Visual

General Objective: To develop ability to visually track a moving object.

Task: Visually tracking a moving object.

Materials: Flashlight, self-propelled wind-up toy.

Procedure:
1. Darken room.
2. Place self-propelled toy (moving at a moderate pace) in front of child.
3. Shine flashlight on the moving toy.
4. Encourage child to catch the moving toy.

Rationale: Visually fixating and tracking are pre-requisite skills to eye-hand coordination.

Adaptations: Flashlight on moving ball or moving children; make a loud sound while toy moves to help maintain attention.

Area Visual

General Objective: To develop ability to visually track a moving object.

Task: Following a mechanical toy.

Materials: Mechancial toy, preferably one that makes a noise and moves slowly.

Procedure:
1. Seat child at table.
2. Show the child the toy.
3. Let child touch and/or play briefly with toy.
4. Put toy on table and release.
5. If child's eyes do not follow the movement, gently guide his/her head and say, "Look."

Rationale: The child has auditory clues, plus visual ones, to help him/her track the object.

Adaptations: Use ball with bell inside; beads; talking puppet; clapping hands, or bell.

Area Visual

General Objective: To develop ability to visually track a moving object.

Task: Tracking an object which slides down a slanted rope.

Materials: Ten inch clothesline, empty plastic bottle with handle

Procedure:
1. Place rope through handle of plastic bottle.
2. Attach ends of rope near ceiling height.
3. Seat child three feet away from rope, equidistant from each end of rope.
4. Gradually lower one end of rope so that bottle slides down the rope, past the child.

Rationale: Child is visually attracted to a moving object.

Adaptations: Use colored bottle, attach a small bell for auditory cue, increase distance from rope.

Area Visual

General Objective: To develop ability to visually track.

Task: Visual locating and tracking a ball as it swings in different directions.

Materials: Four inch white ball such as a whiffle ball or styrofoam ball, plastic coated wire, string pulley.

Procedure:
1. Suspend the ball from the ceiling using a pulley to adjust height. The ball needs room to swing in a wide arc.
2. Swing the ball in an arc in front of the child. At first the child may need to move his/her head to follow the ball, but with practice he will begin to use just his/her eyes.
3. Raise the ball above child's eye level.
4. Lower the ball to below child's eye level.

Rationale: Good visual tracking is a prerequisite skill to the performance of tasks involving eye hand coordination.

Adaptations: Use his/her hand, tube, or stick to bat the swinging ball.

Area Visual

General Objective: To develop ability to visually track a moving object.

Task: Watching ball roll down steps.

Materials: Large ball, steps.

Procedure:
1. Place child at bottom of steps.
2. Implementor stands at top of steps, holding ball.
3. Tell child to look at the ball.
4. Roll ball down steps.

175

Rationale: A bouncing ball is a good attention getter and thus helps the child to visually track an object.

Adaptations: Attach string to ball and pull ball up steps, roll ball down sliding board.

Area Visual

General Objective: To develop ability to visually track a moving object.

Task: Tracking moving shadows.

Materials: Filmstrip projector, darkened room, puppets.

Procedure: 1. Shine light on wall.
2. Move between projector and wall to create shadow on wall.
3. Tell child to "Look."

Rationale: Darkness eliminates extraneous stimuli so child can visually track moving shadow.

Adaptations: Use puppets or implementor's hand to create shadows.

Area Visual

General Objective: To develop ability to visually track a moving object.

Task: Visually following a balloon manipulated by child.

Materials: Balloon

Procedure:
1. Have the child hold out hands (palms up).
2. Drop the balloon onto child's hands and allow it to bounce.
3. Implementor holds balloon and child bats it with hands.
4. Release balloon as child hits it.

Rationale: Because a balloon floats slowly, it is easier for the child to track it visually.

Adaptations:

Area Visual

General Objective. To develop ability to visually track a moving object.

Task: Following movement of soap bubbles.

Materials: Bottle of soap bubbles.

Procedure:
1. Face child.
2. Blow bubbles toward child.
3. Say, "Look."
4. If necessary, guide the child's hand to catch or burst the bubble.
5. Encourage reaching out or chasing the bubbles.

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Rationale: The child must visually track the uncontrolled movement of a bubble to break it.

Adaptations: Use feathers, floating balloons, deflating balloons.

Area Visual

General Objective: To develop color discrimination.

Task: Selecting a red crayon from a group of red and yellow crayons.

Materials: Large open box, colored crayons, clear plastic bag.

Procedure:
1. Implementor shows "red" crayon to child.
2. Implementor places red crayon in clear plastic bag.
3. Show child the box of assorted crayons and ask child to find the red crayons from those in the box and put them in the bag.
4. Assist child if necessary.
5. Continue to work on the identification of "red" until child learns the color, then add another color.
6. The child is required to select the specified color from a group containing only that color and one other color to avoid confusion.

Rationale: This task develops primary color discrimination.

Adaptations: Use any small colored object; use crayon to draw picture after doing task.

Area Visual

General Objective: To develop the ability to match and sort color.

Task: Placing a colored disc into a matching colored bag.

Materials: Red, blue, green and yellow colored discs, and matching felt bags.

Procedure: 1. Give child bag of discs of different colors.
2. Have child place a specific color disc into that color bag.

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Rationale: This will provide for color recognition and for following simple commands.

Adaptations: Play mailman with the color discs, use numbers or students' names.

Area Visual

General Objective: To develop ability to visually discriminate.

Task: Matching lid to container.

Materials: Shampoo bottle, squeeze lemon, coffee can, peanut can, dish soap bottle (note - any bottle not made of glass).

Procedure:
1. Position child at table.
2. Show child each container as implementor removes lid.
3. Place lids to one side, containers to the other.
4. Hand child a container and say, "Put the lid on."
5. Continue with other containers.

Rationale: Child must discriminate by size and shape.

Adaptations: Increase difficulty of size discrimination, have child remove the lids.

Area Visual

General Objective: To discriminate sizes.

Task: Nesting Cans

Materials: Four cans of different diameters that can be nested easily, construction paper to cover outside of cans.

Procedure:
1. Seat child on floor or at table.
2. Present largest and smallest cans.
3. Hand child smallest can and say, "Put it in."
4. Place largest can in front of child and hand him each can and say, "Put it in."
5. Let child nest independently.

Rationale: The four cans must be nested according to size. The task reinforces the concept of "in."

Adaptations: Increase difficulty of size discrimination.

Area Visual

General Objective: To sort a mixed drawer of silverware.

Task: Placing all spoons on "spoon plate," forks on "fork plate," etc.

Materials: Knives, spoons, forks, three paper plates with one piece of silverware on each.

Procedure:
1. Show child a knife and the taped knife on paper plate.
2. Have child locate and put on plate all of the knives.
3. Continue with other utensils.

Rationale: This task develops the ability to sort different eating utensils.

Adaptations: Use other common objects.

Area Visual

General Objective: To develop the ability to sort.

Task: Placing large silver paper clips into a box or baggie.

Materials: Large silver paper clips, small copper paper clips, box or baggie.

Procedure:
1. Place a box of assorted clips in front of child.
2. Show the child the large silver clips.
3. Show the child how to put the silver clips into a box or baggie.
4. Ask child to put all large, silver clips into specific box or baggie.

Rationale: This task improves eye-hand coordination, and ability to discriminate according to size and color.

Adaptations: Use objects which can be sorted according to large and small size and involving two colors.

Area Visual - Eye/hand

General Objective: To transfer all blocks from barrel to box.

Task: Transferring blocks from one container to another.

Materials: Potato Chip barrel full of blocks, shoe box.

Procedure:
1. Place a barrel of blocks and empty shoe box on flat surface.
2. Tell child to pick up a block.
3. Have child put block in empty shoe box.
4. Continue repetition until student initiates activity.

Rationale: This task develops eye-hand coordination.

Adaptations: Use beads, pegs.

Area Visual – Eye/Hand

General Objective: To develop eye-hand coordination using fine muscle movement.

Task: Placing a ball through a hoop.

Materials: Nerf ball attached to a dowel rod, badminton racket with strings removed.

Procedure:
1. Seat child so that implementor is sitting behind child.
2. Place rod with ball on end in child's dominant hand.
3. Hold racket in front of child at eye level.
4. Tell child to "put it through."
5. Guide child's hand and rod to place the ball through the hoop.

Rationale: Child must coordinate eye-hand movements to complete the task.

Adaptations: Use embroidery hoop covered with yarn, fishing net; suspend hoop or racket from ceiling.

Area Visual – Eye/Hand

General Objective: To develop eye-hand coordination.

Task: Putting ring over upright dowel stick.

Materials: Ring toss game including upright dowel stick and rings.

Procedure:
1. Place dowel stick in upright position on floor.
2. Position child in front of stick.
3. Give child one ring and say, "Put it on the stick." Give assistance if needed.

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Rationale: Child must hold ring in proper position to perform task and must visually attend to perform task.

Adaptations:

Area Visual – Eye/Hand

General Objective: To develop eye-hand coordination using fine muscle movement.

Task: Placing curlers over vertical rods.

Materials: Electric curler set without cord.

Procedure:
1. Position child at table.
2. Place curler set without curlers on surface in front of child.
3. Offer one curler to child.
4. Point to one vertical rod and say, "Put it on this."

Rationale: This task develops coordinated hand movements for placing objects on a specific area.

Adaptation: Use toilet paper rolls on fixed vertical doweis.

Area Visual – Eye/hand

General Objective: To develop eye-hand coordination.

Task: Placing clothespins on edge of a shoe box.

Materials: Clothespins, shoe box.

Procedure:
1. Seat child at table.
2. Implementor demonstrates how to, "Put it (clothespin) on the box."
3. Hand child a clothespin in correct position for placing directly on edge of box.
4. Tell child to, "Put it on" and guide if necessary.
5. Fade assistance.

Rationale: Child must visually attend to materials to complete task.

Adaptations: Use pinch clothespins.

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Area Visual – Eye/Hand

General Objective: To develop eye hand coordination.

Task: Pushing object with push broom.

Materials: Push broom, plastic cone-shaped object.

Procedure: 1. Place cone-shaped object on floor.
2. Show child how to push broom and say, "Push it with the broom."
3. Assist child until activity can be performed independently.

Rationale: Child must keep eyes focused on object being pushed.

Adaptations: Use other large colorful objects; use tape or plastic to designate a definite path or pattern on floor child must follow.

Area Visual – Eye/Hand

General Objective: To develop eye-hand coordination.

Task: Rolling a ball down a slope into a box.

Materials: Ball, incline mat, box.

Procedure:
1. Seat child at high end of incline mat facing low end.
2. Place box two feet from child with open end directly in front of him.
3. Hand child the ball and tell him to "Roll it in" the box.
4. Move box three feet away, gradually increase distance.

Rationale: Child must visually fixate on box to roll the ball into it.

Adaptations: Use smaller ball and cube.

Area Visual -- Eye/Hand

General Objective: To develop eye-hand coordination by aiming at target.

Task: Throwing bean bags into boxes or throwing object at target.

Materials: Set of stacking cubes, three bean bags.

Procedure:
1. Place tire in horizontal position on floor.
2. Place largest box a specific distance away from tire.
3. Tell child to step into tire and face box.
4. Offer child bean bag.
5. Touch box and say, "Throw it into the box."
6. If child is successful, replace largest box with smaller box.

Rationale: When child stands in [illegible] child and box is maintained

Adaptations: Use cardboard box [illegible] balls or cloth blocks; increase distance between tire and box instead of using smaller boxes.

Area ... Visual – Eye-hand

... eye-hand coordination.

... pin with ball.

...aterials: One bowling pin, one large ball.

...edure: 1. Place bowling pin in upright position a short distance from child.
2. ... ball to child.
3. ... the ball and knock down the pin.

...le: ... to perform task.

... floor with ... tape or ... alley.

Area Visual – Eye/Hand

General Objective: To develop eye-hand coordination.

Task: Putting correct shape in box to ring bell.

Materials: Wooden shape box with two openings; circle and square, desk bell.

Procedure:
1. Put bell in center of box.
2. Give child a shape.
3. Let child find the correct openi g.
4. When child places the shape in the correct opening the bell will ring.

Rationale: Correct response is immediately reinforced by ringing bell. This exercise develops eye-hand coordinatic

Adaptations:

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Area Visual – Eye/Hand

General Objective: To develop eye-hand coordination.

Task: Putting simple knob puzzles together.

Materials: Puzzle with knobs on the piece.

Procedure:
1. Place puzzle in front of child.
2. Say, "Take out."
3. Physically assist child, praise.
4. Hold puzzle piece up and say, "Put in."
5. Demonstrate and assist child, if necessary.
6. Gradually fade assistance.

Rationale: Puzzles with knobs are easier to manipulate and visually focus upon than puzzles without knobs.

Adaptations: Start with one puzzle piece and continue with more; use color names; use puzzle piece names.

Area Visual -- Eye/Hand

General Objective: To develop awareness of boundaries.

Task: Coloring within defined limits while exploring entire surface freely.

Materials: Parquetry puzzle pieces with shape cut out of center of various forms -- paper, cellophane tape, crayons.

Procedure:
1. Place child in front of flat surface.
2. Secure paper to surface in front of child with parquetry puzzle piece placed on top.
3. Put crayon in child's hand.
4. Direct child to put crayon inside outline.
5. Encourage child to move crayon over entire paper surface while form slides with crayon.

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Rationale: Child is free to move crayon with minimal limitations, but child is still aware of specific area in which crayon is located.

Adaptations: Use paint brush, finger, or sponge instead of crayon.

Area Visual – Eye/Hand

General Objective: To scribble in a directive manner.

Task: Using a crayon to scribble in an enclosed area marked with glue.

Materials: Paper, crayon, glue.

Procedure: 1. Area will be enclosed by hardened glue which child can feel.
2. Child will scribble using crayon in enclosed area.

197

Rationale: This task prepares the child to scribble within a line.

Adaptations: Use yarn, whatever color yarn is used, child must use that color or crayon.

Area Visual – Eye/Hand

General Objective: To develop eye-hand coordination.

Task: Directive pasting.

Materials: Paste, paper (small pieces and sheet).

Procedure:
1. Place materials in front of child.
2. Using simple language; have child do the following:
   a. pick up glue,
   b. put glue on small pieces of paper,
   c. put down glue,
   d. pick up paper and
   e. p[illegible] paper to sheet.
3. Gradually fade physical assistance and/or painting to materials.

198

Rationale: Child must place glue on paper and then place the paper on a specific area.

Adaptations: Draw a tree and use various colored paper for leaves.

Area Visual – Eye/Hand

General Objective: To develop eye-hand coordination using fine muscle movement.

Task: Folding washcloths.

Materials: Washcloths.

Procedure: 1. Child takes a washcloth from basket.
2. Show child how to fold it.
3. Have child fold washcloths, assisting when necessary.

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Rationale: Folding helps the child become more independent in activities of daily living and further develops eye-h coordination.

Adaptations: Fold shirts and pants.

Area Visual – Eye/Hand

General Objective: To develop eye-hand coordination, using fine muscle movement.

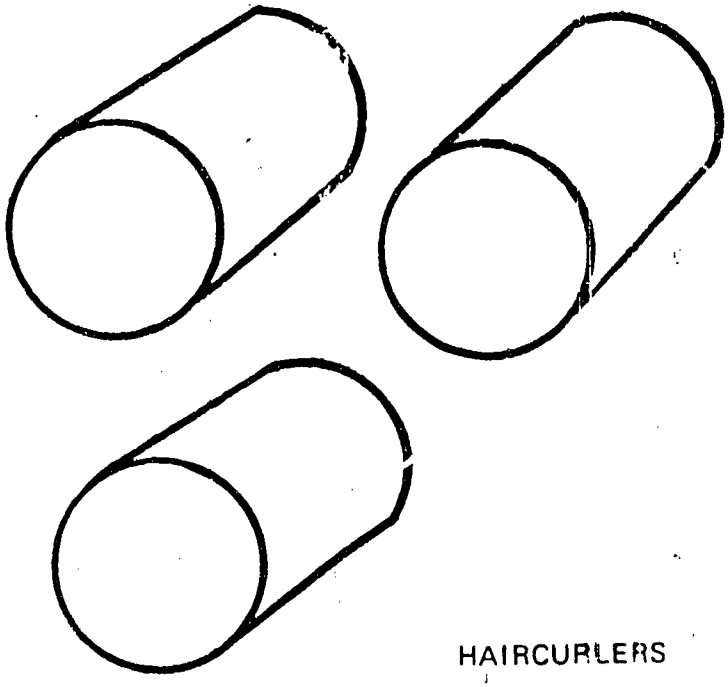
Task: Stringing hair curlers in same manner as stringing beads.

Materials: One package of hair curlers, teacher-made "lace".

Procedure:
1. Position child so he/she can work with hands on flat surface.
2. Place lace near child's dominant hand and one curler near other hand.
3. Say, "Pick up the string. Now pick up the bead. Put the string through the hole." (Remind the child look at the hole.) Assist if necessary.
4. Say, "Hold the string. Now pull the bead to the end of the string."

Rationale: Child must use same eye-hand movements to perform this task that he/she will use to string beads, but the size of materials (especially the size of the opening) makes this task easier than stringing beads.

Adaptations: Gradually offer curlers with smaller diameter, gradually increase number of curlers offered to child. Place curlers in container, and tell child to remove them from container.



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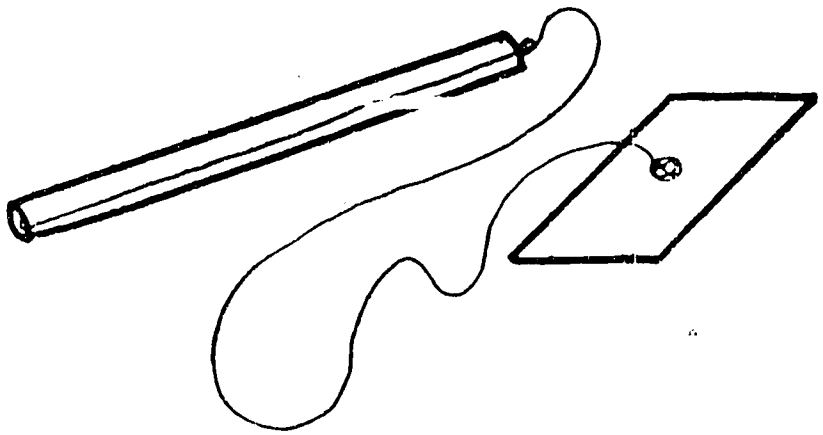

TEACHER-MADE LACE

Area Visual – Eye/Hand

General Objective: To stuff envelopes.

Task: Picking one IBM card out of box and placing it in an envelope.

Materials: IBM cards, business size envelopes.

Procedure:
1. Place IBM cards directly in front of child.
2. Place stack of envelopes to left of child.
3. Have child pick up a card and put it into an envelope.
4. Have child place it to right of box.

202

Rationale: This exercise helps the child develop finger dexterity and further improve his eye-hand coordination.

Adaptations: Ask for two cards in each envelope.

AUDITORY TRAINING

Definition— refers to the adequate and efficient use of the auditory mode to show awareness of sounds, to attend to and discriminate sounds, and to make meaningful word associations.

Introduction

Like the visual, the extent of the auditory abilities and limitations of a severely/profoundly retarded child is difficult to diagnose through regular auditory examinations. Likewise, it is difficult for a teacher of the severely/profoundly retarded to determine exactly how much or what a child perceives auditorily. Once again it is necessary for the teacher to be extremely observant of any and all behaviors that the child elicits which may give some indication of his auditory abilities and/or limitations.

Auditory stimulation is ongoing all throughout the school day. Whether or not the teacher is speaking to a particular child or to a group, all of the children are at least exposed to the auditory stimulation (i.e. Simple commands are given to various children all day long). Some difficulty may arise regarding this constant stimulation. One class may be made up of both types of children: 1)Those who over respond to auditory stimulation, 2)Those who under respond to auditory stimuli. The children who are overly-responsive to auditory stimulation are disturbed by too much noise and it impedes the learning process. For these children, the amount of auditory stimulation and/or auditory cues must be limited or controlled. For the children who underrespond to auditory stimuli, the teacher may have to 'bombard' the child with auditory stimulation. This combination of children in this respect becomes a managment concern for the teacher. He/she must organize his classroom and/or schedule accordingly to accommodate both types of children. Truly a feat!

Considerations

1. Watch closely for any response, motoric, gestural or verbal, that indicates that a child is auditorily attending. Sometimes a mere quick blink of the eyes is indicative of auditory attention.

2. For a child who is auditorily distractable, or who over-responds to auditory stimuli, limit the number, intensity and/or frequency of auditory cues.
3. Often a child who, upon initial entrance to the program, is highly over-responsive to auditory stimuli, will gradually learn to tolerate a higher noise level. Encourage this to some degree. It is, after all, not a very quiet world !
4. Many of these children have difficulty separating the meaningful auditory stimuli (i.e. teacher giving a command) from the concurrent meaningless noises (peer laughing in background). Time must be spent and consideration given to the children who have this type of auditory discrimination problem.

Remember!! The teacher's understanding of how and what the children hear helps him/her to help them!

Area Auditory

General Objective: To develop awareness of sounds.

Task: Raising head in direction of sound.

Materials: Wedge Pillow, Bell

Procedure:
1. Place child in prone position over a wedge pillow so that head extends beyond high end of pillow.
2. Ring bell directly in front of child, slightly above his/her head.
3. Encourage child to raise head in direction of ringing bell.
4. Increase distance child is required to raise head to find the bell.

Rationale: This task develops ability to attend to auditory stimuli while strengthening head control.

Adaptation: Use musical toys, radio.

Area Auditory

General Objective: To locate sources of sound.

Task: Locating the source of a ringing bell.

Materials: Bell

Procedure:
1. Sit in front of child
2. Ri g bell on the right side of the child's head.
3. If hild does not look, gently move his/her head.
4. Pr se, "Good, you found the sound."
5. Continue process on left side of his/her head, below eye-level and above eye-level.

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Rationale: Through physical movement of child's head, child learns to turn tov rd location of sound.

Adaptations: Clap sticks, turn on radio, clap hands, use can with bi ks in it, puncture inflated balloon.

Area Auditory

General Objective: To overcome a hyperactive startle.

Technique: Exposing the child to loud noises.

Materials: Loud clapping hands, bells that ring loudly, such as cow bell, cymbals, paper bags filled with air to pop slamming door, pots and pans to bang.

Procedure:
1. Allow child to make loud noises with the materials. Give assistance if necessary.
2. Allow other children to make loud noises near the child with hyperactive startle.
3. Make sudden loud noises in a quiet room.

Rationale: Frequent exposure will accustom the child to the loud noises and diminish his/her startle reflex.

Adaptation:

Area Auditory

General Objective: To produce sound.

Task: Producing sound with rhythm instrument.

Materials: Two sets of wrist bells.

Procedure:
1. Sit facing child.
2. Hold one set of bells and give one set to child.
3. Shake bells and tell child to shake his/her bells.

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Rationale: Through imitation child learns to produce a sound.

Adaptations: Use rattles, drum with two drum sticks; produce sound (shake bells) and then tell child to produce (shake bells).

Area Auditory

General Objective: To locate source of sound.

Task: Moving self to locate ringing bell.

Material: Bell.

Procedure: 1. Ring bell three feet from child and ask him/her to "Come get the bell."
2. When he/she reaches the implementor let him/her hold the bell and ring it.
3. Move six feet away and repeat.

Rati[illegible]le: Child learns to seek stimulating sounds.

Ada[illegible]tions: Use v[illegible]ous sounds, i.e. whistle, buzzer, transistor radio.

Area Auditory

General Objective: To locate source of sound.

Task: Finding a ringing bell.

Materials: Two paper bags, one wrist bell.

Procedure:
1. Sit facing child.
2. Hold up wrist bell for child to see and ring it loudly.
3. Place bell in bag out of child's sight.
4. Hold up both bags in front of child and shake bags so that bell rings.
5. Let child find bag with bell.
6. Let child play with bell when he/she finds it.

Rationale: Child is using only auditory cue to find source of sound.

Adaptations: Use transitor radio in a box, rattle that makes noise, wind-up music box.

Area Auditory

General Objective: To locate source of sound.

Task: Finding hidden sounds.

Materials: Towels.

Procedure:
1. Group children in a semi-circle.
2. Put towels over children's heads so they cannot see implementor hide in room.
3. When first implementor hides, other implementor will direct children to take towels off their heads. (Implementor will help those children who cannot take towel off head independently.)
4. Implementor will make sounds from hiding place such as calling children's names, knocking, pounding, etc.
5. Children should look in direction of sounds being made by hidden implementor who will then come from hidden position.
6. If children are ambulatory they can seek out hidden implementor.

Rationale: This exercise provides for a social interaction and strengthens auditory awareness. (Similiar to hide and seek)

Adaptation: Have other children hide and make sounds.

Area Auditory

General Objective: To accustom child to wearing earphones.

Technique: Listening to music through earphones.

Materials: Record, record player, jack, earphone set.

Procedure:
1. Set up record player and earphone set and put on a record.
2. Child sits or is positioned beside record player.
3. Turn record player on its loudest volume so child can hear music coming through earphones without wearing them.
4. Hold one earphone next to child's ear. Do not put on his/her head.
5. Child may turn head toward the earphone (music) or child's eyes may look in the direction of the earphone (music). These actions are indications that the child's attention is attracted.
6. Spread earphone set and hold over child's head so music can be heard by both ears. Do not put on child's head.
7. Child may bend head toward one side or look in one direction; if so, hold that earphone closer to child's ear.
8. Gradually decrease the distance from child's ear and one earphone.
9. Gradually decrease the distance from child's ear and earphone set.
10. Put the earphone set on child's ears. Watch child's reaction.
11. If child is distressed by the earphones on his/her head, remove and resume holding earphone by ear.
12. If child is not distressed, leave earphone set on ears for a brief period of time.
13. Gradually increase the length of time the child wears the earphones.

Rationale: The earphones enable a child to listen to music without disturbing others.

Adaptations:

Area Auditory

General Objective: To follow verbal directions.

Task: Following recorded verbal directions while listening through headphones.

Materials: Tape player, jack plug, two pairs of headphones, recording of appropriate verbal directions taped specifically for child.

Procedure:
1. Prepare tape player to play taped recording through jack plug and two headphones.
2. Sit facing child.
3. Put a set of headphones on the child and a set on the implementor.
4. Play taped recording.
5. Tell child to imitate same movements as the implementor while playing tape.
6. After following the above directions several times, encourage child to follow verbal directions independently.

Rationale: Wearing headphones focuses the child's attention on the sounds and eliminates auditory distractions.

Adaptations: Use commercial recorded songs; use language master and specifically prepared cards.

Area Auditory

General Objective: To develop auditory memory.

Task: Imitating sound patterns on drum.

Materials: Drum, two mallets

Procedures: 1. Place child with flat surface between you and the child.
2. Place drum on flat surface.
3. Give child one mallet.
4. Use other mallet to beat drum three times saying, "I love you" as the implementor beats the drum.
5. Say, "Beat the drum."
6. Encourage child to beat the drum as implementor beats the drum and say, "I love you."
7. Tell child to listen. Beat pattern and then tell child to "Beat the drum."

Rationale: Imitation of behaviors is a primary mode of learning.

Adaptations: Use two or four-word phrases; use the child's name.

Area Auditory

General Objective: To develop sound discrimination.

Task: Matching rhythm instrument to sound of rhythm instrument.

Materials: Two tambourines, two sets of wrist bells, cardboard box with one open side, song, "Listen, Listen," Music Activities for Retarded Children, Ginglend and Stiles, page 47.

Procedure:
1. Place box between implementor and child with open side toward implementor.
2. Position child on closed side of cardboard box.
3. Place one tambourine and one set of wrist bells on top of box.
4. Play visible tambourine and say, "Listen." Play bells and say, "Listen."
5. Sing song and play hidden bells at appropriate time.
6. Say, "Pick up the one that sounds the same."
7. Show child hidden instrument that is the same and say, "This is the same."
8. Play instrument and encourage child to play instrument at the same time.

Rationale: Child must use auditory cue to choose the correct instrument.

Adaptation:

ACTIVITIES OF DAILY LIVING

1. Feeding and Drinking
2. Toileting
3. Dressing and Undressing
4. Washing and Grooming

Introduction

Activities of daily living (i.e. feeding and drinking skills, toileting skills, dressing skills, washing, bathing and grooming skills) constitute a significant part of the educational program designed for the severely/profoundly retarded child. The more independent a child can become in performing these every-day living skills, the more independent he/she can become as an individual functioning in the home or the institution.

Scheduling the activities of daily living into the school day can be done in various ways. Throughout each day, the activities are ongoing: i.e. Toileting occurs all day -- at which time toileting skills, undressing, dressing skills and handwashing skills can all be emphasized. When each child arrives at school, leaves school, or has occasion to have to put on a coat or a sweater, dressing skills (unzipping, zipping, removing coat etc.) can be emphasized. Although these skills are ongoing, and can be worked on whenever the occasion arises, as indicated above, the teacher may find it necessary to schedule specific times for activities-of-daily living instruction. Choosing toileting time to teach Pat to unzip his pants may be an unwise choice if Pat really has to go to the bathroom! Or, scheduling instruction of activities of daily living in this ongoing manner may not allow enough time to be spent on those important skills. A special individualized instruction time, to teach activities of daily living, can be feasibly scheduled in any of the various types of scheduling procedures described in Chapter Two.

1. Feeding and Drinking

Introduction

Independent feeding and drinking skills may or may not be a realistic goal for a particular severely/profoundly retarded child. As mentioned several times, the range of abilities in this group is wide. Some children can and will

become independent feeders. For many others, this could never be a realistic goal.

Prior to beginning a self-feeding program, the child must already have, in his repertoire, certain prerequisite skills. He/she must be able to 1)hold and maintain the head erect and controlled, 2)guide his hand to his mouth, 3)remove the food from the spoon, 4)chew and swallow the food.

There are several skills which make-up the final complex behavior of self feeding. A detailed task analysis of the feeding skill should be performed for an individual child. Each sub-task must be considered, possibly further analyzed and developed if the goal is for the child to eventually become an independent feeder.

NOTE: Teaching a child to finger-feed should precede teaching him/her to eat with a spoon.

For many severely/profoundly retarded children, teaching feeding does not begin with finger feeding or spoon feeding, but with teaching the child to tolerate liquid or solid food in the mouth, or to chew, or to swallow. As in every regard, the abilities and limitations of the individual child dictates what feeding and/or drinking goal is appropriate and realistic.

Considerations

Notes on Normal Eating and Drinking[8]

A. Eating

1. Child is in an upright relaxed position with adequate head control.
2. When utensil is in sight, mouth opens appropriately for acceptance of that portion of food.
3. As food is placed on the tongue, the lips close.
4. The food is shifted by the tongue to one side of the mouth, normally to the molars.
5. The chewing process consists of rotary jaw motion resulting in horizontal and vertical jaw motion.
6. During chewing, the front of the tongue manipulates the food while the lips remain closed.

7. Deliberate swallowing occurs with the backward motion of the tongue with the back part of the tongue moving toward the palate. As the food shifts back, the tongue comes forward.
8. Automatic swallowing takes over as the food goes to the back of the throat.

B. Drinking
1. When drinking with a cup, the lips close around the top of the cup.
2. The front of the tongue is down in the mouth with the middle of the tongue humped and waved toward the back of the mouth. This is followed by automatic swallowing.
3. Straw drinking requires the mouth closing over the straw while the tongue grooves around it.
4. The child then sucks to draw the liquid to the back of the mouth where swallowing begins.

2. Toileting

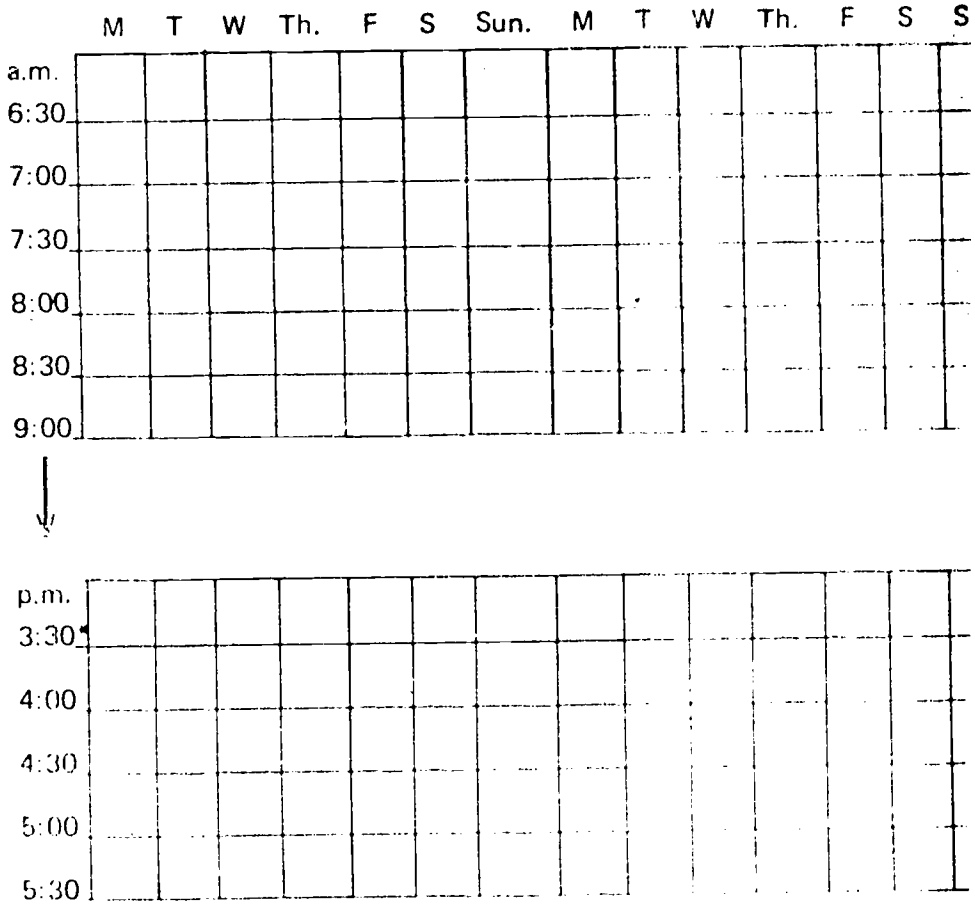
Introduction

Toilet training a child is usually considered an important goal by both the parents and the teacher. A toilet trained child, who is independent in his/her toileting skills, who can care for himself/herself in this respect, is one who is much less demanding of the teacher's and the parent's time. Toilet training often becomes a rather emotional subject, especially with many of the parents. It is usually one of the first goals that the parent will verbalize when asked what he/she hopes the child will accomplish through education and training. However, this subject should remain as unemotional as is possible for the child, the parent, and the teacher. The teacher and parent must be careful not to make bathroom time a negative time.

No attempt should be made to toilet train a child before the child is ready, before he/she has reached a certain level of developmental maturity. It has been recommended that a parent or a teacher not attempt toilet training until the child is able to remain dry for two hour periods of time. The

dry period should be about two hours long: he/she will then have the feeling of a full bladder and will know the sensation of relief when he/she empties his/her bladder.[9]"

Keeping a record of the child's voids will give the teacher and parent an idea of the times that the child usually eliminates. These charts can be kept both at school and at home during the early attempts to note a child's toileting patterns. Sample Chart:



*End of School Day **Bed Time

The illustrated chart utilizes the following codes:

W for Wet (wet pants or diaper)
BM for bowel movement in pants or diaper
D for Dry
*uses toilet to void
**BM uses toilet to defecate

(Example -- D* would indicate that the child was dry when put on the toilet and urinated while on.)

After approximately five days of keeping this chart, at home and school, a pattern should begin to appear if the child is ready to be toilet trained.

Considerations

1. When a child is sitting on a potty chair or toilet, his/her feet should be comfortably resting on the floor, preferably, or on some other flat surfact. (i.e. a box, or a stool placed just in front of toilet on which the child can rest his/her feet). This gives the child a feeling of safety and security.
2. The potty chair containers should be deep enough that the child cannot remove the fecal matter.
3. Positive reinforcement and reward assume an important role in early toilet training. Every effort should be made to be positive when the child has responded appropriately, and NOT to be negative or aversive when an accident occurs.
4. It is best to stay with the child when he/she is on the toilet so that the positive reward can be awarded immediately following the elimination.
5. If potty chairs are utilized, they should be located in the bathroom area. The child must realize that only the bathroom is the appropriate place for going to the bathroom.
6. When toilet training has begun, training pants should replace diapers and rubber pants.

7. When initial attempts are being made to get a pattern on a child's toileting behaviors, it is not the time to practice dressing skills. In this case, priority must be placed on the teacher's becoming aware of the child's elimination pattern.

REMEMBER!! BE POSITIVE – AND CALM!

3. Dressing

Introduction

As with many tasks, several of the dressing/undressing skills are made up of a series of chained, small steps. A technique often utilized in teaching dressing skills is referred to as backward chaining.

In backward chaining, the teacher begins instructing the child at the final step of the task first. By utilizing this procedure, each and every time the child responds (performs), he is, in fact, completing the task. (Refer to page no. 263. The card is a technique card describing a backward chaining procedur for the skill of removal of a sock.) i.e. In reference to the skill of removing a sock, by utilizing the backward chaining technique, each time the child performs, he is removing the sock. This procedure makes it very clear to the child exactly what the final behavior is, and what is expected of him.

Considerations

1. When working with a child on these skills, the teacher should work from behind the child. (This may be from a sitting, standing or kneeling position). As the teacher puts the child through various movements from this position, the child feels the movements in the same fashion as he/she would feel them if he/she were performing the task himself/herself. Also, the nearness of the implementor to the child may be reassuring for, and give a sense of security to, the child.
2. The teacher should put the child through all of the steps of the sequence prior to one that he/she is to accomplish independently. By doing so, the child gets the feeling of the movements involved in the entire task; the movements which will eventually be learned. Also, by putting the child through all of the movements, a learning pattern can be established.
3. Teaching undressing skills should precede the teaching of dressing skills; 'un' doing precedes doing – i.e. taking off a sock before putting on a sock, unzipping before zipping.
4. A factor that must be kept in mind when teaching a child undressing/dressing skills is that of appropriate place and/or time. During the teaching of these skills, the teacher should emphasize the appropriate times and places to remove particular pieces of clothing.

4. Washing, Bathing, Grooming

Introduction

Very much like the dressing skills, many of the washing, bathing and grooming skills are made up of a series of chained skills or tasks. Therefore, the backward chaining technique described earlier is also appropriate when teaching a child these washing/bathing/grooming skills. For example, the skill of handwashing is made up of a series of sequential, small sub tasks, all of which must be performed sequentially if the task is to be completed.

1. Child locates and walks toward sink
2. Child stands in front of and facing sink
3. Child turns on water
4. Child grasps and picks up soap
5. Child rubs soap between hands
6. Child puts soap down on sink
7. Child rubs hands again
8. Child rinses hands, front and back, under water
9. Child turns off water
10. Child locates hand towel
11. Child uses towel to dry hands
12. Child replaces towel appropriately

The child must be able to perform each of the separate skills that make up the task. In addition to the ability to perform each separate skill, the child must be able to independently initiate movement to the next skill in the sequence to carry it through to its completion. The implementor, then must concentrate on two things when working with the child: 1)the child's performance of each individual skill, 2)the child's independent initiation of movement to the next skill in the sequence. As each individual skill may originally have to be shaped and/or prompted prior to the child's independent completion of it, so might the initiation of movement from one sub task to the next.

Utilizing the backward chaining procedure already described, the first task the child must perform in regards to this handwashing example, would be the last task of the sequence: replacing towel appropriately.

Considerations

1. The sub-tasks that make up the more complex skill (i.e. the sub tasks that make up the handwashing skill) may be written as behavioral objectives with a criterion of acceptable performance established.
2. This sample breakdown of the hand-washing skill may have to be broken down into more minute steps for a particular child. The increment of step size between the sub-tasks must be determined by the abilities of the individual child.
3. The teacher and/or implementor can construct a chart which 1)lists the steps of the sequence and 2)has two columns beside the steps, one in which to record independent performance of the sub-task and one in which to record independent initiation of the sub-task.
4. Those considerations discussed earlier (working from behind the child, and putting the child through the movement) also apply in regards to these washing, bathing and grooming skills. The teacher and/or implementor would, from a position behind the child, move the child through the sequential steps which precede his/her independent performance.

Area Activities of Daily Living – Fee

General Objective: To develop independence in feeding.

Technique: Directing spoon held by implementor toward and away from mouth.

Materials: Spoon, favorite food in bowl, table or desk.

Procedure:
1. Sit facing child with flat surface between you and child.
2. Place bowl containing food on table.
3. Scoop food and hold spoon in front of child's face.
4. Direct child how to grasp implementor's wrist.
5. Show child how to pull implementor's wrist toward mouth so child can receive food from spoon.
6. After child takes food from spoon, show child how to push implementor's wrist away, in the direction of the bowl.

Rationale: This procedure establishes the relationship between directing the spoon and receiving the food.

Adaptations:

General Objective: To stimulate the oral area.

Technique: Stimulating rotary jaw movement.

Materials: Dried fruit, piece of solid food.

Procedure: 1. Hold a piece of dried fruit between child's molars on one side of mouth.
2. When child begins chewing on the dried fruit, insert a cube of solid food between molars on the opposite side of mouth.

Rationale: By using dried fruit on one side of mouth and a cube of food on the other, the child is guided to use both sides of mouth for chewing.

Adaptations: Use Slim Jims, taffy, licorice sticks.

General Objective: To make the child's oral region more receptive for feeding.

Technique: Stimulating an inactive upper lip to aid in closure and mobility.

Materials: Paint brush, tongue depressor, latex-covered spoon.

Procedure:
1. Vibrate the child's cheek by placing implementor's index finger in child's mouth and implementor's middle finger on the outside of child's mouth.
2. Move fingers back and forth across all reachable areas of the child's mouth.
3. Tap the child's lip area with a tongue depressor or paint brush.
4. Touch the child's upper lip with a spoon that has thick food on it.

Rationale: Through these exercises, the child will be able to move upper lip so that he/she can take the food from the spoon.

Adaptations:

General Objective: To further develop successful feeding habits.

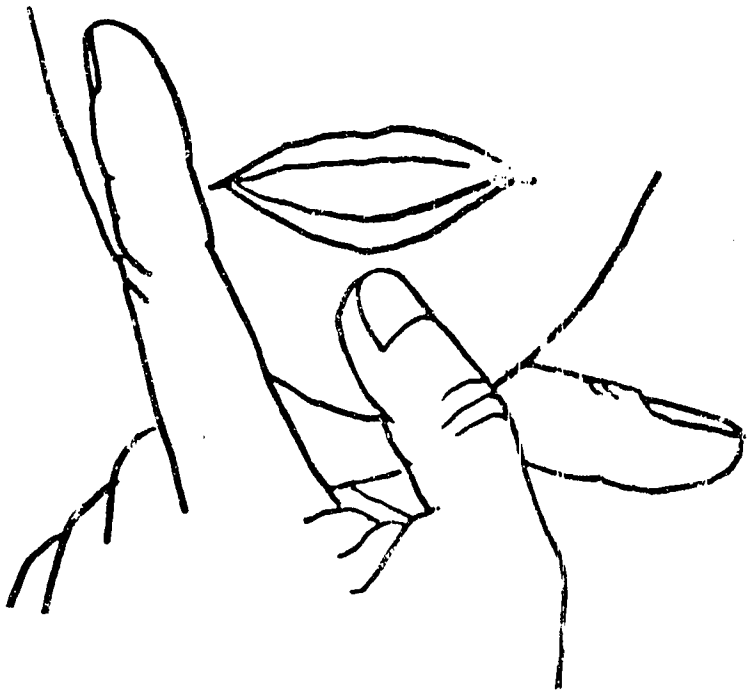
Technique: The use of three-finger jaw control.

Materials: Implementor, child.

Procedure:
1. Place the middle finger under the child's chin, all the way across to apply pressure to the jaw for closure and reduce tongue thrust.
2. Place the thumb on the front of the chin beneath the lower lip to aid in lip closure.
3. Index finger goes along the side of the cheek to stabilize implementor's hand and control the head from dropping to the side.

Rationale: Jaw control provides more control of the child during feeding.

Adaptation:



THREE-FINGER JAW CONTROL

Area Activities of Daily Living--Fe

General Objective: To use lips to remove food from spoon.

Technique: To successfully remove food from the spoon.

Materials: Spoon, bowl, preferred food.

Procedure:
1. Place food near the side of the child's mouth encouraging child to open his/her mouth.
2. Place food in the middle of the tongue.
3. To avoid tongue thrusts, give pressure on middle of tongue with bowl of spoon.
4. Wait for lips to close around bowl of spoon.
5. Withdraw spoon from mouth.

Rationale: Proper feeding skills include lip closure around spoon.

Adaptations:

General Objective: To develop tongue movements.

Task: Licking a lollipop.

Materials: Lollipop.

Procedure:
1. Sit in front of child.
2. Stick out tongue and draw attention to implementor's tongue.
3. Move tongue up and down and to both sides.
4. Put lollipop to child's mouth. If necessary, pop it into child's mouth so child can taste it.
5. Move lollipop away from mouth gradually. When child sticks out tongue, touch lollipop to tongue.
6. Move lollipop up and down and to both sides on child's tongue.
7. Hold lollipop stationary in front of child's mouth and encourage child to move tongue to lick it.

Rationale: Tongue movements are necessary for proper feeding and drinking.

Adaptations: Put honey or peanut butter on sides, top and bottom of lips. Have child lick honey or peanut butter from lips.

General Objective: To further develop successful feeding habits.

Technique: To develop proper swallowing

Material: Child, implementor.

Procedure:
1. Place finger on child's neck at top of throat.
2. Press gently upward.
3. Stroke downward with side of finger.
4. Use a quick short stroke.
5. Repeat press and stroke sequence.

Rationale: Slight pressure on throat cues child to swallow.

Adaptations:

Area Activities of Daily Living—Feeding

General Objective: To stabilize a dish while feeding.

Technique: Placing pegs around perimeter of dish.

Materials: Rubber peg board, plastic pegs, bowl or dish.

Procedure: 1. Place child at desk or table.
2. Place dish on rubber pegboard on table in front of child.
3. Place plastic pegs around perimeter to hold dish in place.
4. Have child spoon feed.

Rationale: Stabilizing the dish increases feeding independence. The materials used are washable and unbreakable, and the pegs can be arranged to fit any size dish.

Adaptations:

eneral Objective: To guide a filled spoon to mouth with little spillage.

echnique: Building up a spoon handle. (See illustration page 235).

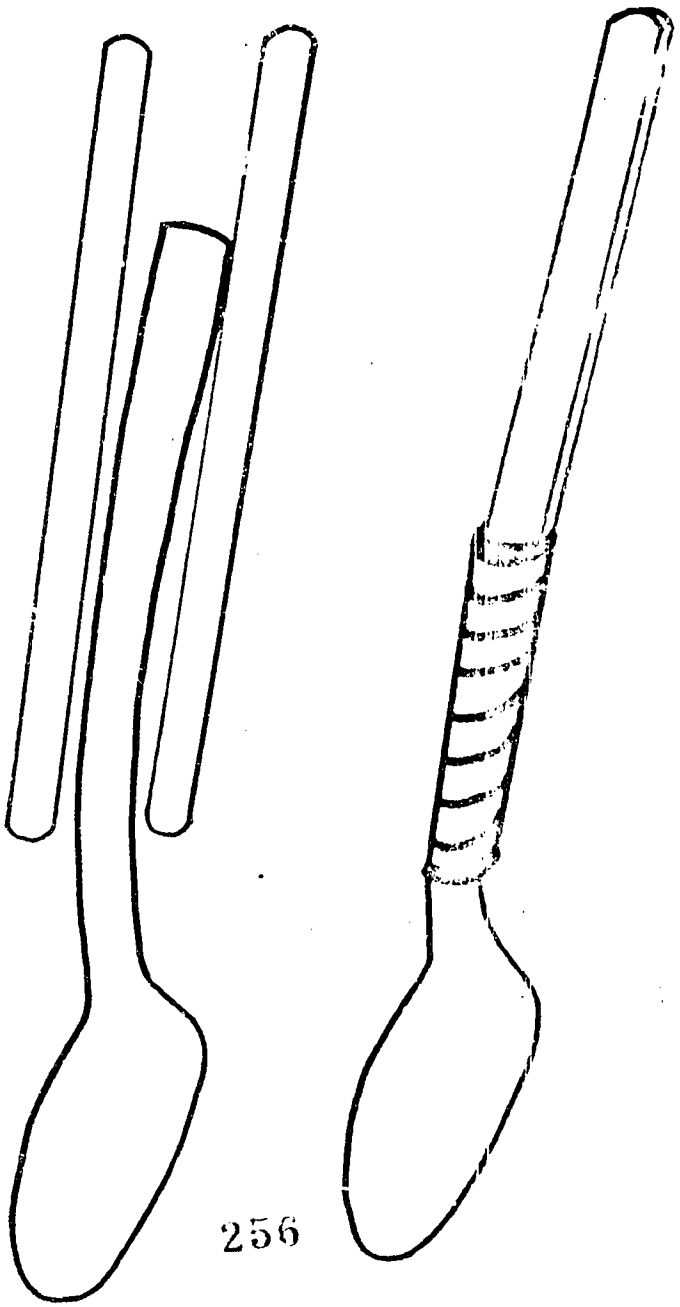
laterials: Spoon (Appropriate size for child), popsicle sticks, masking tape.

rocedure:
1. Place one popsicle stick on each side of spoon. (See illustration).
2. Popsicle stick should extend two inches beyond the end of spoon handle
3. Tape sticks in place.
4. Child uses palmar grasp to hold spoon.
5. Assist child to load food on spoon.
6. As child lifts spoon to mouth, guide spoon from the tip of the sticks, rather than by holding child's hand and guiding.

ationale: Using this technique, the implementor can assist the child's guiding without making contact with the child's hand. Such contact may interfere with the child's grasp. Just the right amount of pressure can be placed on sticks as is necessary.

Variations:

BUILT-UP SPOON



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General Objective: To increase control of the spoon.

Technique: Building up spoon handle.

Materials: Cardboard cylindrical roll, masking tape, spoon.

Procedure: 1. Slide cylindrical roll over handle of spoon.

2. Tape roll in place on handle.

3. Assist child in using the palmer grasp to hold spoon correctly.

4. Fade assistance as child improves in control of the spoon.

Rationale: This technique provides a larger object to grasp than a thin spoon handle. For a child who has an unsophisticated palmer grasp, but who is developmentally ready to begin using a spoon, this technique provides a means to use the grasp he/she has.

Adaptations: Use strips of cardboard strips or popsicle sticks to replace [illegible] instead of masking tape.

General Objective: To further develop successful feeding habits.

Technique: Inhibiting the child's biting reflex through exposure to tongue pressure.

Materials: Tongue depressor

Procedure: 1. Have child open his/her mouth or open the child's mouth for him/her, or present food to encourage opening.

2. Slowly move tongue blade into mouth until closure begins.

3. Tell the child to open his/her mouth, continuously.

4. Continue presenting blade. Make it a game by tickling the child's cheek, lips, teeth, gums, and tongue.

Rationale: This exercise will help inhibit the child's biting reflex.

Adaptations:

General Objective: To stimulate the oral region making it more receptive for feeding.

Technique: Counteracting a hyperactive gag reflex.

Materials: Washcloth.

Procedure:
1. Take child's fingers and rub around his/her mouth.
2. Wrap your fingers in a terry cloth washcloth and begin to rub with a firm pressure on his/her outer teeth and gums.
3. As he/she accepts this, gradually work to the inside of the teeth and gums.

Rationale: This task helps the child accept being touched and handled about the mouth.

Adaptations: Use a different kind of soft material, a paint brush to tickle the child's mouth.

General Objective: To prevent choking through forcing exhalation of air.

Technique: Expelling foreign matter from throat.

Materials: Implementor, student.

Procedure:
1. Call nurse at first sign of choking.
2. Meanwhile, stand behind child.
3. Place arms around child directly under the rib cage.
4. Give the child one sharp, fast squeeze toward implementor.
5. If this does not work, try again.
6. Nurse may have to use other measures.

Example: This technique is a good safety procedure to be aware of.

Adaptations:

Objective: To release clenched jaw.

Technique: Unlocking jaw.

Materials: Child, implementor.

Procedure 1. If child has anything in mouth (teacher's finger, object, etc.) grasp lower jaw.
2. Move jaw to right or left to release object.

Rationale This technique forcibly releases object or finger.

Adaptations:

Area Activities of Daily Living–Drinking

General Objective: To develop ability to drink from cup.

Technique: Cutting out rim of cup, opposite drinking side.

Materials: Plastic or heavy paper cup.

Procedure: 1. Cut out a portion of one side of the cup's rim.

2. As the child drinks from the unaltered rim opposite the cut-out side, the impleme tor can see and correct the position of the child's lips as he/she drinks.

3. Because of the cut-out rim the cup can be tipped in drinking witho t touching ch d's nose.

Rationale: This technique aides the child in drinking and the implementor in teaching the skill.

Adaptations:

Area Activities of Daily Living--Drinking

General Objective: To develop ability to drink from a cup.

Technique: Gripping a plastic tumbler.

Materials: Dychem, plastic tumbler, masking tape.

Procedure: 1. Cut Dychem to fit around sides of cup.

2. Tape Dychem to tumbler.

3. Have child hold tumbler with both hands and drink from it.

Rationale: Because Dychem has a non-slip surface that aides the child in his/her gripping and handling of the cup.

Adaptations: Use Dychem to prevent bowls and plates, or toys from slipping.

General Objective: To develop ability to suck through a straw.

Technique: Holding liquid in straw by placing index finger over end of straw.

Materials: Glass of liquid, plastic straw.

Procedure: 1. Dip straw into glass of liquid and place index finger over end of straw to retain liquid.

2. Place straw in child's mouth.

3. Encourage lip closure around straw by touching upper and lower lip with straw.

4. Wait for a sucking motion, then release finger from end of straw and wait for child to swallow liquid.

Rationale: It is easier to suck liquid from straw when this technique is used than to suck from a straw in a glass. Use before teaching to suck liquid through a straw from glass.

Adaptations:

General Objective: To develop ability to suck through a straw.

Technique: Inserting straw in nipple after child has accepted stronger flow of fluid. (See illustration page 236).

Materials: Baby bottle, nipple, plastic straw.

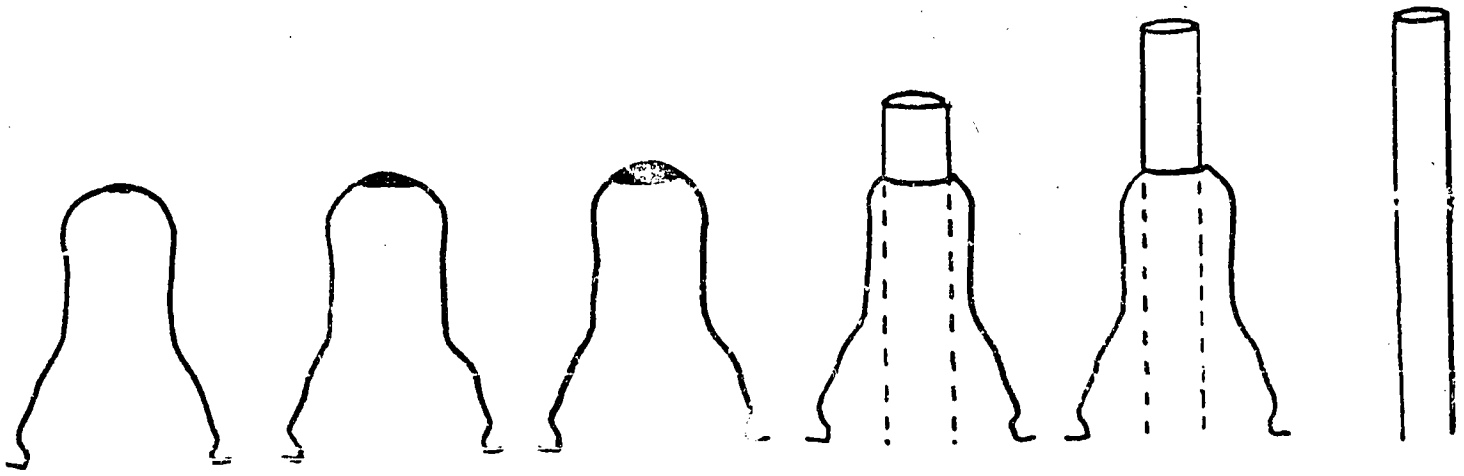
Procedure:

1. If child can suck on a nipple, use this sucking ability to teach the use of a straw.
2. Steadily increase the flow of liquid from the nipple until child can handle the amount of fluid which will flow through a straw.
3. Gradually introduce the straw by inserting it through the nipple allowing it to protrude from top ½".
4. Increase the length the straw protrudes until his/her lips touch only the straw when sucking.
5. Along with the above procedure, gradually decrease the angle of the incline of the bottle as the size of the hole in the nipple is increased without the straw insert. When the child is able to suck through the straw, the [illegible] drinking angle should have been attained.

Rationale: This technique provides a gentle transition from the baby bottle to the straw. Drinking through a straw is more [illegible] as the child grows older.

Adaptations:

PLASTIC STRAW THROUGH NIPPLE



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Area: Activities of Daily Living: Drinking

Goal: To develop independence in drinking.

Technique: Getting cup, filling it with water.

Materials: Plastic cup, sink, water.

Procedure: 1. Keep cup by sink within child's reach.

2. At appropriate times during the day, ask child, "Are you thirsty?"

3. Show or [illegible] steps with child: a) Reach and grasp cup
b) Turn on water
c) Fill cup with water
d) Drink water
e) Replace cup

4. [illegible] child learns to perform each step.

[illegible] she should be afforded the opportunity

Area Activities of Daily Living–Toileting

General Objective: To toilet train child.

Technique: Giving the child enough liquid to necessitate voiding more often.

Materials: Training pants, acceptable liquid for child, timer, reinforcers (preferred food, etc.) potty, equipment to clean up accidents, plastic bag.

Procedure:
1. Put training pants on child.
2. Every thirty minutes give the child all the liquid child will drink in one sitting.
3. Use the timer to check the child's pants every five minutes.
4. If the child is dry, have child feel the dry pants. Praise and reward.
5. If the child is wet, have child feel the wet pants. Express displeasure. Place child on potty.
6. Place child on potty at fifteen minute intervals. If the child voids, hug or reward with food. If child does not void within fifteen minutes remove from potty.
7. If child has wet pants, have the child clean himself/herself with as little help as possible.
8. Have child place wet pants in plastic bag and put on dry pants. Assist child if help is needed.

Rationale: The child will be forced to urinate more frequently by drinking large quantities of liquids.

Adaptations:

General Objective: To become more aware of self as the toileting task is performed.

Technique: Sitting on potty chair in front of mirror.

Materials: Mirror, potty chair.

Procedure: 1. Seat child on potty facing mirror during toileting.
2. Say, "See Pat sitting on the potty."

Rationale: Mirror serves to relax the child and child becomes aware of own position in space during performance of toileting task.

Adaptations:

Area Activities of Daily Living–Toileting

General Objective: To facilitate toileting for boys.

Technique: Directing penis downward between child's legs to apply deflector.

Materials: Potty chair, deflector.

Procedure: 1. Place child on potty chair.

2. Grasp child's legs under knees and raise in an upward motion so penis will drop between legs.

3. Apply deflector.

Rationale: This technique allows application of deflector without touching child's penis.

Adaptations:

General Objective: To [illegible] while on toilet.

Technique: [illegible] at the sink.

Materials: Potty chairs or toilet, sink.

Procedure: 1. Seat child comfortably on toilet or potty chair.

2. Turn water on [illegible] in the sink so child can hear running water.

3. Let child sit for [illegible] minutes.

Rationale: [illegible] stimulates urination.

Adaptations: Use another [illegible] to produce [illegible] of running water.

Area: Activities of Daily Living: Toileting

[illegible] Objective: [illegible] on toilet.

Technique: P[illegible] warm water over genitals.

Materials: Potty chair or toilet, glass of warm water.

Procedure: 1. Seat child comfortably on toilet or potty chair.

2. Spread child's legs.

251 3. Slowly pour warm water from glass over genitals.

4. Wait one minute and repeat.

5. Let child sit for five minutes.

Rationale: [illegible] water relaxes [illegible] muscles and encourages urination.

Adaptations: Use a glass of warm water and let child place hand in glass.

[illegible] Objective: [illegible] soiled pants.

Technique: [illegible] child.

Materials: Cold water, washcloths, towels.

Procedures: 1. Use cold water to wash soiled areas of child's body after he/she has soiled pants.

Rationale: Using cold water will be an unpleasant, uncomfortable experience for the child.

Adaptations:

General Objective: To reinforce a child for urinating in potty chair.

Technique: Using a potty chair that rings a bell when child urinates. (See illustration pages 255-256).

Materials: Potty chair with plastic receptable, 6-10 volt electric bell, two six volt dry cell batteries, two alligator clips, bell wire, metal screening, toilet tissue, small weight (i.e. fishing sinker, curtain weight).

Procedure:

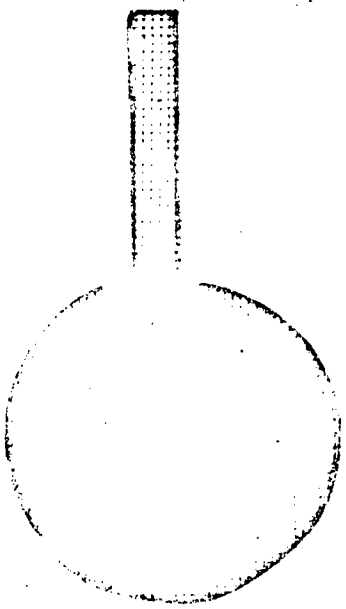
1. Measure diameter of bottom of plastic receptacle and cut two pieces of screening (with tabs) to fit in bottom of receptacle. Make tabs long enough to bend up and over edges of receptacle.
2. Hang electric bell outside bathroom door so child will not be frightened by loud ringing and so implementor can hear the bell.
3. Measure and cut wire needed between one binding post on bell and plastic receptacle. Bare both ends of wire. Attach [illegible] to one binding post on bell. Attach an alligator clip to other bare end of wire.
4. [illegible] reach them.
5. [illegible] binding post on bell and positive (+) terminal on Battery 1.
6. [illegible] each of the above [illegible] points.
7. [illegible] terminal on Battery 1 and positive (+) terminal [illegible] above mentioned points.
8. [illegible] Battery 2 [illegible]. Bare both ends of wire. Attach one end to negative (-) terminal on Battery 2. Attach an alligator clip to

[illegible] continued:

8. [illegible] one piece of screen flat on bottom of receptacle with tab extending up and over side of receptacle. (Receptacle must be dry).
9. Place toilet tissue over screen so that the circular part of the screen [illegible] covered.
10. Place second screen on top of toilet tissue with tab extending up and over side of receptacle.
11. Place small [illegible] on top of screen.
12. Attach one [illegible] to each extending tab. (NOTE: If bell rings, readjust toilet tissue so pieces of screen are not touching each other).

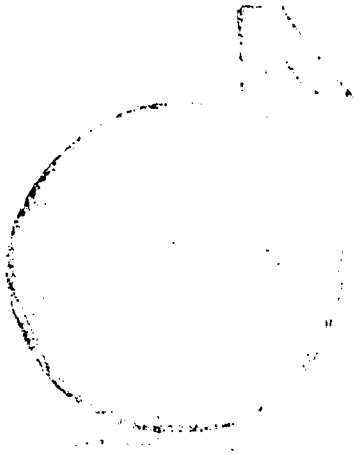
Rationale: It [illegible] room with each child during toileting. When the [illegible] immediately reinforce the child appropriately. [illegible] considerably less expensive than similar [illegible]

[illegible] commercially [illegible] shallow [illegible] something [illegible] This is a description [illegible]



WIRE SCREEN – Cut 2

Figure 1



WIRE SCREEN – Cut 2

Figure 2

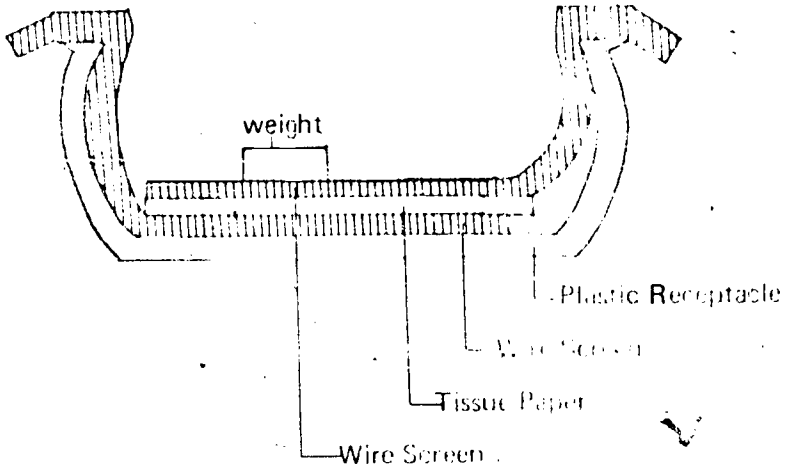


Figure 3

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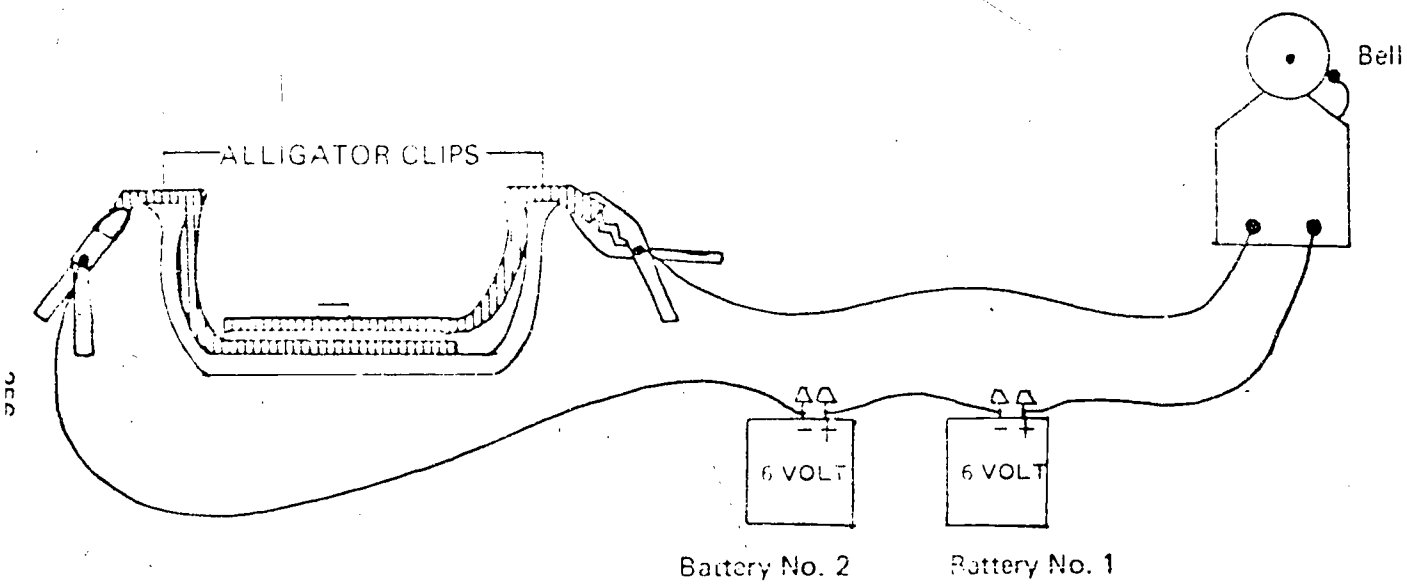

Bell
ALLIGATOR CLIPS
6 VOLT
6 VOLT
Battery No. 2
Battery No. 1

Toilet Training the Retarded, by Richard Foxx and Nathan Azrin, is a manual which describes a thorough toilet training procedure described by the authors. A list of training apparatus appears in the rear of the text. Some of the devices are designed to buzz when a child soils, alerting the teacher or parent. Foxx and Azrin include in this list of apparatus the names and addresses of the manufacturers and the stock numbers of the item.

Foxx, Richard M., Azrin, Nathan H., Toilet Training the Retarded. Ed Mark Associates, 132 Northrup Way, Bellevue, Washington, 98005, 1973.

General Objective: To teach grooming skills.

Task: Splashing hands in water and putting hands on face.

Materials: Basin with water or water table.

Procedure:
1. Seat or stand child at basin.
2. Guide child's hands into water.
3. Put hands on face.
4. Say, "Wash face."
5. Gradually reduce guidance until child will put water on face on verbal command.

Rationale: This task is a readiness skill for washing face.

Adaptations:

General Objective: To prevent soap from slipping from hand.

Technique: Cutting a hole through the middle of a bar of soap. (See illustration page 260).

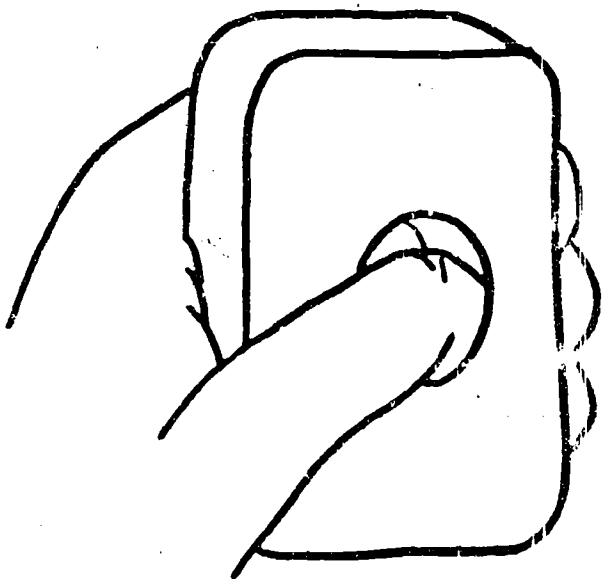
Materials: Soap, knife, sink or basin, water.

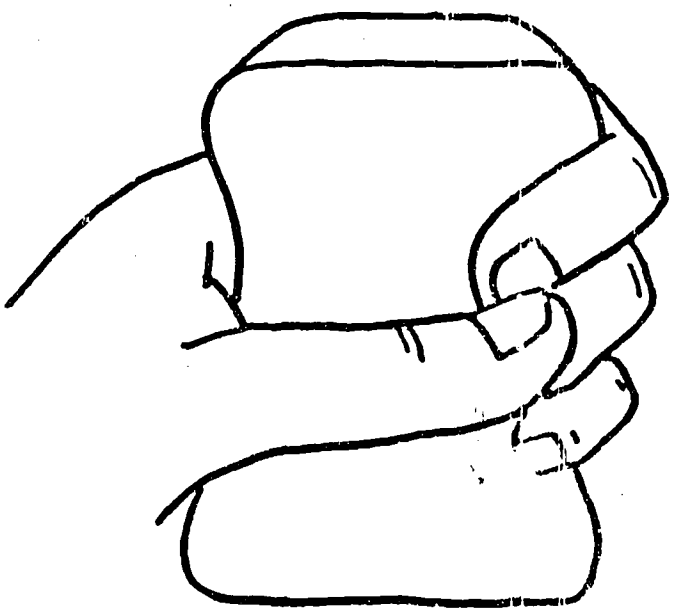
Procedure:
1. Cut a hole through the middle of a bar of soap.
2. Let child pick up and hold dry soap placing thumb through the hole.
3. Place soap in basin or sink.
4. Have child pick up and hold wet soap by placing thumb through the hole.
5. Have child rub soap in hands.

Rationale: Child will be able to grasp soap more securely while learning how to wash hands.

Adaptations: Cut out middle of sides of soap.

CUT-OUT SOAP





299

Area Activities of Daily Living–Grooming

General Objective: To develop good grooming skills.

Task: Using a hairbrush.

Materials: Brush, mirror.

Procedure: 1. Seat child on floor facing implementor and positioned to see himself/herself in mirror.
2. Let child hold brush in dominant hand.
3. Guide child to brush implementor's hair using long strokes.
4. Guide child to use brush on his/her own hair.

Rationale: Child is able to observe direct results of brushing when brushing someone else's hair.

Adaptations: Let child brush another child's hair; use large-toothed comb.

Area Activities of Daily Living–Dressing

General Objective: To recognize specific parts of clothing.

Task: Pointing to pictures of clothing.

Materials: Four-sided cardboard box covered with material, one clothing picture pasted on each side of box.

Procedure: 1. Show child picture of a piece of clothing on cube and point to child's clothing on himself/herself.
2. Continue turning cube and showing parts of clothing while pointing to child's clothing.

Rationale: This task develops awareness of appropriate clothing names.

Adaptations: Use real clothing and match to own clothing.

General Objective: To develop ability to put a button through a hole.

Task: Placing an oversized button through a large "buttonhole." (See illustration page 264).

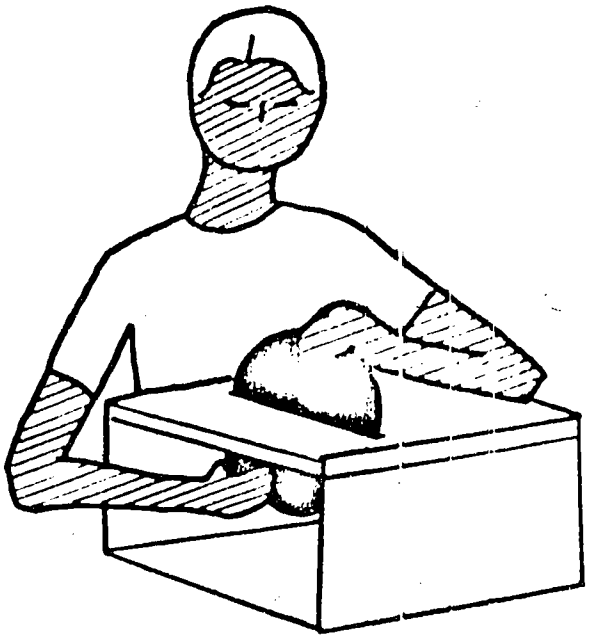
Materials: Cardboard circle seven or eight inches in diameter, three-sided frame or cardboard box which has an open side, over which is attached a piece of heavy weight fabric with a seven to eight inch slit through the middle.

Procedure:
1. Place three sided box with buttonhole in front of child. The open side of the box should be on the side of the hand which will receive the button as it passes through the hole (non-dominant hand).
2. Give the child the button in his/her dominant hand.
3. Guide the child through the task of placing the button through the hole.
4. Retrieve the button coming through the hole.

Rationale: This task is a first step in the development of the buttoning skill.

Adaptations: The button and buttonhole can be made progressively smaller as child masters each size.

OVER-SIZED BUTTON –
OVER-SIZED BUTTONHOLE



General Objective: To develop dressing skills.

Technique: Fastening pants.

Materials: Pants, velcro.

Procedure: 1. Sew velcro pieces onto flaps of pants.

2. Have child press pieces of velcro together to fasten pants.

3. Gradually fade assistance.

Rationale: Velcro is much easier for a child to manipulate and can be used more independently when dressing.

Adaptations: Use velcro in place of buttons, zippers, snaps or bows.

Area Activities of Daily Living–Dressing

General Objective: To increase independence in dressing.

Technique: Using a ring on the zipper pull.

Materials: Zipper, ring.

Procedure: 1. Place ring on zipper pull.

2. Direct child to grasp ring and pull up.

Rationale: The ring is much easier to manipulate than the zipper pull, and enables child to develop the motion needed for zipping.

Adaptations:

Area Activities of Daily Living–Dressing

General Objective: To develop skills necessary for independence in dressing.

Task: Putting hoop on arm. (See Figure 1 and 2, page 269).

Materials: Embroidery hoop covered with red yarn.

Procedure: 1. Face child.

2. Pull hoop over implementor's hand and arm to shoulder and say, "I pu my arm through the hole."

3. Remove hoop, give it to child and say, "Put your arm through the hole."

Rationale: Skills required to perform this task are prerequisites for child to put arm in armhole of coat.

Adaptations: Use painted wooden hoop, plastic hoop.

Area Activities of Daily Living–Dressing

General Objective: To develop skills necessary for independence in dressing.

Task: Putting arm in armhole of coat.

Materials: Coat with armholes outlined with red material. (See Figures 1 and 2, page 269).

Procedure:
1. Lay coat on table.
2. Position child facing table.
3. Tell child to pick up coat with one hand.
4. Trace red outline of one armhole with child's finger.
5. Say, "Put your arm through the hole."
6. Guide child to put arm in hole.

Rationale: Because armholes are outlined in the same color as the hoop, child will be able to transfer the skills he/she has developed, from the previous card. Since the armhole is outlined, it is easier for the child to see.

Adaptations: Outline armholes of sweaters or shirts that button down the front.

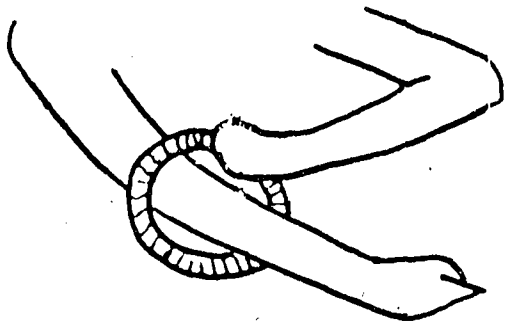


FIGURE 1

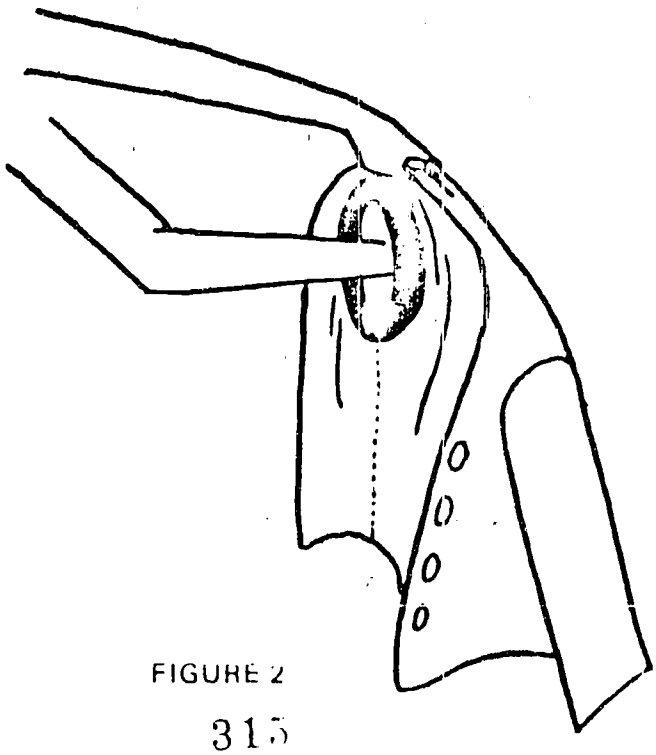


FIGURE 2

Area Activities of Daily Living—Dressing

General Objective: To dress independently.

Technique: Putting clothes on self.

Materials: Adult size pieces of clothing.

Procedure: 1. Help child place adult clothing on over his/her regular clothing.
2. When he/she develops ease with this task, reduce size of clothing.

Rationale: Larger clothing will be easier for the child to manipulate when learning basic dressing skills.

Adaptations:

Area Activities of Daily Living—Dressing

General Objective: To develop dressing skills.

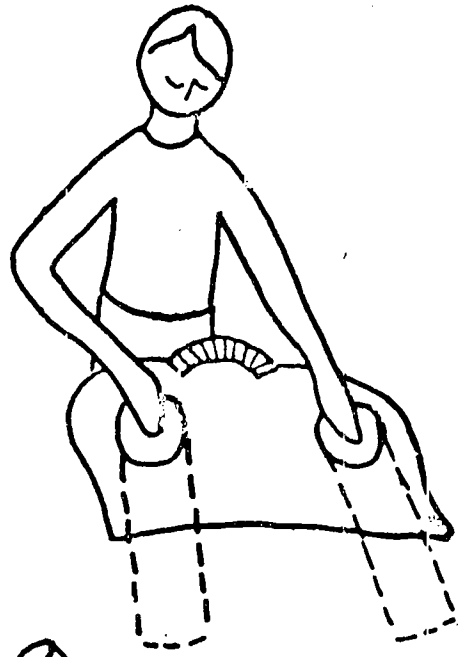
Task: Putting coat on.

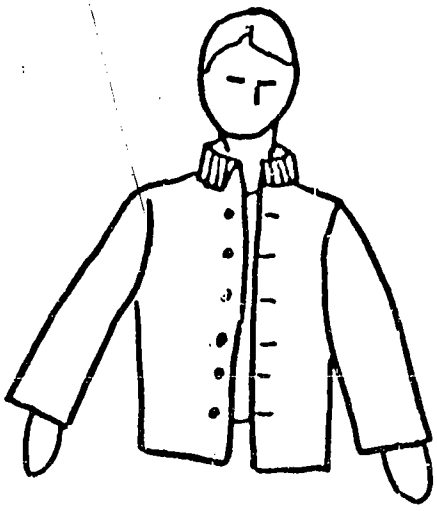
Materials: Coat or jacket.

Procedure:
1. Place coat upside down on table, neck closest to child.
2. Help child put arms into openings.
3. Help child raise arms above head so that coat will slip onto child.
4. Gradually reduce guidance until child can put coat on with just the verbal clue.

Rationale: This method is practical when the customary method of putting a coat on is not feasible or appropriate for a particular child.

Adaptations: Have child position coat on table himself/herself.





General Objective: To remove a sock.

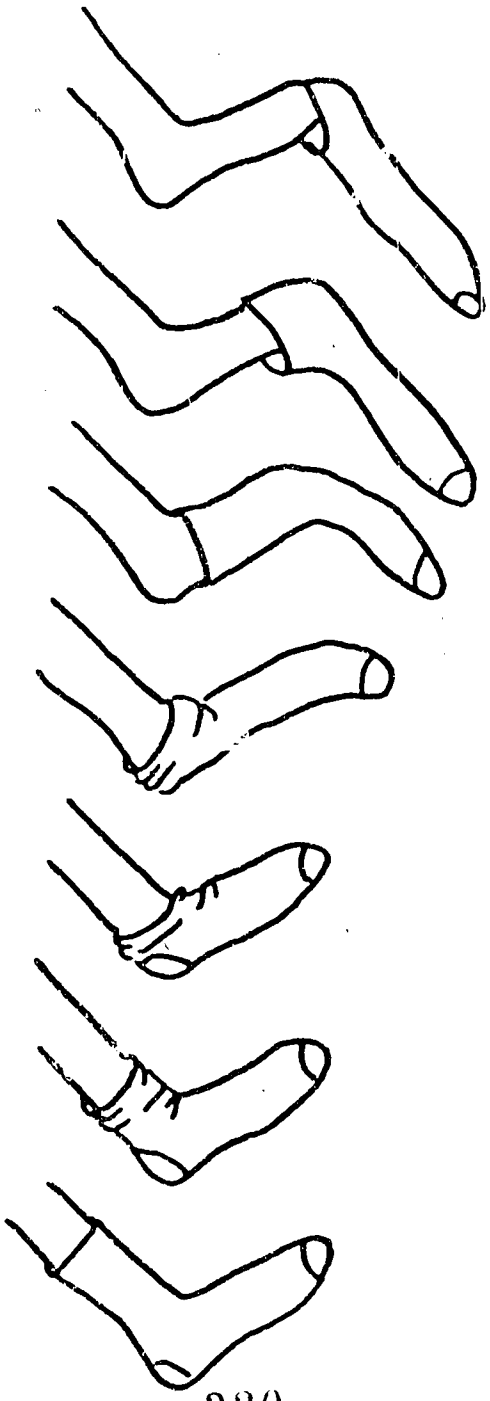
Technique: Backward chaining. (See illustration, page 274).

Materials: Sock.

Procedure:
1. Seat child on floor with one leg bent over other.
2. Kneel behind child facing his/her back.
3. With implementor's hand over child's, remove sock to point at which sock is lying just on the edge of the toes. Have child remove sock from there.
4. After child has accomplished this go through same procedure (Steps 1-3) but put sock at ball of foot. Have child remove from there.
5. Continue procedure, chaining backwards, utilizing the following points: mid-foot, heel, ankle, half-way up leg, completely up leg (task complete).

Rationale: By backward chaining and putting the child through the small component tasks, the child is continually performing the entire and completed task of removing the sock; thus reinforcing the behavior.

Adaptations:


(Toe)
Remove
(Ball)
Remove
(Mid Foot)
Remove
(Heel)
Remove
(Ankle)
Remove
(Upper Ankle)
Remove
(Shin)
Remove

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Area Activities of Daily Living—Dressing

General Objective: Simplify dressing and undressing.

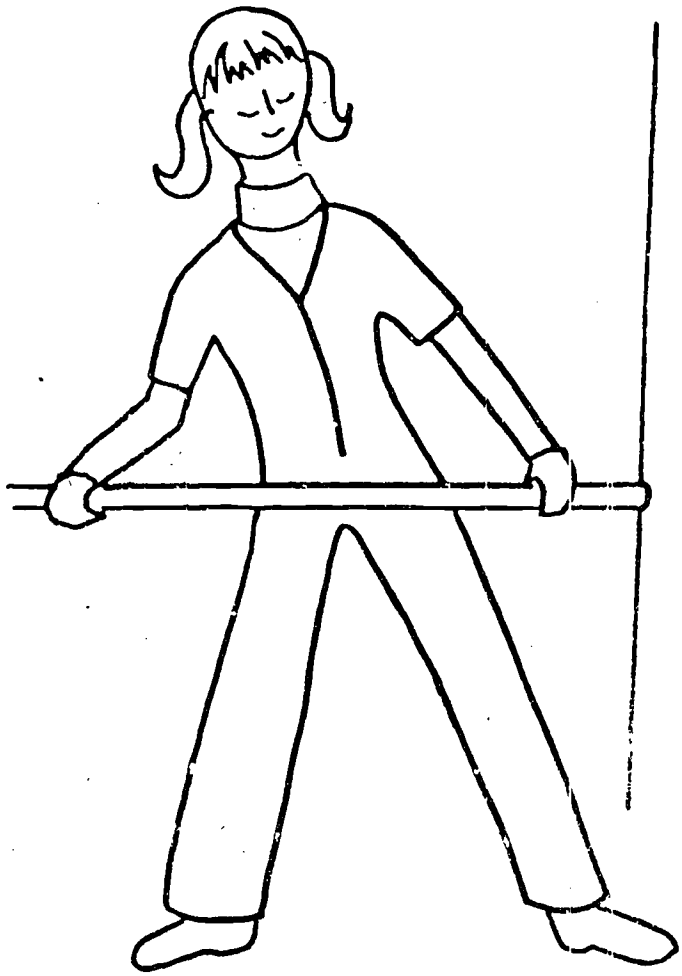
Technique: Using a jumpsuit for wearing apparel for children with little or no self help skills.

Materials: Butterick Patterns No. 3334, and No. 3147.

Procedure: 1. Dress child in jumpsuit. (See illustration page 276).

Rationale: The jumpsuit offers convenience to parent and teacher when helping children with no self-help skills. Children who can manage the zipper are able to dress themselves after a short training period. If a child has an objectionable habit of putting hands or other objects inside slacks, the jumpsuit eliminates this socially unacceptable action. The child's neat appearance is easily maintained with the jumpsuit.

Adaptations:



JUMPSUIT

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COMMUNICATION SKILLS

Definition– refers to activities which enable the child to communicate his/her needs or desires (verbally or non-verbally) and to receive and understand information.

Introduction

The term 'speech development' was deliberately avoided in the construction of this text. Many severely/profoundly retarded children will never be verbal, or demonstrate any verbal-expressive language. However, many can and do communicate non-verbally, gesturally. The person in charge of programming must ask himself/herself if expressive language is a realistic goal for a particular child. If it is, the gestural communication should be ignored, and verbal communication (expressive language) reinforced. If it is not, the teacher must: 1)carefully observe the child to become aware of gestural indications of desire or need and reinforce them and/or 2)establish a particular meaning to a gesture the child already has in his/her repertoire in an attempt to build a non-verbal mode of communication.

Considerations

For a child for whom it has been determined that expressive language is NOT a realistic goal:

1. The teacher should reinforce any and all appropriate gestures which indicate a need or a desire – i.e. If a child makes a movement towards the dessert on his/her tray, give the child the dessert as a reward for the gesture. Gradually make the gesture mandatory if the child is to receive the dessert.
2. Often children come to the program with some, even if few, forms of gestural communication. These can be reinforced and strengthened. For others who have no mode of non-verbal communication, meaningful gestures must be established. The teacher should observe the child's mannerisms and choose one that, in the future, can convey a particular message. He/she then must program the child and the gesture such that it takes on that particular meaning.

For the child for whom expressive language has been determined as a realistic goal:

1. Talk to the child often and repeat, repeat! For example, when giving a chil a command, "Pat, come here," repeat when he/she has responded appropriately: "Good Pat! You came here!"
2. Be careful not to bombard the child with too many and/or confusing verba stimuli. Each child must be observed carefully to determine his/her tolerance for amount of verbal stimulation.

Area Communication

General Objective: To develop social contact.

Technique: Touching implementor's face.

Materials: Implementor, child.

Procedure: 1. Implementor should be at eye-level with child.
2. Place child's two hands on implementor's face.

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Rationale: Child's eyes follow own hands and focus on face.

Adaptations: Touch faces of other children.

Area Communication

General Objective: To establish social contact.

Task: Looking at implementor through cylinder.

Materials: Cylinder that encompasses only the child's eyes.

Procedure: 1. Sit facing child.
2. Place one end of the cylinder around the child's eyes and the other end around the implementor's eyes.
3. Call the child's name and try to get the child to focus on implementor's eyes.

Rationale: The use of a cylinder requires the child to look only straight ahead and to focus on the implementor's eyes.

Adaptations: Gradually enlarge the size of the cylinder so that the field of vision increases.

Area Communication

General Objective: To develop child's awareness of his own vocalization.

Technique: Imitating the child's vocalizations.

Materials: Child, Implementor.

Procedure: 1. Implementor imitates the child's vocalizations whenever child produces them.

Rationale: Children can be unaware of their own vocalizations. This technique will make him/her aware of his/her own ability to produce sounds.

Adaptations:

Area Communication

General Objective: To develop tongue movement.

Task: Producing sounds through tongue movement.

Materials: Child, Implementor.

Procedure:
1. Sit in front of the child.
2. Stick out tongue, bring child's attention to tongue.
3. Move tongue up and down, and sideways while vocalizing.
4. Have child mimic.

Rationale: This task is a pre-requisite for babbling.

Adaptations:

Area Communication

General Objective: To develop mouth and tongue control.

Task: Blowing soap bubbles.

Materials: Bubbles, wand.

Procedure:
1. Blow bubbles for child to see.
2. Stand behind child.
3. Hold wand in front of child's mouth.
4. Blow bubbles for child.
5. Shape mouth in oval position.
6. Tell child to "blow."
7. Continue until child blows on command.

283

Rationale: Child must position mouth and blow to produce bubbles.

Adaptations: Blow on ballons, hands, feather attached to string, crepe paper, mirror (to see breath), cotton balls, and ping pong balls.

Area Communication

General Objective: To stimulate babbling.

Task: Listening to child's own voice on tape.

Materials: Tape recorder, tape.

Procedure: 1. Tape child's babbling.
2. Play voice back to child.

Rationale: This task stimulates further babbling and production of sounds.

Adaptations:

Area Communication

General Objective: To produce sounds.

Tasks: Producing sounds independently.

Materials: Megaphone.

Procedure: 1. Place open end of megaphone over student's face.
2. If child makes sounds, repeat them.
3. Encourage child to make sounds and talk to others through megaphone.

Rationale: The megaphone projects sound better and is pleasing and amusing to the child.

Adaptations: Use cardboard tube, Tok-Back (Developmental Learning Materials).

Area Communication

General Objective: To imitate consonant sounds.

Technique: Shaping the "mm" sound.

Materials: Child, Implementor.

Procedure:
1. Sit in front of child.
2. Take child's hand and place it on implementor's nose and throat.
3. Say "mm". Child will feel vibration in implementor's nose and throat.
4. Place child's hand on his/her nose or throat.

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Rationale: By doing this task, child can feel vibrations when saying "mm".

Adaptations: Have child say "mm" before giving child milk or anything that starts with "m".

Area Communication

General Objective: To promote communication.

Task: Using a communication board.

Materials: Communication board, one picture of a happy face and one picture of a sad face, cover with clear contact.

Procedure:
1. Place child in chair.
2. Place the board in front of child.
3. Introduce just the "Yes" half of the board.
4. Ask child to point to "Yes."
5. After child consistently points to "Yes" introduce the "No".
6. Gradually introduce both concepts.

Rationale: The communication board will ultimately allow the child to respond to specific question.

Adaptations: Ask questions that can be answered by yes or no, use "Smiley Yes" and "Mean Old No," use pictures of activities occurring in the class, pictures of child's needs, pictures of home activities.

Area Communication

General Objective: To develop expressive language skills.

Task: Imitating behavior of another person.

Materials: Doll, dish, spoon, napkin, chair, table

Procedure: 1. Position child so he/she can watch implementor's actions.
2. Position doll sitting in chair at table. Pretend to feed doll from the dish with spoon. Wipe doll's mouth with napkin.
3. Place dish, spoon and napkin on table.
4. Say, "Now you do the same."

Rationale: Imitation is a necessary tool in language development.

Adaptations: Perform other tasks that are familiar to child. (Example: combing hair, lying on floor, petting a toy animal, wearing a funny hat).

Area Communication

General Objective: To demonstrate the ability to match.

Task: Searching for an object that is the "same."

Materials: Large cardboard box, large and small objects with texture-furry, rough.

Procedure: 1. Place child in front of large cardboard box.
2. Give child an object and tell him/her to find the "same object" in the box.
3. Continue until child finds the "same object."

Rationale: This activity provides the child with a stimulating, tactile, experience for finding the "same" object.

Adaptation: Use alarm clock and time the activity so the child must find the object before the bell rings.

Area Communication

General Objective: To develop concept of units (1:1 ratio) and reinforcement of perceptual concepts.

Task: Placing one chip into box by matching chip to a visual clue card.

Materials: Assorted shapes of play chips, five small milk cartons (tops removed), five visual clue cards glued to cardboard strip or sorting box (Developmental Learning Materials).

Procedure:
1. Position child at desk or table.
2. Place cardboard strip with five milk boxes in front of child.
3. Attach visual clue cards above each box.
4. Give the child the play chips.
5. Child places matching chip into each box, by following visual direction on clue card, one chip into one box.
6. Eventually increase number on clue card.

Rationale: This task establishes independent work habits, the child is able to check on work by using visual clue cards.

Adaptations: Use egg carton cut in half lengthwise, use pegs, blocks, beads.

Area Communication

General Objective: To follow a command.

Task: Taking one piece of cereal out of a container.

Materials: Open container, pieces of preferred food.

Procedure:
1. Place open container in front of child.
2. Place several pieces of cereal in container.
3. Take one piece of cereal out of container and show it to child.
4. Say, "One."
5. Put cereal back in container.
6. Say, "Take one out."
7. If necessary, assist child to take one piece out.
8. Point to cereal and say, "One."
9. Allow child to eat cereal.
10. Continue until child can take one out on verbal clue.

Rationale: The concept of "one" is reinforced through the visual, tactile, auditory, and gustatory modes.

Adaptations: Substitute other edible fruits. Use to develop concept of "two" and "three."

Area Communication

General Objective: To distinguish between empty and full.

Task: Calling when water is full in basin.

Materials: Basin, sudsy water.

Procedure: 1. Put child next to basin.
2. Turn water on and add detergent.
3. Walk away and have child call implementor when basin is full for doing dishes.

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Rationale: This exercise develops the concept of full and the sequence of activities.

Adaptations:

PERSONAL–SOCIAL SKILLS

Definition – refers to those appropriate personal and social behaviors that involve living and interacting with other people.

Introduction

Appropriate personal–social skills, as defined above, are necessary if severely/profoundly retarded children are to function in everyday living situations, whether at home, at school, or in the community. In the classroom, the teacher is the judge of what behaviors are or are not socially acceptable. However, in assuming and performing that role, the teacher must consider certain realistic issues.

Considerations

1. Although certain behaviors are obviously socially unacceptable (i.e. tantruming, screaming), sometimes any behavior that a child elicits is indicative of progress. Obviously, the teacher's goal is to establish and reinforce socially acceptable behaviors. However, the teacher should realize that it is sometimes necessary to temporarily accept behaviors that are not socially acceptable for the sake of learning.
2. With one child, the teacher may be attempting to eliminate the same behavior he/she is trying to develop in another child – i.e. The teacher may be attempting to eliminate hand-sucking in a child who is far beyond that level of development, but reinforcing it in an extremely low functioning child, for whom hand sucking is appropriate and meaningful. This may present a minor problem in the classroom and one that must be managed by the teacher specific to his/her particular situation.
3. It should be emphasized here that communication with the parents regarding which personal- social behaviors are to be positively reinforced, ignored or negatively reinforced and WHY, is essential!

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Area Personal-Social

General Objective: To establish group interaction.

Task: Playing intensively.

Materials: Children, implementors.

Procedure: 1. Place all children on floor with implementors.
2. Place and roll c ildren on top of each other, sit and touch each other.

294

Rationale: This activity provid s for group interaction and awareness of each other.

Adaptations:

Area Personal-Social

General Objective: To increase social interaction.

Task: Increasing contact and awareness through involuntary action.

Materials: Elastic rope, large area (playground).

Procedure: 1. Place child inside of elastic rope with implementor.
2. Implementor moves about play area placing tension on elastic rope.
3. Child can be moved about freely by manipulation of rope, rocking from side to side or swinging ab

Rationale: Child is involved in active interaction with another person, but distance is still provided. Child is free to move about but implementor is able to stimulate movements and still keep child within limits for controlled interaction.

Adaptions: Use hula hoop.

Area Personal-Social

General Objective. To develop interaction between students.

Task: Requiring interaction of children by shaking hands.

Materials: Implementor and children.

Procedure: 1. During opening exercise have each child shake the hands of another child.
2. Each child should have a turn.

Rationale: This task develops personal-social contact with other children.

Adaptations: Holding hands while going down the hall or in the classroom, shaking hands with visitors who enter classroom.

Area Personal-Social

General Objective: To actively involve a child in assisting another child.

Task: Following a simple command.

Materials: A simple object such as a ball.

Procedure: 1. Tell child to "Get the ball for Pat."
2. If necessary help child to complete the task.

297

Rationale: This task develops interaction between two or more students.

Adaptations:

Area Personal-Social

ieral Objective: To establish appropriate social behavior with visitors.

k: Shaking hands with visitors.

terials: Implementor, child, visitors.

cedure: 1. Make a list of people who will permit hugging and kissing, (ex. implementor).
2. Allow child to kiss and hug people who permit kissing and hugging.
3. When visitors enter room take child to visitor and say, "Shake hands, Pat."

tionale: Shaking hands when greeting people will be acceptable when the child becomes an adult, while kissing and hugging would be offensive to others.

aptations:

Area Personal-Social

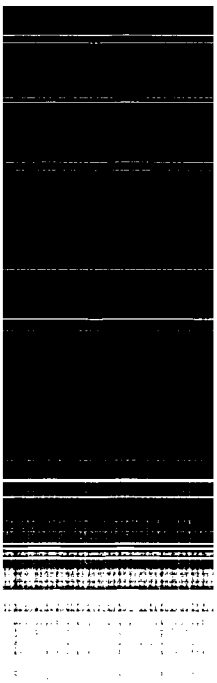
eneral Objective: To increase opportunity for socialization.

echnique: Integrating a low functioning older child with higher functioning children for social activities.

aterials: Child, implementor, higher-functioning class.

ocedure:
1. The TMR children must be located in the same school complex as the severely and profoundly retarded children.
2. The cooperation of the TMR classroom teacher is necessary.
3. The lower-functioning child should be integrated into a TMR class with children who closely approximate his her physical size. Mental age need not be a factor here.
4. The higher functioning children can serve as models for the lower functioning children in many social situations such as free play in the classroom, playground, music class and on special occasions such as classroom parties.

ationale: The Right to Education law requires all retarded children to attend public school. The low-functioning children who came to school for the first time ranged in age from 6 years to 20 years of age. Many had never been exposed to groups of children, had never experienced social situations that even TMR children take for granted. The profoundly retarded children must learn to adjust to the activities of children, as well as to the new demands made by adults. Teachers have always used imitation of children by other children as a teaching tool. It is an effective tool in the teaching of low functioning children as well.



Area Personal-Soc

General Objective: To raise right hand when saluting flag.

Technique: Placing a flag sticker on the child's right hand.

Materials: Stickers, flag.

Procedure: 1. Place flag sticker on child's right hand.
2. Have child place hand over chest making sure they raise hand with sticker on it.

300

Rationale: Child will associate flag on right hand with saluting flag and raising his/her right hand during the opening exercise.

Adaptations:

Area Personal-Social

neral Objective: To control mouthing of hands or objects.

chnique: Immobilizing the elbows.

aterials: Cardboard tube, ace bandage

ocedure:
1. Place cardboard tube over elbow when child places hands in mouth.
2. Wrap ace bandage from two inches below tube to two inches above tube and tuck in ends. (Do not wrap too tightly.)
3. Place toys on table in front of child for manipulation.

tionale: This technique prevents inappropriate behavior and provides opportunity to manipulate objects in a more acceptable manner. It should be used only when child is not in direct contact with implementor.

daptations. Use [illegible] splints.

Area Personal-Social

General Objective: To develop tactile ability to discriminate between edible and non-edible objects.

Task: Pulling edible objects from a box.

Materials: Shoe box with lid, [illegible] non-edible objects, vanilla wafers, table.

Procedure:
1. Cut a hole in one end of shoe box large enough to allow child's hand to reach inside of box. Place lid on box and cover or tape lid so it will not come off.
2. Place box in front of child who is sitting at table.
3. As child watches, place non-edible objects in box.
4. Before placing cookies inside of box, give child one cookie to eat. Place cookies in box as child watches.
5. Guide child's hand into the box. Encourage him to draw an object from the box.
6. If child draws a cookie, say, "Eat the cookie."
7. If child draws a non-edible object say, "That is not to eat." and guide child's hand to lay the object aside.
8. Repeat until child has found all the cookies.

Rationale: This exercise is helpful in eliminating mouthing of non-edible objects. It also provides an opportunity to discriminate between objects in the tactile mode.

Adaptations: Use an assortment of different cookies as a child becomes familiar with the texture of vanilla wafers, vary the non-edible objects.

FOOTNOTES

[1]Manual on Terminology and Classification in Mental Retardation, American Association on Mental Retardation, Special Publication 2, (Baltimore, 1973), page 5.

[2]Ibid., page 18.

[3]Donald G. Myers, Michael E. Sinco and Ellen Somerton Stalma, The Right to Education Child, (Springfield, 1973), page 8.

[4]Gretchen Veigh, L.P.T., Physical Therapy and Psychomotor Retardation. (1974), page 6.

[5]Atwell and Clabby, Answers to Questions Parents Ask, (Erie, 1969).

[6]Veigh, page 6.

[7]Ruth Keene, L. P. T. Acquiring Basic Developmental Skills, Mimeograph, (Pittsburgh, 1974).

[8]Sue Sullivan, L. P. T., Feeding Program for Physically Handicapped Children, Mimeograph, (Pittsburgh, 1975).

[9]Verna Hart, Beginning with the Handicapped, (Springfield, 1974), page 12.

BIBLIOGRAPHY

Allegheny Intermediate Unit 3. Perceptual Motor Development Curriculum Guide. Pittsburgh, PA: Allegheny Intermediate Unit 3, 1974

American Association on Mental Deficiency. Manual on Terminology and Classification in Mental Retardation. Special Publication 2. Edited by Herbert J. Grossman, M.D., Baltimore, Maryland: Pridemark Press, 1973.

Atwell and Clabby. Answers to Questions Parents Ask. [illegible] PA. [illegible], 1969.

Bayley, N. Bayley Scales of Infant Development. New York: The Psychological Corporation, 1969.

Cattell, P. Cattell Infant Scale. New York: The Psychological Corporation, 1940.

Chalfant, J. C. and [illegible]lihovitz, R. G. Illinois Program: Systematic Instruction for the Retarded. Danville, Illinois: Interstate Printers and Publishers, Inc. 1972.

Finnie, Nancie. Handling the Young Cerebral Palsied Child at Home. New York: E. P. Dutton and Co., Inc., 1968.

Foxx, Richard and Azrin, Nathan. Toilet Training the Retarded. Bellevue, Washington: Edmark Associates, 1973.

Gesell, Arnold, and Amatrude, C.S. Developmental Diagnosis. New York: Harper and Row, 1947.

Hall, R. V. Managing Behavior Series. Lawrence, Kansas: H and H. Enterprises, Inc., 1971 72.

Ha[illegible]rna. Beginning With the Handicapped. Springfield, Illionis: Charles C. Thomas, 1974.

Heber, Rick. Definition and Adaptive Behavior, Monograph Supplement to American Journal of Mental Deficiency Second Edition, 1961, 3, 63.

Keene, Ruth, L. P. T. Acquiring Basic Developmental Skills. Mimeograph, Pittsburgh: 1974.

Levy, Janine. The Baby Exercise Book. New York: Pantheon Books, 1973.

Myers, Donald G., Slinco, Michael E. and Stalma, Ellen Somerton. The Right To Education Child. Springfield, Illinois: Charles C. Thomas, 1973.

Pennhurst State School. APT – A Training Program for Citizens with Severely or Profoundly Retarded Behavior. Edited by James F. Brody and Robert Smolovitz, Spring City, PA: Pennhurst State School, 1974.

Pennsylvania Consortium for the Preparation of Professional Personnel for the Severely and Profoundly Mentally Retarded/Multi handicapped. An Instructional Guide for Parents. Pittsburgh, PA: Duquesne University, 1974.

Pennsylvania Department of Education. Compet [illegible] Harrisburg, PA, 1972.

Shearer, David et. al. The Portage Project. Portage, Wisconsin: Cooperative Educational Service Agency No. 12.

Smith, D. K. M–A–P Project, Motor Academic Perceptual Curriculum Guide, Indiana, Armstrong Counties, Indiana, Penns[illegible] Unit 28, 1972-73.

Sullivan, Sue, L.P.T. Feeding Program for Physically Handicapped Children Mimeograph, Pittsburgh, PA: 1974.

Thompson, J. Behavior Modification of the Mentally Retarded. New York: Oxford University Press, 1972.

Vergh, Gretchen, L.P.T. Physical Therapy and Psychomotor Retardation, 1974.

Wabash Center for the Mentally Retarded, Inc. Guide to Early Developmental Training. Lafayett, Indiana: Wabash Center Sheltered Workshop, 1972

Watson, Luke. Child Behavior Modification: A Manual for Teachers, Nurses and Parents. New York: Pergamon Press, Inc., 1973.

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