The information packet contains five abridged readings on early childhood education of handicapped children. Problems encountered in inservice education in childhood education programs are discussed and some proposals for future programs are advanced. Described is a training program which uses an interdisciplinary approach to young handicapped children's problems, promotes staff formulation of communications and educational goals, and provides awareness building experiences for the children. Reported are results of a 2-year itinerant program for early training of handicapped children and their parents through interviews with parents, home observation, and establishment of a toy library. A checklist of observable behaviors in areas of personality, language, intelligence, transference, and motor control is provided to aid teachers in the identification of mentally retarded children. Described is an approach to the learning problems of young exceptional children in which teachers are introduced to use of behavior modification through case studies showing individualized methods of eliminating inappropriate behaviors. (MC)
INFO-PAK 3

SELECTED READINGS

EARLY CHILDHOOD EDUCATION

A GROUP OF ABRIDGED READING SELECTIONS
FROM A SELECTED TOPIC AREA
INFO - PAK #3

SELECTED READINGS

EARLY CHILDHOOD EDUCATION

CONTENTS


   The monograph itself discusses in-service education in childhood education programs, offering suggestions for both trainers and trainees. This particular article by Dr. Miller gives background information on the program as well as a discussion of problems encountered and projects some proposals for the future of the program.


   This training program centers on an interdisciplinary approach to the problems of young handicapped children. Formulation of a basic philosophy by a staff on communication systems and educational goals relative to all personnel working with each child is necessary. Part II deals specifically with the concern for the limitations and potentials of these children. It also suggests various experiences essential in the education of the preschool handicapped child to develop awareness of his/her environment.


   This report presents the results of a two-year Itinerant Program as a possible model for early training of handicapped children and their parents. The first article explains techniques for interviewing parents of handicapped children and various ideas for administrators and teachers for observation of the child in his/her home environment. The second selection proposes the idea of setting up a "Toy Library" with various uses of toys on a developmental level.


   This checklist provides a series of observations teachers should make of young children. Included are guidelines in personality, language, intelligence, transference, and motor control.


   This article describes an approach to the learning problems of young exceptional children. Teachers are introduced to the use of behavior modification through case studies showing individualized methods of eliminating inappropriate behaviors.
Some Modest Proposals

The most immediate pressing need is the development of in-service training programs. Several promising models have been developed. Katz and Weir (1969) have summarized the cogent characteristics of these models and they conclude that the success of an in-service helping approach is based upon the following requirements.

a. It must occur largely in the teacher's classroom. To be helpful, the trainer or helper must see the real-life physical and interpersonal conditions in which the teacher is working.

b. It must emphasize the practical "how to" needs of new and inexperienced teachers. Theory, knowledge, history, philosophy, etc. must follow upon the expressed interests of the trainees.

c. It must be based on a relationship characterized by mutual trust between teacher and trainer. The customary "supervisor" or "inspector" roles developed in many public school districts do not seem to give teachers the support and encouragement they seek.

d. It must encourage the trainee to see herself as experimenter, innovator, learner and problem-solver and to see these qualities as inherent in the role of the teacher of young children.

e. It should lead to professionalism, using the term "professional" to denote commitment to high standards of performance and continuous efforts to grow in competence, to develop new skills and to acquire deeper and broader knowledge of the nature of development and learning.
To create an instrumentality which could put such concepts into practice, I would propose the creation of a minimum of six regional teacher-demonstration centers which would be the main diffusion instrumentality of the focused national research and development effort in early childhood education. These centers would demonstrate a variety of proven instructional programs emanating from the research and development effort and would serve as the headquarters for in-service helping teams. Appropriate affiliations with the community colleges and other institutions of higher learning would be established to facilitate career development programs. Sites for these centers would be chosen on the basis of direct access to the environment containing the on-line programs being served. Charged with the responsibility of outreach on an in-service training basis, the trainer and the content of training would emphasize appropriate community contact and involvement by the trainee to develop greater skills and sensitivity for maintaining social-educational relevancy.

To develop greater preservice training capabilities, I would advocate a much heavier investment in the community college. Preservice field involvement would be more readily accomplished in that setting. It could be terminal for teaching assistants and preliminary to a final two years of professional training at a four year institution leading to regular beginning teacher qualification.

I believe it is time to do a very careful analysis of the purposes served by certification. Much is to be lost by too rapid a movement
toward prescription of requirements. Preservice preparation is only the beginning to the task of establishing and creating teacher competence. Many factors enter into the equation. The match between the teacher's experience and the children she must teach, personality adjustments to supervisors and colleagues play important roles in developing competence. Simply establishing that an individual is prepared to teach is only one step in certifying teacher competence. Edelfelt (1968) points out that in-service teachers need more motivation and reward to stay in teaching than merely the status of being certified or on the basis of college credits received. They need desirable working conditions, career patterns and differentiated levels of compensation.

In early childhood education, we have the opportunity to experiment with a number of career development patterns which could demonstrate advancement in competency without promoting the teacher out of the classroom. Certification should reflect identification of levels of competence so that compensation can be made in terms of differentiated teaching roles and responsibilities rather than simply length of service. With flexible and differentiated certification, steps should be taken to implement the standards at a national level. Perhaps the chief responsibility for certification should be in the hands of the professional organizations who would act for the legal regulatory agencies at the local and state levels.
A Learning System

A number of topics should be considered in the formulation of a basic philosophy by your staff. Two items seem especially important: communication systems and educational goals and procedures as they relate to all personnel associated with each handicapped youngster.

Effective communication systems are essential for individuals or groups to have an understanding of the role and function of other members in a school setting. Modes of messaging among and between the physician, physical therapist, occupational therapist, teacher, speech therapist, teacher aide, etc. are a necessity for providing a smooth meaningful and well-balanced educational program for the child. Let us not forget the parents, siblings, grandparents, aunts, uncles, and guardians, for it is they, who have personally assumed the task of raising and caring for a loved one. Miscommunication among and between these human beings may break the electrical circuit causing a short that will pessimistically affect the psych-educational growth of a child.

When considering a communication system, we need to include social, emotional, physical, and intellectual developmental levels of a particular child as observed by each person in the center. Questions on social functioning at the clinic, classroom, playground, home, and neighborhood must be considered both individually and collectively. The teacher must know how a child reacts emotionally to physical therapy so she can plan appropriately for re-entrance into the classroom in terms of emotional environment. She needs to know the home, social, and emotional actions and reactions for effective educational programming.

A number of forms of communication need to be conceptualized and discussed. As stated previously, no one system will work universally in each center. Three variant but workable modes will be discussed here.
The first is the typical staffing session attended by all professionals and paraprofessionals to discuss the progress of a given child. This method has been successfully used in many instances and has been advocated by numerous text authors on disabled children and adults; however, a few shortcomings are always present, such as time conflict between personnel schedules and even deciding on a captain of the team. Perhaps a particular group can function better without a specially established line administrative hierarchy.

A second mode of communication between professionals may be the development of a communication evaluation sheet onto which each person (teacher, therapist, etc.) contributes pertinent information on a weekly basis relative to the procedures being used that week. This sheet may be circulated and erred upon by the persons involved with particular children. The value of this technique lies in the fact that the group is now able to supplement and augment each other's efforts. In other words, if the speech therapist is working on frontal sounds, then the teacher should focus the language arts program toward similar sounds. If the physical therapist is concerned with particular range of motion therapeutic practices, then the recreation leader or teacher should gear physical education toward enhancing the same. This could be the true team spirit as advocated by Peter (1965).

The above methodologies suggest in-house communication systems are a necessity for securing a uniform approach to filling the needs of the child. At this point, we must also keep in mind the importance of establishing sound relations with extra-school personalities, namely the immediate family. Techniques for working with parents may range all the way from informal drop-in conferences at school or home to formalized group counseling sessions for the parents. Argument pro and con each technique can be discussed forever and will thus be omitted here. The important point is that sound relations with the parents of the crippled child can not be overemphasized.
Finally, a workable communication system between the preschool setting and formalized public or private elementary school is a must. Unless the child's growth and development, coupled with successful and unsuccessful teaching attempts, are transmitted to the next school, valuable time and efforts of the early childhood placement may go for naught. The transition needs to be smooth and precise to insure performance planning and realistic goals for each youngster.

Educational goals and procedures can only be discussed within the context of learning theory; therefore, the next phase in the construction of a basic philosophy must be considered at length.
Part II

With the establishment of pre-school programs for handicapped children, educators now have an opportunity to provide and reinforce success experiences at a much lower age. Up until now, crippled children have had to wait six or seven years to get professional educational assistance at legal age entrance into special or regular school programs. By that time, many personality characteristics are well established and, in some cases, irreparable damage has been done. Early childhood programs can now supply inner life jackets with which to face failures or misfortune.

Once again the challenge of teaching presents itself as we are faced with the responsibility of choosing projects that may or may not be success experiences. Probably the most crucial issue the teacher must face is at what level to reinforce the experience as being successful. I cannot overemphasize the importance of giving praise for only those tasks whereby in fact the child did do a good job. We must be careful not to give false praise and thus, false security.

The above statement leads to Hilgard's (1956) next observation,

"Individuals need practice in setting realistic goals for themselves, goals neither so low as to elicit little effort nor so high as to foreordain to failure. Realistic goal-setting leads to more satisfactory improvement than unrealistic goal setting." (p. 486)

Persons of all ages need to learn to know their limitations. A blind cerebral-palsied friend of mine once asked to respond to this question, "When did you realize you were different from other children?" She replied, "When I asked my mother what was wrong with everyone else." Young children, as well as adults, must be realistic.
when learning to make decisions and setting goals. The professionals' responsibility lies in the task of setting realistic goals for himself as well as choosing appropriate tasks for children. For example, my blind crippled friend once had to make the decision of whether to be ambulatory or use a wheelchair. When weighing the advantages and disadvantages of each against the other, time and efficiency in performing certain tasks were heavily skewed in favor of wheelchair mobility.

Hilgard's (1956) next concern is that "the personal history of the individual, for example, his reaction to authority, may hamper or increase his ability to learn from a given teacher." (p. 486)

When the child reaches pre-school age, his experiences with adults have probably been limited. Any measure of authority can be taken only as it relates to the family structure of the culture from which the child comes. It may, therefore, be important to see whether the child is being raised by an authoritarian or democratic family. If the child functions well under democratic leadership, then he might profit best from a democratic teaching situation. Again, the value of establishing strong parental rapport can be seen in this approach.

"Active participation by a learner is preferable to passive reception when learning" (p. 486) has special applicability when considering pre-school age crippled children. Too frequently, excuses are given for not taking the child out into the neighborhood for active interaction with peers, neighbors, and public figures. Rather, due to ambulation emotional problems, we may find the child a passive receiver glued to a T.V. set. The professional's responsibility may be to get youngsters actively involved in projects or studies both within the
immediate classroom and out in the community. Teachers and other professionals must assume the responsibility of either bringing the child to the environment or the environment to the child as a child can be deprived regardless of socio-economic background. This can be accomplished through the use of field trips, resource people, and recreation programs. One philosophy believed in, and still practiced widely, is that of learning-by-doing as advocated by Dewey (1938). We must get the child actively involved socially, emotionally, intellectually, and physically. Just because a child is in a wheelchair does not necessarily mean he can not participate in youth oriented games both indoors and outside.

Paralleling active participation is the necessity of using materials and presenting tasks that are meaningful to the child. Hilgard suggests "meaningful materials and meaningful tasks are learned more readily than nonsense materials and more readily than tasks not understood by the learner." (p. 486) The next logical question which arises becomes one of discovering what environmental lessons are, in fact, meaningful to the child. In effect we are trying to put ourselves in his shoes. Since our life experiences may be entirely different from those of a physically handicapped child, we are faced with one of the most difficult tasks assigned to working with disabled children. We, thus, have two resources available; the child himself and research literature from child development. Accurate observation of the interaction between child and environment may give us cues to his interests. What are his needs in the home, school, and community?
A Model for Preschool Educational Services For Handicapped Children.

Initial Procedures

Upon referral, the first step was the collection of medical, psychological and social case-work: data. Available information varied with the source of referral and the degree of disability. Children who had been receiving services from agencies or medical institutions frequently had much data accumulated. Parents were contacted, the program was explained and an appointment to visit the child in the home was arranged if desired by the parents. In three instances, children were initially visited in agency preschools and a public kindergarten.

The procedure for the initial home visit changed and developed as the itinerant teacher gained more experience. The process that finally evolved, and which the teacher found most successful, involved preparing a kit of materials for presentation to the parent. This kit provided an aid to the interview and left the mother with concrete items to which she could refer after the teacher left. Mothers, even after many visits, could not always understand how the program functioned, what its purpose was, or sometimes the name of the sponsoring agency, the Allegheny Intermediate Unit.

The initial interview included collection of case history data on the child and discussion of materials in the kit. The teacher outlined the school program and, if social services were not already being used, explained to the parent the availability of services through the Pennsylvania Association for the Blind.

Evaluation of the child, during this initial interview, was observational. During the interview with the mother, while the child was held, in a playpen, or was playing with the toys provided by the teacher, the interaction between the mother and child was observed.

Since this was a project designed for visually limited children the child’s visual functioning became, of course, a central area of concern. The diagnosed visual acuity of the child was usually known in advance, and those children who had been referred as “partially sighted” became of central importance in determining visual functioning. It was observed how the child explored toys, whether visually or tactually. If the child was verbal, the teacher discussed the toys with the child. The child used his eyes the teacher tried to determine through structuring the use and choice of play equipment just how the child used his limited vision. If the child appeared to have vision but preferred not to use his eyes, the teacher tried to determine what might motivate the use of the eyes. It was discovered very early in the program that with non-verbal children, light and color were highly motivational in the stimulation of visual functioning. If the child had no apparent useful vision it was determined how the child responded to touch and sound. This was done through the exploration of toys chosen for this purpose.

During the course of the playing, it was noted whether the child’s mobility was appropriate for his age and degree of vision, and whether he had developed appropriate body image. The child’s understanding and use of language was noted. The teacher usually made all of these observations casually in the course of playing with the child.
The purpose of this observation was not only to assess the child's level of development, but to determine if any of the standardized assessment devices were appropriate in order to plan subsequent sessions. A specific toy that the child could use appropriately with only minimal coaching that would encourage learning was chosen. Hopefully the teacher had anticipated correctly from the referral information and had such a toy with her. Sometimes such a toy was already in the home and only needed to have the purpose in using the toy explained. The mother was shown how to encourage the child to use the toy properly. With infants the need for physical and auditory stimulation was always stressed.

If the child was totally blind or of very limited vision the teacher-director made arrangements to administer the Maxfield Buchholz Scale of Social Maturity for Blind Preschool Children on a second visit. The information gained from this very directed parent interview with the teacher's observations about the child's level of functioning would become the basis for planning an individual program.

For those older children whose level of functioning was appropriate, the Visual Efficiency Scale edited by Natalie C. Barraga, is useful as a tool to determine levels of visual functioning. It must be noted that this scale was not found useful with children less than five years old or who had other problems such as behavior disorders or lack of receptive language. The scale was most useful with those children who were already in a school experience. The scale was very helpful in explaining to teachers how a child functioned and the kinds of material with which he would probably have difficulty.

Several children observed in the initial home visits were so involved physically and mentally, and the effects of sensory deprivation were so severe that no scales could be used to help determine levels of functioning.

**Kit for Initial Interview**

In order to help the mothers to understand the program, a kit of materials which could be discussed and later left with the mothers was assembled. A pamphlet was designed by the teacher-director and printed under the direction of the Communications Specialist of the Allegheny Intermediate Unit. This pamphlet was included in the Introductory Kit and becomes a basis for discussion as it detailed the key features of the project and included illustrations. In each kit was a copy of The Visually Impaired Child by Carol Halliday. This booklet on comparative child development helps the discussion of the special needs of visually handicapped children. In the kit is a selection of pamphlets published by the American Foundation for the Blind. Another pamphlet describing all the services of the Allegheny Intermediate Unit is also included as the concept of a public school system for special education is difficult for parents to understand. Appropriate toys are included for the child.
The Toy Library

Play has long been recognized as the natural occupation of children and that toys are the child's tools. It is assumed that if parents provide the correct toys in the proper developmental sequence along with the opportunity and space to use them, learning and development will occur naturally.

Parents of handicapped children need help, however. Not only are developmental lists and age appropriate labels prepared for normal children, but a child with a sense modality missing or an immobile child will use a toy in a different way or perhaps find a classic toy such as a small car meaningless. Many handicapped children need to be taught how to play.

To encourage parents to stimulate their child's development through play, the Title VI preschool project has established a toy library which has become a key feature of the program. Toys and equipment with specific developmental goals in mind are made available to the children enrolled in the project through a check-out system.

A cataloging system was developed based on the system used by the Regional Instructional Materials Center. However, since the project included infants, the toy library contained many articles not available through the materials centers and, therefore, contained new categories.

Each toy is recorded on two 4 x 6 file cards. The first card is an alphabetical card which contains the name of the item and the catalog number assigned to it. This is the check-out card on which is recorded the date loaned, the child's name, and the date returned. This card is kept in an alphabetically arranged file.

The second card is the catalog number card which contains complete descriptive information about the item. Many items are cross-referenced. Following are sample cards:

<table>
<thead>
<tr>
<th>Date Out</th>
<th>Name</th>
<th>Date In</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-26-72</td>
<td>Jason Strom</td>
<td></td>
</tr>
</tbody>
</table>
34-001
Memory Bend
Encourages motor planning and helps develop the concept of directionality.
Sturdy base holds three feet of plastic wire that bends into various three-dimensional shapes. The child's hand moves the block from left to right, up and down, over and around, toward and away as the eye tracks the block across the midline to the end of the wire. Complete with Instructor's Guide.

Educational Playsystems, Inc.
Catalog No. 495
1 set $4.00

Catalog System and Sample Items

20-000 Infant Materials
   20-002 Roly Poly Chime Bear
   20-004 Rainbow Twirler/Turning Balls
   20-007 Five Finger Exercisor
   20-013 Infant Chimes Mobile

21-000 Printed Material
   21-005 First Picture Book
   21-006 How to Play With Your Baby - Ashton
   21-007 Your Child from Two to Five Years - Roufberg

22-000 Concept Formation
   22-001 Concept Builders—Animals
   22-003 Everyday Object Counters

Here the number progression was interrupted to enable adding more categories as the library grew:

34-000 Sensory Motor
   34-002 Basic Weight Tablets

35-G.000 Gross Motor
   35-G-001 Wheelbarrow Jr Size
   35-G-007 Activator (Cross referenced under Infant Materials, 20-000)
When introducing a toy to the child the teacher would play with the child until he understood how the toy was to be used. The mother was always present and the teacher explained the purpose for using the particular toy to the mother. It was discovered that most mothers think that playing is just a means of passing time. They need to be taught the importance of play in the development of their child. They also need to be taught a proper respect for playthings. Most parents don't know what standards to follow in selecting toys nor how to care for them properly. The itinerant teacher found mothers very appreciative of help in this area because young families spent a great deal of money on toys and had learned through bitter experience that toy advertising, especially on television, is very misleading.

The itinerant teacher found two books very helpful to use with parents in helping them make decisions about toys. How to Play With Your Baby by Athina Ashton describes the development of infants through the first two years. It suggests many ways of playing with a baby that will enrich his life and increase his potential. Your Child from Two to Five Years by Ruth Roufberg is a comprehensive guide to toys, their selection and proper use. It includes equipment for
physical development, books for language development, play materials fostering self-identity, blocks, dramatic and imitative play, manipulative play, free and creative play, art materials, nature and science. Both books are inexpensive, attractive and written in a manner that is easy and pleasant to read. The indexes include helpful charts and lists. Although the books are written for normal children, the levels of development are so clearly presented that most mothers can find just where their child is functioning.

In selecting the toys and equipment for the toy library, the main source was the catalogs put out by the major supply companies. Since these catalogs tended to handle mainly "educational" toys and those items most likely to be in schools, the itinerant teacher found it very helpful to visit toy departments in large stores to select toys which would be more suitable for home use and which would more nearly duplicate what parents could provide. The catalog, Commercially Available Instructional Materials for Use in the Development of Elementary Readiness Skills in Young Visually Handicapped Students, published by the American Printing House for the Blind, and available through the Instructional Materials Reference Center for Visually Handicapped Children, is the most comprehensive listing of materials and sources available. Anyone planning a materials library should use this as the chief reference.
GUIDELINES FOR TEACHERS

Teachers should observe children early for the following signs:

I. Personality and behavior
   A. Extreme disinhibition
   B. Extreme rigidity
   C. Extreme fear, timidity, tantrums or affection
   D. Inability to cooperate
   E. Inability to recognize values
   F. Inability to seek and recognize social approval
   G. Inability to make decisions
   H. Inability to accept decisions

II. Language development
   A. Delayed speech
   B. Gesture speech
      1. Is it awkward?
      2. Is it gross?
      3. Is it refined?
   C. Confusion in grammatical construction
   D. Immature use of grammatical construction and expression
   E. Use of gross language only
   F. Lack of development of fluency
   G. Confused patterns of language
      1. Limitations of use
      2. Stereotyped reproductions

III. Intellectual development
   A. Inability to concentrate
   B. Speed of ability to perceive
      1. Perception by listening
         a. Reaction to sound
            (1). Does sound stimulate him?
            (2). Is sound ignored by him?
         b. Ability to differentiate and give attention
            (1). Gross sounds
            (2). Source of sounds
            (3). Objects of sounds
         c. Inability to relate and recall sounds
         d. Attention to spoken language
            (1). Are manual and verbal guidance needed?
            (2). Is face-to-face attention needed continually?
            (3). Is more abstract attention possible (standing behind, etc.)?
            (4). Is response partial, complete or lacking?
         e. Seeing and perceiving
            (1). Can he differentiate between materials either completely or partially?
            (2). Does he differentiate in a pattern, i.e., smooth sweep, left to right, right to left?
            (3). Does he shift or skip items in a sequence?
            (4). Does he focus adequately?
            (5). Is the attention span adequate, complete, partial or inconsequential?
IV. Transferring and generalizing

A. How does he relate to materials?
B. How does he relate and associate material and the use of materials to skills?
   1. Is he stimulated?
   2. Is he curious?
   3. Is he creative?
   4. Is he distracted?
C. How well does he handle materials?
D. How does he follow directions?
   1. Does he reverse sequence?
   2. Does he sequence partially?
   3. Does he sequence completely?

V. Motor control

A. Dominance
   1. Is dominance established in the eye? In the hand?
   2. Is there consistency in all areas?
   3. Is there consistent or inconsistent ambiguity?
   4. Is there coordination in related areas of performance?
B. Body image (possible overlapping in this area between motor and intellectual)
   1. How does he associate size as compared with space?
   2. How does he manipulate his body in space?
   3. How well does he identify parts of his body by themselves or in relation to another person or a picture?
   4. How does he use his body (hands, etc.) to perform tasks?
      a. Can he use his hands as tools, i.e., pull them through sand or clay or make pictures in sand or clay?
      b. Can he use his hands as tools as pencils and pens or such objects as blocks and puzzles?
      c. Can he use scissors adequately?
      d. Can he control his body while walking, jumping, running, crawling, climbing or somersaulting?
      e. Can he sit attentively at a desk or table, in a chair or on a bench?
      f. Can he relax his body while lying down?

The above guidelines, along with other usual procedures, provide quick and relatively easy observations, but one of major importance to help teachers more quickly evaluate a child. Major research efforts are promising. Work is being directed toward increased understanding of causes of mental retardation, including both biochemical and experimental factors. Progress is being made in methods of identification, treatment, education, and more effective preventive techniques. Residential and community care are continually re-evaluated. Special public school placement is becoming more realistic and increasing rapidly. Cooperation and integration of services are becoming an everyday fact. Yet there is much to be done, and the regular classroom teacher must play a more active role in identifying handicapped children.
One of the issues in special education that will receive major emphasis in the 70's is the early education of the young exceptional child. As we all know, the earlier the educational intervention, the more likely it is that the handicapped child's problems will not be compounded with cumulative deficits. Therefore, those of us concerned with such children at the preschool level must ask ourselves what it is that teachers can do in order to deal more effectively with early education for exceptional children. Some of the directions that the staff of the Experimental Education Unit Model Preschool for Young Handicapped Children is pursuing, as well as several case studies, will be the focus of this discussion. Perhaps they will yield some answers to the question.

The case studies reported here are derived from the actual experiences of teachers and young children in several types of early education programs. The behavioral disorders and learning disabilities of all these children were so inextricably intermeshed that there was no way of deciding which caused which. Nor was such a sorting really necessary. Indeed, it was far more fruitful to view the children in terms of their characteristic behavioral responses (disordered, disabled, or otherwise) rather than in terms of an ambiguous label like learning disabilities, even though classifying labels may have some function at the administrative level in procuring funds for special education programs (Deno, 1970). Viewing children in terms of their actual responses demanded an entirely new attitude: teachers had to completely eliminate the term learning disabilities from their thinking. For, as every teacher of exceptional children knows from even a cursory examination of the literature, the term has by no stretch of pro-
fessional imagination a universal definition. Rather, the definition appears to vary according to the training and professional bias of the individual educator, clinician, or therapist using the term. Therefore, in order to eliminate such thinking, we emphasize that teachers should consider a disability to lie not within the child, but rather to arise from the interaction between the child and the environmental events (instructional materials, teachers, and so forth) that purport to teach him.

FOCUS ON CHILD'S CAPABILITIES

The learning disabilities label carries with it the assumption that the child, and not his environment, is at fault. But the same environmental event that produces what is called a disabled learner also produces a host of other distinguishable anomalies and mediocrities, not only in the exceptional population, but also in what is regarded as the normal population. For example, great value supposedly is placed on the creative individual. Yet the average home, school, and neighborhood environments, particularly in their social components, extinguish creativity before it has a chance to develop into the complex repertoire of responses that characterizes the much prized creative individual. All too often, unique or divergent responses are seen as troublesome noncompliance to be punished in a variety of subtle, and sometimes not so subtle, ways. Such punishment produces not creative children, but that great middle band of unimaginative, uncreative children whom adults complain about is incapable of thinking for themselves, incapable of taking initiative, incapable of making the heuristic leap.

In addition, the child loses his individuality when educators or clinicians insist on labeling him. In this connection, the marvelously descriptive phrase "hardening of the categories" (used by one clinician in voicing his doubts about the usefulness of classificatory terms) is still amusing, but such categories are all too sadly still in vogue. Too often the label, high sounding and erudite, carries assumptions and conceptions that generate a predisposition of futility regarding treatment; or it generates label influenced procedures that often shape the child into a full blown stereotype of what the label denotes.

The child's improvement can be kept in sharp, positive focus for diagnosis as well as for treatment only if educators concentrate on enhancing his capabilities, on extending his existing behavioral repertoire. This approach, of course, demands a descriptive diagnosis based on the child's observable behaviors. Instead of saying the child is aphasic, for example, the teacher should say that the child has a speech repertoire of 10 words, all of which are attached to appropriate referents. The latter affords a positive, benign, and accountable starting point from which each small gain can be measured.

The use of hypothetical constructs such as self-image, immaturity, or readiness bears little functional relationship to the developing child. Not only are such terms ambiguous (Tyler, 1964), they are unnecessary, as Baer (1966) argued so convincingly in his paper, "An Age-Irrelevant Concept of Development." If educators would but abandon their dependence on concepts like readiness and immaturity, the child's progress could then be measured not against some nebulous, peer group that exists only in statistical compilations, but against himself. A teacher could then say, "Last week Billy attended to a given task for a maximum of 2 minutes; this week he is averaging 4 minutes of attending behavior per task. If appropriate contingencies are maintained, his attending behavior should be extended to 7 or 8 minutes per task by next week."

CAREFULLY SELECT REINFORCEMENT CONTINGENCIES

Appropriate contingencies are the keys to improving the child's behavior. The term, contingency, refers to the relationship between a given behavior and its consequences. The consequences of a behavior may be one of several types. The consequence may be positively reinforcing; Billy's teacher praises him when he att-
to his tasks. They may be negatively rein-

They may be negatively rein-

Billy's teacher deprives him of outdoor play when he does not attend to his tasks. Or, they may be neutral: Billy's teacher fails to take any notice of his attending behavior. In general, behavior which is followed by neutral or negative reinforcement tends to decrease in frequency, while behavior which is followed with positive reinforcement tends to increase in frequency. In any case, overt behavior is affected by its consequences and can be altered by altering those consequences.

Therefore, a child's learning and development constitute essentially a complex history of reinforcement contingencies whereby given behaviors are gradually shaped into more refined or complex ones through shifting existing reinforcement contingencies or introducing new ones. Thus, there is justification for the assertion that a learning disability resides not in the child, but in the environment. More specifically, the disability arises from the inappropriate reinforcement contingencies provided by the environment; and even more specifically, it arises from the interaction between the behavior of the child and the behavior of the teacher, for the teacher is the most significant part of the environment. This thesis will be made abundantly clear in the presentation of case studies whose information was originally reported as experimental data from work with children (Allen, 1967a).

DEVELOP LEARNING ABILITY

The case studies that follow cover classes of behavior which are deemed necessary to sound general learning ability. Included are studies of gross motor skills, social behavior, personality adjustment, and intellectual behaviors in the young child. The final studies focus on span of attention and verbal skills—necessary requisites to any kind of classroom performance.

Turning Passiveness to Vigorous Play

The first case study deals with an exceedingly frail, withdrawn, and passive child who spent most of his time in desultory standing or idle sitting. He wandered out of doors with eyes downcast while his peers romped about on wheel toys and climbing equipment. If the child could become involved in active play, it was reasoned, all sorts of active social, verbal, and intellectual behaviors might be triggered. Use of the climbing equipment was therefore selected as a start-
ing point for shaping vigorous play. First, however, in order to determine precisely to what degree the child was engaging in climbing activities, baseline data (actual amount of climbing prior to intervention) were collected. After 6 days of systematic record keeping, data showed that the child spent less than 5 minutes of the 45 minute outdoor playtime in any kind of active play. Furthermore, he rarely came near the climbing equipment.

Following this analysis, shaping procedures were begun with what is technically called reinforcement of successive approximations to the target behavior—in this case, climbing on the climbing equipment. First of all, the teacher gave warm attention to the child for mere proximity to the equipment, then for coming closer, next for putting a hand on it, then a foot, and so on, until the child was actually engaged in rudimentary climbing. Thus, a teacher can make use of the shifting contingencies mentioned earlier whereby step by step the child has to engage in more and more complex components of the target behavior in order to win social reinforcement from the significant adults (teachers) in the preschool environment. During this shaping period, no teacher gave attention to the child when he engaged in sedentary activities.

This procedure resulted in a vast increase in climbing behavior, but only on one particular piece of equipment. At the end of 2 weeks of continuous reinforcement, the child was spending 30 to 35 minutes of every 45 minute outdoor play period on that piece of equipment. The goal for the final phase was to generalize the climbing behavior by making adult social reinforcement contingent on the child's use of any and all equipment in the yard. In other words, the child had to climb on several types of equipment instead of just one in order to receive attention from the teacher. This phase of the program was readily accomplished. Post-checks were made during the remainder of the year as well as several times during the following year. After observing the child at play with his peers, the teachers had no doubt that climbing and other forms of vigorous play had become an integral part of his behavioral repertoire and that he had acquired other desirable behaviors. He was a smiling, laughing, verbalizing little boy, keenly aware of his surroundings.

Reducing Dependency on Adults

The second case study involves a girl typically described as shy, withdrawn, and overly dependent on adults. Systematic observation during the baseline period indicated that (a) she spent a large portion of her school playtime in solitary play or with adults and very little of it with children and (b) when she did play with children, teachers seldom interacted with her.

Acting on the hypothesis that play with children, so necessary to optimum social adjustment, could be strengthened if it were reinforced by attention from the teachers, teachers planned modification contingencies and put them into operation. The teachers agreed never to attend to the child when she played alone or attempted to interact with them when no peers were present. On the other hand, they would give constant attention to her whenever she interacted with other children.

The records soon gave evidence that when she
reinforced (given approving teacher attention) for interaction with children, her social interaction rose from about 15 percent of her total play time to well over 50 percent. In the beginning, of course, teachers reinforced mere proximity or approach to children. At the same time, her interaction with teachers alone, which they did not reinforce, was reduced by half. After several weeks the teachers gradually reduced the amount and varied the timing of their attention to her play with peers; that is, they offered what is technically referred to as a low rate intermittent schedule of reinforcement. Nevertheless, the social behavior held up. It appeared to be largely self-maintaining because, of course, the child was now the recipient of a great deal of peer attention. Postchecks taken at random throughout the remainder of the school year indicated that the child continued to maintain appropriate social behavior.

END CATEGORIZATION

From this and the foregoing studies, there can be little doubt of the effectiveness of planning systematically the adult social reinforcement that exists naturally in the early educational environment of young children. It is obvious that behavior can be modified in either positive or negative directions, depending on the discretion (or lack of discretion) of significant adults. This discussion has been confined to the preschool age child for two reasons. One, this is the area of the author’s research interests; and two, many so called disabled learner might never have reached that state if appropriate contingencies had been employed early in his childhood—if his maladaptive responses had been modified one by one, step by step.

However, it is never too late—just as it is never too early—to alter reinforcement procedures. Much, however, depends upon the teacher—the teacher’s willingness to relinquish categorizing the child and instead to specify the behaviors that are to be changed. These may be disordered academic behaviors, verbal behaviors or social behaviors incompatible with the acquisition of appropriate responses characteristic of the child who is able to learn. If school failure is failure of teachers and schools, not of the children, as mounting evidence seems to indicate, it is indeed incumbent upon teachers to reshape the contingencies in the educational environment so they can enable children to acquire an appropriate repertoire of behavior.