

DOCUMENT RESUME

ED 297 523

EC 210 374

AUTHOR Sainato, Diane M.; Strain, Phillip S.
TITLE ((Early Intervention for Handicapped Preschool Children)).
INSTITUTION Pennsylvania Resources and Information Center for Special Education (PRISE), King of Prussia, Pa.
SPONS AGENCY Pennsylvania State Dept. of Education, Harrisburg. Bureau of Special Education.
PUB DATE Oct 87
NOTE 8p.
AVAILABLE FROM PRISE Reporter, 200 Anderson Rd., King of Prussia, PA 19496.
PUB TYPE Collected Works - Serials (022) -- Book/Product Reviews (072) -- Guides - Classroom Use - Guides (For Teachers) (052)
JOURNAL CIT PRISE Reporter; n18 Oct 1987
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adaptive Behavior (of Disabled); Adjustment (to Environment); Assistive Devices (for Disabled); Child Development; Courseware; Developmental Stages; *Disabilities; Educational Diagnosis; Educational Legislation; High Risk Persons; Infants; *Mainstreaming; *Normalization (Handicapped); Peer Relationship; Preschool Education; *Student Adjustment; Young Children
IDENTIFIERS *Early Intervention; Education of the Handicapped Act Amendments 1986

ABSTRACT

This issue of the newsletter focuses on early intervention for handicapped preschool children. The lead article, entitled "Promoting Independent Work Skills in Handicapped Preschool Children," highlights findings of a project designed to identify critical skills needed for independent functioning in mainstream preschool and kindergarten environments, select target behaviors for intervention, and identify effective intervention procedures. Issues addressed include promoting independent work skills in the absence of the teacher, increasing responding during group instruction, facilitating transition times between activities, and promoting independent seatwork skills. Additional sections of the newsletter describe a published research study on preschool peer interactions, review four current publications in the area of early intervention and developmental problems, summarize the Carolina Curriculum for Handicapped Infants and Infants at Risk, and describe a norm-referenced skill assessment instrument for children ages 2 and 3. The newsletter also provides a courseware review and descriptions of adaptive devices, as well as a review of two videocassette programs, one on the analysis of movement patterns from birth to 12 months in a developmentally normal child, the second on Public Law 99-457, Education of the Handicapped Act Amendments 1986. (JW)

ED 297523

U. S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

[Early Intervention for Handicapped Preschool Children]

PRISE Reporter

No. 18

October 1987

Pennsylvania Resources and Information Center for Special Education
200 Anderson Road
King of Prussia, PA 19406

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

S. Banerjee

FC 210 374



PARISE reporter

issues and happenings in the
education of handicapped students

Vol. 15, October 1987

pennsylvania resources and information center for special education 200 Anderson Road, King of Prussia, Pa 19406 215-265-7321

PROMOTING INDEPENDENT WORK SKILLS IN HANDICAPPED PRESCHOOL CHILDREN

Diane M. Samato, Ph.D.
Phillip S. Strain, Ph.D.

University of Pittsburgh
Pittsburgh, PA

Integration of handicapped students with their normally developing peers has been accepted as public policy. However, it is typical for school systems to mainstream only those students who do not demand an inordinate amount of teacher attention or drastic alteration in the school's accepted curriculum.

In addition, the specialized nature of preschool programs for handicapped students, i.e., level of supervision, degree of independence, complexity of task, may limit the handicapped child's chances for success in the regular preschool classroom. Handicapped preschoolers receive more instruction and supervision in specialized settings than do normal peers or handicapped children in integrated classrooms. The discrepancy between these learning environments may increase the incidence of behavior problems and decrease generalization of skills as the child moves from special to regular education.

The problem of preparing handicapped preschool children for transition to the "next environment" is difficult. Hops and Cobb (1973) have stated, "All children, regardless of ability level, must first be taught the prerequisite skills that will enable them to take advantage of educational opportunities offered in the classroom" (page 196). They have labeled these prerequisites "survival skills."

The Early Childhood Research Institute at the University of Pittsburgh has as its primary mission the development and validation of innovative strategies for assessing and teaching social and related skills to handicapped preschool children. One line of research at the ECRI has been to promote the work skills of these children.

The purpose of the Independent Work component has been to identify those skills critical for independent functioning in mainstream preschool and kindergarten environments, to select target behaviors for intervention, and to identify intervention procedures which would foster independence in handicapped preschool children. The following discussion highlights some of the findings of the past four years.

The "Special" Preschool Environment

The traditional preschool special education classroom has more than one instructional agent. Often the personnel roster

includes a teacher, one or two aides, and a collection of ancillary personnel (i.e., speech therapist, physical therapist, or volunteers). The ratio of adults to students is often very low, which is thought to facilitate "individualized instruction" and to promote higher achievement. Much instruction for handicapped preschool children takes place on a one-to-one ratio. While this may promote high rates of responding during instruction, *little responding happens in the absence of direct teacher attention*. Children in special preschools spend 16% of their time in 1:1 teaching situations. This is in direct contrast to children in regular preschool classrooms who spend 2% of their time in 1:1 instruction and 42% engaged in large or small groups with the teacher.

This finding has two direct implications. First, handicapped children in special preschool classrooms have *less opportunity to respond* and are *engaged significantly less often* in tasks than are their normally developing peers in nonhandicapped settings. It appears that the only times in which handicapped preschool children are engaged in any type of instructional activity is when they are with the teacher. Because of the nature of each child's special needs, the number of children requiring instruction and the traditional low teacher-student instructional ratio, each student spends little time engaged in task performance, in responding, or in a potential learning situation.

In order to alter this less than efficient teaching environment, techniques must be found to increase the amount of meaningful responding in which these children engage. One strategy is to promote *independent work skills* and *independent responding*. "Independent work" is defined as *responding in the absence of the teacher or responding within a higher teacher-student ratio*. The first part of this definition may include a variety of tasks from independent seatwork to longer strings of behavior such as managing materials, or certain self-help or self-care tasks. The second portion of this definition refers to receiving instruction in large or small groups.

Increasing Responding During Group Instruction

Importance. There are three major reasons why it is important to consider group instruction for handicapped preschool children: 1) it may be a more effective and efficient teaching arrangement, which may also afford a more efficient distribution of teacher time; 2) it offers opportunities for children to interact with and learn from each other; and, 3) group instructional arrangements may ultimately better prepare these children to function in subsequent, least restrictive environments.

Implementation. Teachers should carefully arrange the instructional environment to promote on-task behavior. For example, group instruction should take place in an area which is relatively free from distraction. The teacher should *not* seat disruptive children next to each other or near material shelves. In

addition, a consistent seating arrangement and schedule of activities should be followed for the 12 to 15 minutes of group instruction time.

To promote children's correct responding during group instruction time, teachers should give clear commands specifying what the child is to do. A command such as "John, would you tell us what the weather is today?" gives the noncompliant Johnny a chance to say "No." Further, it has been demonstrated that *modeling with instructions* is more effective than either instructions or corrections alone.

Research on group instruction at the Institute has shown that once teachers have taught children to behave appropriately during group instruction time, have become skilled at giving good commands, practice modeling the response prior to having children answer, and provide clear feedback, the teachers can then increase children's rates of responding by having the children practice choral or unison responding. To facilitate choral responding teachers taught children to respond on cue. It was found that choral responding is a good way for children to practice skills that have been presented to them, but which they have not yet mastered.

Facilitating Transition Times

Importance. One of the skills required of children in regular preschool settings is the ability to make transitions between activities. There are several reasons to teach behaviors which will facilitate transition time. First, it minimizes the amount of nonproductive time that children spend; second, it provides teachers with more time for instruction; and third, it decreases the number of behavior problems which are likely to occur during unstructured time.

Observations of special preschool classrooms showed that as much as 25% of a class session may be spent in transition from one activity to another. During this time, teachers either had to take children by the hand to move them into another activity, or they devised elaborate "line-up" procedures. In most observed transition times, many handicapped preschoolers were very disruptive.

In addition to observation of handicapped preschool children during transition time, previous studies examining the requirements for independent performance indicate that the ability to make smooth transitions between activities *without* excessive help from the teacher is a skill rated as either "very important" or "essential" by 85% of the teachers surveyed.

Implementation. Preschool teachers can facilitate transition times in several ways. In our work we have noted two specific strategies which not only reduce the amount of time it takes for preschoolers to complete transitions, but also promotes appropriate behavior. The first strategy relies on a "buddy" system. Children who are usually successful or behave appropriately during transition times are assigned as buddies for their peers who dawdle and become disruptive. The buddies receive brief role-play training in taking other children by the hand and leading them to the next area. We have also taught children to give verbal reminders about appropriate behavior. The buddies' role during often complex transitions (e.g., put your mat away, get a book and go to the reading corner) is to cue their partners verbally at each step of the transition.

Another effective procedure for facilitating transition times is to use an antecedent prompt or verbal direction. For our study we had teachers place a desk-top bell in one area of the room. Prior to children's release from an instructional area, the teacher told the children to "go to the table and ring the bell." Children seemed to enjoy ringing the bell and thus hurried to the next area. Throughout the study children maintained high levels of appropriate behavior during this intervention.

Promoting Independent Seatwork Skills

Importance. A skill vital to school success for all children is the ability to control one's behavior. The ability to monitor one's behavior, to make accurate and correct judgments about its appropriateness, and to alter one's subsequent behavior, are skills that serve one not only in school but later in life. The teaching of self-control and its components (e.g., self-assessment, self-monitoring and self-evaluation) are rarely addressed in the preschool curriculum. Yet without these skills, preschool children find school extremely difficult. (Their teachers find it even worse!)

The ability to self-manage fosters the child's ability to *work independently* on tasks assigned by the teacher. For teachers, this self management reduces the amount of teacher attention given to non-academic tasks (e.g., classroom management and discipline) and assists them in preventing common behavior problems which interfere with or preempt opportunities to learn.

Implementation. In order to promote the ability of young handicapped children to monitor and control their behavior during independent seatwork time, we used three procedures. First we taught children to self-assess using a self rating "book," then we taught them to match their own behavior ratings and the teacher's ratings, and finally we reinforced them for *accurate* assessment of their behavior.

To begin teaching children to self-assess, teachers asked them at 2 to 4 minute intervals whether or not they were working quietly and neatly. As children began to be more accurate in their evaluations, they began to use a self rating book (containing a picture of the child performing a desired "seatwork behavior" such as sitting quietly or raising a hand with a question) after they had completed their assigned tasks. After they had marked their own rating scales, the teacher showed each child his or her "official" ratings and reported whether or not the child had accurately assessed her or his behavior. Each child who accurately met the criterion number of matches for the day received a small sticker or prize. It is important to note that we were interested not only in appropriate behavior, but accurate assessment in reporting of all behavior by the child.

Once we had established that children could accurately assess and match their ratings we withdrew each component of the program, beginning with the reinforcement for accuracy, then matching with the teacher, and finally the self rating books. It is interesting to note that by the end of the study three out of four children were able to work throughout a twenty minute seatwork period with very little teacher prompting and without the use of the self management program. For one child, the self rating book was the only component needed to maintain his appropriate behavior during an independent seatwork time.

In summary, success in less restrictive environments for handicapped preschool children depends on a wide variety of factors. Facilitating handicapped children's independent functioning in classroom settings through the promoting of appropriate child behavior during group instruction, transition time and independent seatwork time is an important step in integrating these children with their normally developing peers.

References

- Hops, H. & Cobb, J. (1973). *Survival Behaviors in the Educational Setting: Their Implications for Research and Intervention* (pp. 193-208). In L. Hamerlynck, Handy & E. Mash (Eds.). **Behavior Change: Methodology, Concepts and Practice.** Champaign, IL: Research Press.

Preparation of this manuscript was supported by Contract No. 300-82-0368 (Early Childhood Research Institute) from the Department of Education to the University of Pittsburgh. However, the opinions expressed herein do not

necessarily reflect the position or policy of the U.S. Department of Education, and no official endorsement by the Department should be inferred. Partial support for this manuscript was also provided by Grant No. MH37110-01A1 from the National Institute of Mental Health to the University of Pittsburgh.

Diane M. Sainato is a Principal Research Associate for the Early Childhood Research Institute, and the Associate Director of the Matilda Theiss Child Development Center at the University of Pittsburgh. Her particular area of interest is the prevention and reduction of behavior and learning problems in young children.

Phillip S. Strain is Associate Professor of Psychiatry and Special Education, and Principal Investigator of the Early Childhood Research Institute. Dr. Strain's primary research interests are peer-mediated social skill interventions for handicapped preschool children.

RESEARCH BRIEF

Study Examines Preschool Interaction

This study investigated the effect of three setting events (environmental variables or conditions) on peer interactions within four preschool activity contexts (free play, snack/lunch, teacher-directed individual activity, teacher-directed group activity). The setting events were a) teacher interactions with children, b) type of material in use, and c) peer pressure. Fifty-three children from six day care and preschool programs in northern Utah participated. Children ranged in age from 3 to 5 years and were equally distributed by sex. Socioeconomic family status ranged from lower to upper middle class income.

The behavioral measure used was an observation procedure designed to obtain concurrent information regarding selected preschool setting events and children's interactions with peers. Four categories of teacher behavior were observed, including 1) verbalization or motor behavior directing a group to engage in or decrease some activity, 2) verbalization or motor behavior directing a single subject to engage in or decrease an activity, 3) prompts toward a subject to engage in peer interaction or 4) no verbalization or motor behavior directed toward a group or single subject.

Materials used by the children were coded for individual use, group use or multiple use. The third setting event observed was related to three categories of peer presence: proximity (one or more children in an imaginary circle around the subject); orientation (eye contact between subject and peer) or alone (no children in proximity to subject). Interaction was coded as being either positive or negative and as being initiated either by target child or reciprocated.

In addition to observational data, empirical probabilities were determined and charted. Greatest peer interaction occurred when teacher directed the children least or had no interaction with the children (as in free play). Two behaviors occurred infrequently, peer orientation (eye contact), and negative (aggressive) behavior. Setting events of material use and peer presence had little effect on peer interaction. Results are discussed in terms of how teachers can alter their behavior to promote peer interaction.

Innocenti, M. S., et al. **A Naturalistic Study of the Relation between Preschool Setting Events and Peer Interaction in**

Four Activity Contexts. *Early Childhood Research Quarterly*, 1986, 1, pp. 141-153.

SOFTWARE/HARDWARE

Following Directions: One and Two Level Commands provides training and practice in following one and two step oral directions that progress through a sequence of increasing length and complexity. The vocabulary and content center around spatial, directional and ordinal relationships. The natural voice and graphics allow the program to be used with any group ranging in age from preschool through elementary grades that needs to develop skills in understanding, retaining and responding to oral commands.

The teacher uses a set of menus to select the stimulus set from the spatial relations or directionality disk, chooses a command level (one-level, sequential, or two-level), and sets the parameters that allow flexibility of student response in such areas as maximum time allowed for input, criteria for advancement, and instructions for using the program. Scores are kept on the screen and the interaction ends when the student meets the criterion level set by the teacher. A testing format eliminates the instruction, cueing and feedback found in the lessons and provides the student with only the oral command and a visual stimulus.

Special Adaptation for the Handicapped

Because there is no required reading and the content and vocabulary are geared to a slower learning student group, this program is appropriate for a wide range of ages and handicaps. The teacher is able to select from a variety of response approaches allowing the program to be useable with a wide range of different capabilities. If a youngster can use the keyboard, direct selection only requires knowing and using five keys. For the physically disabled, a single switch can be chosen as the program interface and the scanning speed can be adjusted to the user's needs. Use of the **TouchWindow**, from Personal Touch, can provide the easiest access, enabling the student to simply point to the correct location on the screen. This interface is particularly helpful for use with very young, cognitively impaired or highly distractible students, since they only have to deal with the verbal message and the screen. A joystick or game paddle can also be used as a response device.

Laureate Learning Systems, Inc., 110 East Spring St., Winooski, VT 05404. 1986. \$225.00. Intended Audience: Preschool-Elementary. System Requirements: Apple II (64K minimum), Echo Speech Synthesizer. Contents: 2 disks, manual.

The **TouchWindow** is an add-on peripheral that converts the computer into a touch screen system. The window provides a transparent, pressure sensitive surface that allows the user to touch the monitor to input responses instead of using the keyboard. An accompanying disk, Master Touch I or other commercial software adapted for use with the **TouchWindow** enables the computer user to respond by touching the screen with light pressure from a finger, blunt pointer or stylus. The device attaches to the monitor with velcro strips and is plugged into the

external gameport. It is easily removed from the monitor and when placed on a flat surface the **TouchWindow** can function as a graphics tablet or interactive book. Accompanying software and a specially developed book convert the device for these purposes. The **TouchWindow** software provides programs for word processing, constructing a simple spreadsheet, doing a puzzle, playing checkers or drawing freehand pictures that can be saved and printed. Other programs work with a book that attaches to the window allowing children to play simple games and quizzes by touching the correct parts of the page.

Adaptations and Special Considerations for the Handicapped

For the very young, developmentally disabled or motorically handicapped this new device offers a number of attractive features. Many handicapped students find the keyboard difficult to manipulate, have problems locating the correct keys or simply find the need to respond to a keyboard a difficult concept to master. Therefore a direct response to the screen eliminates a hurdle to effective computer use for many students. The monitor can be placed at an accessible height, with the keyboard and disk drive placed out of the way of the student. Software from Laureate Learning, Sunburst, Edmark, Mindscape and The Handicapped Children Computer Cooperative Project has been designed to work with the **TouchWindow** and the Apple II family of computers. Many of these programs are well suited to the skill levels of special populations; some titles that also utilize the Echo speech synthesizer provide a true multisensory learning environment.

Personal Touch, 4320-290 Stevens Creek Blvd., San Jose, CA 95129, 1985. Appropriate for all students and instructional levels. Hardware requirements: Apple II or IBM PC, 10" - 15" monitor. Contents: Touch screen, 2 manuals, disk, stylus.

ASSESSMENT

The Cognitive Abilities Scale (CAS): An Educationally Relevant Test for Two and Three-Year Old Children, provides norm-referenced assessment in five skill areas necessary for cognitive development. These are:

Language — 30-item subtest assesses the child's ability to use and understand oral language. It covers semantics, syntax and morphology as well as assessing expressive or receptive knowledge of nouns and pronouns, ability to use regular plurals, word endings and articles, and to combine words in speaking.

Reading — 16 item subtest covers book-handling and comprehension skills.

Mathematics — 22-item subtest assesses areas such as seriation, mathematical concepts, number recognition, meaningful counting, matching numbers with quantities, and matching sets.

Handwriting — 6 items measure skills involved in manuscript writing, whether by copying or imitation.

Enabling Behaviors — 14 items cover the child's ability to remember auditory information and to imitate vocal and nonvocal behaviors.

Because it includes nonvocal items, the **CAS** allows a comprehensive assessment of cognitive development in children

whose speech is difficult to understand or who have problems with the noncognitive aspects of speech, such as articulation or slurring.

Four types of scores are provided. The five subtests yield raw scores, percentiles and standard scores. The Cognitive Quotient, a general index of the child's overall level of cognitive ability, is the most comprehensive score. The Nonvocal Cognitive Quotient may be used in place of this when necessary.

Components of this test are: Examiner's Manual which contains directions, scoring tables and technical data on the standardization, reliability and validity of the test; 25 Record Books; an 8-page Child's Book; Picture Cards and toys.

PRO-ED, 5341 Industrial Oaks Blvd., Austin, TX 78735, 1987, \$93.00.

DISSEMINATION HAPPENINGS

National Diffusion Network

The following programs are available for adoption or adaptation through the National Diffusion Network (NDN). For further information on this or other NDN Programs, Pennsylvania educators should contact the State Facilitator, Research and Information Services for Education (RISE), 725 Caley Road, King of Prussia, PA 19406, 215/265-6056.

Project SKI*HI Outreach is a comprehensive program that provides screening, audiological, diagnostic and assessment services and a complete home intervention curriculum for hearing-impaired children (birth to age 6) and their families. This program includes a system for hospital screening for high-risk infants. A diagnostic and supportive entry process ensures efficient, expeditious entry of children and families into the program. The home intervention curriculum includes a hearing aid program, a total communication program, an auditory program, and a language program. Psychological, emotional and child-development support are provided for parents in the home. In addition, weekly and comprehensive quarterly assessments of child and family are performed.

A Regional Demonstration Program for Preschool Handicapped Children is a comprehensive program of educational services intended to increase the verbal, perceptual, motor and general cognitive skills of children with the following handicaps: speech impaired, emotionally disturbed, physically handicapped, learning disabled, deaf or hearing impaired, blind or visually impaired, mentally retarded and autistic. Unique features of this exemplary program include:

- The *Interactive Teaching Process* in which special-education teachers, teacher aides and clinical team members provide diagnostic/prescriptive teaching, language intervention and positive reinforcement on a continual basis in the classroom.
- The *Transdisciplinary Team Model* through which team members train each other and share roles in assessment, intervention, and consultation.
- The *Parent Involvement Model* which includes the parent volunteer system, parent group and an individualized approach to parent participation.

CURRENT CITATIONS

Beckman, Paula J., et al. **Translating Developmental Findings into Teaching Strategies for Young Handicapped Children.** *Journal of the Division for Early Childhood*, 1986, 10(1), pp. 45-52. This article focuses on competencies important to direct interaction between teacher and child and outlines how general findings about the young child's interactions with the environment can be applied in intervention programs. To accomplish this purpose the authors review the literature dealing with interactions occurring between young children and their caregivers, identify teaching principles based upon these findings, and provide illustrations of how these principles can be applied to intervention.

Current theory and research place developmental importance on features of children's interactions with the environment that includes 1) responsivity to child cues, 2) appropriate language input, 3) active involvement with the environment, and 4) achievement of an "optimal match" between the child's level of functioning and task demands. These four principles can be applied to interventions by identifying factors found to be consistently important to development in young children, by identifying applications from the developmental literature which pertain to children with handicaps, by systematizing these applications in direct work with handicapped children and in teacher training efforts, and by documenting the ways these principles do and do not apply to handicapped children.

Bickman, Leonard & Weatherford, David L. (eds). **Evaluating Early Intervention Programs for Severely Handicapped Children and Their Families.** PRO-ED, 5341 Industrial Oaks Blvd., Austin, TX 78735, 1986, 370 p. \$19.00. This book defines the current status of early intervention evaluation. Experts from two related areas of discourse, early intervention and evaluation, have contributed insightful articles to confront the issue of effectiveness. Part I describes the characteristics and needs of severely handicapped preschoolers and the intervention programs which serve this population. Both noncategorical programs and programs exclusively for the severely handicapped child are described including the program objectives, fiscal support, service delivery models, staffing patterns, and curricular focus. Part II offers an overview of the efficacy of early intervention programs; sources of evaluation practice which examine the needs, purposes, questions and methods of evaluation; and the effects of intervention on the families of severely handicapped infants and preschoolers. The measurement issues of the educational programs and of family functioning are examined in Part III. The final section of the book is concerned with the impact and utilization of evaluation research on policy making.

Bricker, Diane D. **Early Education of At-Risk and Handicapped Infants, Toddlers, and Preschool Children.** Scott Foresman & Co., 1900 East Lake Ave., Glenview, IL 60025, 1986, 438 p. \$27.95. The author offers students and practicing professionals a contemporary view of the field of early childhood intervention in a two-part format. Part one of the book presents the theoretical foundations of delivering services to populations of at risk or handicapped infants and children. Part two describes the program development and implementation of such services

with concrete intervention strategies. The knowledge gleaned from this format will enable students, trainees and field personnel to evaluate outmoded practices and replace them with more effective approaches.

Bricker's basic idea is that theory must serve as the foundation for the development and implementation of early intervention practice. This integrated approach increases understanding of how to replace or alter ineffective procedures. The author does not offer the reader just one delivery approach, but presents theory and practice in a manner that allows for their incorporation into a number of intervention formats.

Keogh, Barbara K. **Developmental Problems in Infancy and the Preschool Years.** JAI Press, Inc., 36 Sherwood Place, P.O. Box 1678, Greenwich, CT 06836-1678, 1986, 283 p. \$49.50. Keogh's fifth and final volume in the *Advances in Special Education* series surveys the development of potential problems during infancy and the preschool years from the vantage points of various authors' perspectives, interests, and areas of expertise. The result is a definitive review of contemporary theory regarding very young children at risk and its implications for assessment, intervention, education, and prognosis.

Central to the volume's message is the application of a transactional model which conceptualizes the child's interactions with his/her environment as a shifting balance between risk factors and protective factors. To understand the child's development one must consider these multiple interactions or transactions, some of which facilitate growth and resiliency, some of which disrupt growth, resulting in vulnerability.

INSTRUCTIONAL MATERIALS

With the passage of P.L. 99-457, infant programming has become an area of interest, especially since there are few curricula designed to address the specific program needs of the handicapped infant. The **Carolina Curriculum for Handicapped Infants and Infants at Risk** was designed to provide curricular intervention strategies appropriate for use with handicapped youngsters functioning in the birth to 24 month developmental age range. Items are included in an easy-to-use format, and materials necessary for teaching, teaching strategies and criterion measures for evaluating performance are provided for all items. It is appropriate for, and has been pilot tested in, home intervention programs, center-based infant stimulation programs, and developmental day care centers. It is designed to be used by both professionals and paraprofessionals, and curriculum based assessment and developmental progress charts are part of the package.

A strong feature of the **Carolina Curriculum** is the breakdown of the five developmental domains (fine and gross motor, self-help, communication, and cognitive development) into twenty-four refined areas. Examples of areas not commonly addressed in early childhood curricula include: tactile integration and manipulation, spatial concepts, symbolic play, gestural communication, feeding, and bilateral hand activity.

Johnson-Martin, Nancy, et al. **Carolina Curriculum for Handicapped Infants and Infants at Risk**, 1986, \$29.95. Paul H. Brookes Publishing Co., P.O. Box 10624, Baltimore, MD 21285-0624.

VIDEO

Neuro-Developmental Analysis of Normal Movement Patterns: Neonate — Twelve Months, introduces the viewer to the "milestones" of normal child development and offers guidelines for the analysis of movement patterns of a normal, male child from birth to 12 months. Information is presented on the following, through each month of development:

- normal components of movement during the first year of life.
- integration of reflexes through volitional movement control.
- antigravity extensor and flexor control.
- development of lateral righting responses.
- protective and equilibrium reactions, and
- variability of normal development

Also discussed is the interrelationship of gross motor, fine motor, and oral motor development.

In Part 1 of this series, one meets Ryan, a full-term infant, and watches his development and movement patterns through 3 months of age. Part 2 covers months 4 through 7, and part 3 finishes the first year. Throughout the series each month is discussed separately, with information presented as Ryan reacts to his environment and various stimuli.

3 - 1/2" VHS videocassettes/1 teacher's guide/
25 minutes/color/\$385.00/1985.

Children's Hospital Medical Center, Ellena and Bethesda Aves.,
Cincinnati, OH 45229.

PRISE reporter is published by the Pennsylvania Resource and Information Center for Special Education. Miriam Price, Director. PRISE is a project funded by the Pennsylvania Department of Education Bureau of Special Education through P.E. 92-142 and is administered, managed, and supervised by Montgomery County Intermediate Unit #23, Erlenheim, Pennsylvania. Dennis Harden, Executive Director.

The policy of MCIU #23 is to provide equal opportunity in all of its educational programs, activities, and employment. In compliance with Title VI, Title IX, and Section 504 no person will be subject to discrimination on the basis of race, color, religious creed, national origin, sex, age, or handicap. The opinions expressed here do not necessarily reflect the position or policy of PDI or MCIU #23, and no official endorsement should be inferred.

Commonwealth of Pennsylvania

Robert P. Casey, Governor

Department of Education
Thomas K. Gullfoad
Secretary

Division of Federal Programs
and Special Projects
William E. Ohman, Chief

PRISE service funded by Special Education Resource Center, C-1, ESER-90.

P.L. 99-457 The Next Step Forward for Handicapped Children describes the new federal legislation, passed in October 1986, which strengthens the current Education of the Handicapped Act. It highlights the four major areas of the new law which:

1. Mandates that states provide free public education for children ages 3 to 5 by the 1990 school year and increase financial support for these children

2. Facilitates the participation of non-education services and resources in meeting educational needs of handicapped children ages 3 to 21. The law introduces intervention services such as family training, speech pathology and audiology, occupational and physical therapy, case management, psychological services, medical diagnosis, early identification, and health services and the components of the Individual Family Service Plan.

3. Provides new state grants for handicapped children from birth to age 2. Specific information is provided on securing Part H Grants.

4. Strengthens and expands discretionary programs. For example, the law adds early intervention and preschool activities to the Regional Resource Centers. Also the Center will be required to provide assistance in developing grant writing skills.

The new law also provides for special education and transitional services. It clarifies the concept of transition and emphasizes vocational and life skills. Parent training centers are to increase attention to the parents of handicapped children from groups that have been underrepresented in the past, and new centers are to be developed in unserved areas. Another provision is the establishment of a National Clearinghouse for Special Education, which will collect and disseminate information on the need for personnel in educating handicapped children, provide information on careers and training, link personnel to jobs, and help colleges and universities meet state standards. Finally, part G of the law promotes the use of new technology, media, and materials in educating the handicapped.

1/2" VHS Videocassette/21 overhead masters.

2 books, 4 handouts, 1 teacher's guide/23 minutes/color/
\$147.00/1987.

Council for Exceptional Children, 1920 Association Drive,
Reston, VA 22091.

PRISE reporter

200 Anderson Road
King of Prussia, Pennsylvania 19406

This issue of the **PRISE reporter** focuses on the subject of early intervention for handicapped preschool children. Topics addressed include current research findings, early diagnosis of handicaps, developmental stages, intervention practices and teaching strategies.