

FOCUS ON EXCEPTIONAL CHILDREN

Assessing Severely Handicapped Children

Rebecca F. DuBose, Mary Beth Langley, and Vaughan Stagg

Public Law 94-142 mandates the nationwide provision of special education and related services for all handicapped children, *regardless of the severity of their handicap*. More specifically, children must be assessed, and individualized education plans must be provided. Each plan must specify: (a) the child's present levels of educational performance; (b) annual goals, including short term objectives; (c) educational services to be provided; (d) the dates for initiation and anticipated duration of services; and (e) appropriate objective criteria and evaluation procedures for determining whether instructional objectives are being achieved (Section 602 [4] [19]).

Across the country, school systems are feeling the strain on available resources. Particularly alarming is the scarcity of trained manpower to meet the special educational needs of severely handicapped children. Sailor, Guess, and Lavis (1975) proclaimed "an immediate need to provide a cadre of competent, qualified teachers with allied personnel and resources to deliver an effective and functional educational program for severely handicapped" (p. 201).

During the past four years, attention has focused on the immediate shortage of trained teachers and the critical factors that constitute necessary teacher competencies for directing the educational program of severely and multiply handicapped children (Altman & Meyen, 1976; Brown & York, 1974; Meyen, 1975; Sailor, Guess, & Lavis, 1975; Sontag, Burke, & York, 1973). These concerns are being addressed by staff members of teacher-training institutions singly and in concert with personnel in other training programs.

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Little has been done to train allied personnel to fill effectively their assigned roles in services to severely impaired children. The substantive knowledge of testing and measurement included in the training of diagnostic personnel has proved to be inadequate. Generally, such procedures have been concerned with norm-referenced testing and have not included task analyses, criterion-referenced measures, or special adaptations for use when serious impairments notably affect performance. Clearly emerging are needs for (a) diagnosticians whose training has included a heavy emphasis on the concerns of severely handicapped children, and (b) a workable model for planning, executing, and evaluating an educational service system that can be expected to make a difference in the behavioral expressions of severely impaired children. This article will concentrate on a portion of the latter concern and present a paradigm for the analysis and instruction of severely handicapped children.

THE PROBLEM AS RELATED TO SEVERELY HANDICAPPED PERSONS

Severely and profoundly handicapped children are newcomers to public schools. Their behaviors and needs

are disparate from those of their age-mates. Sontag, et al. (1973) offered a behavioral description of severely and profoundly handicapped children:

those who are not toilet trained; aggress toward others; do not attend to even the most pronounced social stimuli; self mutilate; ruminate; self stimulate; do not walk, speak, hear, or see; manifest durable and intense temper tantrums; are not under even the rudimentary forms of verbal control; do not imitate; manifest minimally controlled seizures; and/or have extremely brittle medical existences (p. 21).

Persons manifesting the behaviors described have been traditionally labeled as "untestable." At best, interview scales provided the referring agent with a label or score but little or no additional information. The possibility of intensive programming to teach the person new skills lay dormant.

Examiners were trained in the administration of traditional mental measures and knew little about the assessment of preacademic children. Few of them were skilled in the assessment of physically and sensorily impaired persons. Additionally, examiners had not been trained to render assessments leading directly into classroom programming. Thus, both the person assessed and the examiner responsible for the assessment have been relative strangers to each other.

THE PROBLEM AS RELATED TO THE TASK

With the passage of mandatory education legislation, assessment of severely handicapped children via norm-referenced instruments has become the target of consistent criticism (Hunt, 1975; Jedrysek, Klapper, Pope, & Wortis, 1972; Keogh, 1972; Knobloch & Pasamanick, 1974; Mann & Suiter, 1974; Meier, 1975). Intervention agents relying on information from evaluations based on norm-referenced testing have frequently received only *confirmation* (in the form of a statistical abstraction) that a child was delayed. Rarely do evaluations based on such information supply the agent with insights into how the child learns or where to proceed next in the intervention process. As Haywood, Filler, Shiffman and Chatellant (1975) noted, a normative approach results in comparisons with respect to the acquisition of products. In addition, this approach has led to a static classification of children.

The most defensible use of normative assessments is for policy makers and researchers. Because of the impact of public policy decisions on large numbers of children,

FOCUS ON EXCEPTIONAL CHILDREN is published monthly except June, July, and August as a service to teachers, special educators, curriculum specialists, administrators, and those concerned with the special education of exceptional children. This journal is abstracted and indexed in *Exceptional Child Education Abstracts*, and is also available in microfilm from Xerox University Microfilms, Ann Arbor, Michigan. Subscription rates, \$10.00 per year. Copyright 1977, Love Publishing Company. All rights reserved. Reproduction in whole or part without written permission is prohibited. Printed in the United States of America. Second class postage is paid at Denver, Colorado.

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group data are necessary for the formulation of those decisions. Researchers, as well, have a justifiable interest in normative techniques, as they need to apply the same criteria across children and relate their performance to consensually accepted quantifiable standards. Product-oriented measures can play an important role by providing a starting point in the diagnostic process, as well as a picture of the strengths and weaknesses of the child's learning strategies across a variety of learning situations. This is necessary, but it is not enough. Knowledge of the child's success or failure in mastering different skills or associations is needed following a determination of his strengths and weaknesses; one must discover the amount of teaching or intervention required for the child to reach a particular developmental goal or, in other words, the discovery of the degree of modifiability. This information can best be assimilated through a process-oriented approach.

THE PROCESS-ORIENTED MODEL

An alternative to the product-oriented approach, a process-oriented approach (see chart), allows one to capture the sources associated with the behavioral, social, physical, and mental deficiencies that characterize the severely handicapped child. Such deficiencies are multidimensional in nature and are dynamic developmental phenomena rather than static states. A dynamic view of the problem associated with severely handicapped children creates a different set of concerns with respect to assessment. Proponents of a process-oriented approach make the following assumptions:

1. Every child, regardless of his level of functioning, is an active agent operating on his environment, and this activity can be measured.
2. Assessment determines the child's needs in psychological, educational, and social domains, both independently and in relation with one another.
3. The learning processes employed by the child can be identified, measured, and modified within the assessment milieu.
4. The child's performance on a series of learning tasks is the most appropriate criterion for determining modifiability of learning processes.

A number of investigators have found process orientation to be a functional approach. Haeussermann (1958)

advocates an adaptive-capacity approach concerned with a qualitative analysis of a child's performance. Successes and failures are explored in terms of the sensory, experiential, motivational perspectives or other aspects of the child's psychological organization. Schucman (1957) found a test-teach-test model more sensitive than traditional testing methodology for determining the educability of severely mentally retarded youngsters. Budoff (1973) and Feuerstein (1970) found a similar paradigm effective with higher functioning children.

As mentioned previously, the severely handicapped child himself poses an assessment dilemma since he has passed the most optimum time for learning skills in all developmental areas. Before one can determine why a child functions on a specific level, one must understand the dynamic interrelationship of motor, cognitive, language, social, and self-care skills and the effects on the development of the child passing the period of optimum readiness. The thrust of the assessment process must be on the interaction of abilities across all skill areas. Emphasis on isolated learning incidents or previously acquired products does not allow the examiner to observe the dynamic interchange among skills that facilitates the integration of experiences or to observe where the breakdown is occurring that inhibits this integration and, thus, the learning sequence.

While static, product-oriented measures can supply information in the initial stages of the assessment process, a dynamic, process-oriented approach provides a description of the intervention procedures designed to modify learning processes in order to enhance learning efficiency. Such an approach would not lead to a categorization of products or children that characterize typical evaluation reports which many authors have called "litanies of failure."

Parameters of the Intake Process

The interview/intake process provides team members with an opportunity to gather information crucial in the planning of an evaluation. Such data can be used to anticipate difficulties that may be encountered, to schedule team members so as to maximize their time and skills, and to determine relevant agencies to be contacted.

Referral. The agency referring the child to the diagnostic team will serve in an initial contact and liaison role. The agency must get a report from the team and, if possible, should participate in the team evaluation.

History. A thorough developmental history should be gathered at this point, and data regarding pre- and perinatal status should be obtained. Information regarding the sensory, physical, language, and self-care milestones experienced by the child can be ascertained. Particular attention should be given to real-life behaviors in the home and school that reflect these domains.

Parents should be made aware that they are considered to be an integral part of the assessment process. They possess far more knowledge about many aspects of the child than any team will ever know, and their views and opinions deserve respect. The use of family members as participant-observers in the assessment process provides them with an opportunity to pose questions and receive feedback, and allows team members to note family reactions and priorities that must be given serious consideration in formulating subsequent programming.

Agency input. The families of handicapped children often have had contact with a variety of medical, social, and educational agencies. Agencies that parents have contacted for previous evaluations or services should be noted for later contact. One should also obtain an estimate of the parents' knowledge of agency findings. Information from these agencies can supply the evaluation team with pertinent information. Such information needs to be integrated into the programming that eventually is recommended for the child and family. As such agencies are often involved in supporting the family in the community, they need information that is pertinent to their services. Provisions should be made for continuous communication with such support services so that a coordinated plan of intervention can be implemented.

Parameters of the Assessment Process

The assessment milieu. The impact of the context in which behavior takes place has been documented by various investigators (Barker, 1968; MacDonald, 1976; Sroufe, Waters, & Matas, 1974). Bruner (1973) stressed the necessity of focusing on the interaction of the child with the environment rather than concentrating on either the child or the environment as independent entities. Bortner and Birch (1970) noted that glaring differences occur in estimates of potential when alterations are made in performance conditions. Their review indicated that levels of concepts and skills are reflections of the interaction between potential and actual circumstances of training and task requirements.

The use of cross-situational assessment procedures provides a means of distinguishing performance from capacity. Such an approach leads to a conceptualization of the goodness of fit between the child and his learning situation. Certain kinds of child/environment fit will produce directions of behavior and the successful expression of selected aspects of the child's capacity. Changes in the environmental context may facilitate other types of performance that reflect different capacities.

Throughout the assessment process, the examiner must be attuned to behaviors other than those specifically being assessed. An excellent opportunity to observe language skills exists during motor testing. Fine-motor abilities are best evaluated during functional activities, such as those required for self-care.

The interrelationship of skills becomes even more critical when assessing the cognitive and social interaction skills of a child functioning within the first half of the sensory-motor period. Observing how the nonambulatory child moves to obtain a preferred object, searches for a dropped pacifier, and uses his upper extremities to manipulate and discriminate the functions of rattles, cups, bottles, and spoons alerts the examiner to the child's concepts of object permanence, object concept, construction of objects in space, imitation, causality, and means-ends relationships, as well as to the child's awareness of his environment and the people in it. The child's social interaction with significant others can be viewed in isolation and contrasted with his performance in different contexts, and with strangers.

Screening

Before planning extensive assessment procedures, each participant on the evaluation team should gather valuable screening information that will help in selecting the appropriate formal and informal tools that will yield the best data on the child. The primary purpose of screening is to identify strengths, weaknesses, and significant developmental deficits within the total behavioral complex at a particular time in a child's development (Banus, 1974; Friedlander, 1975). As the child enters the evaluation setting, the examiners can informally begin to acquire screening information needed to address the following areas of the child's development: (a) understanding and awareness of surroundings; (b) visual, auditory, and physical means of exploring surroundings; (c) abilities to operate on surroundings; (d) respon-

siveness to various stimuli; and (e) reaction when reinforced through different means.

Frequently used formal screening instruments include the Denver Developmental Screening Test (Frankenberg, Fandal, & Dodds, 1970), the Developmental Screening Inventory (Knobloch, Pasamanick, & Sherard, 1966), and the Developmental Profile (Alpern & Boll, 1972). A recent addition to this field, the Developmental Activities Screening Inventory (DASI) (DuBose & Langley, 1977), has been adapted for use with both nonverbal and visually impaired children.

Benefits of screening are numerous. Information derived from screening visual, auditory, and physical abilities is critical to all aspects of assessment. Screening can identify the most advantageous size, form, and intensity of materials, the best means of presenting tasks to the child, and the most effective arrangements to be used during the assessment. Decisions can be made regarding the use of reinforcements, either tangible or social. Formal tests or parts of them that will be most appropriate for the child will emerge from screening. When initial screening information can be shared with other members of a multidisciplinary team, all examiners are better prepared for eliciting from the child optimal responses for maximizing his performance.

Assessment of rapport. Establishing a working rapport is the examiner's responsibility. The tone of the assessment depends upon the physical and sensory impairments of the child, chronological age, developmental level, and emotional status. While the examiner must be flexible in his approach, and sensitive to the child's total behavioral repertoire, he must maintain control of the testing situation.

Very young children will optimally respond after several minutes of close physical contact during which the examiner rocks, tickles, and babbles to them. Rapport may be maintained by placing the child on a large mat or pillow and letting him first manipulate materials there rather than immediately sitting him at a table. Often, a cooperative relationship with an older child can be created if the examiner leaves on the table a manipulative toy for the child to examine.

The severely handicapped child who refuses to comply with task demands, throws materials, and is physically abusive to both self and the examiner must first undergo behavior management training within the testing situation. Techniques found most effective have been ignoring inappropriate physical or verbal behaviors, responding

through social or tangible reinforcement to desirable responses, rewarding performance of less desirable behaviors with highly preferred activities, differential reinforcement of other behaviors, and physically manipulating the child through the task.

Patience and time are of utmost importance, as some children may require several days before developing a readiness to comply with demands. How quickly the child adapts to limits placed upon his behavior and establishes a working rapport with examiners is a critical issue to consider when recommending placements and teaching strategies.

Assessment of comprehension. Before the examiner can begin to assess the child's acquisition of cognitive, language, motor, and social skills, he must first be able to communicate expectations of demands on a level the child understands. A major difficulty encountered in testing severely handicapped children is deciding whether an inappropriate response resulted because the child lacked the conceptual basis of the task or because he failed to comprehend the examiner's directions. Too often the severely handicapped child is declared untestable as his lack of response is interpreted as a lack of ability.

Haeussermann (1958) stressed that realization of the child's readiness for developing a mode of communication depends on observations of the child's performance that, in turn, indicate his level of comprehension. Banus (1974) pointed out that often the child knows the answer to a problem but the directions for eliciting the expected performance are too difficult for the child to understand. Altering the level of directions required to convey task demands will often evoke a successful performance. Imposing more structure by eliminating the number of stimuli and by offering verbal, visual, or physical cues are among the most common means of adapting tasks so that the demands are more comprehensible.

Assessment of response patterns. The quality of the child's response to tasks reveals information about his thinking processes and generalization abilities. Carrow (1972) enumerated the most common types of responses required by testing instruments. The child's approach to task demands indicates whether a response was motoric or conceptual and how he seeks information, in addition to identifying possible factors inhibiting a successful performance.

Minimal responses are exhibited by children who indiscriminately mouth or bang materials. Frequently,

severely handicapped children impulsively begin to manipulate task media, performing an appropriate motoric task rather than attending to cognitive or linguistic demands. Perseveration is not uncommon, and often children respond automatically to a task set, demonstrating the effects of previous repetitive interactions with similar or identical material or contexts. Children in whom generalization concepts are emerging may solve tasks through trial-and-error approaches. The child who spontaneously self-corrects a response is demonstrating his ability to compare and contrast his own performance with task demands.

Once a behavior is well established within a child's repertoire, he will consistently approach the task in the same way, carefully scanning all possible solutions before responding. Brown, Nietupski, & Hamre-Nietupski (1976) implied that a skill is not really developed unless the child performs it in three different natural settings, to three different sets of materials, and to three different appropriate language cues. One way of eliminating "chance" responses is having the child repeat tasks throughout the assessment to meet with the above criteria. Thus, a process-oriented approach and a multidisciplinary team are essential.

The examiner must determine the reason for failure of test items, as the developmental potential of a child is influenced more significantly by the basis of failure than by the failure itself (Haeussermann, 1958). Responses of a child reaching his limits will be erratic in contrast to the consistency and cooperativeness of his responding when items were within his developmental level. Failure on a task yields data regarding salient features of tasks on which the child is focusing and gaps within his behavioral repertoire, as well as effects of the child's impairments on his perceptual, cognitive, and motoric abilities.

The functional linkage between impairments and the child's response must be investigated to determine why the child functions as he does. Through sequential probing, comparison of skills, and the process of elimination, the examiner can determine the underlying basis of failure. If a child with efficient eye-hand coordination and grasp fails to string beads, the examiner can eliminate motoric involvement as a contributing factor to the failure. Cognitive processes can next be analyzed. In bead stringing, a child who does not realize that the string is still present inside the bead lacks an awareness of object permanence and cannot remember the sequence of movements necessary to complete the task. His lack of this ability will significantly affect his acquisition of

buttoning skills, requiring him to be dependent upon an adult for dressing needs. Through comparison of the types of responses the child exhibits and the relationship of those responses to functional skills, the examiner may begin to draw conclusions regarding the basis of the failure and how the child uses available information.

Assessment of skill acquisition. An eclectic process-oriented approach stemming from Piagetian tasks (Uzgiris & Hunt, 1975) and from the works of Gesell and Amatruda (1947), and Bayley (1969), as well as Haeussermann's (1958) structured interview have permitted examiners to identify developmental levels of severely handicapped children across all skill-acquisition areas. Through creative adaptation of materials, administrative procedures, and developmental expectations, the examiner can determine where in a skill hierarchy the child can succeed.

For example, if a child fails to meet criterion on the Merrill Palmer Scale of Mental Tests (Stutsman, 1948) for nesting four cubes, one cannot assume that the child lacks awareness of serial and spatial relationships. Administration of a downward progression of tasks tapping these concepts will reveal the level at which the child has acquired these skills. The examiner should then arrange a hierarchy of performance situations that will allow the child to demonstrate where his concepts lie in the domain of spatial reasoning. If the child cannot nest four cubes through visual comparison, the examiner should observe whether he can do so through a trial-and-error process. If the child has difficulty with the graduated sizes, the examiner should then investigate whether the child can match box lids with the correct boxes. The child who picks up an inverted cup demonstrates his recognition of the object despite its unusual spatial orientation. Having knowledge of ages at which specific behaviors normally occur, of developmental sequences, and of how to tap the acquisition of skills through adapted media, the examiner can employ a wide range of commercially available materials as supplementary diagnostic tools for determining developmental potential.

Assessment of learning efficiency. A test-teach-test model of assessment permits one to observe the child's potential abilities by assessing his efficiency of acquiring new skills. This area of assessment is especially essential when surveying prevocational abilities of older severely handicapped children. Questions within this realm of adaptive behavior that can be answered through a test-teach-test model concern the child's attention span, the number of trials required to attain a skill, how long he can

retain it, and whether he can apply the new skill in another situation or under a different set of variables.

Media found most useful in determining how a child learns new skills are some of the commercially available preschool teaching toys. One such example is Mattell's *The Farmer Says*, which produces animal sounds when its string is pulled. Repeatedly guiding the child to search for and locate the string, grasp the handle, and pull, gradually fading the prompts, enables one to see how many trials including physical guidance are necessary before the child assumes the initiative for activating the toy. Once he independently operates the toy, insight into his generalization processes can be obtained by giving him a toy operated on the same basis as *The Farmer Says*. Observations should focus on how quickly the child realizes the mode of activation of the toy and how efficiently he recalls and initiates the previous learning experience to complete the motoric sequence required for activation of the toy. The test-teach-test model affords the examiner not only a means of assessing learning efficiency but also allows him to predict what the child is capable of doing.

Formal Assessment

The selection of formal assessment instruments for use with the severely handicapped has been a frustrating task for professionals in this field. No single assessment instrument exists that can adequately tap the potential of all severely handicapped children or that serves all examiners' purposes. Following are characteristics found to be most desirable in instruments used in assessing severely handicapped children:

1. They should be easily obtained and simply scored.
2. They should possess adequate validity and reliability.
3. The items should be primarily manipulative in nature.
4. Scoring should be minimally dependent upon the child's speed of performance.
5. The items should be adaptable across all handicapping conditions.
6. The instrument should yield data immediately transferable into sequentially planned developmental activities for educational programming.

The following table contains a condensed compilation of instruments which the authors have found to be the

most functional in assessing all developmental domains of severely handicapped children. Individually, none of these tests possesses all the desirable characteristics, but judicious selection of several instruments or parts of them provides the examiner with a powerful battery for determining current functional abilities.

PARAMETERS OF THE INDIVIDUALIZED PROGRAM

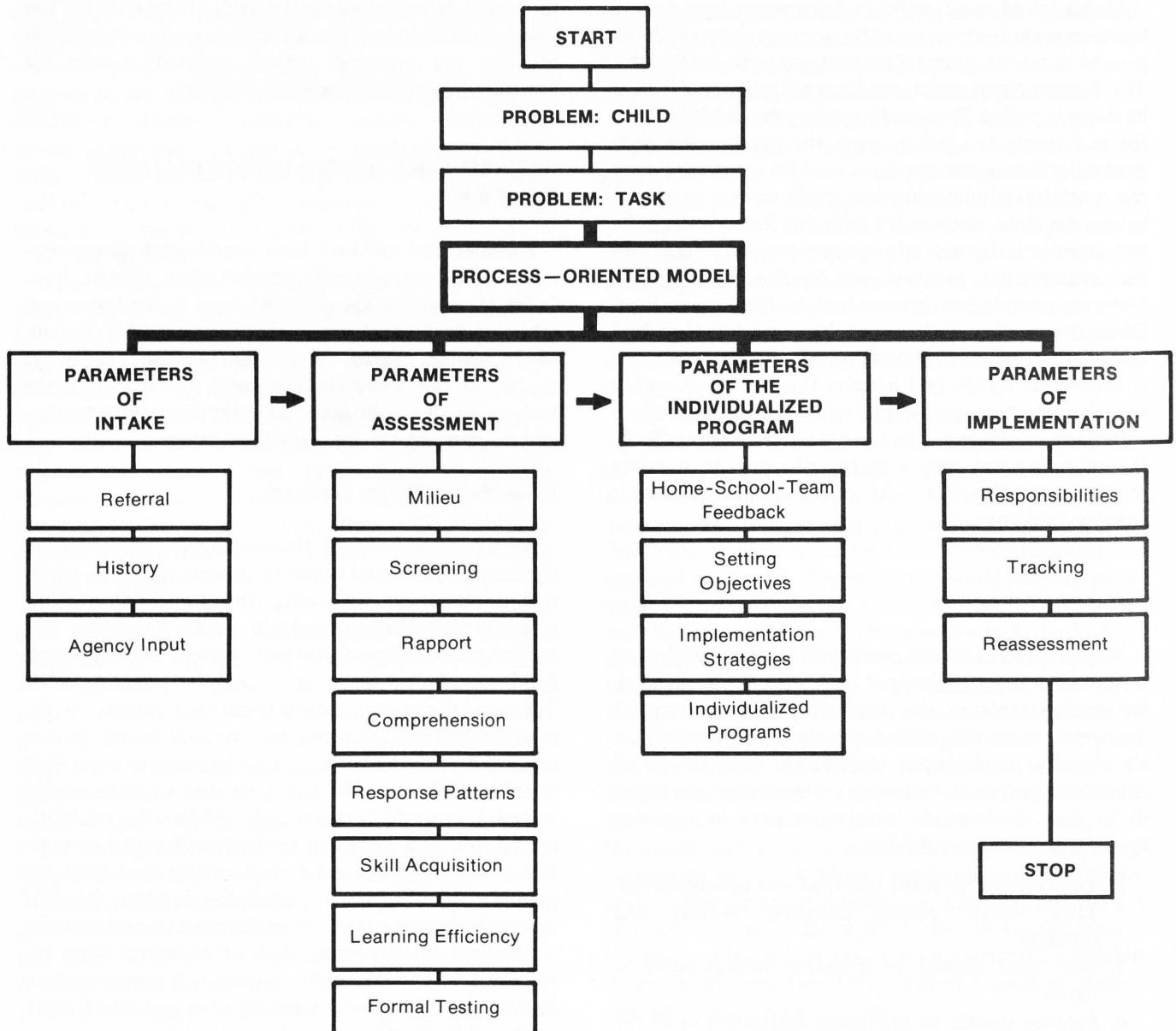
Families and teachers have experienced disappointment because traditional psychological reports have failed to specify what could be done in the home and school to facilitate change in the child's behavior (Keogh, 1972; Moran, 1976). If assessment data are to be translated into home and classroom programs, parents and teachers must be involved in the assessment process and in planning the individualized program.

Home-School-Team Feedback

At the conclusion of the assessment, the multidisciplinary team should report to parents regarding where their child is in comparison with other children of the same chronological age and with similar handicaps, and suggest which form of instruction would be most beneficial considering his state of readiness (Beller, 1970). Team members can report their observations of the child's attention span and performance under various conditions, the level of assistance he needs to succeed in learning skills, and the characteristics of instructional materials or methods to which the child most consistently attends. Parents can relate to the multidisciplinary team which reinforcers are most effective with their child, the people within the family constellation to whom the child is most responsive, and the environmental and material constraints of the home. Recommendations from the team are more meaningful to parents if team members formulating a practical teaching plan can relate availability of family time and materials to the plan.

Teachers of severely handicapped children frequently find their time, funds, and assistance within the classroom very limited. The teacher must share with the assessment team the general format and routine of the class, the daily schedule, time allotted for each child, materials available in the class, and the teaching style used. This information will assist the team in formulating recommendations that consider these restraints.

PARADIGM FOR ANALYSIS AND INSTRUCTION OF SEVERELY HANDICAPPED CHILDREN



SELECTED ASSESSMENT INSTRUMENTS FOR USE WITH SEVERELY HANDICAPPED

| | | | |
|---|-----------------|-----------------------|---|
| Developmental Activities Screening Inventory Teaching Resources 100 Boylston St. Boston, MA 02116 | 6-60 months | Screening | A teacher-administered screening instrument to determine general cognitive-adaptive functioning levels, accompanied by developmental activities suggestions. |
| Haeussermann's Developmental Potential for Preschool Children Grune & Stratton 757 Third Ave. New York, NY 10017 | 2-6 years | Screening | An instrument designed primarily for cerebral palsied children as an assessment of cognitive abilities. Materials include objects from child's everyday environment. |
| Bayley Scales of Mental Development The Psychological Corp. 4040 Harry Hines Blvd. Dallas, TX 75235 | Birth-30 months | Cognitive | Similar to Cattell although more standardized and reliable. Also contains motor and social scales. |
| McCarthy Scales of Children's Abilities The Psychological Corp. 4040 Harry Hines Blvd. Dallas, TX 75235 | 2½-8½ years | Cognitive | An instrument to measure general cognitive functioning, as well as the child's strengths and weaknesses in verbal and perceptual performances. Quantitative, memory, motor development, and laterality skills also are examined. |
| Merrill-Palmer Scales of Mental Development Stoelting Co. 1350 S. Kostner Ave. Chicago, IL 60623 | 18-71 months | Cognitive Development | The scales assess not only the child's cognitive abilities, but expressive and receptive language and fine and gross motor skills. Comprised largely of performance items, some of which are timed. Provision is made for a child's refusal of an item. |
| Ordinal Scales of Psychological Development Uzgiris, I. C., & Hunt, J. McV. <i>Assessment in infancy: Ordinal scales of psychological development.</i> Urbana, IL: University of Illinois Press, 1975 | Birth-24 months | Cognitive Development | Series of 6 ordinal scales based on Piagetian observations of sensory-motor schemas. Concerned with the hierarchical interrelationship of achievements at different levels. Six scales include visual pursuit and permanence of objects, development of means for obtaining desired environmental events, development of vocal and gestural imitation, development of schemas for relating to objects, development of operational causality, and construction of object relations in space. |

Selected Assessment Instruments (Cont.)

| | | | |
|---|-----------------------------------|----------------------|--|
| Receptive-Emergent-Expressive-Language Scale Anhinga-Press 550 Park Ave. East Tallahassee, FL 32301 | Birth-36 months | Language Development | Primarily an interview scale, the REEL assesses the child's comprehension and expression of early language skills. The scale reveals any differences that may exist between the infant's CA and his combined receptive-expressive age. |
| Environmental Pre-Language Battery The Nisonger Clinic Ohio State University 1580 Cannon Drive Columbus, OH 43210 | Early Language Development | Language Development | Designed for use by parents, para-professionals, and teachers in assessment of the child's comprehension, verbal and gestural imitation ability, and expression of one- and emerging two-word constructions. |
| Environmental Language Inventory The Nisonger Clinic Ohio State University 1580 Cannon Drive Columbus, OH 43210 | One- and two-word utterance level | Language Development | Intensive assessment of the child's application of semantic grammatical rules in two- and three-word utterances. The child's expressive language is assessed in imitation, conversation, and play as he is provided with contextual and non-linguistic cues. |
| Inner Language Scale Child Study Center Peabody College Box 158 Nashville, TN 37203 | Birth-24 months | Language Development | The way in which a child responds to objects and environmental stimuli is assessed on this scale, based on Piagetian theory. |
| Test for Auditory Comprehension Learning Concepts 2501 W. Lamar Austin, TX 78705 | 3-7 years | Language Development | Measures auditory comprehension of language structures and permits assignment of the child to a developmental level. Performance of items requires only a pointing response, and scales assess morphology, semantics, and syntax. |
| Fiorentino Reflex testing methods for evaluating CNS development Springfield, IL | Reflex level-walking | Motor Development | Provides guidelines for looking at reflexive behaviors in children. Photographic examples are included within the text of normal and abnormal reflex development. |
| Cerebral Palsy Assessment Chart Semans, et al. <i>Physical Therapy</i> , 1965, 45, 463-468 | Reflex level-walking | Motor Development | Chart from which the cerebral palsied child's postural control may be assessed for the purpose of rehabilitative planning. The level which should next be emphasized is indicated in the scale. |

 Selected Assessment Instruments (Cont.)

| | | | |
|---|------------------------------------|-----------------------|---|
| Fokes Stephens, W. B. <i>Training the Developmentally Young</i> , John Day, 1974 | Birth-7 years | Motor Development | Provides height, weight, and character- istic behaviors of children of each level assessed. Assesses skills of upper and lower extremities, such as locomotion, climbing, jumping, balance, reach, grasp, release, manipulation, throwing, writing, and perceptual-motor abilities. |
| Peabody Developmental Motor Scales Monograph #25 IMRID Publications George Peabody College Nashville, TN 37203 | Birth-7 years and Birth-6 years | Motor Development | An instrument for use in assessing gross and fine motor development. The scoring section allows the child credit for minimum success rather than a pass or failure. The scales are accompanied by developmental activities for each area assessed. |
| Adaptive Behavior Scales American Association on Mental Deficiency 5201 Connecticut Ave NW Washington, DC 20015 | Preschool-Adult | Social Development | Social scale standardized on mentally retarded children; divided into two sections: independent functioning and aberrant behavior. Criterion referenced checklist is most helpful in determining whether a child has coping skills to exist outside an institutional setting. |
| Lakeland Village Adaptive Behavior Grid Lakeland Village Medical Lake, WA 99022 | Birth-16 years | Personal- Social | Allows the evaluator to derive develop- mental levels for areas such as eating, grooming, dressing, mobility, recreation, socialization and behavior control, all of which are task analyzed. |
| Maxfield Buchholz Scale of Social Maturity for Preschool Blind Children American Foundation for the Blind, Inc. 15 West 16th St. New York, N.Y. 10011 | Birth-6 years | Social Development | Adaptation of the Vineland Social Maturity Scale for blind children. This scale of social development evaluates children in areas of general motor development, dressing, eating, loco- motion, socialization, communication, and occupation. |

Setting objectives. A result of assessment using a process-oriented paradigm is the data from which one can draw when formulating goals and objectives. When the objectives are formulated by all responsible agents, they are likely to be personal and specific. The *objectives* are most functional when they describe the skills to be taught in the next six months; *goals* may be set for a longer period of time.

Developing implementation strategies. Following each objective, the program should note who should teach the task, the materials to be used, and the steps to

follow in the instructional plan. Again, the extensive data available through the process-oriented model permits the examiner to incorporate all salient variables that are likely to produce success.

Designing the individualized program. The individualized program must be multifaceted, to include:

1. Concrete measurable data that can be used to compare the child's performance to a past or future performance or to a performance target.
2. The child's behavioral repertoire.

3. A detailed prescriptive program outlining goals and objectives for establishing behaviors.
4. A suggested teaching plan.
5. A projected timeline for accomplishing the objectives.

The plan indicates how each person or agency interacts with the child and delineates responsibilities. The plan allows for program changes as the caregiver sees the need but, at the same time, keeps others abreast of changes.

PARAMETERS OF IMPLEMENTATION

Assignment of Responsibilities

Implementation of the assessment data is as critical as gathering the data. Implementation concerns include how the information is conveyed to parents and agencies; agreement on goals, objectives, strategies, and evaluation; agreement on responsibilities; provisions for a feedback mechanism; and, ultimately, the responsibility of case management.

If rapport with parents has been well established and a trusting bond exists from the beginning of the assessment, conveying results to parents does not have to be a traumatic and shocking experience, but a time of synthesizing information and planning a course of action that permits parents to fulfill their natural role as teachers of their child. They can formulate their own role in the individualized plan and in doing so are more likely to fulfill their assignments.

Agencies having a role in the implementation of the assessment data should be participants in the planning of future strategies. They know their own responsibilities, their limitations and possibilities. Without their cooperation in planning the intervention, the assessment becomes another product, and the process terminates.

Tracking progress. The use of a tracking form for gathering implementation data has proven successful (DuBose, Langley, Bourgeault, & Harley, 1977). The form should meet the needs of the agencies and persons directly involved with the implementation. Measured progress on goals and objectives in the assessment report is reflected on the tracking form. The form offers an opportunity to redirect strategies as needed or set new goals and objectives. The case manager is responsible for determining when and how frequently the tracking form

should be used (three to six months is usually sufficient). The value of information shared through tracking forms is that all agencies report their implementation progress in a concise, uniform manner that adds continuity to the assessment process.

Reassessment. Reassessments are scheduled when (a) data indicate the individual plan has been completed, (b) data indicate the plan needs numerous alterations, as the objectives are not being met and minor alterations were not sufficient to adjust the program to a workable level, (c) a time lapse of 12 to 18 months has occurred, or (d) major changes in the child's condition suggest needed change in the instructional program. Reassessment usually takes place within the same setting as the previous assessment so those familiar with the case can continue to participate in the process. Tracking forms are used to monitor progress, and the cycle continues. By using the process-oriented model, the child's needs are continually identified and prioritized; the environment's ability to respond to those needs is noted, and a carefully planned program is developed for bringing about changes that will facilitate learning in the child.

SUMMARY

Assessment of severely and profoundly handicapped persons cannot be a unilateral act culminating in a product filed away and used only for extracting data from which labels and classifications can be assigned. The authors advocate a dynamic process-oriented model that begins with problem identification, provides the means for including all relevant persons and data, and can be used to explore in depth the parameters of the behaviors of the person and of the milieu in which he lives. The model presented here provides specific plans and the procedures for implementing those plans, and culminates in follow-through to assure that targeted objectives are being accomplished.

REFERENCES

- Alpern, G.D., & Boll, T.J. *The developmental profile*. Aspen, CO: Psychological Development Publication, 1972.
- Altman, R., & Meyen, E. Public school programming for the severely/profoundly handicapped: Some researchable problems. *Education and Training of the Mentally Retarded*, 1976, 11(1), 40-45.

- Banus, B.S. *The developmental therapist: A prototype of the pediatric occupational therapist*. Thorofare, NJ: Charles B. Slack, 1974.
- Barker, R.G. *Ecological psychology: Concepts and methods for studying the environment of human development*. Stanford, CA: Stanford University Press, 1968.
- Bayley, N. *Bayley scales of infant development*. New York: The Psychological Corporation, 1969.
- Beller, E.K. The concept readiness and several applications. *Reading Teacher*, 1970, 23, 727-765.
- Bortner, M., & Birch, H.C. Cognitive capacity and cognitive competency. *American Journal of Mental Deficiency*, 1970, 74(6), 735-744.
- Brown, L., Nietupski, J., & Hamre-Nietupski, S. Criterion of ultimate functioning. In M.A. Thomas, *Hey don't forget about me!* Reston, VA: Council for Exceptional Children, 1976.
- Brown, L., & York, R. Developing programs for severely handicapped students: Teacher training and classroom instruction. *Focus on Exceptional Children*, 1974, 6(2).
- Bruner, J.S. Organization of early skilled action. *Child Development*, 1973, 44, 1-11.
- Budoff, M. Learning potential and educability among educable mentally retarded. (Progress report, Grant OEG-0-8-08056-4597 from National Institute of Education, HEW). Cambridge, MA: Research Institute for Educational Problems, 1973.
- Carrow, E. Assessment of speech and language in children. In J.E. McLean, D.E. Voder, & R.L. Schiefelbusch (Eds.), *Language intervention with the retarded: Developmental strategies*. Baltimore, MD: University Park Press, 1972.
- DuBose, R.F., & Langley, M.B. *The developmental activities screening inventory*. Boston: Teaching Resources, 1977.
- DuBose, R.F., Langley, M.B., Bourgeault, S.E., & Harley, R.K. The model vision project: Assessment and programming for blind children with severely handicapping conditions. *Journal of Blindness and Visual Impairment*, 1977, 71(2), 49-53.
- Feurstein, R. A dynamic approach to the causation, prevention and alleviation of retarded performance. In H.C. Haywood (Ed.), *Social cultural aspects of mental retardation*. New York: Appleton Century Crofts, 1970.
- Frankenberg, W.K., Fandal, A.W., & Dodds, J.B. *The Denver developmental screening test*. Denver, CO: University of Colorado Medical School, 1970.
- Friedlander, B.Z. Notes on language: Screening and Assessment of young children. In B.Z. Friedlander, G.M. Sterritt, & G.E. Kirk (Eds.), *Exceptional infant* (Vol. 3: Assessment and intervention). New York: Bruner/Mazel, 1975.
- Gesell, A., & Amatruda, C.S. *Developmental diagnosis* (2nd ed.). New York: Paul B. Hoeber, 1947.
- Haussermann, E. *Developmental potential of preschool children*. New York: Grune & Stratton, Inc., 1958.
- Haywood, H.C., Filler, J.W., Shiffman, M.A., & Chatellant, G. Behavior assessment in mental retardation. In P. McRaynolds (Ed.), *Advances in psychological assessment* (vol. 3), 1975.
- Hunt, J.M. Psychological assessment in education and social class. In B.Z. Friedlander, G.M. Sterritt, & G.E. Kirk (Eds.), *Exceptional infant* (Vol. 3: Assessment and intervention). New York: Bruner/Mazel, 1975.
- Jedrysek, E., Klapper, Z., Pope, L., & Wortis, J. Psychoeducational evaluation of the preschool child: A manual utilizing the Haussermann approach. New York: Grune & Stratton, 1972.
- Keogh, B.K. Psychological evaluation of exceptional children: Old hangups and new directions. *Journal of School Psychology*, 1972, 10, 141-145.
- Knobloch, H., & Pasamanick, B. *Gesell and Amatruda's developmental diagnosis* (3rd ed.) Hagerstown, MD: Harper & Row, 1974.
- Knobloch, H., Pasamanick, B., & Sherard, E.S. A developmental screening inventory for infants. *Pediatrics*, 1966, 38 (part II) 1095-1104.
- MacDonald, J.D. Environmental language intervention. In F.B. Winthrow & C.J. Mygren (Eds.), *Language, materials, curriculum management for the handicapped learner*. Columbus, OH: Charles Merrill, 1976.
- Mann, P.N., & Suiter, P. *Handbook in diagnostic teaching: A learning disabilities approach*. Boston: Allyn & Bacon, 1974.
- Meier, J.H. Screening, assessment, and intervention for young children at developmental risk. In B.Z. Friedlander, G.M. Sterritt, & G.E. Kirk (Eds.), *Exceptional infant* (Vol. 3: Assessment and intervention). New York: Bruner/Mazel, 1975.
- Meyen, E. *Preparing personnel for the severely and profoundly mentally retarded*. Paper presented at the Conference on Education of Severely and Profoundly Retarded Students, New Orleans, April, 1975.
- Moran, M.R. The teacher's role in referral for testing and interpretation of reports. *Focus on Exceptional Children*, 1976, 8, 1-16.
- P.L. 94-142. An Act to amend the Education for all Handicapped Children Act to provide educational assistance to all handicapped children and for other purposes. Sec. 602 (4) (19).
- Sailor, W., Guess, D., & Lavis, L. Training teachers for education of the severely handicapped. *Education and Training of the Mentally Retarded*, 1975, 10, 201-203.
- Schucman, H. *A study in the learning ability of the severely retarded: a method for obtaining a quantitative index of the educability for severely mentally retarded children*. Unpublished dissertation, New York University, 1957.
- Sontag, E., Burke, P., & York, R. Considerations for serving the severely handicapped in the public schools. *Education and Training of the Mentally Retarded*, 1973, 8, 20-26.
- Sroufe, L.A., Waters, E., & Matas, L. Contextual determinants of infant affective response. In M. Lewis, & L. A. Rosenblum (Eds.), *The origins of fear*. New York: John Wiley, 1974.
- Stutsman, R. *Merrill Palmer scale of mental tests*. Chicago: Stoelting Co., 1948.
- Uzgiris, I.C., & Hunt, J. McV. *Assessment in infancy: Ordinal scales of psychoeducational development*. Urbana, IL: University of Illinois Press, 1975.

ALERT

March 1-4, 1978

Association for Children With Learning
Disabilities
Radisson Muehleback Hotel
Kansas City, Missouri

May 2-5, 1978

Council for Exceptional Children Convention
Kansas City Convention Center
Kansas City, Missouri

CLASSROOM FORUM

by Debby Gilbert
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A primary concern of most teachers who work with exceptional children is communicating with regular classroom teachers, especially now, with the emphasis on mainstreaming, partial integration of exceptional children, and the development of individual education programs. How does the teacher of exceptional children develop good rapport and a helping relationship with other members of the faculty? How does this teacher solicit their help in fairly grading and evaluating special students who are in the regular classroom? How does this teacher communicate best in integrating one of the special students into the regular classroom and in helping the regular classroom teacher once the child is integrated? How can they both promote peer acceptance of the exceptional child in the classroom?

Teachers and supervisors of classrooms for exceptional children have always faced the question of how to better communicate with teachers of regular classrooms. Regular classroom teachers' support and cooperation are vital prerequisites to any successful program for exceptional children involving the flexibility to move into and out of the mainstream.

The shift away from the self-contained special education classroom places many of our children in the position of having to deal with several different teacher personalities, somewhat rigid grading systems, varying reactions to their exceptionality by teachers and peers,

different types of homework and projects, and a myriad of other variables. The following strategies used by teachers and supervisors have been observed to be effective in promoting favorable communication between special teachers and regular classroom teachers.

The first strategy is to communicate the *characteristics* of the children you serve and the *purpose* of your program, whether your program is new to that school or not; more specifically:

- Ask or be willing to present programs and workshops on topics pertinent to your area of exceptionality, covering areas such as characteristics, criteria for inclusion in the program, how your job meshes with theirs, grading and evaluating, materials used, and behavior management techniques.
- Develop a packet of written information on the above areas, including articles from newspapers and periodicals, ideas for instruction and materials, and recent developments in your area. Keep these packets up to date and provide one for each teacher (perhaps in a file folder) for easy storage and retrieval in their classrooms.
- Present your program at PTA meetings via filmstrips and other interesting means.
- Arrange a visitation day to your classroom. Allow regular classroom teachers to observe students working, look at the room arrangement, and work with the materials.
- Arrange a display of materials, books, and current periodicals on your area of exceptionality in the teachers' lounge or library.

Second, you must *communicate your willingness* to be an effective member of the entire faculty. Suggestions are to:

- Volunteer for and accept assignments to bus duty, playground duty, and other routine jobs expected of all teachers.
- Share materials whenever possible. Alert teachers to where appropriate materials can be secured.
- Volunteer to help with field trips and special programs so that your students may participate.
- If you have a planning time, you might agree to work with the students in the regular classroom in some capacity to give the teacher a break.
- Offer to observe and assist in programming for other students having learning difficulties (this does

not mean working with a student directly).

- Attend all faculty and PTA meetings.

When it is time to *integrate* a special student into the regular classroom, some careful steps will assure you, the classroom teacher, and especially the student of a successful experience. Sequentially:

- Be sure the student is indeed ready to handle integration into the regular classroom by conducting formal and informal testing in the area(s) in which he or she will be participating.
- Discuss integration with the principal and secure his or her assistance and approval. (Also discuss this with your supervisor or coordinator if you have one.)
- Talk with the teacher you feel would be most conducive to accepting your student into his or her classroom and would be willing to make that special effort to help the child.
- Secure materials from the teacher that will be used in his or her classroom and keep up with the boardwork and related activities so you can use the same resources in your classroom until the student is comfortable with them.
- Confer with the teacher, parents, and in some cases the student, to gain support of all parties prior to integration.
 - Agree on the times the child will be in the regular classroom.
 - Arrange for the student to keep a task notebook and a calendar at home for long-term tasks.
 - Decide upon, with the parents, a specific time and system for doing homework.
 - Arrange specific reporting methods among the classroom teacher, special teacher, and parent.
 - Discuss how the student will be evaluated.
 - Arrange a behavior modification program to use if necessary for motivation and social behavior purposes.

After a student has been integrated into the regular classroom, you must *communicate your desire to facilitate working with your student*. Importantly:

- Share your knowledge of the student with the teacher—the child’s learning aptitudes and problems, behavior, and learning style.
- Try to observe (or have your supervisor observe)

the student in the regular classroom, particularly if the child is deficient in “teacher pleasing” behaviors.

- Assist in adapting regular classroom instruction to meet the needs of the student—lend tape recorders, calculators, special writing materials; type instructions, etc.
- Cooperate with the regular classroom teacher in evaluating and grading your student (re-test or give tests orally, etc.).
- Try to hold joint conferences in order to promote understanding and cooperation with all concerned.

Finally, communicate to the regular classroom teacher ways in which the two of you can promote good peer acceptance of special students in the regular classroom. Some ideas are to:

- Allow special students to earn points which may be used to invite their friends in the regular classroom to visit their class for special occasions.
- Provide opportunities for the special student to join the regular class for field trips, special programs, etc.
- Institute a “buddy” system between a special student and a strong student who will assist in direction following, work pace, class rules, etc.
- Allow special students to visit the classrooms of other teachers and grades, to help the teacher or to help a student who is weak in an area in which they are strong.
- Make yourself and your classroom accessible. Don’t ostracize yourself.

It’s difficult to visualize the role or feelings of the regular classroom teacher unless you have taught a regular classroom yourself, and no easy cookbook recipes can be developed for effective communication, because each teacher and teaching situation is different. But if any or all of the strategies mentioned are implemented, you will assuredly create a more positive atmosphere for the special student and those working with the child.

The ideas and suggestions of the special education teachers in DeKalb County, Georgia, have been much appreciated during the formulation and writing of this article.

In my school system, preschoolers with developmental delays are evaluated by the speech and language pathologists. Lately, it has become evident that this sort of screening does not tap the problems of all preschoolers referred for testing. Do you have any suggestions to help us look at the "total child?"

Most school systems are bombarded by preschool referrals from kindergartens, pediatricians, and parents. My own school system is no exception. Our preschool assessment program has been in existence for some time, but this past year it was decided that our focus would be on trying to *develop a more thorough assessment strategy*. To tap more areas of possible difficulty in preschoolers, a diagnostic team was developed. The team consisted of professionals with expertise in the areas of speech and language, learning disabilities, and behavior disorders. An assessment coordinator supervises the team and obtains developmental information from the parents.

Children are evaluated by one of two methods: through an individual appointment, or in a diagnostic classroom situation. In the individual appointment, the child is seen separately by each evaluator. Observations of the child are made by the other evaluators during this testing through one-way mirrors. The speech and language pathologist evaluates the child's receptive and expressive language, articulation skills, hearing, and the structure and function of the oral mechanism. The learning disabilities team member obtains information about the child's pre-academic functioning on cognitive, fine motor, and gross motor tasks. The behavior disorders specialist evaluates the child's behavioral responses and the environmental conditions that surround them.

In the diagnostic classroom, the elements of the individual assessment are woven into a three-day classroom setting. The assessment team works together in the classroom using informal methods of evaluation with individuals or small groups. In this setting team members are able to observe the child's social interactions with other children, response to behavior management techniques, and reaction to diagnostic teaching. The child interacts with blocks, beads, letter and number stimuli,

creative play toys, and other teaching resources commonly found in most pre-school programs. The speech pathologist uses the traditional tools to evaluate the child. The learning disabilities specialist uses the VMI and other informal tests to evaluate fine and gross motor abilities. The behavior disorders specialist, meanwhile, is observing the child in the individual or small group testing situation, and also may use the DAP frustration and problem-solving tasks, as well as the case history, to assist in the evaluation.

This year the team has focused on the diagnostic classroom setting as the best way to evaluate the child, and has limited the class to one day rather than three, due to cost and time factors.

When all of the information has been gathered, a staffing is held. Team members share their findings with the parents and other professionals, and with their help try to develop an educational strategy for the child.

If the team believes more information is necessary to determine the child's eligibility for a special program, extensive psychological testing is scheduled. If not, the team determines whether the child could be helped in one of the preschool classrooms.

One discovery has been that the younger children who are referred usually are quite involved, whereas the five- and six-year-olds tend to exhibit more developmental lags and social problems.

Some 50 percent of the children evaluated are referred for some specific type of special help; the percentage of those referred for special placement plus the percentage receiving more subtle help brings the total measure of services to two-thirds of those evaluated.

A recent survey of parents involved in the evaluations last year indicated that parents were complimentary toward the program and did not state any complaints as to the thoroughness or success of their child's evaluation. A less formal survey of the teachers and professionals involved indicated that their reaction was favorable and that they felt placements and educational recommendations were more appropriate to the child than was the case previously. Through this program, we feel that more children are being identified as needing some assistance during the preschool years when intervention can make a significant difference.

We wish to thank Mrs. Judy Wolman, Learning Disabilities member of the Special Education Preschool Assessment Team, Coralwood Center, DeKalb County, Georgia, for preparing these comments.