DOCUMENT RESUME

ED 135 163   EC 093 007

AUTHOR   Casto, Glendon; And Others
TITLE   Affective Development in the Normal and Handicapped
                Preschool Child. Summary Report. Review and
                Recommendations.
INSTITUTION   Utah State Univ., Logan. Exceptional Child Center.
SPONS AGENCY   Bureau of Education for the Handicapped (DHEW/OE),
                Washington, D.C. Div. of Research.
PUB DATE   Jul 76
NOTE   66p.; For the final report, see EC 093 006

EDRS PRICE   MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS   Affective Behavior; *Affective Tests; *Emotional
                Development; *Handicapped Children; *Instructional
                Materials; Personality Development; Preschool
                Education; *Research Needs; Research Reviews
                (Publications); Self Concept; Social Development;
                *Theories

ABSTRACT
                Presented is the summary report of a project designed
to review the state of the art in basic areas of affective
development in the normal and handicapped preschool child. Reviewed
are theories of affect and development of specific emotions with
particular emphasis on five dimensions (emergence of self, caretaker
attachment, adaptation-mastery, self concept, and socialization). The
affective development of the handicapped child is discussed in terms
of six handicapping conditions: mentally retarded, hearing impaired
and deaf, blind and partially seeing, speech impaired, physically
handicapped, and emotionally disturbed. Information gaps in the
affective area are identified, and suggestions for research and
development strategies are proposed. Charts of the available
instrumentation and curriculum materials for affective development
are also given. (SBH)

SUMMARY REPORT

REVIEW AND RECOMMENDATIONS

July 1, 1976

AFFECTIVE DEVELOPMENT IN THE NORMAL AND
HANDICAPPED PRESCHOOL CHILD

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PREFACE

This project was one of a series of reviews of the state of
the art in basic areas of child development. This project addressed
affective development in the normal and handicapped preschool child.
The project, which ran for one year, intended to:

1. Analyze available data on child development that
    relates to affective development.

2. Analyze available data on handicapped children's
    affective development.

3. Analyze available educational techniques and materials
    which relate to affective development.

4. Analyze available instrumentation for assessing affective
    development.

5. Identify critical questions and information gaps requiring
    further study.

6. Develop a conceptual framework for pursuing further inquiry.

The first four objectives were realized by developing manuscripts
that: (1) reviewed affective development in normal and handicapped
preschool children, (2) reviewed available educational techniques and
materials, and (3) reviewed available instrumentation for assessing
affective development.

To identify critical questions and information gaps requiring further inquiry, a national conference was held. This two-day conference, sponsored by the Bureau of Education for the Handicapped, was held in Washington, D.C. on June 16 and 17, 1976. Prior to the conference, rough drafts of the report were sent to the participants. The purpose of the conference was to elicit suggestions for revision of the manuscript and recommendations for future research. Following the conference, revisions were incorporated and the final report prepared.

This summary report will present the report's findings by: (1) summarizing the reviews of affective development in the normal and handicapped preschool child, (2) presenting the report's chapter on "Identification of Information Gaps and Proposed Research and Development Strategies", and (3) supplying charts of the available instrumentation for affective development and available curriculum for affective development.

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CHAPTER I

AFFECTIVE DEVELOPMENT II' THE
NORMAL PRESCHOOL CHILD

I. AFFECTIVE DEVELOPMENT IN THE NORMAL PRESCHOOL CHILD

Introduction

The importance of the affective domain in the overall development of the individual has long been recognized. The study of affect has proven to be highly problematic, however. Attempts to explain affective development have resulted in many theories of affective development and emotional arousal and a plethora of research projects which have provided bits and pieces of largely unorganized information. One complicating factor has been the failure of researchers to agree on definitions of affect and emotion. Definitions range from those emphasizing neurophysiological components to those employing an experiential, a phenomenological frame.

In this manuscript, we deliberately chose a broad definition since we hoped to stimulate interest in an aspect of development that has received relatively little consideration. Affect was therefore defined as including the emotional state and the personal attitudes of the individual. The emotional state includes the individual's appraisal of his state and the situation, the physiological reaction, and the motor response. Personal attitudes refer to such variables as self-concept and evaluations of others. A minor distinction was made between affect and emotion in this manuscript, with affect referring to a wide range of feeling experience and emotion referring to specific states.

The particular point of view which directed the preparation of these manuscripts was a conceptualization of the infant and young child as a "controlled system". According to this view, the individual, from

conception on, is in constant interaction with the environment. This
interaction may lead to a fit between the individual and his environment.
When the mutual adaptation leads to a proper fit, the conditions are
established for continuing growth and development. Not only does the
individual adapt to his environment, but the environment often makes
accommodations for the individual. For instance, family members may
adjust to the presence of a new infant by changing their schedules in
order to meet the new member's needs.

The individual, even at infancy, is equipped with behaviors and
survival systems that direct his transactions with the environment.
If provided with the usual environmental conditions needed for survival
(i.e., shelter, food, caregivers), the individual is capable of acting
on the environment in such a way as to successfully meet his needs.
That is, the infant is a competent system whose behaviors are purposeful.
For the sake of illustration, let us consider one infant behavior, the
smile. The social smile emerges at the young age of about two months.
This smile is not random, but directed at the caregivers. It serves to
reinforce the caregiver for attending to the infant and thus ensures
continued care. It also connotes a state of satisfaction, and serves to
inform the caregiver that all is well.

The process of achieving an adaptation thus involves exchanges between
an individual with purposeful behavior and a more or less accommodating
environment. Removal of an individual from the environment he is adapted

to and placement in another environment energizes behavior directed
toward successful adaptation. Similarly, changing the environment
results in disruptions analogous to those arising when an ecosystem in
nature is disrupted or disturbed. The system attempts to repair itself.
The success of the repair efforts depends upon the nature and severity
of the disruption and the capacity of the individual and the environment
for adaptation.

The implications of this model for the young handicapped demand
consideration. There are, of course, tremendous individual differences
in the manner in which an adaptive fit with one's environment is achieved.*
The handicapped child usually confronts more barriers to achieving this
fit than the so-called normal child. He oft·ntimes is not as well equipped
to deal with the environment. Also, some environmental conditions, such as
negative evaluation of the handicapped, may interfere with the environment's
accommodation of the individual. Adaptation to new or disturbed environments
also presents problems for the handicapped. Our society exacerbates the
problems by forcing the handicapped to undergo environmental transitions
through our processes of labeling and segregating them. In the case of
the handicapped child who undergoes a transition from the home to an
institution at an early age, the disruption in the environment, and subsequently
in the individual, may be so severe as to preclude adaptation.

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*The term "adaptive fit" as used here has been defined by Carlson and Cassel
 in a forthcoming manuscript on adaptive functioning available through
 Bureau of Education for the Handicapped.

In summary, systems theory emphasizes the infant's capacity for
adaptation, his competence as a system, the importance of the exchange
between individual and environment, and the critical nature of environmental
accommodation. Systems theory may thus provide a unifying framework from
which to view development.

One other viewpoint determined the organization of the manuscript.
In order to relate curriculum, assessment devices, and annotated bibliography
entries to key areas of development, affective development was dichotomized
into five critical dimensions. These dimensions were chosen because they
appeared to be central to affective development. The dimensions included:

1. Emergence of Self (Physical, Cognitive, Affective)

2. Caretaker Attachment

3. Adaptation-Mastery

4. Self-concept

5. Socialization

Obviously, affective development is not segmented into distinct and
independent dimensions, but the dimensions provided a useful analytic
framework for explanation and integration.

REVIEW OF THEORIES OF AFFECT
AND DEVELOPMENT OF SPECIFIC EMOTIONS

The review of theories of affect began with Aristotle who described affect in dualistic terms. The review touched briefly on the contributions of Darwin, James, Cannon, Lindsley, Mandler and Arnold. The review concluded that the theories of Mandler and Arnold go a long way towards explaining affect and emotion but held that each is incomplete in itself. The review also commented on the promise of theories being articulated by Sroufe (1976), and Emde (1975), because they are both grounded in developmental research.

The review of the area of affective development having to do with specific emotions began with the work of Bridges (1932). Her longitudinal study demonstrated that the first emotion appears as a generalized excitement reaction and then differentiates later into other specific positive and negative emotions. Mentioned also were studies done by Ekman and Associates (1975), which has led them to suggest that basic emotions are innate and appear uniformly across cultures. The review commented on the importance of the study of basic emotions within the overall context of affective development. The review summarized by stating principles of affective development and outlining affective development according to affective dimension, specific emotions and possible physiological mechanisms.

PRINCIPLES OF AFFECTIVE DEVELOPMENT

1. A complex interaction exists between affective development, cognitive development, and perceptual motor development.

2. Affect serves to alert, arouse and energize behavior. It may also direct the behavior of human organisms at certain times, serving a survival function.

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3. Affect in terms of both the experience (state) and the behavioral expression represents an interaction between hereditary factors and environmental conditions.

4. Affective development follows a predictable course and is governed by maturation, learning, and environmental conditions.

OUTLINE OF AFFECTIVE DEVE..OPMENT

DEVELOPMENTAL DIMENSION	SPECIFIC EMOTION	POSSIBLE PHYSIOLOGICAL MECHANISMS
	U-3 Months	
1. Discovery of physical self	Excitement Delight	Reticular Activating System
2. Self as object of affect	Distress	
	3-6 Months	
1. Object permanence	Fear Emotion	Upper Brain Stem
	6-12 Months	
1. Caretaker attachment	Anger	Limbie System
2. Affective decentering	Love (affection)	Thalmus
3. Separation anxiety		Hypothalmus
	12-24 months	
1. Mastery (competence)	Disgust	Neo-Cortical System
2. Self-concept	Jealousy	
3. Behavioral ego-contrism	Affection	
4. Separation-individuation		
	24-48 months	
1. Socialization	Guilt Pride Defiance Etc.	

DIMENSIONS OF AFFECTIVE DEVELOPMENT

Affective development was conceptualized in terms of five dimensions which were chosen because they appeared to be central t ... ⌄lopment. These dimensions are interrelated and may also develc ·· ·· ·⌄· ,. However, some of the dimensions are indicative of specific age periods, simply because the organism manifests more complex behavioral capacities as it develops. The five dimensions were intended to encompass the important events in affective development. The dimensions, in approximate developmental order, are:

Dimension 1 -- Emergence of Self (physical, cognitive, affective)

Dimension 2 -- Caretaker Attachment

Dimension 3 -- Adaptation-Mastery

Dimension 4 -- Self-concept.

Dimension 5 -- Socialization

These dimensions were employed as an outline for discussion of affective development in the normal and handicapped preschool child.

Emergence of Self

Emergence of self refers to the infant's growing awareness that he is separate from his environment. This awareness takes place on the physical, cognitive, and affective levels. In the course of development, the individual moves toward maturation in physical, cognitive, and affective areas in a complex manner. Development on all levels proceeds concurrently with complex interactions taking place at all times.

Our discussion of the emergence of self focused on three interrelated events that contribute to this development: discovery of physical self, emergence of self as object of affect, and development of object permanence.

Discovery of physical self refers to the infant's emerging knowle that his body parts belong to him. This knowledge is importht terms of how the infant manipulates his body parts and thereby gains satisfaction. The infant is constantly expanding his repertoire of physical actions to discover and utilize more and more of his body. He builds from his available physical mechanisms and reflex actions a more complex behavioral repertoire.

Early in life the infant begins to learn about the complex world of emotional stimuli and responses and thus learns how to use affect as an interaction tool. An infant's affective development progresses from an undifferentiated stage in which the child emits emotional behavioral indiscriminately to a stage in which the child is able to emit an emotional response called for by a specific situation.

Object permanence, a Piagetian concept, refers to the infant's ability to conceptualize the existence of an object when that object is not in sight. The very young infant's perception of the world appears to be of a changing scene with objects floating in and out of his field. That is, his attention is centered on objects which have no permanence. At about nine or ten months, a child demonstrates his knowledge of the existence of objects outside his perception by searching for them when they are missing from his sight and touch. He thus develops more subtle discriminations in perception and begins to understand the permanence of both animate and inanimate things. The ability to conceive of objects as ier ent is highly important to the infant and signals the emergence of many other abilities.

Caretaker Attachment

Caretaker attachment represents one of the most critical elements in emotional development. The review touched on the basis of this attachment, the functionality of it and the characteristics that are unique to it.

Rene Spitz (1945), was the first researche   peak to caretaker attachment. He introduced the notion that n   er   )f crucial importance in the emotional development of infants.

The earliest explanation of caretaker attachment was derived from learning theory and held that attachment occurs as a result of the secondary reinforcement arising from such basic needs as hunger, thirst, and pain. This explanation of attachment was later to be challenged by the work of Bowlby (1969(, and Harlow (1966).

Ethology has made significant contributions to the study of attachment as have psychoanalytic researchers. Ethology views attachment in terms of its utility for the species and the individual. Psychoanalytic theory has provided a rich conceptual basis for understanding attachment.

Attachment behavior develops out of an individual's interactions with a caretaker. Contact and cuddling play a role in the development of attachment as does the visual interaction of the infant with a caretaker. The degree of sensory stimulation provided the infant by the caretaker seems to play a role also. Most of the researchers reviewed agreed that caretaker attachment is crucial to normal affective development.

Adaptation-Mastery

The infant gradually moves from formation of an attachment relationship,
to display of distress when separated from his caretaker, to healthy exploration.
By separating himself from his caretaker, the infant increases his opportunities
to interact with his environment and increases the likelihood of adaptation to
it. The caretaker is used as a lease of operations and in this sense provide
the security which facilitates ad   n.   eview included the se es f
events proposed by Bowlby (1972).

1. An infant develops an attachment to caretaker.

2. When a young baby is separated from the caretaker, he exhibits
   emotional distress.

3. As the baby becomes confident that the attachment figure will
   always be available to him the behavior emitted upon separation
   diminishes in intensity.

4. These expectations regarding the availability of the attachment
   figure reflect the child's experience with attachment figures.

5. A child who has confidence in these expectations of availability
   of the attachment figure moves beyond separation anxiety to healthy
   exploration.

Self-Concept

Self-concept was defined as a set of beliefs about one's physical self
and one's behavior. Self-concept was seen as having a basis in the roles the
individual is required to take and the individual's feelings about his own
body.

Sense of self develops very gradually, beginning about the time the infant is able to differentiate between himself and the world around him. As the infant's ability to identify sensations and events and to distinguish between himself and his environment increases, the groundwork is laid for the accellerated development of self-concept.

Parents were seen as performing the primary role in the development of self-concept. Parents assist in the process of the child's developing an image of his body and also provide the first feedback regarding the child's actions. In fact, there is considerable correspondence between a child's self evaluation and the way he is regarded by his parents (Khon, 1961). Later, the child receives feedback from his siblings, peers, and others, and this feedback assists him in refining his perceptions of himself.

Socialization

Socialization was seen as being an extremely important dimension in affective development. Socialization begins with the caretaker-infant relationship and subsequent patterns of interaction are influenced by the nature of this first relationship. The infant's first signs of social responsiveness are directed at his primary caregiver and she is the first individual with whom a social relationship is formed. The caregiver is also the first person to impose demands on the infant.

The young child comes into contact with several socializing agents who structure interactions with the environment. Initially, caretakers, and family members teach the child some of the rules of behavior. The child later is exposed to peers and outside agents such as pre-school and elementary school teachers and principals. The infant and young child thus gradually acquire standards for behavior by exposure to demands. At first, behavior

is under external control, but later standards for behavior are internalized
and the child learns to delay gratification.

According to Schaffer (1971), there are three sequential achievements
an infant must accomplish if he is to attain mature social behavior:
(1) the differentiation of human beings as a class apart from the rest
of the environment, (2) the recognition of certain individuals as familiar,
and (3) the formation of specific attachments. Schaffer chooses not to explain
social development in terms of drives but rather to conceive of sociability
as originating in the infant's perceptual encounters with other people. He
stresses the interrelatedness of cognition and social behavior and the
reciprocity of social behavior.

The review ended with a series of statements about the kinds of
affective skills a child of five who was classified as being affectively
competent might possess. The list of attributes included:

1. The child would emit positive and negative responses freely.

2. The child would discriminate easily between caretaker and
    significant others.

3. The child would demonstrate a secure attachment relationship
    to at least one person.

4. The child would initiate social interaction with peers or adults.

5. The child would display and recognize in others five or six basic
    emotions.

6. The child would get and maintain the attention of adults in
    socially acceptable ways.

7. The child would demonstrate cooperative play and sharing with
    siblings or peers.

8. The child would demonstrate respect for the rights of others.

9. The child would demonstrate appropriate responses to negative situations.

10. The child would praise himself and show pride in his accomplishments.

11. The child would demonstrate knowledge of sex role in play activities.

12. The child would accurately depict his skill level in four or five major areas.

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CHAPTER II

AFFECTIVE DEVELOPMENT IN THE
HANDICAPPED PRESCHOOL CHILD

II. AFFECTIVE DEVELOPMENT IN THE HANDICAPPED PRESCHOOL CHILD

Overview

The purpose of this chapter was to outline the development of
the handicapped preschool child according to five dimensions:
(1) Emergence of Self (Physical, Cognition, Affect ـ), (2) Caretaker
Attachment, (3) Adaptation-Mastery, (4) Self-Concept, and (5) Socialization.

The six handicapping conditions spoken to in this chapter were
as follows: (1) the mentally retarded, (2) hearing impaired and deaf,
(3) the blind and partially seeing, (4) the speech impaired, (5) the
physically handicapped, and (6) the emotionally disturbed. Within each
section the course of development was outlined according to the five
dimensions with the emphasis on noting those areas in which affective
development does not proceed as in normals. It should be mentioned at
this point that a paucity of research on affective development in
handicapped children made this a difficult task.

The following summary will briefly outline what has been written
about each of the handicapping conditions. For more complete information,
please refer to the final report.

AFFECTIVE DEVELOPMENT IN
THE MENTALLY RETARDED

Summary

A primary characteristic of the retarded child is his slower learning
rate (Zigler, 1973). Since many mentally retarded infants are hypotonic
(Coleman, 1973) we may expect physical activity to occur less often both
in utero and in vivo.

Smiling, increased vocalization and increased bodily activity are
delayed in the retarded infant. Cicchetti and Sroufe (1976) found in a sample
of 14 Downs syndrome infants that the median onset of laughter was 1C months.
This delay also results in a delay in the retarded child's capacity to develop
an adaptive communication system. The retarded child's delayed development
in activities such as holding, mouthing, visual inspection, biting, shaking,
and examining has been documented (Cowie, 1970). This results in a delay
in the retarded child's acquiring a sense of object permanence.

The retarded child's delayed development of a communication system
affects his/her attachment to a caretaker. Behaviors such as smiling,
laughing, and gazing which enhance the attachment process are usually delayed
in the retarded infant.

When the retarded child does develop a communication exchange with a
caretaker, and especially if the caretaker is responsive, the infant may
become very dependent on the caretaker. A cycle noted in many instances in
mental retardation is for the child to be dependent and for the caretaker to
be overprotective. Without intervention, this cycle may be deleterious to
further growth and development.

As mentioned earlier, when an infant develops an attachment to a
caretaker and becomes confident that the caretaker will always be available,
exploratory behavior increases. For the severely retarded child, institution-
alization usually precludes the development of an attachment relationship
that is sufficient to stimulate adaptation to and mastery of the environment.
Indeed, studies by Spitz (1945), Pasamanick (1946), Dennis (1960), and
Sternlicht and Siegel (1968), uniformly demonstrate the devasting effects
of institutionalization on affective development. It seems clear that
depriving the infant of a caretaker at an early age exacts a severe penalty
in terms of later development.

For the retarded child who remains at the home the picture is brighter.
Other than the constraints imposed by his slower rate of development, it has
been aptly demonstrated that the retarded child does respond to a stimulating
environment and can learn mastery of his environment. However, Webster (1963)
reports the quality of development suffers.

Self-Concept

Research on the development of the self-concept in retarded children
is plentiful. Again, the evidence is an indictment of institutionalization.
Beginning with Goldfarb's (1944) series of studies the evidence continues to
accumulate that institutionalization retards the development of a sense of
self, results in greater negative attitudes towards the self, and severely
limits the ability to form positive identifications with others.

Webster (1963) has commented that the retarded child has a poorly developed sense of self which stems from a disturbance in ego development. He further sees this as resulting in an immature or infantile character structure.

For the retarded child who remains at home the development of self-concept seems to proceed through the same stages as for normals except at a slower pace. However, because our society views the retarded child in an essentially negative fashion, the retarded child is predisposed to develop a concept of self which is negative.

Socialization

Since most people agree that the socialization process is largely a function of interaction with others, the mentally retarded child begins this process with a handicap. The child's slower rate of development immediately places restrictions on transactions with people. Deprived of a "rich" social environment by limited communication abilities and by the reactions of others toward him, the retarded child many times fails to acquire the repertoire of social behaviors which would allow him to be more successful in social intercourse. Bijou (1970 has commented ....

> "A sparse social environment not only reduces the
> frequency of social reinforcing stimuli, it limits
> the opportunities for a child to engage in programmed
> activities that result in discriminations normally
> expected in his particular culture ...." (p. 153.)

The institutionalized child usually suffers to a greater degree in terms of restricted social environment than does the child reared at home. In both cases, the lack of opportunities to acquire social skills and to learn personal and social controls restrict most retarded children's ability

to have a direct impact on their social environment. Rather, the retarded child is forced many times to interact with his social environment through indirect means. These indirect means may include tantrums and other acting out behaviors which have caused many people to say that most retarded children have behavior problems.

AFFECTIVE DEVELOPMENT IN THE HEARING
IMPAIRED AND DEAF

Summary

There is a substantial body of research examining development of
communication in the deaf child and the impact of deafness upon personality
adjustment. Findings have generally indicated that deaf children are some-
what more poorly adjusted, rigid, immature, and neurotic than normals
(Schudt and Schudt, 1972). Levine (1965) suggests that the findings do
not necessarily imply psychopathology resulting from deafness. Rather, they
can be interpreted as providing normative data on a minority group who live
in a different environment and do not have the language and other skills
required for normal personality development.

The deaf child may have problems learning to communicate effectively.
Since he cannot hear he is unable to respond to auditory cues from those
around him and problems in communication may arise. The parents' attempts
to communicate with their deaf child may lead to frustration on their part
and this, in turn, may exacerbate problems in communication. Research on the
mother-infant relationship indicates that the caretaker attachment for deaf
children may be impoverished by the nature of the child's handicap and the
mother's subsequent frustration in trying to communicate with her child. There
is some evidence, however, which suggests that this may not be the case when the
deaf child's parents are deaf also.

It is most likely that the deaf child does not move as quickly or aptly
through the adaptation-mastery stage as his normal peers. First of all, there
is some evidence that deaf children are not encouraged to explore as much as are
normal children. It has also been found that deaf children show less pride in

mastery than either their deaf peers with more communication skills or

than hearing children. Another reason for the deaf child's lag in mastery

development is his poor communication skills. Deaf children are hampered in

that they cannot ask questions and receive replies about events and objects

in the world about them. They also cannot explore the environment as

thoroughly as normals since they lack the sense of audition.

Studies on self-concept seem to indicate that deaf children have poor

self-concepts. The self-concept improves for children with better communication

skills and for children of deaf parents. It also appears to be the case that

deaf children suffer a serious setback to the formation of social relationships

and may have difficulty in grasping social standards. In general then, deaf

children face many setbacks in their affective development although acceptance

of their impairment and early communication, as when the parents are deaf also,

seems to have a positive influence on the child's emotional adjustment.

AFFECTIVE DEVELOPMENT IN THE
BLIND AND PARTIALLY SEEING

Summary

Affective development in the blind infant is closely tied to his
biological dependence on a caretaker. Continual intervention by adults
seems necessary for optimal development.

Although blind children exhibit appropriate reflex actions shortly after
birth, discovery of their bodies proceeds essentially through tactile channels.
In a study done in 1968, Pratty and Sams found that for the blind child,
awareness of body movements is easily acquired. Awareness of body parts
and laterality and directionality of movement seem to be the most difficult
tasks. This requires being able to locate the self in space without appropriate
visual cues.

Blind infants demonstrate the same developmental sequence as normal
infants in the appearance of basic emotions. While their range of affect
does not appear to be as great, they do emit the appropriate basic emotions.
Friedman (1964) for example, presents evidence that the blind child smiles
at the appropriate times and with appropriate body movements. What is
inhibited in the blind child are behaviors which elicit responses from others.
This in a sense forces him to rely on physical contact and verbalizations to
communicate.

Wolff (1966) has commented on the blind child's lack of knowledge about
the permanence of objects as representing an important consequence of having
little or no vision. He speculated that the blind child is delayed also in
acquiring concepts of space, time and causality. In the normal child vision

and touch are important in developing these concepts. In the blind infant touch is available but a substitute modality has to be employed for vision. It seems crucial that in facilitating the development of object permanence in blind infants that they be stimulated to utilize a variety of senses in exploring the environment.

Contact and cuddling along with the use of vocalizations appear to enhance the development of a blind infant's attachment to a caretaker. Important also is the degree of stimulation given the infant by the caretaker. This amount of stimulation is important because the blind infant does not respond in the expected fashion and the mother may reduce her attempts to stimulate the infant as a direct consequence of the infant's lack of response. In addition, Sandler (1963) reports that in any blind child there will be a pull toward self-centeredness. This has a potentially limiting effect on the development of a strong attachment. Fraiberg (1972) in discussing "separation crisis" in two blind children presents evidence that attachment occurs later in blind children than in normal children. She has also commented on the extended period of the separation crisis in blind children.

The obstacles to mastering an environment one cannot see are tremendous. White and Castle (1964) found that blind infants exhibit more exploratory behavior when they receive extra handling by adults. To further encourage the blind infant to master his environment a variety of approaches have been recommended. Langley (1961) encourages parents to facilitate all kinds of experimentation by the young child. Raynor (1975) has outlined a series of specific activities which parents can follow in stimulating the blind child to explore and master his environment.

Self-Concept

When the blind infant is able to distinguish himself from the world
around him, the process of development of self-concept begins. As noted
earlier, this process occurs later in the blind infant because of the
sensory depriva_ion he has undergone. Also, the blind infant has to
develop other modalities to use instead of vision to aid him in this process.
Fraiberg (1964) holds that the constitution of a body and self-image represents
one of the most difficult developmental tasks for the blind child. Unless
stimulated by others, the blind child is inclined to use his body in self-
stimulating actions which are repulsive to many peoole. Jones (1967) has
urged that the development of body concept in the blind should be fostered
using imitation, tactual sensations, olfactory and gustatory sensations, and
motor manipulation. Raynor (1975) believes the child's caretaker can foster
the development of a sense of self through fostering independent exploration.

Socialization

Although there is evidence that the blind child develops close interpersonal
relationships with his primary caretaker, the development of relationships
with others in the environment is made much more difficult. Interpersonal
relationships with peers are affects, as are relationships with siblings and
other significant adults. Wills (1972) presents a strong case for continual
intervention by an adult to stimulate the blind child into moving from simple
repetitive play and simple role play into more complex play activities. Indeed,
adults become increasingly important in sustaining a blind child's interactions
with peers and in doing so inadvertently provide models which result in the

blind child's acquiring adult-like behavior patterns. Anastasiow and
Hanes (1975) have suggested that a functional relationship exists between
sex role identification and sex role behaviors. For the blind child such
identifications are word dependent and therefore more difficult to make.

AFFECTIVE DEVELOPMENT IN THE
SPEECH IMPAIRED

Summary

Disorders of speech can be divided into four general categories:
(1) voice disorders, (2) articulation disorders, (3) delayed speech, and
(4) stuttering. Speech impairments have their derivation in many sources
and may be noted when the child first begins to learn to vocalize or may
not show up until later in childhood, as is sometimes the case with stuttering.

Some, though not all studies on the subject, have found disturbances
in parents' personalities to correlate with the presence of articulation
disorders in children. These studies imply that the mother-child relationship
for children with articulation problems might not be as warm and accepting as
most caretaker-child ties are. It cannot be assumed, however, that parents
are the cause of the problem since other variables may have confounded the
research, i.e., the parents' reaction to a speech impaired child. Studies
of parents of children with delayed speech have also found distrubances in
the caretaker-child relationship. There thus seems to be a general feeling
among researchers that parental personality factors play a significant role
in contributing to children's speech disorders.

Speech disordered children may suffer from a lack of environmental
stimulation at or before the adaptation-mastery stage of development. They
may, for instance, be subject to an impoverished environment or inadequate
speech models. There is much evidence to suggest that a lack of environmental
stimulation can hamper the development of speech.

Studies of the self-concept in children with speech disorders have not yielded clear-cut data. Some research has found a correlation between the presence of speech disorders and a poor self-concept, although this relation-ship is usually not considered causal. It is difficult to state the exact relationship between the presence of speech disorders and a poor self-concept. Part of the difficulty follows from the wide spectrum of possible causes of speech disorders. If a speech disorder arises in conjunction with an impoverished environment, then the probability is high that a poor self-concept will result. It has also been noted that there is a correlation between speech disorders resulting from physical deformity and a poor self-concept. Research has been unable to determine the origin of a poor self-concept when it is present in speech disordered children, however. That is, we do not know whether a speech impairment can damage one's self-concept or if a poor self-concept can manifest itself in the form of a speech disorder.

If a child with a speech disorder has had difficulty communicating with his mother, he will probably also evidence difficulty in communicating with others and may, thus, be less responsive socially. If his speech disorder is not so severe that it hampers interpersonal communication, then the development of social relationships and the learning of social and personal controls may proceed as in normals. In the case of stutterers, the child's speech problem may become a social handicap, especially if the child is self-conscious about the problem. But care must be taken in interpreting studies that find the stutter to have problems relating to others. It is uncertain whether or not disruptions in social contact cause stuttering or are the result of stuttering.

There thus seems to be no one pattern of social responsiveness for speech disordered children, although children with severe disorders are likely to experience problems in communication which may hamper the development of social relationships. It is apparent that more research is required to understand the affective development of the speech impaired and the origin of speech disorders.

AFFECTIVE DEVELOPMENT IN THE
PHYSICALLY HANDICAPPED

Summary

Physical handicaps can include a wide range of disorders, from heart disease to cerebral palsy, making the physically handicapped an extremely heterogeneous group.

In order for the discovery of physical self to proceed normally, a child must be able to manipulate body parts and receive sensory feedback from these parts. A child with a severe physical deformity or a child who has been immobilized by early surgery will, of course, be limited in the amount of physical activity he can engage in and his self-discovery and sense of object permanence will be delayed.

Physically handicapped children are highly susceptible to impoverished caretaker-child relationships. Their defects are usually obvious and parental admiration is, thus, not as easily cultivated. Also, parents who feel guilty or burdened may put an additional strain on the child and parent-child relationship.

The physically handicapped child's mastery development can suffer serious setbacks that may arise from a variety of difficulties which he is subject to. The more physically handicapped they are the less they are able to gain exposure to their environment. Restriction in mobility will, of course, restrict background experiences. If parents are fearful of allowing their children to move about freely and to engage in a variety of experiences, exploration will be discouraged and adaptation-mastery will be delayed..

The physically handicapped are, for many reasons, highly susceptible to feelings of inferiority and devaluation. The developmental failures they have experienced may leave them with a sense of defeat. Their parents may feel "disappointed" and these feelings, which may be covertly communicated to the child, will then become incorporated into the child's self-concept. Cultural attitudes toward obvious physical defects no doubt affect the child's view of himself. An impoverishment in the caretaker-child relationship may also contribute to a poor self-concept. It thus seems to be the case that physically handicapped children are more prone to poor self-concepts than normal children, although a warm and accepting family environment can do much to prevent the formation of a poor self-concept.

Problems the physically handicapped child may encounter in making social contact stem from a negative self-concept and/or negative evaluations by others. Impoverishment in social relationships may also interfere with the learning of social and personal controls. Wright (1960) contends that instead of identity of treatment serving as a guide to social behavior, the person with a disability and those around him should think rather in terms of how the person can best participate. Creative solutions to the question of how handicapped children can be included in activities may benefit their self-concept and facilitate positive social evaluations of them.

AFFECTIVE DEVELOPMENT IN THE EMOTIONALLY DISTURBED

Summary

Conditions in young children considered emotionally distrubed range from severe psychosis such as autism to specific behavior problems. The psychoses are characterized by highly disturbed thought and behavior patterns such that the individual lacks reality contact sufficient to function as a normal individual. Psychoses occurring in infancy and early childhood include autism or childhood schizophrenia and symbiosis. Emotional disturbance is used in reference to the various disturbances that are not as profound as the psychoses. Emotional disturbance is the term of choice for children who display personality disorders, neurotic disorders, and specific behavior problems. Since it is employed for such a wide range of symptoms it has little explanatory value.

The psychotic conditions schizophrenia and autism imply a withdrawal from social contact and often involve bizarre behavior such as repetitive rocking. It is at the time the normal infant is learning that he can emit emotional responses and elicit behavior from others that autism becomes apparent. The social smile is absent and autistic children do not show the pleasure that normal infants exhibit in the presence of their mother. Since the autistic child has difficulty in learning to employ affect as an interaction tool, he fails to develop a normal attachment to his caretaker. He does not rely upon the mother for comfort and assistance to the extent that the normal

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child does. Neither does he engender the caretaker's attachment for him since he does not "reward" caretaking behaviors with smiles and other signs of pleasure. The autistic child is also thwarted in his mastery of the environment since he does not explore and manipulate the environment in the same manner as do normal children. He exhibits an atypical relationship with the environment in that he is highly structured and constricted and engages in little exploration. Since the autistic child fails to develop normal interactional patterns and accurate perceptions of himself and others, he lacks the ability to formulate a concept of self. Rather than showing a poor self-concept he simply may not have developed any self-concept at all. Autistic children are also significantly lacking in social responsiveness.

The symbiotic psychosis is characterized by excessively dependent behavior. There is some evidence that children manifesting a symbiotic psychosis suffer an impairment in the development of an accurate body percept. In early childhood they sometimes show signs of serious disturbances in perception of body image and in body functioning and they often confuse themselves with other people (Mahler, 1952). Symbiotic psychosis is usually not suspected until the second year of life. The symbiotic child shows a reversal of the symptoms of the autistic child. His communication is hypersensitive and he is easily frustrated. He "over-learns" how to use himself as the object of affect and manifests an excess of affection communications, often to the point of being oversensitive. He thus manifests an "over-attachment" to his mother. Since he does not separate easily from his mother and manifests extreme anxiety upon separation, he does not explore his environment as does

the normal child. His mastery of the enviornment is thus hampered. Like the autistic child, the symbiotic child has difficulty in forming a concept of himself as a separate being.

Included in the category emotional disturbance, are children with acting out problems, enuresis, excessive tantrums, and the like. These disturbances are usually not noted until the late preschool years or elementary school years. The adaptation-mastery stage is the time when many emotional disturbances are noted since the young child is now required to manifest greater self-control and awareness of the environment. Children with emotional disturbances often develop a poor self-concept. Since children evaluate themselves partially on the basis of information they receive from others, negative views of their behavior may be incorporated into their self-concepts. The emotionally disturbed child exhibits a wide range of interpersonal styles, depending upon the nature of his disorder. It is difficult, however, to make generalizations about the affective development of emotionally disturbed children since the label emotional disturbance encompasses a broad range of disorders.

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CHAPTER III

IDENTIFICATION OF INFORMATION GAPS AND PROPOSED
RESEARCH AND DEVELOPMENT STRATEGIES

IDENTIFICATION OF INFORMATION GAPS AND PROPOSED
RESEARCH AND DEVELOPMENT STRATEGIES

There are several information gaps in the affective area which have

been identified. In the following section, the gaps are first described

in general terms; then a case is made for inter- and intra-agency cooperation

in addressing the information gaps. Next, intervention research paradigms

are suggested for answering specific questions. The specific research and

development objectives recommended for the affective area are then listed

in outline form together with strategies for achieving the objectives, funding

responsibilities, etc.

INFORMATION GAP 1

No clear explanation of the course of affective development exists.

That is, theories of affective development and emotion abound. However,

a clear exposition of affective development, anchored to available research

findings, would serve a valuable function in stimulating both basic and

applied research and suggesting intervention strategies. Building upon

available knowledge, studies addressing the affective competencies required

to reach each developmental milestone should be carried out. These studies

should address clearly defined handicapping conditions as well as handicapping

conditions from a non-categorical viewpoint.

INFORMATION GAP 2

For many years researchers have stressed the importance of cognitive

factors in development. Recently, a view has emerged which holds that affect

serves as a primary motivator and organizer of development and that affect in

the infant enhances cognitive development (Sroufe & Waters, 1976). A primary

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information gap exists with regards to the complex relationships and interactions between cognitive and affective development. Again, longitudinal studies could tease out these relationships. Examples of specific questions which could be addressed in this area include:

> What are the implications of lags in one developmental domain for other domains?
>
> How do specific affective experiences serve as setting events for cognitive development?

INFORMATION GAP 3

It would be extremely useful to delineate the characteristics of the affectively "competent" infant. Studies of this type would of necessity require looking at the affectively competent child at age five and then developing a profile of affective competence. Once this profile is developed a look backward could reveal particulars of the interactions between early experience and the development of such competence. Much useful information relating to this effort already exists in the work of White & Watts (1973) and others.

INFORMATION GAP 4

In the affective area, probably as much as in any other developmental area, there is an information gap with regards to the parameters of an ecological system which promotes healthy affective development. For certain children the critical forces which have a major impact on development lie neither within the child nor within his family but in the impoverished, desperate circumstances in which the family is forced to live. Skodak & Skeels (1949) dramatically proved effectiveness of environmental intervention by demonstrating significant I.Q. gains in mental retardates when they were removed from the institution. Assessing and altering environments to foster healthy affective growth requires a long needed research and intervention technology.

INFORMATION GAP 5

An information gap exists with regards to curriculum which addresses
affective skills in the age period birth to three. Currently, through the
Handicapped Children's Early Education Projects, and other projects, curriculum
materials have been developed which address affective development above age
three. What is needed is a systematic curriculum addressing certain critical
affective dimensions up to age three. The curriculum should be goal referenced
and individualized to the extent that it speaks to specific affective
characteristics. For example, we know how crucial it is to the child's
development that he form an attachment relationship. Developing attachments
is one of the critical dimensions addressed in curriculum development efforts.

INFORMATION GAP 6

As in the case of affective curriculum, an information gap exists in
the assessment of affect in children up to age three. However, the need also
exists for a standardized, comprehensive, social competence scale for the
child of 3-5. For the very young child a criterion referenced scale of
affective development which extends from birth to age three is needed. This
scale shoul: he derived from the major affective dimensions betwen the ages of
0-3. It should be goal referenced and individualized.

Specific Research and Development
Questions and Suggested Strategies

Adequate research and/or development in six broad information areas is
likely to require massive amounts of funding. Certainly, if each area were
funded independently this would be true. In addition, two of the areas suggest
basic research activities which are outside the purview of the Bureau of

Education for the Handicapped. How then, with limited funding, could the six broad areas be addressed? The answer lies in a combination of: (1) inter- and intra-agency cooperation and (2) an overall research strategy of using intervention research paradigms in attacking the information gap areas. The reasons for suggesting the above combination are as follows:

1. Within the various divisions of the Bureau of Education for the Handicapped are funding resources which could be brought to bear on the information gaps with the Research Division orchestrating the effort.

For example, an extremely large number of HCEEP projects are being funded for a three-year funding period that could effectively address some of the information gaps if the information gaps were brought to the attention of grant applicants as they prepare and submit proposals. In addition, some technical assistance related to intervention design techniques might be required. Present projects are already funded to demonstrate that early intervention works. The next logical step is to focus some of these efforts in the affective area.

2. Currently, the Bureau of Education for the Handicapped, the National Institute of Mental Health, and the Office of Child Development are funding research and development efforts in the affective area. While the current efforts are not duplicative, closer coordination of inter-agency efforts could result in bringing more resources to bear on the basic information gap areas. The Bureau of Education for the Handicapped has already demonstrated its willingness to move in this direction. These efforts could be easily expanded.

3. Intervention research is applied research. It also has the potential to answer basic research questions. The rationale for utilizing intervention research paradigms to address some of the information gaps lies in the fact that intervention research is being supported heavily in the preschool areas and that intervention research designs lend themselves to filling in the information gaps while at the same time accomplishing a socially useful purpose. When we consider the problem of how to structure the affective experiences of the first few years of a child's life, or consider the problem of how to explicate the interaction between cognition and affect, intervention designs can provide basic answers and serve socially useful functions as well.

Information gaps 1, 2, 3, and 4 could be addressed with a single longitudinal study conducted over a period of 5 years. The design of the study could follow the general outline of White's study (1973) but would focus on affective development. The study would include the following phases.

Phase 1 - Identify and list the behaviors which make one affectively competent at ages 1, 2, 3, and 4.

Phase 2 - Identify three target populations:

1. A population of normal children exhibiting a wide range of affective competencies.

2. A population of handicapped children exhibiting affective competence.

3. A population of handicapped children exhibiting a lack of affective competence.

Phase 3 - Study the processes of optimal and restricted development
         of affective competence occurring naturally in target
         group one.

Phase 4 - Study the processes of optimal development of affective
         competence occurring naturally in target group one.

Phase 5 - Isolate the major differences in the patterns of experience
         of the three target groups.

Phase 6 - Identify in target group two the environmental conditions which
         impinge on the development of affective competence.

Phase 7 - Provide and evaluate interventions suggested from phase 3, 4,
         5, and 6.

The addition of an intervention group to the design allows for generation
and testing of hypotheses through the longitudinal period. Findings from the
ethological studies of groups one and two could be translated into intervention
terms and tested continuously. The intervention paradigm recommended by
Brofenbrenner (1975) includes family centered intervention, ecological
intervention, and pre-school intervention using a sequential strategy in
providing interventions. Also, single subject experimental design could
test intervention hypotheses in situations where this is feasible.

Funding for the longitudinal study could come from several sources.
The funding alternatives include:

1. Funding an experimental program through the HCEEP network. Since
   this network is changing its program format after this year with
   the intent to fund 4 or 5 experimental programs on a long-term
   basis (5 years at least), it would seem to be a logical source
   of funding.

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2. Funding an experimental program jointly through the Bureau
   of Education for the Handicapped and the Office of Child
   Development. This would result in benefits to both agencies,
   since nearly all of the findings would be applicable to programs
   conducted by both agencies.

3. The total program could be broken into two parts with the National
   Institute of Mental Health funding the study of group one and Bureau
   of Education for the Handicapped and Office of Child Development
   jointly funding the study of groups two and three.

Information gaps five and six could be addressed partly by way of the
longitudinal research described above and partly by other means. The
development of assessment devices would be undertaken as an essential aspect
of the longitudinal study. The development of systematic curricula could
be accomplished either by having an HCEEP demonstration project assume the
responsibility or through a Research Division sponsored RFP.

In summary, the role of the Research Division would be to:

1. Stimulate interest in research on the information gaps
   in the affective area.

2. Pursue liaisons with other divisions within the Bureau which
   could fund information gap research through intervention programs.

3. Participate in a modest way in funding a longitudinal research
   project.

4. Provide technical assistance to those HCEEP projects wishing to
   address the information gaps as part of their demonstration programs.

Suggested Research Division Priorities

Priority 1 - Validate information gaps specified in this RFP.

Priority 2 - Disseminate information gaps and proposed research and
development strategies to Research Division and Program
Development Branch mailing lists.

Priority 3 - Establish liaisons with other divisions within the Bureau
and other H.E.W. agencies.

Priority 4 - Fund longitudinal intervention study. (Preferably through
HCEEP experimental programs).

Priority 5 - Issue RFP to fund required curriculum development project.

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Appendix A

Chart of Available Instrumentation for
Affective Development

NAME OF INSTRUMENT	Test	Rating Scale	0-6	6-12	12-24	24-36	36-48	48-60	Parent	Paraprof.	Professional	Teacher	Emergence of Self	Caretaker Attachment	Adapt Master	Self-Concept	Socialization
An Evaluation Scale for 4 & 5 year olds		X						X				X			X	X	
Assessment by Behavioral Rating						X	X	X					X	X	X		X
Bayley	X	X	X	X	X	X					X		X		X		
Brown I.D.S. Self-Concept Referents' Test	X							X		X	X	X				X	X
Cain-Levine Social Competency		X						X			X	X					X
California Preschool Social Competency		X					X	X		X		X				X	
Children's Self Social Constructs Test	X						X	X		X		X				X	X
Cincinatti Autonomy	X						X	X			X	X				X	
Comprehensive Identification Process		X	X			X	X	X		X	X		X		X		
Day Care Behavior Inventory		X				X	X	X				X				X	X
Denver Developmental Screening Test		X	X	X	X	X	X	X		X	X	X					
Developmental Guidelines (Karnes)		X				X						X			X	X	
Developmental Screening Questionnaire		X				X	X	X	X			X					X
Early Intervention Developmental Profile	X	X	X	X	X	X					X		X	X	X		X
Infant Behavior Inventory		X			X	X	X		X				X	X		X	X
Infant & Preschool Social Behavior Checklist		X	X	X	X	X	X	X								X	

Name of Instrument	Type of Instrument		Age						Administered By				Dimensions				
	Test	Rating Scale	0-6	6-12	12-24	24-36	36-48	48-60	Parent	Paraprof.	Professional	Teacher	Emergence of Self	Caretaker Attachment	Adapt. Master	Self-Concept	Socialization
Learner Self-Concept	X							X		X		X				X	
Lexington Developmental Scale		X				X	X	X				X					✓
Minnesota		X	X	X	X	X	X	X	X			X	X		X		
Preschool Rating Scale		X				X	X	X				X					X
Preschool Self-Concept Picture Test							X	X				X				X	
Primary Academic Sentiment Scale	X							X				X				X	X
Primary Self-Concept Inventory	X						X	X				X				X	
Psychiatric Behavior Rating		X				X	X	X				X	X		X	X	
Scale of Attachment Behaviors		X	X	X							X			X			
Self-Concept & Motivation Inventory	X							X				X				X	
Sewell Early Education Development Program	X	X	X	X	X	X	X				X	X	X	X		X	
Vineland Social Maturity		X	X	X	X	X	X	X				X				X	

APPENDIX B

Chart of Available Curriculum
for Affective Development

NAME OF CURRICULUM MATERIALS	0-6	6-12	12-24	24-36	36-48	48-50	Parent	Paraprof.	Professional	Teacher	Emergence of Self	Caretaker Attachment	Adapt Master	Self-Concept	Socialization	Manip. Activities	Records/Cassettes	Picture Books/Posters	Filmstrip/Movies
THE AMAZING LIFE GAMES THEATER				X	X	X		X		X			X	X	X	X			
BABY LEARNING THROUGH BABY PLAY	X	X	X				X	X			X	X	X	X	X	X			
BIG BOX: BODY AND SELF AWARENESS					X	X	X	X	X	X			X	X	X	X		X	
CHILD AND HIS WORLD						X		X	X	X			X	X	X		X		
DEVELOPING INDIVIDUAL VALUES IN THE CLASSROOM					X	X		X		X				X	X	X			
DEVELOPING UNDERSTANDING OF SELF AND OTHERS (DUSO)						X		X	X	X				X	X	X	X	X	
THE DEVELOPMENT OF FEELINGS IN CHILDREN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
DISCOVER: SELF & SOCIETY						X		X		X				X	X			X	X
EARLY CHILDHOOD SERIES				X	X	X		X		X			X	X	X	X	X	X	X
EYE GATE FILM STRIPS						X		X	X	X			X	X	X		X		X
FOCUS ON SELF DEVELOPMENT						X		X		X			X	X	X	X		X	X
HUMAN DEVELOPMENT PROJECT					X	X			X	X	X			X	X	X			
KINDLE						X		X	X	X			X	X	X		X		X
MAPPS, SOCIAL-EMOTIONAL PROGRAM	X	X	X	X	X	X	X	X				X	X	X	X	X	X		
THE OLYMPUS SYSTEM OF HOME-BASED EARLY CHILDHOOD EDUCATION	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X
PACEMAKER PRIMARY CURRICULUM LEVEL A						X		X		X				X	X			X	
PEABODY EARLY EXPERIENCES KIT (PEEK)				X	X	X			X	X			X	X	X	X	X	X	
PEABODY LANGUAGE DEVELOPMENT - KIT P.					X	X			X	X			X	X	X	X		X	

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NAME OF CURRICULUM MATERIALS	AGE						DESIGNED FOR USE BY				DIMENSIONS					MODE OF PRESENT			
	0-6	6-12	12-24	24-36	36-48	48-50	Parent	Paraprof.	Professional	Teacher	Emergence of Self	Caretaker Attachment	Adapt Master	Self-Concept	Socialization	Manip. Activities	Record/Cassettes	Picture Books/Posters	Filmstrip/Movies
THE PORTAGE GUIDE TO EARLY EDUCATION	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
PRESCHOOL SPECIAL EDUCATION PROJECT	X	X	X	X			X	X		X	X	X	X	X	X	X			
THE MOST IMPORTANT PERSON					X	X		X		X			X	X	X			X	X
PROJECT ME					X	X		X		X				X	X	X	X		X
SEED DEVELOPMENTAL ACTIVITIES	X	X	X	X					X	X	X	X	X	X	X	X			
SOCIAL DEVELOPMENT-TEACHING PICTURES					X	X		X		X				X	X			X	
THE SOCIAL LEARNING CURRICULUM						X		X	X	X				X	X	X			
STEPTEXT						X		X		X					X			X	
TEACH YOUR BABY	X	X	X	X			X	X			X	X	X	X	X	X			
THRESHOLD EARLY LEARNING LIBRARY					X	X		X		X				X	X	X			
TOY LENDING LIBRARY							X	X			X			X	X	X	X		X
YOUR CHILDS INTELLECT: A GUIDE TO HOME-BASED PRESCHOOL EDUCATION	X	X	X	X	X	X	X				X	X	X	X	X	X			