reduction Neuropsychology

Help for Developmental Differences at the Preschool Level

"By age four, a child's intellectual, psycholinguistic, visual-motor, and personality

characteristics are developed sufficiently well to determine deviations, both positive

and negative. By age five, almost every precursor of learning, attention and behavior

problems is apparent." (Edna Copeland)

In order to help children with areas where they may be "at risk" for developmental

disabilities, careful evaluation, planning and remediation can be very helpful.

The staff who work with preschool children are very much aware of children who

appear different than the "average". They are in a far better position to notice these

differences than are the parents because parents are looking at one child of a given age

whereas the staff works with a classroom with many children of the same age.

The staff then has the concern of trying to identify areas of difference and to approach

the parents about their findings – gently. They also have the responsibility of trying to

adapt their program so that the needs of all of the children are met. They should also be

aware of qualified professionals in their area who would constitute a referral file to

diagnose any visual, auditory or neurological problems.

The areas where learning difficulties would be most likely noticed at the preschool level

are:

-Attention/concentration/impulse control/behavior

-Hearing/auditory perception/auditory processing

-Vision/visual processing/visual-motor skills

-medical" (Edna Copeland)

Children who have attention difficulties may be exhibiting difficulties in social relations,

and emotional maturity. They may be the children who have trouble sitting on the line

or paying attention to a large group activity for any length of time. "They are often

bossy and may have fine-motor problems" (Copeland).

As you can imagine, a child who has trouble attending may have trouble following

directions and learning new concepts – especially as the new idea comes through his

weakest learning modality. Some neurologists will confirm that most learning disabilities

at this age are due to an attention disorder because a child cannot learn what she

cannot attend to. Current research shows that attention difficulties are as the result of a

physical problem – a chemical imbalance in the brain causing some areas to be

understimulated. The sooner as attention difficulty can be dealt with, the less likelihood

of learning disabilities occurring in later grades. Many of the behaviors of attention

deficited children are felt to come from the frustration they feel as they try to deal with

their world.

Hearing difficulties can be purely physical. The Eustachian tube of most preschoolers is

in a horizontal position and therefore easily holds fluid when a child contracts a cold.

The retention of the fluid diminishes hearing and often becomes infected which can

cause further hearing disruption and permanent damage. A child who is exhibiting

language and social deficits should be checked for possible physical causes before any

assumption is made that the child has a developmental difficulty. Untreated ear

problems can cause permanent developmental delays as the child's sensitivity to

language diminishes. A child may have difficulty remembering what has been heard or

difficulty transferring what has been heard into vocalizations or motion. Auditory

problems frequently are found in children who have attending difficulties.

Visual problems can range from visual acuity problems (near-sightedness of for-

sightedness and astigmatism) to the pattern in which the eye track as the child attempts

Dr. Val Scaramella-Nowinski Pediatric Neuropsychology Pediatric Neuropsychology Diagnostic and Treatment Center to read, to the ability to focus the eye at the proper reading distance. The process of

being able to see with the eyes, process the image and reproduce an image with the

hand or talk about the image is very complex. Children can have difficulties with any of

the connections I the eye-hand process or visual to vocal process. A physical exam by a

qualified pediatric eye physician can help the child deal with pure physical difficulties.

Perceptual problems that influence the way a child perceives the images are not as

easily corrected but multisensory approaches of learning can certainly help them to deal

with visual perceptual difficulties. These may be the children who rarely choose to do

block building or sensorial activities in the classroom.

Children who have allergies often can exhibit learning difficulties. If they are "itching"

inside, it is difficult to pay attention. If they have been placed on antihistamines, they

may be more active or more lethargic depending on medication and their reaction to it.

The portion of the brain governing attention is next to the portion which controls

allergic reactions. If a child has been placed on medication for A.D.D, the level of

medication must be carefully monitored. You, the professional, can easily note observed

differences. Children who have epilepsy may be having small seizures that cause

momentary blackouts which interfere with learning. Your input as professional observer

can be most helpful as you keep in close contact with the parents (and physician if the

parents have given permission.)