CHAPTER 14 THE PRACTICE OF DIAGNOSING LEARNING PROBLEMS

1. INTRODUCTION

A child with learning problems is touched in his/her total personal actualization (See Van Niekerk and Sonnekus, 1979) and, therefore, it is necessary to show how his/her actualization of becoming and learning relate to the nature of his/her learning effects, as the symptoms or manifestations of his/her learning problems.

It is not always possible to show which factors can be considered the cause of a learning problem and if they indeed play a causative role. More often, it is the case that the deficient actualization of becoming and learning appear simultaneously with learning problems and, thus, there is a correlation rather than cause. (This matter is discussed in a previous chapter). However, in its turn, a learning problem can give rise to problems of actualizing becoming, in connection with which there are symptoms of learning problems.

2. DISHARMONIOUS ACTUALIZATION OF BECOMING

A child with learning problems is in a disharmonious teaching situation, as explained in Chapter 11, and the meanings he/she attributes to his/her handicap are again sedimented in his/her actualization of learning. Thus, there is a continual interaction among the actualization of becoming and learning, on the one hand, and learning effects, on the other hand. "In researching emotional problems, the question that most often arises is whether reading disability is caused by emotional problems or whether reading disability results in emotional problems. It appears that each tends to contribute to the other ... " (Ekwall and Shanker [in English], 1985: 12).

Usually, a child with learning problems is convinced that he/she cannot handle his/her schoolwork or any assignment. He/she shows feelings of frustration, impotence, inadequacy and aggression against the school and school subjects. In this respect, Ekwall and Shanker (1985: 318) say [in English] "Most students become

irritated when they fail to experience some success. Students with severe reading disability, however, tend to become extremely irritable on meeting a task at which they are not immediately successful. Their moods may also change rapidly."

Affective lability is common and can result in a withdrawal into a unique world of fantasy and the irreal, a refusal to do homework when it is connected with reading and writing, and even to truancy or vandalism--the possible deviant behaviors are multiple.

Thus, emotions and personal meanings determine a child's (also always an adult's) attitude and behavior, and even can aggravate his/her already existing distressful situation, of which a further consequence is that the child shows an inadequate grasp of subject matter contents.

Hence, a child in a disharmonious teaching situation is restrained in actualizing his/her total person, which creates a fertile ground for further restraints in his/her learning. Thus, a child, as it were, is in a vicious circle from which he/she cannot find an escape by him/herself. A defective learning effect is the symptom of inadequate personal actualization. This is discussed in the following division (Part V) of this book.

3. DEFICIENT

LEARNING EFFECTS

3.1 Introducti on

A child with learning problems progresses poorly with the

instrument al skills of reading, spelling, writing and arithmetic,

although there often then are correlated problems regarding subject

matter contents as a result.

When a child's problem

with a skill İS described, this should be done in terms of his/her

grade level, the requireme nts determine d by the syllabus, as

well as his/her individual abilities.

3.2 Deficient reading

Children with reading

problems usually show a variety of reading techniques which arise

in all of them. For example, a child can read with the help of his/her

finger, read word for word, repeat, insert, guess at, or

sound out words.

A deficient understan ding of the content is

clear when a child reads with incorrect phrasing, poor intonation,

ignores punctuatio n marks and cannot answer questions

about the content.

There are different levels of reading

passages which are ranked according to their degree of difficulty

based on a particular child's accuracy of reading techniques and

understan ding, and which can help with the selection of suitable

reading materials for each child. The independe nt level is defined by

approxima tely 99% reading accuracy or word recognition , and

approxima tely 90% accuracy in understan ding, which means that

a child can use this reading material for independe nt reading.

The teaching level is defined by 95% reading accuracy

and 75% accuracy in understan ding, which means that this level

of reading material can be used for reading instruction The

frustration level is defined by approxima tely 90% reading accuracy

and approxima tely 50% accuracy of understan ding, which

means that this reading material is too difficult for the

child, and also cannot be used for instruction before his/her skills have

improved (Ekwall and Shanker, 1985: 368-369).

The criteria are explained by Betts (1946) and further clarified by Johnson and Kress (1965:6,10) in terms of behavioral characteris tics which usually go together with them:

The level of

independe nce:

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Rhythmic, expressive

oral reading; accurate use of punctuatio n;

silent reading is faster than oral reading; answers to

questions are in language equivalent to that of the questioner;

no sign of lip movements , use of fingers, head movements

reading aloud or anxiety regarding his/her assignment S.

The instruction al level:

* The same particulars.

The frustration level:

*

Abnormall y loud or soft voice; **a**rhythmic

or word for word reading aloud; absence of expression

in oral reading; faulty use of punctuatio n;

use of finger (by regularly pointing to each word);

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movement of lips or head; requests for help;

lack of interest in selecting reading material; yawning or clearly

fatigued; and refusal to continue. Although other authors propose a few other levels of reading,

they usually are based on intuitive feelings (Ekwall and

Shanker, 1985: 370).

The more intelligent child

usually can understan d the content of the reading material even when

mistakes are committed in his/her inaccurate reading. Albert

Harris (Harris and Sipay, 1972: 42) states [in **English**] "as the

nature of the reading task becomes more one of comprehen

sion and interpretat ion, intelligenc e becomes a stronger

determinin g factor."

Adequate eye-movements are

extremely important for developing reading skills, and a deviation

can greatly restrain this developme nt. When there is any

indication of a deviation in this regard (Ekwall and

Shanker, 1985: 282-285), corrective means are required, either by

means of glasses or eye exercises prescribed by an oculist or

optometris t.

Faulty eye movements will be manifested

in looking back to previous words or parts of a sentence, omitting or

repeating words, pausing at the end of lines, the loss of orientation point during transcripti on, moving the head or keeping one's place

with a finger, eyes held too close to the book and eyes which are

red or watery.

The types of reading errors committed

are multiple, and their appearanc es differ with individual

children. Here is an attempt to indicate some of the most general

types of errors and the accompany ing perceptual

disturbanc es:

* Possibly a child does not know the

correct sound values of a written symbol or doesn't know how

to pronounce vocal combinatio ns such as dipthongs, for

example, "100i"* instead of "loei". Errors can arise at

^{*} All words in quotation marks are Afrikaans words.

the beginning of words, for example, "been" instead of

"leen"; or at the end of words, for example, "lenig"

instead of "lening". Reversal of letters within a word can occur, for

example, "bak" instead of "dak" (spatial orientation

Letter sequences can change, for example, "kruk"

instead of "Kurk". * Letters can be omitted, for example,

"daai" instead of "draai", "braai" instead of "haai".



Inadequate discriminat ion can lead to misreadings,

for example, "nooit" instead of "mooi". *

Anticipatio

ns can lead to substitutin g a word or part of a word, for example,

- "koud"
 instead of
 "koel".
- * A child can show an inability to

synthesize auditorily when he/she articulates a word.

Most reading errors committed, in each case, are attributabl

e to an inadequate analysis, and all the above errors can

be applied to this.

Standardiz ed as well as informal tests are

available in both languages (Afrikaans and English) to evaluate a

child's reading skills. This is given attention in Chapter 14,

Diagnostic Practice.

3.3 Writing deficiencie s Written work can be judged in terms of language use,

gnosticcognitive level (concrete or abstract, logical or unorganize

d, creative or stereotypic patterns of thinking) and content. In

addition, the quality of handwritin g ought to be judged in its

completed form as well as during its execution. The grasp of the

writing implement, as well as the position of the arm and body,

and the nature of the writing action are responsible for the legibility of

the writing. Any conspicuou sness during the act of

writing ought to be considered in the judgment. The ways in which

corrections are made (spontaneo usly or after being pointed out) are

important as manifestati ons of a child's spontaneo US

attending and ways of thinking. Deviations in written symbols

can be attributed to motor inaccuracie s, motor inhibitions, motor

perseverati ons or inadequate visualmotor integration Spacing

of letters and words, and the slope of lines often are a conspicuou

S manifestati on of inadequate motor control

and use of space.

3.4
Spelling
deficiencie
s

Spelling can be judged by independe nt work, transcripti

ons and dictation so that it can be determine d if the discrepanci

es which might arise can be ascribed to an error in thinking or to a visual

or auditory loss. The following are general spelling errors:

Phonetic ways of spelling, for example, "toegmaak " instead of "toegemaa k".

Omissions such as "trug"

instead of "terug". * Faulty implement ation of spelling rules such

as open and closed letter groups, for example, "hoome" instead of

"bome"; doubling of consonants for example, "kate"

instead of "katte"; diminutive forms such as "karriekie"

instead of "karretjie".

The aim of dictation is to determine

if a child can link sounds to letter symbols, and if he/she is

able to correctly remember auditorily. During transcripti ons, the

degree to which a child controls his/her work must

be observed.

3.5 Arithmetic deficiencie s

Here it is important to note computatio nal fluency,

number understan ding and the ability to use abstract methods

for solving problems, written as well as oral. Deficiencie s can be

manifested in counting with the fingers, counting and computatio

nal errors in ordinary notational forms or in abstract problem solving.

3.6 Manifestat ions of neurologic al "dysfuncti

ons" and their implicatio ns for harmonizi ng teaching

neurologic al dysfunctio n does not necessarily have to lead to a learning problem, but indeed can be the reason for

problems with the instrument al skills. In this connection , Ekwall

and Shanker (1985:10)state [in English] that "The fact does

remain that a certain proportion of disabled readers do have

neurologic al difficulties but that neurologic al difficulties

probably account for a small percentage of the actual causes of

reading disability. However, ... the fact that a student is classified

as having a minimal brain disfunction , does not help in the diagnosis

of the child's reading problems. Astudent must be taught to

read regardless of how we label his or her condition."

Although there are no obvious indications of neurologic **a**1

problems, children with learning problems often show the so-

called "soft signs" of neurologic al dysfunctio ning: slight motor

problems, clumsiness, visualmotor deficiencie s, deviant Or

abnormal retardation 111 language acquisition , problems with

reading and mastering arithmetic skills (Lerner, 1981: 61),

impulsivity and hyperactivi ty (DSM III, 1980: 44). In the past, this group

of children was known under a variety of labels: hyperkinet 10

syndrome, hyperactiv e child syndrome, minimal brain damage,

minimal brain dysfunctio n, minimal cerebral dysfunctio n, (DSM III,

1980: 41), psychoneu rologicaldysfunctio nal, the child with specific

learning handicaps Or restraints, and the neurologic ally

handicapp ed child (Du Toit, 1980: 59). Hyperactiv ity is manifested in gross motor activities such as excessive running or climbing.

The child appears to be physically driven, and he/she finds it

difficult to sit still. Older children and adolescent s can be

exceedingl y restless and fidgety. The quality of the motor

activities differentiat es these children from children who are

merely overactive, since the hyperactivi ty is characteriz ed by

haphazard, aimless and unorganize d ways of doing things

(DSM III, 1980: 41).

The label child with attention deficits is

chosen because deficient attending is the most general and

conspicuou S characteris tic of these children, and it continues

to appear 111 adolescenc e while overactivity decreases

(DSM III, 1980: 41).

The diagnostic criteria for the

attention deficit syndrome with hyperactiv ity are:

* Poor attending

At least three of the following:

* Often does not complete tasks;

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often
does not
listen;
  attention
15
distractible
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finds it difficult to concentrat e on school work or tasks requiring

sustained attention; and finds it difficult to maintain a

play activity.

*

Impulsivit y

At least three of the following:

* Often acts

without thinking;

continually changes activities;

finds it difficult to organize his work; needs lots of

supervisio n; often talks out of turn in

class; and

finds it difficult to wait for his turn in play or group situations.



Hyperactiv ity

At least two of the following:

* Runs and climbs

excessively finds it difficult to sit still; continually fidgeting;

finds it difficult to remain seated; moves excessively in his sleep; and always on the move and appears driven.

Onset hefore the age of seven. Has persisted

for at least SIX months. Not attributabl e to schizophre

nia, affective lability, or mental retardatio n (DSM III, 1980: 44).

The attention deficit syndrome without hyperactivi ty has the same characteris tics as above except that the

characteris tics and restraints are less accentuate

The most important question for the orthodidac tician (education

al psychologi st) is how a child with attention deficits comes

forward to meet and deal with learning assignment s, how he/she

proceeds to give meaning via learning, and how his/her

"deficiency " can be contributo ry to the disharmoni **OUS** dynamics

of teaching.

The characteris tic disturbanc

es in attending, impulsivity and hyperactivi ty have the following

implication s for an attention deficit child's actualizati

on of learning:

There is a direct relation between

bodiliness and learning (Engelbrec ht, 1970: 103). This relationshi

pis disturbed by a child's hyperactivi ty and impulsivity so that

his/her body, as a standpoint in the world, and a situation from which

he/she acquires a perspective and grasp of reality, loses its meaning.

In this way, his/her own body is experience d as a body with deficiencie s because it continually leaves him/her in

the lurch. The possibility of completing the learning

assignment , thus, does not acquire adequate form because the body

between him/her and the task is unstable (Du Toit, 1980: 69). This impedes spatial orientation hecause matters such as

size, distance and especially constancy, all directly related to

perception, are not adequately actualized by his/her bodily involveme

nt in the world.

Temporal orientation also occurs via the

body. According to Kephart (1971:54)temporal orientation initially is

a motor activity which later İS combined with auditoryvisual perception. Understan ding time is brought about by three

aspects of motor activity: simultanei ty, rhythm and sequence.

Simultaneit y is perceived when muscles move together,

rhythm is perceived when muscles are moved alternately OT

repeatedly and sequence is perceived when movements occur as

coordinate d patterns. Because of his/her hyperactivi ty and impulsiven

ess, a child finds it difficult to he able to proceed to generalize from

several perception s, he/she does not acquire a fixed notion of

time (Cruicksha nk, 1981: 175-180) with the consequen ce that

problems such as figureground confusion and dissociatio

n arise. The classroom as a learning space must he

arranged in such a way that learning via bodiliness is

optimized: smaller classrooms, providing individual cubicles and

teaching within arm's length of the child (Cruicksha nk, 1981:

176-177). In this way, a child experience s that he/she

acquires control of his/her body in space and his/her field of

perception is restricted.

The sensing, as a mode of

learning, of a child with attention deficits is restrained because

his/her world is experience das unstructur ed owing to his/her

pathic unrest, and he/she continually confronts learning tasks

subjectivel Consequen tly, there are figureground disturbanc

es, dissociatio n and perseverati on (Lerner, 1981: 63). His/her

hyperactiv **e** hehaviors can be interpreted as a desperate

attempt to acquire a grip on reality by attending: his/her inability to

selectively attend not only restrains his/her perceiving but also

his/her feelings of intense frustration result in an enduring underlying

anxiety (Du Toit, 1980: 73) and an attenuated experience of his/her

self-esteem (Cruicksha nk, 1981: 179).

Perceiving, as a

distanced, objective act of learning directed to analyzing, ordering

and synthesizin g, as necessary steps in solving a problem, is

actualized inadequate ly by a child with attention deficits. Penetrating

to the essences of what is perceived is almost impossible for a child

who experience S deficiencie sin analyzing and

synthesizin g on an auditory and visual level. The consequen ces of an

inability to perceive effectively, among others, are reversals, problems

of sequence and problems with sound and word recognition (Cruicksha nk, 1981: 90-91).

The act of thinking is not

actualized authentical ly, especially because of defective classifying,

categorizin gand ordering which ultimately gives rise to an

inability to think abstractly (Du Toit, 1981: 75). Characteris tic of an

attention deficit child's inability to think is the fact that his/her

language primarily functions on a concretevisual level.

The modes of learning of imagining and fantasizing

are not actualized adequately on a gnosticcognitive level

because a child with attention deficits finds it difficult to think in

terms of the perspective of something Or someone

(Tansley and PanCkhurst 1981: 118-119).

Remember ing also is not adequately actualized by a child with

attention deficits because he/she has problems with registering

memory, sequencing and with the speed with which he/she recalls

facts (Dumont, 1980: 160-161).

The reduction

of learning materials, and curriculum planning, in general do not

consider the diffuse grasp of reality and the particular ways of

actualizing learning of the attention deficit child, as noted

above. The demands of the amount of learning contents

holds the possibility of disharmoni zing the dynamics of

teaching. If the stated problem (of a lesson) does not

consider such a child's inability to penetrate the sensory-

experience **d** actualities, and merely directs a gnosticcognitive

appeal to the child, he/she will not be guided to penetrate what is

immediatel y present, and he/she will experience an ever increasing

gap in his/her knowledge. The result is a disharmoni ous lesson

event in which the learning material gradually appears to he more

fragmente d and meaningles s.

To harmonize the dynamics of teaching concerning a child with attention

deficits, the integration of a detailed image of the

actualizati on of learning of each child along with refined pedagogica

lessences is required (Du Toit, 1980: 83-84). Cruickshan k (1981;

176) refers to the orthodidac tition's task with respect to the

principle of individuali zation: Children with attention

deficits in no way are a homogene ous group--the degree of

distractibili ty, as well as its nature might differ. For one child,

the problem might be of a visualmotor nature, by another

auditorymotor and by yet another tactualmotor and hyperkines thetic, so the idea of a "group" of children with attention deficits

often merely is hypothetic al.

4.
SYNTHESIS

The mutual interwoven ness of deficient becoming

and defective learning outcomes, as deviations with

respect to specific symptoms, have come to the fore in the ahove

discussion. The variety of ways of manifestati on or symptoms of learning

problems continually must be related to a child's total personal

actualizati on and his/her coconstitutio n of the dynamics of

educating and teaching, especially with respect to his/her

learning role in these dynamics, and with special reference

to his/her unfavorabl 6 functional activities in this regard.

Reading problems, writing deficiencie s, spelling errors and

erroneous computatio ns, as deficient learning outcomes, on the one

hand, and neural dysfunctio ns, poor concentrati on, hyperactivi ty and perceptual problems as the defective actualizati on of

learning, on the other hand, must not be isolated as symptoms

but rather be recognized as moments of the disharmoni

OUS dynamics of teaching to specify what the dysfunctio nal effect

is on a child's actualizati on of learning, as such.

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