

1591

# LEARNER SUPPORT AND DEVELOPMENT

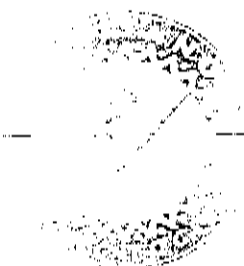
## NATIONAL CONFERENCE

2000

### PROGRAMME

20 - 21 September 2000

DEPARTMENT OF EDUCATION  
HEAD OFFICE  
CIVIL



DEPARTMENT OF EDUCATION

**WEDNESDAY 27 SEPTEMBER 2000**  
**VENUE: C.R. LOUW : AUDITORIUM**  
**POSTER PRESENTATIONS**  
**Chairperson: Dr Petra Abrahamse - WCED**

15:45

**INCLUSIVE EDUCATION: THE LEARNER WITH TOURETTE'S SYNDROME**  
Dr N de Lange - Vista University of Port Elizabeth

**A DEVELOPMENTAL NEUROPSYCHOLOGICAL PERSPECTIVE ON BARRIERS TO LEARNING: A TRAINING COURSE BY THE UNIVERSITY OF JYVASKYLA, FINLAND**  
Mr Jan du Toit - University of Stellenbosch

**THE ROLE OF STUDENT COUNSELLING IN LEARNER SUPPORT AND DEVELOPMENT AT PENINSULA TECHNIKON**  
Dr Able de Villiers - Peninsula Technikon

**CHALLENGES FOR THE TRAINING OF EDUCATIONAL PSYCHOLOGIST IN SA**  
University of Stellenbosch - Ms W. Rossouw, Prof. P. Engelbrecht and Ms R. Newmark

**AN ANALOGY BETWEEN THE MANAGEMENT OF A STAFF DEVELOPMENT PROGRAMME AT A SCHOOL**  
Dr Johanna Geldenhuys - Vista University

**GENERAL MEETING TO FORM A LEARNER SUPPORT AND DEVELOPMENT "FORUM/ASSOCIATION/COMMITTEE"**  
Dr Johan Pretorius - Acting Director: Psychological Services - WCED

101

WCED  
101

**WEDNESDAY 27 SEPTEMBER 2000**  
**VENUE: C.R. LOUW : AUDITORIUM**

*Chairperson: Ms Berenice Daniels*

08:30 - 09:15 **DISTRICT SUPPORT TEAMS**

Ms Dorothea Sasepe - Director - National Education Department

09:15 - 10:00

**ADDRESSING ASSESSMENT NEEDS WITHIN THE TRANSFORMING EDUCATION AND TRAINING SECTOR**

Dr Anil Kanjee - Director - HRSC

**VENUE: C.R. LOUW : AUDITORIUM**

*Chairperson: Ms Pauline Oliver*

**VENUE: ROOM ONE**

*Chairperson: Dr Gerhard Barkhuizen*

10:30 - 11:15

**FEEL THE WAY FORWARD - A WCED PERSPECTIVE**

Dr Muthi Theron - Director: Special Education Needs

11:15 - 11:45

**THE IMMEDIATE ROLE OF SPECIAL SCHOOLS IN DEVELOPING**

**INCLUSIVE EDUCATION AND TRAINING SYSTEM**

Mr S. Heister - Chief Education Specialist - WCED

11:45 - 12:30

**INCLUSIVE EDUCATION IN THE WESTERN CAPE: AN NGO**

**PERSPECTIVE**

Ms Michelle Beknap - Western Cape Inclusive Education Forum

12:30 - 13:15

**LUNCH**

13:15 - 14:00

**TAKING PERSONALITY TYPE INTO ACCOUNT IN THE CLASSROOM**

Mr Anton Krizinger - School Psychologist - Caledon

13:15 - 13:45

**EDUCATOR DEVELOPMENT - THE COGNITIVE DIMENSION**

Dr Lena Green - University of the Western Cape

13:45 - 14:15

**WORKING WITH THE REMEDIAL TEACHING FOUNDATION TO**

**SUPPORT LEARNERS**

Ms E. de Villiers - North West Education Department

14:15 - 14:45

**DIFFERENTIATION: THE WHAT, HOW AND WHY**

Ms Jodie Fomster - DCES WCED

14:45 - 15:15

**THE MULTICULTURAL CLASSROOM**

Peof Sebbon - UMISA Student

15:15 - 15:45

**TEA**

15:15 - 15:45

**TEA**

14:45 - 15:15

**FACILITATING TRANSFORMATION IN HUMAN RELATIONS: A**

**TRANSACTONAL ANALYSIS PERSPECTIVE**

Ms Rina Brink - School Psychologist - Paarl School Clinic

# THE DEVELOPMENT OF ASSESSMENT, EVALUATION AND TEST MATERIALS OF THE HSRC

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## Poster 1

### **Butterfly Dynamic Assessment Battery**

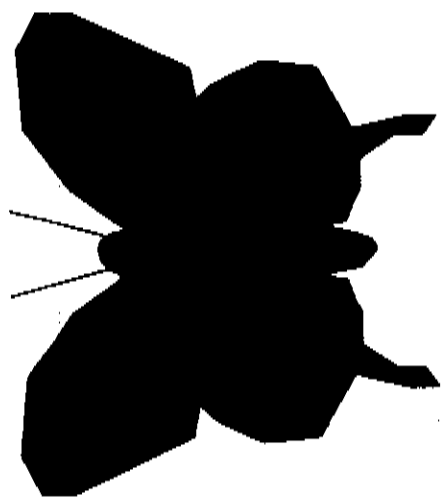
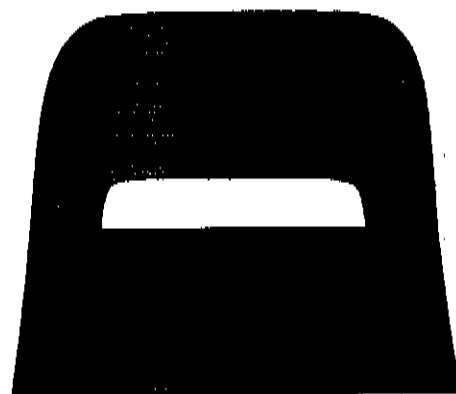
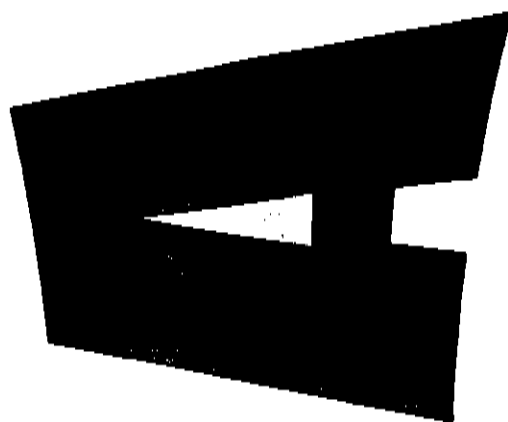
#### **Summary**

The title of the instrument is "Butterfly Dynamic Assessment Battery" (acronym "BDAB"). This instrument was developed to address assessment in the context of learning. In other words, the focus is on the individual's capacity to acquire competence in new cognitive challenges rather than on his/her already acquired knowledge or skill. The BDAB is structured to give an individual multiple opportunities to master material at a given level of difficulty before related tasks of a more challenging nature are presented. Such an approach reduces the chance that a child is left behind and rated poorly on the instrument simply because he/she needs more time to understand the requirements of the task in question.

The stimulus material of BDAB is highly pictorial and is in colour. Diagrams of butterflies occur liberally in all the exercises comprising the instrument. These creatures were selected as the anchor material because they are "friendly" and all children are familiar with them, irrespective of cultural background. The instrument was developed for the learners in the foundation phase of education. It is an individual test that was originally developed for the educator but this is to be finalised. Testing is characterised by dynamic interaction between the tester and the learner. During the testing the learner receives feedback on his/her performance of a task and is given the opportunity to improve.

The term "Battery" appears in the name of the instrument because it consists of a number of exercises or subtests - ten in total. These are divided into two subsets,

'core" and "supplementary". Therefore, the full battery consists of the core subtests plus the supplementary subtests. Each of the subtests assesses a particular aspect of cognitive processing. The BDAB assesses 10 processing dimensions. These dimensions were derived from the theories of Sternberg (1985, 1997) and Das and Naglieri (Das, Naglieri & Kirby, 1994; Naglieri & Das 1997).



**THE BUTTERFLY  
DYNAMIC  
ASSESSMENT  
BATTERY**

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# **WHAT DOES IT ASSESS?**

**THE BDAB ASSESSES CRITICAL ASPECTS  
OF COGNITIVE PROCESSING:**

**➤ METAPROCESSES AND THE  
PROCESSES**



# TARGET GROUP

THE PRIMARY TARGET GROUP IS  
CHILDREN IN THE FOUNDATION  
YEARS OF EDUCATION, GRADES 0 TO  
4 (5 YEARS TO 9 YEARS OF AGE)

**THEORETICAL**

**BACKGROUND**

**THEORIES OF STERNBERG AND DAS  
AND NAGLIERI WERE INTEGRATED**

# TRAINING

PROSPECTIVE USERS REQUIRE THOROUGH TRAINING BEFORE USING THE INSTRUMENT TO MAKE DIAGNOSTIC DECISIONS WHICH WILL IMPACT ON THE LIFE OF THE CHILD, PARTICULARLY WITH REGARD TO APPROPRIATE REMEDIATION OR OTHER INTERVENTIONS.

# **CORE BATTERY**

- **IMPULSE CONTROL**
- **SELECTIVE ATTENTION**
- **PLANNING**
- **NAMING**
- **USE OF CONCEPTS**
- **TRANSFER**

# **SUPPLEMENTERY**

## **BATTERY**

- **MONITORING**
- **BREEDING**
- **FINDING CONCEPTS**
- **SUCCESSIVE PROCESSING**

# SUBTESTS

SUBTEST	COGNITIVE FUNCTIONING PROCESS
1. IMPULSE CONTROL	The delaying of a response to a problem or stimulus until all information has been gathered and carefully examined.
2. SELECTIVE ATTENTION	Ignoring or "tuning out" irrelevant material and focussing fully on material necessary to perform the task at hand.
3. PLANNING	Setting aside time before responding to a problem, and using this to observe and assemble information in order to devise an effective response strategy.
4. MONITORING	Regularly or continuously checking that one's activities in doing a particular task are "on track", i.e. that one is achieving the goal that was set.
5. NAMING	Selective Encoding (Verbal): Involves sifting relevant from irrelevant verbal information and establishing this in working (short-term) memory or committing it to long-term memory.
6. USE OF CONCEPTS	Selective Encoding (Non-verbal or graphic): The same as 5 above, but involving graphic or pictorial material

## COGNITIVE FUNCTIONING PROCESS

### SUBTEST

#### 7. BREEDING

**Selective Combination (Involving rule application):** Involves selecting and combining relevant information in order to solve a particular problem, using a set of rules that has been given to one.

#### 8. FINDING CONCEPTS

**Selective Combination (involving concept attainment):** The same as 7, but in this case the individual has to find or identify the concept (he/she is not given the rule or concept)

#### 9. SUCCESSIVE PROCESSING

**Successive processing:** working through a multi-step (serial) task, where the outcome of one step is required as the input of the next step. This type of processing is to be contrasted with simultaneous processing, which involves working with and integrating all information more or less simultaneously. Most of the other tasks in BDAB are simultaneous processing tasks.

#### 10. TRANSFER

**Selective Comparison:** Involves relating newly acquired information (such as the details of a new problem) with information already stored in long term memory, to solve the problem. This process can be called transfer because transfer involves adapting or integrating established knowledge in order to solve a problem which differs to a lesser or greater extent from problems previously encountered and for which the person has solution strategies.

# ***CONTACT PERSONS***

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## POSTER 2

### Summary

The aim of this poster is to display the products that could be of benefit to the psychologist and the education and training sector. It displays four tests (the Grover-Counter Scale of cognitive development; The Learning Potential Computerised Adaptive Test, The Differential Aptitude Tests, World of words) that can be used to measure: cognitive development of children from 3 years to 10 years; learning potential in the domain of general non-verbal reasoning ability of persons with the education level from grade 5; some facets of intellectual functioning such as abstract reasoning ability, language ability, processing speed, mechanical insight etc for learners from grade 7 to grade 12; and others which can be of great help in career counselling and career decision making.

### The Grover-Counter Scale of cognitive development (GCS)

The GCS has its origin in an attempt to address practical problems arising predominantly in the field of mental handicap. The assessment of the level and nature of current intellectual or cognitive functioning in a mentally handicapped child or adult is one basic requirement for all further management. Decisions regarding such important matters as the correct placement in an educational or work setting; the precise kind of teaching or training programme that will be most effective at any particular time; the choice of exact remedial measures matched to clearly observed cognitive weaknesses - all these should rest on an assessment of cognitive functioning which is well focused and accurate and the results of which can be translated into meaningful recommendations.

The test is not intended to replace a recognised and well-standardised predominantly verbal type test for use with subjects who have well developed verbal skills. Neither is it intended as an all-round development scale, though in both such cases it can serve as a valuable supplement.

The GCS was designed for the following South African populations: In general, "normal" children in the chronological age range from 3 years to approximately 10 years, particularly where a predominantly verbal test is unsuitable for some reason; specifically, mentally handicapped children and adults from chronological age approximately 5 years onwards, particularly where a predominantly verbal test is unsuitable.

A major aim in devising the Grover Scale was to provide an instrument which can reveal such cognitive functioning (within a defined range) in persons with extremely impaired verbal skills, whether receptive or expressive or both.

Impaired or limited verbal ability, especially of the expressive kind, is characteristic of many mentally handicapped persons but may stem also from other causes such as defective hearing, aphasia, elective mutism, or the fact that the language medium of the test used is not the mother tongue of the subject, a situation which can, unfortunately, occur in a multi-linguistic society. One of the settings in which the need for an alternative test has become increasingly clear, is that facing the psychologist who must assess and make meaningful decisions about mentally handicapped African children, for instance, the child's suitability for admission to special education

## **Cognitive Skill Development**

The HSRC is also involved in a project that aims to develop cognitive skill instruction exercises-based on a South African model for cognitive skills instruction-for use with the Foundation phase learners who have been assessed with the Butterfly Dynamic Assessment Battery and found to be in need of cognitive skills development. Cognitive skills or thinking skills form part of the Curriculum 2005 and underpin most outcomes to be achieved by learners in the respective learning areas. "Aligned with the principles of Curriculum 2005, the exercises will provide learners with the tools to think critically and creatively, not only in the classroom but also in their everyday life, says Salome Human, HSRC researcher and project leader" The exercises are designed to produce independent and effective learners, to train teachers to mediate and model cognitive skills to their learners, and to provide them with a tool for continuous assessment of cognitive education outcomes.

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***(The brochures are available for the following tests: Please take one)***

- ◆ **Differential Aptitude tests (DAT)**
- ◆ **Learning potential computerised adaptive test (LPCAT)**
- ◆ **World of words**