



"HENRI COANDA"  
AIR FORCE ACADEMY  
ROMANIA



"GENERAL M.R. STEFANIK"  
ARMED FORCES ACADEMY  
SLOVAK REPUBLIC

INTERNATIONAL CONFERENCE of SCIENTIFIC PAPER  
AFASES 2013  
Brasov, 23-25 May 2013

## INNOVATION AND ORIGINALITY OF FEUERSTEIN METHOD

**Otilia Anca TODOR**

Faculty of Psychology and Pedagogy, Spiru Haret University, Brasov, Romania,

**Abstract:** *Reuven Feuerstein – psychology and pedagogy professor emeritus at the University of Bar Ilan, Israel, and reader at George Peabody College of Vanderbilt University in Nashville (Tennessee, USA) – elaborated **the theory of mediated learning**, which he operationalized in order serve educational practice, avoiding thereby the exclusion of vulnerable children from the education system, offering them opportunities for social adaptation. Professor Feuerstein provides us through his methodology and Instruments a valuable program of "learning instrumentation" used both in Romania and worldwide. The Instrumental Enrichment Program is adopted by villages throughout Europe as "complementary method to traditional education" proving efficiency in education and training of thousands of students*

**Keywords:** *mediated learning, cognitive potential, mediation criteria, LPAD, learning instrumentation, cognitive functions, structural and cognitive modifiability.*

### 1. INTRODUCTION

Feuerstein was born in Bucovina in 1921, and started his career as educator and escaped the Nazi terror in Bucharest. During World War II, Reuven Feuerstein fled into the country which was then called Palestine and began working with children and adolescents who came from refugee camps. These children, who came from Europe, Africa and Asia, were culturally deprived children. Based on their performance level - given the low level of intelligence tests and their poor schools results - many of the children were considered retarded in development. Feuerstein refused to accept the simplistic hypothesis of mental retardation of these children and found that they had a much better potential than the potential observed in tests. He attributed poor cognitive development of surviving children of the death camps to *the lack of mediated culture learning*.

After psychology studies in Piaget's lab, with Rey and Eysenck, he has developed his own theory of cognitive development of

children. His theory, based on the notions of *learning potential* and *cognitive and structural modifiability*, required the development of a suitable method related to the concept of "instrumental enrichment" and a dynamic approach. In this regard, the method has been tested on very different categories of children and young persons: Ethiopian immigrants (deprived of schooling up to that moment), immigrants from different cultures (with a low degree of knowledge of the country's language) to facilitate their enrollment in school and society, children with different types and degrees of disability, military with low schooling levels, children and young persons with behavioral disorders, hardly adaptable and hyperactive. In all these cases, the educational program proposed by Feuerstein has proven useful, leading to improved adaptability of participants.

Feuerstein, together with a group of researchers developed an approach to compensate for the lack of mediated learning and cultural transmission, to modify learning and thinking abilities in a structural way. One

of the systems applied in practice, which derives from his approach, is the Instrumental Enrichment Program. (Reuven Feuerstein, Mildred Hoffman, Teacher's manual for organizing points.)

There are some questions discussed more and more extensively and to answer them, he started a process involving several disciplines "Born or become intelligent?", "Intelligence can be modified under the influence of brain development?", "What is the role of the learning experience in interpersonal relations, is there a single type of intelligence?", "What is the relationship between cognition and emotion?"

Then, the introduction and development of cybernetics brought forward, after years of recovery, the study of the mind and methods by which thought is organized with the aspiration to clarify all aspects and their identification (Michaela Minuto, Renato Ravizza, 2008).

Particularly, the revolutionary stage begins for the psychologists, Jean Piaget states: the child is not a "kid" but the child's thinking develops in different stages. Jerome Bruner emphasizes the role of the interaction with the adult and the importance to give a meaning to the experience. In the theories of Carl Rogers, Erik Erikson, Abraham Maslow (who started between the two world wars) the psychology is related to reflection on values and on the human being as individual in its uniqueness. In this period the interrupted dialogue with the Orient is reopened, bringing into the country the studies of Luria and Vîgotski highlighting the relation between thought and language, the role of social interactions as points of development, human ability to outdo itself due to cultural transmission and relationship with others (Michaela Minuto, Renato Ravizza, 2008).

Feuerstein's Instrumental enrichment method is part of cognitive education and focuses on that part of education which is mostly capable of change: the child and his teacher (J. Lebeer, 2000). The specificity of Feuerstein's idea and method is exactly the focus on adult's role in the emergence of progress in children thinking and learning abilities. The parent, the educator, the teacher or other intervening becomes, therefore, the

organizer of life experiences leading to the cognitive formation and its structural changes. Mediated learning experiences explain the diversity of human nature and its modifiability.

## **2. UTILITY AND WORLDWIDE CONFIRMATION OF FEUERSTEIN'S METHOD**

During the past years, the theoretical foundation of the method and its research were extended worldwide, due to The International Centre for the Enhancement of Learning Potential and to the network of people that rely on the theory of mediation in their educational work.

The International Centre for the Enhancement of Learning Potential, founded in 1993 by Reuven Feuerstein together with his son, the rabbi Raphael Feuerstein represents an operational and reference centre for all those interested in this method. The work started in Hadassah – WIZO – Canada Research Institute (HWCRI) is continued in this centre performing activities with children, their families and develop research and developing activities for new theoretical and conceptual instruments (Minuto, Michela., 2009). Feuerstein's method is investigated and implemented in this Center. The staff consists of a team of over 160 professionals - psychologists, therapists, educators and support staff - providing recovery services, interacting with children and young adults who have special educational needs or other disorders. Professional courses (trainings) are held based on Professor Feuerstein's method for teachers, psychologists and health professionals in Israel and around the world.

The centre organizes workshops on MLE (Mediated Learning Experience), LPAD (Learning Potential Assessment Device) and IE (Instrumental Enrichment). This proves to be a primary international structure to discuss training materials used in over 70 centres of more than 30 countries throughout the world. The operations are divided into 3 main parts: Direct Services, Training and Analysis, Research and Development. By a wide and updated range of programs designed to improve learning and thinking potential, Feuerstein Center contributes significantly to



"HENRI COANDA"  
AIR FORCE ACADEMY  
ROMANIA



"GENERAL M.R. STEFANIK"  
ARMED FORCES ACADEMY  
SLOVAK REPUBLIC

INTERNATIONAL CONFERENCE of SCIENTIFIC PAPER  
AFASES 2013  
Brasov, 23-25 May 2013

the quality of life of people in Israel and many other countries.

The first step is to measure the potential of a student using The Learning Potential Assessment Device (LPAD) - a series of cognitive tests applied over several days. After conducting this assessment, individualized intervention is quantified by a professional team. The intervention takes the form of Instrumental Enrichment (IE), tasks in analytical perception, comparisons, classification, orientation in space and time and is applied by Mediated Learning.

Mediated Learning implies a strong interaction between the student and a "mediator" who interprets the external stimuli and the response to those stimuli. IE focuses on process rather than content, so that the student learns how to learn. Many of the students benefiting from Feuerstein method can later be integrated into the traditional educational system.

The method can be personalized for the specific needs and abilities of the student, including for those with:

A. Autism disorders

Autism Spectrum Disorders (ASD) include mental deficiencies, autism and other disorders.

The use of MLE (Mediated Learning Experience) for the treatment of children with autism is remarkably efficient. Since autistic persons resist the type of interaction used in mediated learning, Feuerstein Center professionals organize intensive evaluations using LPAD to discover those "islands of normality" that offer educators a window into the world of the autistic child.

B. Visual impairment and blindness

In 1993, Dr. Roman Gouzman from Feuerstein Center began to adapt IE (Instrumental Enrichment) methods and

instruments for the blind persons, a category with very specific difficulties. IE includes analytic perception, orientation in space and time, compared behavior, classification and other areas, most of which were adapted for the blind persons. Braille writing system also allows the blind to work independently. IE approach within Feuerstein Center is one of the most successful programs available to blind users worldwide.

The experience of Feuerstein Centre has shown that the practice of these exercises can help a visually impaired person to obtain cognitive functions that a seeing person gets through visual perception, making integrated education a viable and effective option for blind students.

C. Brain damages

Millions of people worldwide suffer from brain damage caused by car accidents, military service or heart attacks. For many of them cognition, social interaction and movement are insurmountable. However, recent research has shown remarkable regenerative properties of the brain, and in the mid-1990s Feuerstein Center established a neural-cognitive rehabilitation program for children and young adults with traumatic brain injuries. In short: IE provides reconstruction of a life full of meaning and significance

D. Down Syndrome

Down Syndrome (DS) is one of the most common chromosomal abnormalities.

Most children with DS have average to severe learning problems and their physical, motor and speech development are slower than their peers. However, they are normally involved in cognitive structure modification program and in Mediated Learning because, generally, they interact. Such mediation is effective even at very early ages. Parental

involvement is crucial and parents are also beneficiaries, although sometimes they alienate themselves from their DS children.

#### E. Culturally disadvantaged persons

A group often overlooked, facing education issues, is that of emigrant children with speaking difficulties, with foreign culture and different educational expectations in their new country. Feuerstein Center uses LPAD to determine the volume and depth of atypical issues for a student and to determine whether the student is "different" or "disadvantaged". Then IE is applied: 14 paper-pencil instruments targeting the analytic perception, orientation in time and space, comparisons, classifications designed to correct deficiencies in thinking and learning skills and to provide students with the concepts, skills and techniques necessary to cope with the individual study.

The program is transcultural, placing the process above content and can be implemented both in the classroom and individually.

### 3.REFERENCES

1. Feuerstein, R., (1980), *Instrumental enrichment and the concept of cognitive modifiability*, University Park Press, Baltimore
2. Feuerstein, R.S., Falik, L., Rand, Y., (2006), *Creating and Enhancing Cognitive Modifiability: The Feuerstein Instrumental Enrichment Program*, ICELP Publications, Jerusalem
3. Feuerstein, R., et al., (2005), *La teoria di Feuerstein i suoi sistemi applicativi una raccolta di contributi*, Milano, trad. it. a cura di Associazione Connessioni
4. Feuerstein, R., Rand, Y., Feuerstein, R.S., (2005), *La disabilità non è un limite. Se mi ami costringimi a cambiare*, Firentze, Libriliberi
5. Mara, D., (2004), *Strategii didactice în educația inclusivă*, Ed. Didactică și Pedagogică, București
6. Minuto, M., Capra, A., Rossi, C., (2009), *La mediazione nei processi di apprendimento il metodo Feurestein nel mondo*, Otto, Torino