

INSTRUMENTAL ENRICHMENT, BASIC VERSION: AN OVERVIEW

Reuven Feuerstein, a cognitive psychologist in Israel, developed a special program of cognitive education for young children and for functionally delayed adults, known as “Instrumental Enrichment Basic.” (A separate program, designed for learners of ages 9 through Adult is also available, known as “Instrumental Enrichment Standard”). The Basic program has nine separate segments—called “instruments”—which are targeted to early learning needs in mathematics, literacy, and social interaction. Teachers are trained to mediate the students’ use of the instruments and strengthen their processes toward readiness for mathematics and literacy.

Each instrument involves the application of principles, thinking strategies, and application of discovered rules, in a variety of tasks; thus, the program enables students to better identify problems, form hypotheses, test hypotheses, make comparisons, and solve problems.

Each instrument focuses on one particular cognitive function that is pre-requisite to successful school learning; the tasks become increasingly complex and abstract. Implementation is recommended for one half-hour daily over a period of two years. Teacher training for the program requires one day of training per instrument.

The cognitive functions for the instruments and their titles are:

1. Tri-Channel Attentional Learning: Using touch, learners first form mental images of three-dimensional objects hidden from view, focusing on number, orientation, size, types of sides, angles, etc., followed by then recognizing the object visually and reproducing it by drawing. Thus, tactile, visual, and verbal modalities are used.
2. Organization of Dots: Students identify geometric shapes, comparing shapes to a model; figures rotate in space and become increasingly complex; emphasis is on finding and describing different kinds of patterns.
3. Orientation in Space: Students learn to recognize, differentiate, and label positions in space; learners also identify relative positions of objects and events.
4. Identifying Emotions: Students learn to identify feelings and emotions by interpreting facial expressions and understanding the appropriate use of emotions in various situations. The aim is reduce ego-centrism and initiate empathy.
5. From Empathy to Action: This instrument helps create a state of empathy by identifying a state of mind, deriving from the facial and bodily expression of a pictured person in some critical situation. Alternatives are presented, and students select options and their consequences.

6. From Unit to Group: The learner manipulates geometric shapes to discover the idea of units, groups of units, and units as groups. The instrument sets up operations which underlie mathematics, focusing on ways in which objects can be aggregated, separated, summarized, and described.

7. Compare and Discover the Absurd: Students discover and understand the nature of an absurdity (or incongruity) between two situations. They analyze, control, and compare relationships between the situations. This instrument is divided into 2 levels: Compare and Discover the Absurd A and Compare and Discover the Absurd B.

8. Know and Identify: Students investigate how familiar objects are made and work as well as their properties, including structures and functions, using pictures and words. They name, define, identify common and different attributes of objects, and categorize them.

9. Thinking to Learn and Prevent Violence: The instrument presents pictured situations in a variety of types of conflicts; teachers ask a series of questions related to each situation, and the student then predicts the outcome from each of four alternatives, including the evidence available and the likely responses of people in the situation.

10. Learning to Question for Reading Comprehension: The instrument has a series of pictorial sentences, with questions to be answered about each one. The focus is on comprehending what is read, teaching that a sentence which is heard or read is a source of information leading to deeper information that is embedded.