Feuerstein’s Instrumental Enrichment

Basic Level Student Instruments

Early Childhood
(Pre-Kindergarten—3rd Grade)
About the Program
The Feuerstein’s Instrumental Enrichment – Basic Program is a series of tasks designed to help young children from pre-kindergarten through 3rd grade in order to develop global basic concepts, increase cognitive functioning, build up intrinsic motivation, and increase social emotional areas. The implementation of the instruments effectively requires a different teaching style called Mediated Learning Experience (MLE). The intention is to improve students’ social adaptability that ultimately contributes towards real-life problem solving skills and content areas. Like Feuerstein’s original Instrumental Enrichment (FIE) program, the FIE-B programs consist for the most part of structured paper-and-pencil exercises. However, the tasks are designed for a wide range of entry-level abilities, allowing teachers to order each instrument optimally for individual child or groups of children. Like the original FIE program, FIE-B is designed to provide a rich context for the development of cognitive and meta-cognitive structures. Additionally, FIE-B targets the acquisition of basic content knowledge about the differentiation of familiar objects, familiarity with geometrical shapes, labels required for classification, and basic ideas of numbers.

Meeting Education of Young Children
In the 21st century, we have new common core standards setting high expectations for every young child. This new call is to prepare young children to compete in the ever growing global economy. The national framework will align with what we know about child development in the early years. With nationwide guidelines, early childhood educators can prepare children for the Common Core K-12 system.

Like the new framework, one of the main goals of Feuerstein’s Instrumental Enrichment-Basic program is to prepare young children for school readiness. In order to accomplish this, teachers must foster social, communication, and self-regulation skills while providing outlets for expression and development of ideas. A high-quality interdisciplinary approach to developing the “whole child,” needs to provoke student’s attention and curiosity by asking questions such as “how,” “what,” “why,” and “when” while explicitly focusing on the required thinking skill in a task.

The shift between the Common Core State Standards and Feuerstein’s Basic program is geared to give children a jumpstart on their learning. With the goal of preparing for school readiness, Feuerstein’s Basic program is designed for less likely placement into special education, more likely to graduate high school and go on to college.
From Units to Groups
From Units to Groups provides the discovery of concepts regarding units, groups of units and units as groups by manipulating simple geomantic forms and shapes which helps to establish the basic cognitive operations that underlie mathematics. Being able to create and manipulate the shapes into groups which can then be divided, multiplied, and counted in order to discover the total number of groups as units. From Units to Groups is connected to mathematics (geometry) by allowing children to find the:

- Definition of the problem.
- Acquisition of the concept of numbers.
- Relationship between groups.
- Transition of counting to summative processes of organization.

Sample Task
Provide the student with the concept of units, groups of units, groups as units, and the number of units in all the groups.
Organization of Dots-Basic

Organization of Dots-Basic provides the identification of required geometric shapes from a model by selecting and linking the respective dots. The dots are seen as disconnected and unstructured information. Using a figural model, the student draws lines to connect dots that create order and meaning from initially perceived disconnected and amorphous information. Through repeated practice and successful completion of progressively more difficult exercises, the instrument encourages task-intrinsic motivation. Organization of Dots-Basic is connected to mathematics (number sense) by encouraging children to discover the:

- Definition of the problem.
- Selection of dots that are relevant to the figure that is sought.
- Planning behavior.
- Hypothetical thinking and use of logical evidence.
- Summative behavior.

Sample Task

The student selects from a scattered cloud of dots and links the respective dots to match the model.

![Organization of Dots – Basic](image-url)
Orientation in Space: Basic

Orientation in Space - Basic provides the student with verbal instructions and they must follow them to identify the objects and the relationships between the objects. This instrument enriches the recognition, differentiation, and labeling of positions in space within increasingly complex situations. The student is asked to identify positions in space using a known or mediated vocabulary (up/down, right/left, inside/outside, above/below, etc.). Orientation in Space is connected to mathematics (geometry) and language arts (listening and verbal communication skills).

- Accurate use vocabulary presented.
- Focusing on relevant details.
- Using logical evidence to determine a correct response.
- Considering the instructions in the scene before responding.

Sample Task

The student needs to systematically scan the total scene, look for the objects, and identify the relationship between objects.

Learned concept: Above  Under  In the middle of  Center of
Identifying Emotions

Identifying Emotions students learn to identify feelings and emotions by interpreting facial expressions and begins to understand the appropriate use of each emotion in a variety of social situations. This is done by defining the nature of a certain feeling and sharpening the understanding of feelings. The instrument strengthens the relationship between emotions and cognition. Identifying Emotions is connected to language arts (vocabulary development and verbal communication skills) and social emotional (defining people’s feelings).

- Process the emotional expression and the situations.
- Recognize and understand the relationships between pictures.
- Compare relevant information.
- Analyze the situation before responding.

Sample Task
Define the nature of a feeling and its origins to sharpen the understanding of feelings.

Name the emotion:

_______

<table>
<thead>
<tr>
<th>Appropriate Emotion:</th>
<th>Reason:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

From Empathy to Action
From Empathy to Action presents students’ with an initial situation related to alternative situations, giving the student options to understand the nature of actions resulting different expressions of empathy. The identification of the facial and body expression of the person(s) in a critical situation begins the creation of the state of empathy. The students’ can then begin to identify with the feelings and emotions of another. From Empathy to Action is connected to language arts (vocabulary development and verbal communication skills) and social emotional (conflict and problem resolution).

- Consider given information to understand the situation being depicted.
- Defining the problem presented by each situation and finding alternative situations.
- Understanding relationships between feelings, events and outcomes.
- Describing and formalizing descriptive language.

Sample Task
The student is presented with situations that require an empathic understanding and response which are directed toward an appropriate action.

Thinking to Learn to Prevent Violence
Thinking to Learn to Prevent Violence focuses on students’ reaction to situations of interpersonal conflict and socially acceptable behavior. The main structure of this instrument is to bring students’ ability to predict the outcome of various possible responses to a conflict and to judge the outcomes of different behavioral responses. Thinking to Learn to Prevent Violence is connected to language arts (verbal communication skills) and social emotional (social conflicts and bullying).

- Understanding and predicting the reactions and position of others.
- Identifying different types of aggressive actions (verbal & physical).
- Analyze the types of response that occur and give alternative outcomes.
- Regulation and control of behavior.

Sample Task
The student is required assess the situations in order to discover what is occurring and understanding its meaning.

First Reaction
1. Put the pictures in the right order to show what each first reaction leads to.
2. Write the correct letter or color in each box.
3. In each bubble write what the person said or thought.
4. Rank the reactions in the circle from best (4) to worst (1).
Compare and Discover the Absurd

Compare and Discover the Absurd develops the processes of comparison and discovery. Situations of absurdities (information which is inconsistent, illogical, and discrepant) and humor are presented. Using several types of criteria for different situations (Level A: size, shape, direction, quantity, etc. Level B: weight, age, function, etc.), the student must look for the reasons for what is wrong (incongruous) with the pictured situations. Compare and Discover the Absurd is connected to science and language arts.

- Comparing relationships between two situations.
- Explain and resolve the “disequilibrium” created by the feeling of the absurdity.
- Identify relevant details to organize the situation.
- Understand “why” and “how” the events need to be changed.

Sample Task

The student must look for the reasons of what is wrong (absurd) with the pictured situations.

1. Compare Picture 1 to Picture 2 according to the table below:

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Picture 1</th>
<th>Picture 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
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<tr>
<td>Shape</td>
<td></td>
<td></td>
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<tr>
<td>Weight</td>
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<td>Function</td>
<td></td>
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<tr>
<td>Speed</td>
<td></td>
<td></td>
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<tr>
<td>Quantity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facial expression</td>
<td></td>
<td></td>
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<tr>
<td>Effort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. What is unusual about this picture?

3. What should be changed in the picture?

4. What is the story in this picture?

Learning to Question for Reading Comprehension

Learning to Question for Reading Comprehension focuses on the comprehension of what is read. Students’ learn that a sentence which is either heard or read is a source of information which can be elaborated to obtain by understanding deeper information. Encouraging and stimulating the students, they learn to ask questions - to understand that a sentence can be a potential source of answers to different questions. Students generalize the understanding of types of questions that will elicit the analysis of the meaning of a sentence. Learning to Question for Reading Comprehension is connected to language arts (writing and reading comprehension).

- Define the role of the context between both the picture and sentence.
- Forming hypotheses and inferring the process.
- Clearly communicating and justifying responses.
- Creating relationships for the understanding the information.

Sample Task

Students are required to complete syntactical chains (sentences) to infer and construct responses based on their understanding of the story.

1. Danny is climbing a tree.
   a) Who are we talking about? ____________
   b) What is he doing? ____________
   c) What is he climbing? ____________

2. He is holding onto a branch with his hand.
   a) Who is ‘he’? _______________________
   b) What is he holding? _______________________
   c) What is he holding on with? _______________________

3. He sees a birds’ nest.
   a) Who is ‘he’? _______________________
   b) What is he doing? _______________________
   c) What is he looking at? _______________________

Know and Identify

Know and Identify presents students with a series of pictures which requires them to identify and label different objects and then establish working definitions according to specific criteria. The objects are selected to be “readily” grouped because of the share likeness. Teaching vocabulary, like the names of the objects, their functions, etc. as general concepts, helps the students’ work independently and summarize their findings. Know and Identify is connected to science (define specific criteria and shared attributes).

- Clear communication of objects and their relevant details.
- Following directions and responding to the problems.
- Making comparisons.
- Internalizing relationships between symbols and objects.
- Use of strategies to communicate the response.

Sample Task

Students are asked to group the objects and their common attributes through guided discussions in which students share their knowledge of the objects and acquire new vocabulary.

![Image of objects with numbers 1 to 6]

**FUNCTIONAL RELATIONSHIPS**

I. **Naming**: Name the pictures

II. **Definitions**: Find the right pictures according to the definitions below

1. It clucks. __________________________
2. It is made of wood and is used to light things. __________________________
3. They are usually made of metal. __________________________
4. It is used for frying. __________________________
5. It lives in a coop. __________________________

Tri-Channel Attentional Learning

Tri-Channel Attentional Learning requires students’ to explore characteristics of shapes by physically manipulating and exploring the details of the presented shapes (squares, circles, triangles, polygons, and segmented irregular shapes). Students’ identify a variety of concepts (number, orientation, size, angles, etc.) to visually recognize, reproduce, and ultimately recognize the shape that has been perceived. Tri-Channel Attentional Learning is connected to mathematics (geometry).

- Recognizing shapes, relationships and their essential characteristics.
- Paying attention to all the information.
- Internalizing a visual and motor picture.
- Using clear communication to explain the correct response.

Sample Task

The student is presented with a shape that must be physically manipulated step-by-step to recognize and reproduce the design.
INTRODUCING IRI's FLAGSHIP PROGRAM:
FEUERSTEIN’S INSTRUMENTAL ENRICHMENT (FIE)
Build the mind early for enduring academic success.

How do educators lay a foundation for optimal thinking among our youngest students? The challenge is to encourage and leverage the powerful brain growth which is most rapid in these early years.

IRI’s customized implementation of Feuerstein’s Instrumental Enrichment FIE / Thinking program and our aligned Reading and Math professional development opportunities prepare teachers to mediate students’ cognitive functions for higher achievement. Educators receive world-class, research-supported classroom strategies, tactics, and student consumables.

As educators we understand that it is our responsibility to enable students to THINK BIG, especially when they are little.

Objectives:
- Develop young children’s thinking skills critical to optimal learning
- Decrease impulsivity, reduce guessing, enable spontaneous comparisons, enhance concept formation, strengthen inquiry skills, improve emotional control, develop empathy, make sense out of the absurd, better connected thinking, advance precision, sharpen perceptions, enhance intrinsic motivation
- Prevent or stymie learning disabilities
- Enable advanced students to excel
- Stimulate higher, faster, and enduring achievement among all students

Methodology:
- Feuerstein’s research-rich, world-renowned Mediated Learning Experience tool for teachers to facilitate student thinking experiences
- Feuerstein’s “Instruments” to jumpstart cognitive functions for more efficient thinking by all students
- Figural representations stimulate student problem solving
- Students weave previously discovered rules and new concepts to increase complex thinking

Professional Learning:
- Work sessions to master use of cognitive instruments before introducing to applied setting
- On-site coaching in teachers’ classrooms and demonstration lessons to assist with implementation
- On-line mentoring and chat-room; peer collaboration
- Project leadership seminars, project assessment coordination, and monthly progress review with district project leadership teams