



## Q&A with Feuerstein Experts

(November 2008)

Various members of the iRI team will respond. These are brief answers, which can be further elaborated individually.

Please email the Cognitive NewsLINE Editor at [newsletter@iriinc.us](mailto:newsletter@iriinc.us) with questions you would like the Feuerstein Experts to answer.

*"Many of our four year olds are not ready for pre-school. Most come from poverty homes with single parents. I know we are supposed to give them a head start, but these children are really behind. For instance, they can't draw squares and circles. Most can't copy capital letters. How long do we have to wait until they are ready to learn?"*

— *Early Childhood Teacher, Charter School, Arizona*

Dr. Feuerstein encourages you to make an active intervention, which he calls mediation. He would say, "Don't let anyone convince you that this is just a developmental stage. Don't wait." For instance, if a three year old is not yet holding a pencil and drawing lines or tracing letters, you can step in and show the child how to hold the pencil and draw lines between two dots. Don't be surprised by how quickly the child imitates your "show and tell." When others see this, they will want to do it too.

Once you are past the physical hurdle, you can proceed to help the students understand what is a straight line, and progress to simple geometric shapes such as squares and triangles. With repetition and encouragement, you will be pleased to see how quickly the students develop these skills. Do the same for the letters. Use a sandbox or large sheets of newsprint and crayons to guide the students. Repeat in different media so that the ideas crystallize. "You must help them overcome, no matter what. By this age, they should be ready for your intervention."

— (Feuerstein, Feuerstein, Falik & Rand, 2006)

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*"I am often asked by parents how long their child will take to go through a program like FIE. Is there a national average? Two years? Three? Why?"*

— *Margie L.*

When we talk about cognitive change, we may well ask, "How will I know that change has taken place in my child's thinking, and how long will it take?" The at-risk learner has been practicing ineffective thinking for a long time, and habits of deficiency are well established. Feuerstein's Instrumental Enrichment (FIE) functions as a vehicle for the learner to begin to use high level thinking skills, to learn to name them and be aware of them, and finally to habituate himself to deliberately use the necessary cognitive functions in every part of his life. That, as with any habit, takes time to develop.

As a curriculum, we have seen that FIE changes learners after one year of intervention. Learning to spot those changes requires the instructor to watch for what I call the "little miracles" or, more pedagogically,

the "critical incidents." A critical incident is a small change that does not have huge ramifications, but which signals the beginning of a larger change. An example would be for a student to ask, upon entering a room, "Are we going to do some of those difficult dots pages today?" This innocuous question tells me that (1) he has begun to anticipate that learning will take place, that there is some point to school, that he has some knowledge and control over what is happening, and (2) that he is subtly offering to be a partner in the enterprise (or he wouldn't have "suggested" that he anticipates it), and (3) that he is using past experience to anticipate present experience. Those are powerful, if tiny, changes. Other critical incidents would be apparently minor events, such as offering to help someone else with a problem, suggesting an alternative strategy, hypothesizing about the meaning of a task, etc. As instructors, we may elaborate and explain to the learner the beauty and intelligence of these incidents, so that he/she, too, can see his/her own increasing competence. So I think learners need a year of exposure to begin to allow those critical incidents to take place. After two years, one can begin to see the automaticity of cognitive responses and behaviors. You can also observe more transfer to other content areas and life experiences. I think two years of FIE is essential, three is ideal. For a severely impaired learner, there is no end to the good that continued, multi-year exposure can do.

— Shannon Almquist, iRi Master Trainer, FIE

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***"How could you initiate FIE in classrooms of 30 regular students? How could you demonstrate to their parents that FIE works?"***

— Jessica V.

Where a class size of thirty is the norm, the class size should not be changed for FIE. The benefits outweigh the disadvantages of the large class size as students learn not only from the teacher but also from their peers. While every student still does his or her work on the FIE tasks individually, the group discussions can always contribute to the student's insight and understanding. The challenge of involving all the students in classroom discussions is for the teacher to address, and the training we offer addresses this challenge.

— Meir Ben Hur, Ed.D iRi Vice-President and Lead Trainer, FIE

The short answer is that you must teach kids to be peer mediators very quickly, because you cannot be at the side of the 10 who need mediation as they tackle the early Organization of Dots pages. The first 3 weeks are the hardest! This is because none of the kids have a sense of what FIE is or why we would teach it. So here comes the long answer, assuming 3 times per week at the beginning and 2 times per week after you get started:

**Week One, Day 1:** Discuss thinking. "Who do you know who you think is a good thinker? What does it mean to be smart? Can anyone be smart? Who is the best thinker you know of? What makes them your choice?" As they give some answers, you can begin to 'grow' a Work Wall (a bulletin board of strips of words and terms you will use all year.) If they say their thinker doesn't get all distracted and fly off in all directions, you can introduce the term "restraint of impulsivity" or "gathers complete information" or "identifies relevant and irrelevant information." Not lots, not overwhelming, but you want to give students the message that they are correct, and there is a term for that. If you want to integrate language arts, have them write a 10 minute paragraph on "What does it mean to be a thinker? What jobs require thinking? (All, of course, but they may think only high profile jobs do.) Why do you suppose we are taking school time to teach you to think?" Save these paragraphs to use as markers for where they began, and give the same assignment half way through the year, and you will see an increase in the use of thinking skills terms, indicating that they are beginning to own and use these terms as they speak to themselves.

**Week One, Day 2:** Introduce Organization of Dots, following the teacher guide, and including the cover page and part (or all) of page one. It is critical from the beginning to allow time for **introduction**, **independent work**, and **discussion for insight**. In a large class, I don't let anyone go past row one until I have checked to make sure they really understood that the shapes must exactly duplicate the model (not just any old triangle). As we proceed, I indicate such "stopping places" so we can check. The faster kids can begin to help me check. After the first half page, we pause ("Put your pencils down!") for a discussion for insight. Here we again create terms for the word wall, such as Model, Strategy, Precision, Comparison, etc.

**Week One, Day 3:** Review, introduce second half of page 1, discuss possible strategies, based on yesterday, and talk about mediation. “What did I say to you when you were stuck? What questions did I ask? How did I mediate you? Do you think you could mediate someone else, if you finish your page?” Now, you can allow kids to take on the role of mediator, with the understanding that they must talk, not grab the pencil and do the problem! This might be a shorter class, or you may look at page B1, which will come next week and compare it to page 1, anticipating difficulty and hypothesizing strategies.

This sort of careful beginning includes bridging to subject areas (“Where else do we need to be precise? Where else is there a model that shows you what to do? Where else do you need strategies? Where else do you have to check for error?”) and bridging to extra-curricular areas such as sports, everyday decision making such as shopping, cooking, driving, and current event areas such as strategies for getting elected president.

The careful beginning will set the stage that FIE is a vehicle for improving our thinking, not a (fun) set of pages to be “done.” It is vital to get kids to discuss their thinking. A group of 25-30 kids is difficult at first, but you set protocols for peer tutoring and for small group discussions. In the class, for instance, you might assign kids in groups of 4 to make a list of where different occupations (doctor, postman, bus driver, cook) must be precise, or where they must gather complete information. Then they can share with the class their examples. By the third or fourth week they will know that they are allowed and expected to always look for how they have intentionally used or recognized thinking skills throughout their lives and that you want to hear their examples.

— Shannon Almquist, iRi Master Trainer, FIE

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*How can you demonstrate to students’ parents that FIE works?”*

— Jessica V.

Simply put it’s ALL about organization of the classroom or clinical setting. Just like showing parents sample pieces of a regular worksheet, you should be doing the same when it comes to FIE. You should be using student folders and journals in which each instrument is saved from the beginning of the year to the end of the year. This will enable you as well as the students to physically see what has been accomplished. As you save worksheets from math, social sciences, spelling tests, etc. your intention is to show the parents the student’s content work and what they have or have not accomplished. In FIE, this is the same idea, relatively speaking, showing the progression of change or modifiability (for example, page 1 of Organization of Dots compared to page 10 of Organization of Dots), the increasing levels of complexity, novelty, and abstraction. By pointing out specific items on the pages and showing the progression from page to page with the vocabulary used, parents will get the idea.

Parents will also begin to pick up the vocabulary you are using in the program, such as, “Hey Mom, I am being really systematic while cleaning my room!” or “Today, I almost got in a fight with Matt but I used self-regulation to control my behavior.” Even better, when you have a student who isn’t doing so well in the academic areas go from being a ‘C’ student, to an ‘A’ student! Talk about intrinsic motivation and really given the parents something to question. “Wow! What are you doing differently in the classroom?”

— Kathleen Bellanca, Executive Director,  
National Center for the Enhancement of Thinking and Learning

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