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TOOL KIT

Accelerating Student Achievement in Special Education

Presentation by

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**“We can, whenever and wherever we choose, successfully teach all children whose education is of interest to us. We already know… more than we need to do this. Whether we do it or not must finally depend on**

**how we feel… about the fact… that we haven’t, so far.”** *Dr. Ron Edmonds*

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**Introduction**

***“I want my children to understand the world, but not just because the world is fascinating and the human mind is curious. I want them to understand it so that they will be positioned to make it a better place. Knowledge is not the same as morality, but we need to understand if we are to avoid past mistakes and move in productive directions. An important part of that understanding is knowing who we are and what we can do… Ultimately, we must synthesize our understandings for ourselves. The performance of understandings that matter are the ones we carry out as human beings in an imperfect world which we can affect for good or ill.”*** *Howard Gardner, Pioneer in Multiple Intelligence*

**“Accelerating educational achievement”** in children labeled as *Special Education* is all but an oxymoron. The highway of “Achievement,” by itself, in special education, especially in poor, underperforming schools seems, for many, just out of reach. A common belief is that the best we can expect is regular attendance and acceptable behavior. In fact, that is exactly where many schools and educators inadvertently and deliberately set the bar. Achievement objectives while laudable and required, though unevenly, too many educators feel it puts undue pressure on the child.

To discover that accelerated achievement and special education are not entirely mutually exclusive is to deny the reality of many years of failed experiments and futile endeavor.

Reuven Feurstein’s research takes the position that those boulevards “special education” and “accelerated achievement” are enjoined at the intersection of Instrumental Enrichment.

Let’s look at Special Education more carefully:

“Special Education” is, by law, specially designed curriculum to meet the needs of children who have disabilities – at no cost to the parents and family. Over 5 million public school children receive special education and related services each year in the United States. There are thirteen distinct disability categories for making a child eligible for special education services:

* Autism
* Deafness
* Hearing Impairment
* Multiple disabilities
* Other Health Impairment
* Speech or language impairment
* Visual impairment
* Deaf/Blind
* Emotional Dysfunction
* Mental retardation
* Orthopedic impairment
* Specific learning disability
* Traumatic brain injury

These conditions and barriers to learning can be mitigated by focusing on specific and combined employment of support services, listed below, particularly if they are on-going as opposed to intermittent.

* Behavior de-escalation strategies
* Autism treatment techniques
* Differentiated instruction
* Auditory processing workshop
* Transition to middle and high school
* Alignment of curriculum to state standards
* Para-training
* Culturally responsive pedagogies
* Inter-departmental professional development
* Effective assessment and diagnostic tools

**Instrumental Enrichment…**   
is one intervention that has proven especially useful for disadvantaged populations, including special education classes, where expectations for learning have been traditionally held low due to the mythology that environmental factors such as poverty and zip code inevitably translate into low performance.

Public schools, even with the help of modern research and textbook companies, have struggled with a universal resolution for teaching one thing, how to read. We have squandered years of resources with imprecise attempts to make one size fit all. Instrumental Enrichment is not a panacea, but it is…a game-changer because its success in developing cognitive prowess does not depend on written language.

The Role of… **“Instrumental Enrichment”** as a strategy in effecting improved achievement in urban elementary public school children is modern, innovative, and powerful.

Reuven Feurstein’s exceptional research on **cognitive modifiability** where he designed interventions to augment the cognitive development of youth refugees from Ethiopia into Israel, 1948. Two of those interventions will be introduced in this session: ***Organization of Dots*** and ***Orientation in Space***. Both are powerful. The **favorable outcomes** that they bring to the classroom and school environment can be a reality.

**This is especially true when schools are organized with these optimum conditions in public, elementary environments:  
  
\* A Clear and Focused Mission  
\* Strong Instructional Leadership  
\* Rigorous & Relevant Curriculum  
\* Safe and Orderly Climate  
\* High Expectations for Achievement  
\* Frequent Monitoring of Student Achievement  
\* Engaged Parents and Family**

**What is… “Instrumental Enrichment?”** Well, it systematically employs these teaching and learning behaviors:

1. Provides learners with concepts, skills, strategies, and techniques needed to function independently.
2. Corrects learners’ deficiencies in essential thinking skills such as analysis, categorization, and inference.
3. Shows learners how to use these skills to improve learning in   
   all curriculum areas.
4. Develops learners’ intrinsic motivation

5. Enables learners to experience lifelong improvements in achievement, as measured on standardized tests.

6. Underscores fundamental equity, demonstrating that   
 *“all students can learn.”*

7. Encourages Sharing among Mediators that generates a beneficial use of human capital and community resources.

***“The IQ tests we did initially on [the refugee children] had no way of taking into account the horrific experiences they had lived through; nor of telling, we believed, what their true potential was. When we assessed the children’s ‘learning capacity’ rather than their present performance, we discovered that all the children had potential that had been completely submerged in the standard IQ tests.”*** *Reuven Feurstein*

While the techniques and strategies associated with Dr. Reuven Feurstein’s research and program have found use in many settings, including, his initial exploration and impact on the controversial topic of cognitive modifiability. He tackled, head on, whether the “Intelligence Quotient” is fixed at birth, or can be changed for the better has gained wide acclaim over time. His work outdistances and emboldens the work of Howard Gardner on the esteemed topic of Multiple Intelligences.

Instrumental Enrichment… has proven especially useful for disadvantaged populations where expectations for learning have been traditionally held low due to the mythology that environmental factors such as poverty and zip code automatically into low performance.

“Special Education” was formalized with the passage of the 1962 Elementary and Secondary Education Act, which also ushered in a new era of federal funding commonly referred to as “Title I.”

The challenge of “differentiated instruction” has persisted as the most pervasive and persistent conundrums in public education.

Public schools, even with the help of modern research and textbook companies, have struggled with a universal resolution for teaching one thing, how to read. We have squandered years of resources with imprecise attempts trying to make one size fit all.

**Instrumental Enrichment is… a game-changer** because its success in developing cognitive prowess **does not depend on written language.**

**Key Concept:**  
Feurstein developed the Instrumental Enrichment (IE) protocol which allows a parent, caregiver, or teacher to **“mediate”** an individual’s thinking, and in particular, their problem solving capabilities. This fundamentally changes the role of the classroom teacher from merely “teaching” to **“mediating”** the learning experience.

**WHAT DOES AN EFFECTIVE “MEDIATOR” DO?…**

1. Helps the student see that they are learning to solve problems;
2. Studies the exercises carefully to identify the most unique patterns;
3. Asks students the question: “What do you do when your strategy does not work?”
4. Describes the difference between being “mad” and “frustrated;”
5. Helps students discover and clarify their initial assumptions;
6. Guides students to recognize that inappropriate assumptions and/or “orientations” fixate the mind and cause “blocking;”
7. Tells students, “When you get stumped, skip it and come back;”
8. Helps students see how they perceive themselves as learners;
9. Invents ways of helping other teachers understand that the “classroom” is often, “where children learn their **in**-capabilities!”
10. Points out the distinction between affective and cognitive modalities;
11. Reads the teacher’s guide with caution; knowing it is good for guiding, not replication;
12. Knows that vocabulary offered need not be forced. The vocabulary must be kept relevant to the exercise at hand, and the exercise not made into a language lesson;
13. Understands that if they introduced vocabulary, they must use it;
14. Does not skip pages. Students who miss a lesson, should be helped to complete missing pages before going on;
15. Discusses “learning” with students;
16. Repeats concepts in a variety of different examples and applications;
17. Encourages students to identify applications for what they are learning;
18. Expects students to be able to discuss the transfer their learning across the curriculum;
19. Gives explicit value and feedback to a given experience; and
20. Changes stance; facial expressions; body language; volume level and inflection of voice; and asks “why” and “how” questions rather than “what” questions.

Our focus, now, turns to the first instrument: **Organization of Dots.**

This has proven to be the quintessential tool for my intervention in the standard elementary school classroom and special education endeavors where students identified as “special ed” have been mainstreamed.

The scenario went as follows:

***As a supervisor and mentor for elementary school teachers, I would visit classrooms and offer lessons on applied mathematics and language arts.***

***Let me preface my encounters with a comment about the Dr. George Washington Carver Academic Elementary School. Although it was located atop a hill in San Francisco with a spectacular view of the San Francisco Bay from the playground and its moniker suggests a kind of “prep school,” it was located in a low-income, high crime neighborhood.***

***The school leadership was strong and provided not only administrative leadership, but instructional leadership, as well. The children were referred to as “Achievers.”***

***In Mr. Burke’s 5th grade class, four students, all male, all special education students, all “main-streamed” meaning they were no longer assigned to a self-contained special education room. They still struggled with behavior and literacy, but kept to themselves as Mr. Burke tolerated very little disruption.***

***In the front row of a 22-seat class were several girls who were capable and dominated the responses when questions and problems were given. Once the “Organization of Dots” was introduced three things happened immediately:***

***1. The Achievers were so engaged that all of them, including the special education students, had to be asked to stop working when the lesson time was up.***

***2. The classroom experienced a reduced level of conversation and increased focused attention on the task at hand; and***

***3. The “four boys” were making the same progress with the Organization of Dots instrument as were the eager and capable young ladies who always “had the answers.”***

This empirical account offers evidence of the special education students’ discovering, perhaps for the first time, that they were doing as well as the “bright” children was startling to them and reflected an authentic breakthrough for their school performance. It did not make them better readers. It did make them more confident about their abilities, and more willing to invest requisite effort on other tasks. It did prompt the teacher to engage them more directly about their strategies and infuse the vocabulary that is essential to understanding the tasks that comprise the **Organization of Dots.**

“One problem that we do not have is the intellectual capacity of our children.” *Dr. Asa G. Hilliard, Endowed Chair, Georgia St. University, Dept. of Psychology*

**“Orientation is Space,”** a second “Instrument,” is designed to introduce problem solving in the context of spatial intelligence and affirming a greater sense of “Where Am I?” This objective is important and fuels the sense of achievement through a series of exercises that are progressive and confirm through repetition four relational positions: Left, Right, Front, and Back. These simple directions are often confounding to the most astute mind in converting the idea of **“Where,? Which direction?, etc.”** to a confident rendering of a student’s relative position and orientation as they navigate the hallways, streets, neighborhood, and the globe. The **Orientation in Space** Instrument enhances the students’ grasp of the cardinal directions which gives them access to the entire spectrum of geography, longitude and latitude, and an introduction to geometry. **It relies on the same principles as the Organization of Dots and other instruments: Mediated Learning, specific vocabulary, problem solving, repetition, hypothesizing, testing hypotheses, and strategy.**

**The net outcomes of these two exemplars** are likewise similar: inferential reasoning, reduced impulsiveness, expanded vocabulary, confidence as a learner, intrinsic motivation, greater willingness to engage and solve problems, and an enhanced perception of self, as a learner. The cumulative effect on school climate and classroom calm gives teachers more “time to teach.”

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