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Working With Children's Powers Not Their Handicaps

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by Robert P. Echter

Discussion of Objectives and Strategies

Introduction¹

In all cases our special education students are dealing with serious and extreme problems of one sort or another that impact their learning in school, by definition. That makes them a very heterogeneous group. Trying to solve all their problems simultaneously is complex and anything but regular. I have been a teacher 30 years mostly with a very wide range of special education students. In this paper I try to convey that the quality of relationship we have with our students has very important implications for whether they are able to reach a degree of facility with subject matter that will allow them to participate more fully in school and society.

My own course of teacher preparation was atypical. I studied psychology, saw that clinical psychology was education, looked at the role of nature in psychology and education, and then studied the early stages of growth, before I looked for a basis of the science of education. I found Piaget wanting in that he gave teachers little concrete direction or understanding of how his data and theorizing might be applied and utilized in classrooms. Although I found his theories stimulating and an antidote to American behavioral psychology, it provides little compass to a teacher who has to deal with children in a classroom. I did find to my great surprise, a basis of the science of education in a two-day workshop on teaching mathematics with Caleb Gattegno. I went because I held a long and deep interest in mathematics and was on the lookout for an enriching experience in the field of math education. Although I was only very briefly introduced to some ideas of the approach I likened to both the person who presented them to me and the short printed description of the workshop. Well, the rest is history as they say. I took up an unbridled interest in his work, struck by his approach of "subordinating teaching to learning" in concrete terms. He gave through game-like activity evidence I could see and reference in my own experience that I could later transfer to my students as long as I tried to clarify the principles involved. What was so stimulating to me about Gattegno's work, who incidentally knew and had worked with Piaget (I later learned), and it should be noted translated some of Piaget's work and was very respectful of his contributions, was his major emphasis in going from developmental theory to concrete technology and approaches with a point of view which teachers need. It was simple, any child could do it and it was learning that opened up the use of a student's assets to them. It made sophisticated learning child's play while taking learning seriously. My "autistic, brain damaged and retarded" students at the time

took to it like ducks to water. Skills of math, reading, and language that had eluded them despite their teachers and parents best efforts, now showed up elsewhere at school, home and in their community, whether playing games, at doctor's offices or in relationships with their siblings. I remind you this was already a specialized school with an international reputation for doing pioneer work. I learned the techniques and modeling with my students. I remember that GK, a 7 year old could locate before I could words I was looking for on "very complicated" word displays used for teaching reading, but he made sense of them. Two esteemed consulting psychologists who liked my work both predicted that the materials, particularly the videos and the chart displays would be way too complicated and confusing for these children. The results in their words were irrefutably positive and they supported with a lot of their own work the school sending me to an international convention to report with documentary evidence what happened. Gattegno's advice that starving students piecemeal was counterproductive, and we should "give them a banquet" bore up to scrutiny. I was the same person, but acquired a technology and an approach that enabled me to more explicitly work with my students' powers of learning. We had taken for granted remarkable learning they had done that was normally ordinary. For instance, speaking their native tongue to a degree, walking, or whatever. Gattegno took these into account as explicit signs of intelligence and assets, learning powers 2 with which we could link and correspond.

I took risks. I put my job on the line and even changed my position in the school with less of a title (but no less money) because of the importance I felt this work held for my students and I and the world at large and was able to leave my previous "supervisory" position in capable hands. For example, in this approach my students used Cuisenaire Rods (formerly known outside of the United States by Cuisenaire-Gattegno Numbers in Color) to get basic mathematical concepts through the operation of their own senses. In fact much of what I will be saying later in this paper is based on what I observed and learned from watching Gattegno in action, but in order to understand those purposes better it is first necessary to give a little history of the typical special education class situation confronting American special education teachers.

Public Law 94-142 (Education for All Handicapped Children: The Individuals with Disabilities Education Act)

1. In 1975 Congress passed Public Law 94-142, changing radically the way in which special class students would be better integrated into the school culture than was previously the case. Before 94-142 special class students were segregated in the American school and not viewed by most school personnel as really being part of the educational arena.
2. The law mandated that before a child can be put into a special education program there needed to be a conference consisting of teachers, parents, psychologists, social workers and administrators whose task and obligation it was first to determine if the child was eligible to be in a special education program and second to come up with an individual education plan for that child.
3. The plan could not be implemented unless the parents of the child agreed with the plan and in instances where the parent disagreed there was an appeal process that could end up in higher bodies in the respective state system.
4. The legislation included under the rubric of "handicapped", retarded individuals, physically disabled individuals, neurologically-brain injured individuals, as well as children with a serious learning difficulty and/or serious emotional problems interfering with development of their learning.

A consequence of the implementation of the legislation was a guarantee that a special education class or program would include a very heterogeneous group of students, a degree of heterogeneity that far exceeds that found in so-called regular classrooms. This of course confronts the teacher with some very difficult problems, not the least of which is how to understand and respond to children as individual persons not just another member of the group. So it required teachers to be sufficiently prepared by virtue of their training to deal with the practical implications of this heterogeneity. The fact is the training of special education teachers, like the training of regular classroom teachers is far from adequate and has long been a subject of criticism and controversy.

Purposes

This paper has several major purposes. First is to describe and discuss what it means to take individuality seriously. This does not mean the teacher is only dealing with children on a one on one basis, but rather that she is also concerned with student-student relationships as well as forging a group ambience of social and intellectual learning. The second purpose is to provide concrete instances of the ways in which I have attempted to deal with individuality and group formation. Not the least of my purposes is to show that thinking only conventionally makes a vitally important difference in whether we see the obvious and have it force our ability to make a significant difference, a life changing transformation.

The purpose of this paper is not to offer generalizations, which however true they may be lack specificity and concreteness. The emphasis will be on what I have done in these instances and why I acted as I did. As in any classroom there is what we conventionally call a curriculum that centers around reading, writing, calculation, problem solving, etc. Ideally my purposes here could have greater meaning and impact if they were accompanied with videos of what I do in the classroom and school. The fact is Gattegno developed many videos illustrating among other things, teaching foreign languages, literacy in a few languages, and a comprehensive K-12 geometry curriculum. He also presented a curriculum and programming advice in his widely esteemed book *Towards A Visual Culture: Educating Through Television* , (1969). The instances I shall describe will be organized by headings: The Pre-conventional Learning Phase, Integrity, Humor and Games, Emotional Intelligence, Friendship and Teaching, The Classroom Constitution, Mistakes I Have Made Teaching and What I Learned and Teaching As A Performing Art. What is placed in these headings can be placed in more than one category.

Our obligation is to try to determine and bring out what children can learn and to test the limits of what they can learn. The concept of intelligence is much too abstract. I question what is the range of things my students can learn and what does that say about what that may mean for them in the future. Intelligence refers to a variety of processes, acquisitions all taking place in contexts of one kind or another. The factor of integrity and my title come in. I know what their deficits are supposed to be. I am obligated to determine what their assets are or may be and what I can do via my relationship to them to exploit those assets. It's a very practical question. The fact that children pass tests means that children pass tests, with whatever that implies. That may or may not have any productive consequences. I don't know. It is not good evidence of learning. For instance, Seymour Sarason(1985) describes some diagnostic errors where he was taken in by appearances and he wasn't being consistent with what he firmly believed.³

The Pre-conventional Learning Phase

Regardless of handicap there are certain things that justify saying that regardless of the type of handicap teachers encounter, even before the children enter the special class for the first time we know certain things about them. One of course is that they have had a history of learning and /or personal problems. Another

thing is that they've developed a sense of inferiority and failure in varying degrees. Third is that with few exceptions they do not view school personnel and even other students as understanding or supportive.

A teacher's approach to her students is psychological, interpersonal and educational. That is asking a lot of teachers. It is a lot that is not made at all easy even though the number of students may be smaller than the number in regular classrooms. What special education students feel or have experienced before they come into the classroom defeats the purposes of learning and development. The assumption is that these children have deficits and that is the focus of the teacher and the students, or put in another way these students have deficits that need to be repaired or compensated for in some way. The assumption far too frequently ignores something no less obvious than their deficits, and that is that these children have assets. These assets will initially at least not be anywhere near as obvious as their deficits. If a teacher tends to see a child only in terms of deficits it sets drastic limits on what that child will experience and learn. Saying these things I do not criticize or scapegoat teachers. Indeed, I view them as victims of a conventional training, pedagogical training and a school culture that centers around deficits far more than on assets.

The initial interpersonal goal is to approach children in order to do things with them that will engender and establish trust and motivation, wanting to learn. Children have questions about safety and trust. I aim to make them feel comfortable, safe, and not fearful. For instance, in the early phases of establishing a relationship with children I have shown them a blank sheet of paper and asked them what they see. They say, "Nothing", and I say, "That's what you have to fear. There is nothing to be afraid of." They remember it. Although most examples in this paper will sound like one child and I it is done in the presence of the other students and adults, too. What I'm doing is public. It is exposed to the general view of all relatively. The group is aware of it. Basically I start with a mode of relating that will engender a response the respective child is capable of responding to successfully and that employs assets of that child to help them and me.

We all know the store clerk who says, "May I help you", and smiles, indicating that in this small event there is implicit asking if there is any way they can be helpful to us, and we respond. They're nice people. They signal they want to like us and we should respect them. The first goal is this pre-conventional learning phase, the relationship. The second goal is the conventional learning. Without the first we stand a far worse chance of achieving the second. I'm reminded of "The King and I" when Anna, the teacher is introduced, the children gather around and she sings with them, "Getting to know you, getting to know all about you." Unless this is in the forefront of our minds we will miss the point that it's in the forefront of children's minds, and we start with children and where they are. That is the mistake that Mr. Holland made in the first half of that movie by the same name.

Any judgment regarding a child's intelligence has to include the degree of energy and motivation the child puts into problem solving tasks. That is especially important with special education children for the reasons I gave. They start off feeling they're dumb. We don't have to give them that message they get it from the culture of our school system and society. If a student is not reading by the end of first grade they generally feel inferior, I think. They would in one sense rather fail because they act up, resisted trying rather than conclude they are dumb.

Children judge you not by what you say you are, but by how you act. Schools vary on when a teacher brings a problem to the principal they've learned if they're not going to get a sympathetic understanding, but a judgmental one, or on the other hand they have no hesitation because the principal has made clear in their action they'll listen and respond. It's no different in classrooms. Another thing, children know whether what a teacher says when a praising them, is deserved or not. It's got to be given in a way and at a time when the

child accepts it. Everyone in the group or nearby observes all of this directly or indirectly. The major point is that before the "formal learning" phase, one needs to begin to establish a relationship that begins to make the child feel safe and comfortable with you.

Integrity

We can think of integrity in terms of consistency in understanding and acting. I make certain basic assumptions and if I stick with them I'll figure out a way of solving whatever problem I'm dealing with. The concept of integrity is too complicated to really present and discuss in any detail, but for the purposes of this paper by "integrity" I mean that the teacher is always very sensitive to the fact that the learning depends on the relationship. The teacher's obligation is to make a child feel respected, accepted and safe. It is a teacher's willing commitment to the belief that it is his or her obligation to create a relationship that allows them to understand and help their students. It is the teacher's obligation. This doesn't mean they'll always know what to do, but unless the relationship is secured the teacher can't venture forth, find out. We need solid grounding.

The relationship is the medium. Part of that commitment is in the title of my paper. It is my obligation to test for and find out what are the students' assets. It's like locating oil in the ground and the question arises how do you get it out and create energy, release and transform it with a gain in freedom and ability to learn.

- For example, I had a student in third grade that was so low when tested for special education that almost everyone immediately wanted her in full time special education. Legitimately the school feels they don't have the resources to adequately deal with and address the student's needs? As special educators we know what the law says (least restrictive environment) and we see assets. We have to and take advantage of them. I noticed one day she had an extraordinary talent for learning in an area not normally associated with academic subjects, but I found a way to link it up with learning reading and spelling. It was beautiful. It opened up a whole new world for us. All I saw were her assets. It was riveting!

If you look at a student's file it is almost always a litany of deficits, but if you're to take what my basic assumption and beliefs are you're not going to be influenced by that except minimally. It tells me I better start looking in other directions. We potentially have access to their powers, what they have, we don't have access to what they lack, by definition. That has the aspect of intelligence. By "access" I mean intellectual, personal and motivational factors, and you cannot separate them.

"Integrity determines the scope of your radar and what it allows you to see and understand. Integrity is conceptual. It is that which organizes things like the cognitive, the motivational, and the emotional. It's a set of interrelationships."⁴

These children vary so, and I have so many different roles that I play that the time children need to think and reflect, such as before writing, is far less than it should be because we are on a treadmill. Thinking and reflecting for children is obviously somewhat different than it is for adults. Just as very young children are present totally in the field of perception, boys and girls are involved through action across the natural environment. I know from childhood every little hill and intimately the topography of my neighborhood. Other adults have confirmed with me that they have the same recollection. If we don't regularly, systematically and consistently with sense link up with them in terms they can construct we don't have a prayer of conveying to them what we think they need to know. It would also show them we don't care to understand, appreciate them by putting ideas within their reach. The kinds of tests used to score achievement usually do not reflect this psychological "absolute" of childhood as evidence. To do otherwise is a waste of time. When things are coupled together as in a relationship, they are coordinated in a whole.

Starting with the whole of it we end with the whole of it. The integrity of our work that starts with our students where they are is not amorphous. Its roots, structure and dynamics are tangible. Integrity is as real in teaching as it is in bridge building. It's the structure that holds it together. It's very important, obviously. It's self-evident. So, what does this have to do with intelligence and working with children's powers? It's simple, teaching doesn't hold together otherwise. It falls apart. We begin where we are. In order to have something substantial we have to have a relationship. That is a fact. All teaching is built on relating. In teaching we need to make ideas palpable (tangible, sensible).

We may fumble along finding stepping stones while getting our footing, changing this or that aspect (that is a functioning of intelligence), taking into account more points of view, restarting when we run into dead ends, getting evidence and building solid criteria on the way. For example, one could define "integrity" in a few words and be done with it. Or one could make a whole life of it, or seminar or write a book on it. In fact, Gattegno conducted just such a seminar shortly before I met him in January 1972. I've never heard it though I think it is an audio recording.

Integrity is the structure, the substance of bridge building between subject matter and students. William James made it eminently clear in his discussions with teachers.⁵ His aim was to connect the everyday integrity of students with the real subject matter as it made sense to their lives. His mission was far more global in scope and scale than that, but it raises the question, from where do we begin. When we get too much fragmentation things blow apart. It happens psychologically for our students, too. So it is our inherent responsibility to hold things together and transfer learning across traditional subject boundaries. Gattegno (1981) wrote that the primary difficulty associated with learning disabilities is the failure to make the whole of a respective field of study and its stepping-stones clear and self evident through our students' own action and perception. It could be a subset of a larger field. For example, in teaching reading he began with a small set of sounds and spellings that gave both the conventions that tie English writing in space with speaking in time, and major skills that focus on the creative powers for deducing a word from within the set of probabilities for spelling by establishing a network of words. When teaching foreign languages he would start with the breathing of that particular language. Basically he would start with what held it all together in intelligence and sensitivities. We are involved as a totality in our acts. "Learning is by the whole of the self. My perceptions are educated as well as my feelings, my sensitivities, and my schemes for reducing elements for more economical retention."⁶ When we lose the integrity of our work, we lack intelligence about it. We lose the actual sense, the connective tissue of the whole presence in the activity with the assets involved. Integrity in this sense refers to a whole life, and the lives of others. So we are concerned with a student 's whole life. It is in the present.

Humor and Games

The classroom is a deadly serious place in which the teacher is the legislature, the executive and the judiciary. For example, we ordinarily do not think of humor as a means of engendering interest, trust, spontaneity and relaxation, but I am always vigilant about opportunities that convey to students I can be the type of person who could relate to them in ways they find playful and enjoyable.

- On occasion I have initiated playing "catch the thumb" with students. It relates to the spontaneous involvements in games of action, and I'm saying to the child without saying it, "I want to do something with you that you're going to like and enjoy. I'm not here only to teach", (the way children think of teaching). We are playing together, but in a way that is very serious

and respectful yet lighthearted, friendly.

- Take another case, C. G., a 4th grade student in evaluation (soon to qualify as Seriously Emotionally Disturbed). She has been in 14 foster homes. The point is to look for her resilient aspects, I think. She walked into the room the other day on an errand, where I was sitting with the psychologist who had been evaluating her. She was with her usual stone face and lacking emotion. I said, "Wait a minute" (playfully). "I have an extra smile in my drawer here, you might want to have it." I actually opened my desk for her. Then judging by the smile on her face I said, "Well, maybe you don't need it. Maybe you have one already". In this I was saying she was independent in this area, but not without support in a relationship. We saw her smile several more times that morning with me and with others. The psychologist saw it and said that he had not seen that side of her before. It showed a strength not previously revealed to him in his testing. I use humor for more than one purpose, but one of those is to get students to see me as a friendly person who can laugh and make them laugh.
- On occasion I'll get very young (short) students to listen to me by looking above them and all around, turning, saying I hear you. Where are you? They think it's great! I call them by name. They call to me, "Here I am!" Even tugging on me. I don't wait too long, so as not to belittle them before I give them my full attention and acknowledgement. It is a playful engagement, like "hide and seek", but it is very important. I suppose I am finding a way of letting them know I will listen to them. I do it because at that particular time I think this would be a form of tension release to them and reinforce their view of me as someone capable of getting the point of what we're doing.
- Very frequently I extend my hand to a student to shake hands especially when we're first meeting. I say it with a facial expression of humor and the child knows that. When I say, "It takes more energy than that to work together", he's not increasing his energy because a teacher told him to, I'm making a game of it. That's the point. I don't tell him why I'm doing it or how I want him to feel, I act it out with him. He sees it concretely. I could say to him, "Squeeze it harder", and make him feel he's a puny ineffective kid, or I can smile and say, "Hey, a little bit more, a little bit more". It isn't only play unrelated to learning. This will become clearer in examples from reading, writing and math, below. They often transfer these 'games of relationship' to other students. The games are consistent with what I have learned about children's play from decades of study and watching them on playgrounds, in hallways and on the streets.

Emotional Intelligence

The root meaning of "context" is to weave together, connect. Emotional intelligence has everything to do with that. What I want teachers to understand is that there are certain predictable characteristics that most if not all of these children have by virtue of their experience as failures, home situation or what have you, and I also want the children to understand that they have assets.

- For example, I point out how "difficult subtractions" can be made easy by a relatively simple transformation, by adding the same number to the both numerals so that the subtrahend has one integer and the rest zeros. This simple thing once it is understood and practiced removes tension they had previously learned to connect with trying to learn something that seems difficult.
- Sometimes I have pointed out to a student that they have the "power" to ignore other kids who are trying to provoke them and that I feel they could use that.
- I reinforce those assets. In practice, for example CC got very angry with another student for saying something that seemed innocuous to everyone else, but he was hypersensitive to it, for some reason. He left the room, sat on the floor in the hall just outside our door and absolutely refused to come in. My best efforts to get him to return to the room failed. I asked other students to see what they could do. WC started speaking to him in Spanish. I knew CC was a limited English speaker, but I didn't know WC was so fluent in Spanish! In a very short time CC came in and resumed our class work, with no seeming negative impact. Perhaps he got the message we tried to understand him. This is very important. It is a concrete example of where I did something in which I was not successful solving the problem and I asked another child to see what he could do, and lo and behold....
- JT was in kindergarten. I knew him because he is the brother of a special education student and he receives speech services. Regularly quiet and guarded he seemed particularly sad to the principal and his teacher this day. They expressed their concern to me at the start of school. So at their behest I spoke briefly with him to see what I could do. On the way to find his brother we held hands and skipped down the hall. The three of us went to my office. We never found out why he had been so sad, but after we played a game of hand over hand pile he laughed. I then gave him the challenge of balancing Cuisenaire rods end on end with increasingly tall ones. He liked this, too. He got engaged in the challenge of it. He was smiling now and obviously relieved or at least distracted from whatever had been bothering him. I then took him to see our principal, an unusually compassionate and thoughtful person who immediately understood when I implied to her that this kid could use to give and get a hug with her. You can with the best of intentions try to interrogate a child in order to make him feel better and make him feel worse. Because if he can't answer you for whatever reason and you press him about it, he feels he's letting you down and you don't understand.

Schools can be very stressful. There are many reasons for this, and without attention to the awareness of that we are not likely to remedy the conflicts associated with it. We live in a community that is stressful sometimes. There is a surfeit of daily stresses. Time conflicts, drudgery, confinement, comparisons with others, fatigue, ridiculous requirements and more all come to the fore. A great deal of stress comes from not taking the time to think, or listen, or from feeling isolated from regular normal informal social conversing and the like. For instance, if we let children speak with each other we run a risk of volume control, but we also run an opportunity.

Friendship and Teaching

All the students in the school know me. Daily I supervise all the students for a half hour before the school day formally begins and I take advantage of opportunities to get acquainted with students who I know are having problems, as well as the others.

- For instance, I recently ran into S.T. and his granddad downtown in New Haven (It's the start of summer vacation). He had known me because I got to know him as a student who was referred, but not evaluated for special education. I kept tabs on him and built something of a friendship with him. He eagerly asked me to see him regularly during the summer and teach him reading. When I asked him why he thought I was a nice and good guy (who he could trust) he recounted that I had let him go to the bathroom when no other adult would let him. He conveyed to me a sincere interest in learning together. It was extremely touching.

Writing and Reading

My job, my obligation is to start with what my students would want to read or try to read, or what they would want to write or try to write. For example, I frequently invent games where there is no or little talking, but we write notes to each other, letters to our loved ones, notes to the principal, etc. Basically trying to initiate writing about what concerns them. It is important to bring out what is on their mind. What they have to say. Perhaps they are missing their parent who is in jail, or this or that. It makes no difference. What is of consequence is embodied in the relationship of care and learning. We work on the skill of writing while we listen to and educate each other. I also let my students initiate things. For instance, I was addressing an envelope to a parent in their presence and one by one they asked for envelopes to put their letters in and send or hand deliver. Of course I gave envelopes to each who asked. Guess what, a few were given to me with some very beautiful notes inside.

- SJ eleven years old in third grade was slow figuring out how to read words with which she was not familiar, and her reading skill was inconsistent. Her language was not well developed for her age or grade, but affecting her comprehension was her reading without the phrasing or melody of naturally spoken English. So I pointed out to her that when she came to periods at the end of sentences her voice didn't go down as she does in her ordinary speech. I didn't explain it in exactly that way, but so you will know what I mean by melody, think of all the different meanings you can convey by varying the way you say, "people like us". She finally got the point, and it completely changed her reading, the way it sounded to her (and others) and the comprehension with which she then read. It immediately carried over to her other reading. It was as if a light went on. She had it. It was hers. The next day she lapsed back until I pointed it out again, very briefly and subtly. Practicing is required to gain facility with a skill. It is not once and for all until it is automatic and can be applied to a higher level of skill. What I did with her at some point is I put on my audio and then I played it back to her and then I explained what it is, I showed her what I meant. If one had video they could see her response, and they could see my, "hallelujah". A lot of my teaching is deliberately silent. It may be silent and very potent.

The Classroom Constitution

Rules and regulations of the classroom are a constitution, of sorts. It is means by which children understand why I will do what I do when I do it and why I will respond as I do to what students do. What we allow and what we don't. Its formation is made explicit in the quality of relationship we create. It is also involved in the games we play for student learning in the regular academic subjects.

- For instance, JK had very, very low school skills, was very, very demanding, regularly in trouble and frequently kicked out of his regular education class (he was part time special education and new to our school). I started a game with him that is used with Cuisenaire rods for teaching math, in which a few are held behind the back and he has to select without looking the one I indicate by pointing at a similar one. It is a pedagogically relevant activity, establishing the imagery that corresponds with relative size by units, with which language of math can then be associated when dynamics are involved. Not only did he like that game, but the next time he came in he asked to play it, and he was very serious, studious about it. We were not wasting time. When another child started fooling around and not abiding by the rules of the game and decorum of the classroom, he put his foot down and demanded that the other student comply with the rules, sit down and behave!

The same thing happened when students were watching a video that shows the dynamics of the behavior of words when transforming one word to another by networking through algebraic relationships that reveal "word attack skills", but to them it was play (An animated film called "Pop Ups"). When I introduced it to them I didn't force them to watch it, I called it to their attention, and even let them do other things, being attentive to when they looked at it and what they did with it and each other. It's actually a beautiful and brilliant piece of work that captures the imagination and attention of children. It is work of student learning, but they call it watching a video or play. I often make a game of things. So a lesson might be taught as a quiz show.

- MK (another clinically depressed child), who regularly and frequently either on his own or by pulling in another student would play games with Words In Color charts to study, challenge and broaden his learning of reading, writing and spelling. It was monumentally successful not only in his learning the academic skills, but in his social and emotional relatedness as well. The improvement was witnessed at home and by outside doctors.

That has been typical and regular throughout these trials over a lot of years. Lesson plans traditionally have to do with subject matter, and what I'm saying is, particularly with these children you can never lose sight of the quality of relationships between you and them and they among each other. It is part of the context. It helps memory. It makes the other things more possible, keeping in mind the history of failure, lack of recognition, low self-esteem and problematic family backgrounds. You're not dealing with kids who have reason to trust teachers. Trust is part of what this whole section is about. In other words, when a kid feels, "I'm safe with you", they feel they can trust you, too. Then off we go!

Intelligence, like intuition and attention helps our choice of words, modulation of tone, listening, and silence for communication. It has been said that communication is a miracle. This highlights the intelligent use of

feedback, the dynamics of talking with someone in an interchange that is not just a transfer of information, it is social in the highest sense. In teaching we have to be given to knowing whether our students are just going through the motions or understanding. This is explicit, too.

Parents

Jailed parents are a reality of urban special classes and the fact that I am aware of this, I don't ask them the question, "Is your father in jail or not", but as soon as a child says something about it I so to speak will respond by eliciting what's on their mind, enabling them deliberately to correspond with them (with the approval of their legal guardian-parent), and if not, at least let them feel the ability and power to express those feelings, interest and care. We stand on our credibility with our students as authentic.

Parents stand in a position to know the reality of the carryover of school to home. Parents say they know when a teacher is very good. How do they know, I asked. They get immediate and direct correspondence with the teacher on a regular basis with pluses and minuses, and a relationship of mutual responsibility. They said, besides hearing from the teacher with good and bad news, the respective student talks about us all the time in a good light. The parent sees the student having a continuing interest in learning school skills at home, and school skills become the first thing the child wants to do at home with his parent.

I call parents frequently, as much to convey information as to get information. Very often I call with the children there. Sometimes I let the children call their parent when they ask. They have the freedom to ask me, the trust that they can ask me if they may call their parent, and I will not look upon them as an alien from outer space.

Mistakes I Have Made Teaching and What I Learned

I don't want to communicate that I haven't made mistakes. For example, after many missed opportunities I became aware that when a particular student came into school and something was amiss, he obviously had something on his mind, whether he was acting out or silent, if I waited too long we would have difficulty all day. What I discovered by accident was that if someone took five minutes with him at the very beginning of the day to discuss whatever he wanted to, and could get off his mind what was bothering him, teaching was far more successful the rest of the day.

V.S. was regularly misbehaving. He taught me something very important. I went to visit his family. There was also some difficulty in the relationship with one of the parents as I recall. The result of that visit and subsequent contacts with the parents in school and on the phone, was that V.S. became very good and my relationship with both parents grew very personal and warm. I in effect became a friend of the family. V.S. taught me that someone who is very bad can become very good. I haven't visited families at home nearly as much as I would like to and I find it extremely valuable when parents come in on visitation nights, but they are far too infrequent. It is extremely difficult to get together as much as we should.

The pressure of paperwork and my job as Planning and Placement Team Chair can be enormous. So that for example last year on the first day I received a few hundred pages of rules and regulations for the federal, state and district system. The demands on my time are such that I can't always do what I would like to do in terms of home visits. Also, I'll call parents and sometimes they don't respond. We all make mistakes. One kind of mistake is we learn something and potentially we could have learned it earlier. I want any teacher to understand that in the real world you don't always do what you should do. You can misread situations. There are teachers whose principal or supervisor is a royal pain. This is why teaching special education children even

if their numbers are 10 or 15 can be a very demanding task. (I have had as many as 35 students by the end of a year, in three school buildings and 115 PPT meetings I orchestrated and wrote up). It also involves coordinating with several other teachers with changing schedules and the like. Central office, the state capital or the federal government say, "jump" and we do. Too many teachers adjust by short changing students in one way or another. It is understandable, but not excusable. There are so many obstacles to teachers and administrators that it is too complicated to describe in this paper. The bottom line is we are in our classrooms, not off in Alaska or Washington, D.C.

We have a system of what matters are grades, test scores, promotion, not evidence of learning. This is evident in what parents, students, legislators, administrators ask about, but what parents and teachers say they are really interested in for young students is their learning, growth, competence, independence and sustained-heightened interest in learning, and forums in schools for teachers to regularly and frequently discuss these and other professional issues don't exist.

Teaching As A Performing Art

No treatment of this topic would do it justice without reference to *Teaching As A Performing Art* (Sarason, 1999). Last year I referred to it as the best book on education I have ever read. I'm under pressure here to get a paper done, not perform a work of art. The root meaning of "consent" is to feel, think, judge together. Most people don't think of teaching as showering with humanity, but I do. We are in a field as wide and diverse as human evolution. It is life as much as anything else we do. If there is one thing that a special class teacher can count on is life in these classrooms is unpredictable and one has to prepare to respond to and exploit it for personal-interpersonal educational reasons. Teachers will say humorously how much they resent the 'page 72 syndrome' ("by October 16 you will be on page 72"). That way of thinking about curriculum, learning and relationships in the special class is self-defeating in the extreme.

In more than a handful of students there is or is thought to be some kind of brain dysfunction. Here again one cannot make that the major focus in how one thinks about and responds to a child. My job is in a sense to test the hypothesis by trying to determine what that child can or cannot do and then figure out ways whereby that can be compensated for. It is also important to establish some sound social connection with and among our students because they often do not normally find it elsewhere in school.

Gattegno, for instance consistently taught students skills way beyond those taught in most regular classes. He taught in a way they found intrinsically enjoyable and he was constantly seeking ways to reduce the costs to rote memorization.

I was in a hall near my classroom and a teacher was being critical of my teaching. Saying essentially that I was not demanding or critical enough of my students. I pointed out that if you only see in conventional terms all you can see are conventional things. You are blind to the obvious. If you let intelligence in the obvious can appear there. I added that my cohorts and I had won all kinds of awards and accolades from parents, students, local, state, national and international organizations. There are plenty of teachers who see and feel and think as I do, but we are not organized along these lines.

I saw a very pretty woman in the market. It was of no consequence to me that she had a clubfoot and other

slight, but evident physical deformities. She was extremely touching to look at in nothing other than an attractive way. Does it make any sense to view our students with less regard for their assets and who they are? She made a mark on my life without ever saying a word. Likewise, teachers have a very important impact on the lives of their students one way or another

Literature Review and Discussion

Intelligence is defined in M. Webster's dictionary as "1. Ability to learn and understand or to deal with new or trying situations. 2. Relative intellectual capacity". With regard to the first definition we have seen the importance of "context" brought up time and again in the literature on intelligence, such as problem solving in and outside of the regular classroom. The importance of context is brought out in the work of Sarason, Krishnamurti, Sternberg, Binet and others. The second definition bears little on this argument: "Relative" to whom, Einstein? We always have "relative intellectual capacity. Our real concern is with learning, and all of my students have shown underestimated intellectual capacity. For example, at Benhaven, a school for autistic and brain-damaged children, a student who was immanently going to be given up by the school because of her lack of progress and sent to a "back ward" of an institution made a lot of progress. Nine-year-old LG gained literally 3-5 grade levels and years in literacy, math, speech, language and social-emotional response at home and in her community as well as school, in one year. I give as an example of context in learning Sternberg's reference to Brazilian street children who could do math in a street situation, but could not do the same math in school.⁷ This phenomenon has been reported in many other places over many years, in a wide variety of difficult situations. Roger Brown has taken up context, too. J. Krishnamurti's statement that, "The classroom is the field of study"⁸ sort of says it.

Another issue that comes up from early on is the undue emphasis on measurement with regard to intelligence testing. Binet understood the issue and its fallacies, but Terman and Goddard did not. When a criticism of intelligence testing was raised over the years another test would be added to measure the neglected component, whether it was the Vineland, the Wechsler Adult Intelligence Scale, tests of creativity, etc. This emphasis neglects certain things in the interplay between internal and external environments in intelligence, the "transactional approach".⁹

Caleb Gattegno said, "Most students who show a lack of understanding in compulsory subjects at school have mistaken this lack of understanding for a lack of intelligence in themselves"¹⁰. I have taught adults to read and understand a little of Russian in an incredibly short time, or to read and write numerals to trillions using 21 bits of information to demonstrate principles of the economy and dynamics of the powers of children. Seymour Sarason pointed out "There is one overarching criterion by which schools should be judged: If when a student is graduated from high school, that student wants to continue to learn more about self, others, and the past and present world, that school has done a good job."¹¹ "...American psychology...takes the obvious very seriously: No single psychological characteristic is comprehensible apart from its degree of relationship to other characteristics of an individual."¹²

Classroom Activities (Samples of Lessons)

A lesson plan in education starts with a conception of what makes for productive learning in a classroom. What is the nature, what are the features of that context that make the attainment of other purposes more feasible. That's part of the lesson plan. That is even more important with special education students who've had a history of difficulty, deficits, failures and the like. You can count on children in a regular classroom to have ease, to some degree wanting to learn. I'm dealing with children, many of whom don't want to learn, because trying to learn is failure.

- An example is what happened with RR, a very low scoring and school performing third grader, when I generated teaching the students fractions, and multiplication of fractions through a game of folding a piece of paper in half (or thirds) and a half of that, etc. RR was the first to get it, and he got it well. He understood it, could manipulate it and taught it to other students, including students in his regular education class who had not learned or understood this yet. He had the power to explain. What happens in this activity is I introduce the language of fractions (half, third, sixth, etc.) through having each student fold a piece of paper like me. They can fold it, open it, and inspect it for the veracity of any statement they make, in terms of how many rectangles are revealed, or concealed. For instance, folding a paper in half and then in half again would produce 4 rectangles. Thirds in half would produce 6, or vice versa. But make a game of it. I put it in terms of their action and perception, and ask them to recall and evoke an imagery of it. Then with a language attached it becomes a matter of play, slow at first for accuracy, then practicing with varying the problem. It is fun.
- With a fourth grade class including special education students I, without any explanation, wrote on the blackboard as long a sentence as I could write, but putting a blank line where every other word would be. The point of this game is to force their explicit use of grammatical sensibilities (without calling them that). The challenge of course is to make a sentence that makes sense. It has to be intelligible, it could be funny or not, and the students could propose sentences with blanks of their own. The teacher adjusts the length and difficulty to accommodate the needs of the students, but stretching their abilities as in a very long sentence gives them a feeling of their power and provides practice, while letting many students work at different levels.
- Another game I developed has to do with recognizing things from as little information as possible. Of course this could be done with spelling words by showing various bits and parts of words (as Gattegno did), and progressively more of a word until a student gets it. It is done to develop the power of recognition. I create a relationship then extend it to more formal subject matter, such as from pictures to words. I have extended this to a wide range of topics, over many years very successfully. Implicit in it, but made explicit in the rules I set is decorum. No one gets called upon if calling out, out of their seat or not raising their hand and waiting to be called upon. Some suggestions as answers are reasonable, but not what I had in mind, so I say, "It could be, but it's not". The first student who gives the correct answer with following the rules of the game gets to complete the word, etc. on the blackboard, or propose another problem. (Gattegno's phonic code chart with a pointer is also useful for this type of game).

In Conclusion

There are many different ways that I have learned whatever it is I have learned, but certainly one of the ways with the most impact by far is being able to see it done by somebody whose principles I know and I can watch in action. Caleb Gattegno was one. In this paper I can only give a reader some verbal impression of how I think and what I do and unfortunately in the training of teachers being able to observe and be observed is usually far less than it should be. The principles I'm trying to verbalize have to be concretized and by far the best way of doing that, short of being there or interacting in some way, is literally showing. I can talk about humor and trust, but if you see it in action it takes on a salience. The observer can see it's a game that has personal enjoyable aspects as well as educational. It isn't a matter of just having fun.

Things I say in this paper are illustrated in a movie, *Mr. Holland's Opus*. In the first half you see a slew of mistakes. In the second you see the change. When the point is made visually it doesn't need explanation. Teachers I know who saw that movie and I were deeply and emotionally impacted by it. Others who are not teachers did not respond in the same way. The emotional depth was not there for them. They did not feel it as deeply as we could and were forced to. They don't have that experience we do. They don't clearly understand. They don't have the concrete that it comes with. They don't have the experience or know how deeply felt the experience is for teachers. We realize what it meant. I suppose we felt understood or at least heard. There are limitations to verbal description and explanation. The very nature of words is to refer to categories of experience. That is why I have emphasized showing and acting with the students. Without reference in our own system do we have a way of conjuring up what could be shown or known with a root in our own experience? Verbal description does not have the educational impact for teachers that a movie like *Mr. Holland's Opus* might. Video can be forceful in a way writing is not. Although vicarious, too, movies are more like having been through it in contrast with only having been told about it. We can recall the meaning of what we have been through, whereas it is another to recall the meaning of what we have been told if it is not related to our experience. Teaching balance in Tai Chi is all one thing, physical, psychological, spiritual. The same is true in all teaching. It is one whole thing. How are they to have a sense of it unless they have done it?

Notes

1 Thanks are not enough to Seymour Sarason for his generosity and wisdom as my sounding board. It is an honor and delightful. This paper is infinitely better because of him. This dear friendship has been an extraordinary school for me. I know of no higher work being done by a psychologist in education than his.

2 Sarason, S.B., 1985, pp.89-101.

3 Gattegno, 1970, Chapter 1, pp.15-36.

4 Sarason, S.B., personal discussion, July 2001.

5 Sarason, S.B., 2001, pp.164-178.

6 Gattegno, 1971, p.64.

7 Sternberg, R., 1999, p.438.

8 Krishnamurti, J., 1980.

9 Sarason, S.B., Doris, J., 1979, pp.31-38.

10 Gattegno, C., 1975,1988,p.176.

11 Sarason, S.B., 2001, p.95.

12 Sarason, S.B., 2001, p.96.

Resources

Bibliography for Teachers

Blumenkrantz, David G.. "Let's Play: Initiating Youth Into the Healthy World of Play." *Developing Competent Youth and Strong Communities Through After-School Programming* . Eds. Steven J. Danish and Thomas P. Gullotta. Washington, D.C.: CWLA Press, 1996. 67-114. Mainly concerned with adolescents, it has a large list of references on play and learning.

Echter, Robert P. "The Application of Gattegno Techniques and Precision Teaching to the Teaching of Autistic and Neurologically Impaired Children." (Unpublished monograph) The Association for Children With Learning Disabilities, International Convention, Houston, TX. 1974. Besides a description of the program detailed data is included that describes what a supervising psychologist said was "remarkable" progress. The results of this work were later reported in the press in the U.S. and Great Britain.

Gattegno, Caleb. "Of Boys and Girls." *Know Your Children As They Are: A Book for Parents* . New York: Educational Solutions, 1988. 119-208. Gives an introduction to the psychology and education of childhood with the importance of games of actual and virtual action spelled out.

----- "The Intelligent Self." *The Mind Teaches The Brain* . New York: Educational Solutions, 1975,1988. 169-183. Using knowing as an instrument of study he explores questions concerning intelligence. It includes criticisms of Piaget's work in this field.

----- The Science of Education Part 2B: *The Awareness of Mathematization* . New York: Educational Solutions, 1988. This is the final work on teaching math by one of the most distinguished teachers in the field of his generation, known worldwide. He developed Cuisenaire Rods, invented geoboards and authored a video geometry curriculum for France, among many other things.

----- *The Science of Education, Part 1: Theoretical Considerations* . New York: Educational Solutions, 1987. His major treatise of a lifetime (he wrote 125 books), it includes chapters on "Affectivity and Learning" and "Memory and Retention". This is a fascinating and rich study of human learning. Part 2 includes many examples from regular school fields of study.

----- *What We Owe Children: The Subordination of Teaching to Learning* . New York: Avon Books, 1970. This presents the whole of his approach with particular focus on regular school subjects.

----- *Towards A Visual Culture: Educating Through Television* . New York: Avon Books, 1969. This book was widely cited and esteemed (his most popular). It gives examples and advice with some details. Frequently found "inspiring" by others, it offers his insight on what is possible for this medium.

Krishnamurti, J. "Dialogues with Dr. David Bohm 1980" , (audio). Ojai, California: Krishnamurti Foundation, 1980. A series of 15 talks

with a Nobel Prize winning physicist on a wide range of topics concerning psychology and education. A worldwide esteemed educator of the twentieth century. Other dialogues with Dr. Jonas Salk, religious, academic and scientific names, as well as many public dialogues over a long career are available. He also founded about six schools in India, England and the United States.

Sarason, Seymour B. *Psychology & Mental Retardation: Perspectives in Change* . Austin, TX: Pro-ed, 1985. This includes a few case histories of gross errors he made in diagnosis. This is by one of the pioneers of the humanization of the field.

----. *Teaching As A Performing Art* . New York: Teachers College Press, 1999. Last year I referred to this as the best book on education I have ever read.

----. *American Psychology & Schools: A Critique* . New York, Washington, D.C.: Teachers College Press, American Psychological Association, 2001. He calls the field of psychology to task for not taking more of an interest in schools. He addresses the implications of standardized testing, Columbine High School lessons, and productive learning, to name a few topics.

Sarason, S.B., Doris, J. *Educational Handicap, Public Policy, and Social History* . New York: The Free Press, 1979. Issues of intelligence testing and the field of special education are placed in historical context.

Sternberg, R.J. (1999) *Successful Intelligence: Finding a balance* . Trends in Cognitive Science. 3 (11), 436-442

Materials for Classroom Use

Pop Ups, Words In Color . New York: Educational Solutions. Animated film that shows word attack skills in action, and charts that display a curriculum for literacy in English.

Algebricks, Folklore of Mathematics Series . New York: Educational Solutions. Manipulative materials (Cuisenaire Rods) and animated films for geometry.

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