ABSTRACT

The author reviews developments in the field of learning disabilities (LD). She traces the emergence of three models or perspectives of the causes and cures of LD: the psychological process model, the behavioral model, and the holistic model, which the author suggests is the model for the 1990's. Trends leading to acceptance of each model are cited, as are each model's basic assumptions. Flaws in the behavioral approach are cited; and the author contends that despite its apparent success, the model promotes synthetic skills rather than real ones. She describes the holistic model which has several basic assumptions, including that the LD student approaches academic tasks passively and lacks motivation and expertise in traditional school subjects. She suggests that students' strengths and interests must be capitalized on, and different learning rates and content accepted. (CL)
LEARNING DISABILITIES AT THE CROSSROADS
by Mary Poplin

Being new to the Claremont Colleges and the Claremont Reading Conference and being from out of state, there are a few liberties granted foreigners that I would like to take. These include liberties in making observations, liberties that won't be permissible next year as I become an old Claremont professor. It is often very difficult if not impossible to see yourself as others do, so I would like to share with you some observations of the Claremont Reading Conference from my colleagues in states such as Virginia, New York, Texas and Kansas.

Before coming to Claremont I asked persons whose opinions I respected what they knew of the Claremont Graduate School. Most of these persons would say, "I don't know that I've heard anything about their special education program but I have heard they have a very progressive reading conference." The Reading Conference was the one thing most frequently mentioned by my colleagues in conjunction with the Claremont Colleges.

Upon arriving, I began to peruse the previous years' proceedings. After reading them I understood why the Conference is so well respected. I suspect those of you who have been attending this conference over the past few years know more about the emerging directions in reading, and in all of education, than any other group in the world.

Long before special education and learning disabilities reached the crossroads I'll speak of today, Malcolm Douglass and his guests and participants have been dreaming and promoting such a change. You are all to be commended for your support of this highly contemporary conference.

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"
First of all, I should warn you I am not an unbiased educator. I am biased toward special education and toward certain methods I believe best. Since 1969, I have studied special education history, lived its present and hoped for its future. I enjoy the people who choose it as a profession. I enjoyed the early freedoms it offered me to experiment in my teaching—the sort of carte blanche that comes only with new mysterious programs impoverished by a lack of resources and ignited by the energies of dynamic people, not to mention the eccentricities of the students we taught.

I can tell you I am getting old in this field for I now long for the good ole days of freedom and poverty in return for the wealth, bureaucracy and overindulgence we see today in special education and, particularly, learning disabilities. Well, I have come not to speak of our triumphs or biases but of our blunders. I believe the errors we are committing today in special education reflect problems shared by all of education, e.g., gifted, bilingual, multicultural, and reading and science education. Perhaps, for the first time learning disabilities shall find itself not alone at the crossroads, as we have in the past.

This is the second time in our brief history we have had to face a major challenge to previously held beliefs. (The field of learning disabilities was first organized in 1963 to use the word "history" is a bit presumptuous.) I'd like to take you through each of the three models or ways of viewing the causes and cures for learning disabilities. The first, the Psychological Process Model was predominant in the 60's and one whose ghost still raises its head occasionally to haunt us with reminders of the past. The model of the 70's and still a major force in the field of learning disabilities is the Behavioral Model. Being dissatisfied with the explanations and methods proposed by these two models, the field of learning disabilities
is at the crossroads once again. Our next model will incorporate many of the ideas you have heard, thus far; we shall call it the Holistic Model, a model for the 90's. Each of these models represent the different ways those of us in learning disabilities conceptualize learning problems and remediations. They reflect what we, as teachers, presume about the disabilities of our students and ultimately what activities take place. Let us look at the incidents which led to these shifts in paradigms.

The Psychological Processing Model

In the 1960's and early 70's, we shared some assumptions about children's learning that formed what I call the Psychological Processing Model. The sixties were a time when we believed that the neurological problems exhibited by these children were manifested in the way these children perceived auditory and visual stimuli (and to a lesser extent, tactile and kinesthetic stimuli). We believed that auditory and visual perception and/or processing problems were the roots of all evil. That formed the first and most basic of our four assumptions.

Secondly, we presumed that these psychological processes could be measured, that we had instruments that could adequately test discrete visual and auditory processing abilities. We assumed good readers would score significantly better on processing tasks than poor readers. They did not. Soon we were to learn of the lack of reliability and validity of the instruments we were using—the Illinois Test of Psycholinguistic Abilities, the Wepman Auditory Discrimination Test, the Frostig Developmental Test of Visual Perception, and so on. Of course, this was much later after the initial corps of learning disability specialists had been trained in the administration and interpretation of such tests.
Once an educational idea is translated into test scores, those of us in the schools know the logical next step is to teach to the test. And so we did. Our third assumption was that psychological processes could be trained. Kit after kit of materials were developed, packaged and sold to all of us. We had the MWM, the Frostig programs, the GOAL, DLM perceptual training kits, the Aids to Psycholinguistic Teaching, and literally hundreds of other taped materials and millions of ditto masters. Soon we were to discover that these programs did not work. The students who experienced the training became no better at perceptual skills than those who did not.

Worse than all of this, we were to discover that all of this auditory and visual processing had nothing to do with reading, writing, talking and calculating. After years of training various psychological processes and channels, students with learning disabilities did not get better at academic skills.

Later, we softened the psychological processing emphasis and decided to speak of modality preferences—auditory and visual. It was obvious that the more specific functions of discrimination, association and memory were not holding up under analysis. So, we began to look for general patterns of modality preferences, i.e., what mode or sense does the child use most effectively? The answer—all of them. For example, the way Brian remembers his phone number is very likely not the way he will remember a passage he has read or the sequence of letters in his name. The reason those of us in this audience remember or fail to remember the score of next week's Superbowl game has little or nothing to do with auditory or visual perception. Instead, it depends on motivation, previous experience and relevance. We discovered after much discouragement that the human mind is just not that simple.
But there is a mystery about this model. The medical-psychological flavor gave special education a status, a special place in the schools with a jargon all our own — and, quite frankly, we liked it. You probably know special educators who still cling to these terms.

With all the jargon aside, at its most basic level, we believed that training psychological processes meant we were either circumventing or retraining damaged neurological tissue. We, also, ardently held that this perceptual or process training was prerequisite and must be accomplished before meaningful, relevant learning could take place. Therefore, we never quite got around to meaningful learning.

The closest example of the psychological process model in regular education is some reading readiness programs. These programs often state as their goals — auditory and visual discrimination training. But regular educators have never been so zealous as to really believe they were training psychological processes nor have they inhibited more meaningful classroom activities while these readiness activities were being mastered.

As we contemplated our failures and our future, we were reluctant to let go of the past. We operated under the principle of "don't give up what you got, 'til you got something else." Soon, 'something else' arrived—the Behaviorists, ready to guide or "program" us into the promised land.

The Behavioral Model

The behaviorists carefully demonstrated to us their list of reinforcers, their charts, 6-cycle cell paper, curriculum scope and sequences and directions on how to write the longest most non-meaning sentences in the English language, otherwise, known as behavioral objectives. This model emerged in the early to mid-70's and has predominated our thinking about
learning disabilities ever since. Nothing is unteachable. No one cares what processes are defective or if any are. Here, the assumptions are very different.

First, we assume all learning disabilities are the result of unlearned behaviors. Melissa can't read because she hasn't learned reading behaviors. Secondly, we believe that these reading, or other, behaviors can be defined in observable, quantifiable terms. Once defined we can measure them and chart them. If a skill cannot be defined, we are told to break it into parts - task analyze and sequence the subtasks.

Our third assumption is that by adding a well defined criteria and the appropriate reinforcement (or lack thereof), we can increase or decrease any academic or social behavior. And, lastly, we believe that once these behaviors are acquired in sequence, the student will show a marked increase in overall reading, writing, math or social performance.

Terms such as perception, auditory and visual deficits and modalities, and psychological processing were replaced by words like instructional objectives, mastery learning, criterion-referenced assessment, competency-based education and task analysis. Six hundred and sixty-five sequential steps to reading are developed. There is the /a/ sound as in "apple." The poor child has to say /a/ when shown the letter, 10 of 10 times in two weeks succession. He/she has to find the letter "A" while hearing the sound, then trace and write the letter "A" while hearing the sound, and so on. We have curricula that will cover walls, page after page of objectives leading, we presume, to reading.

In 1975, a very dangerous thing happened to special education -- the behavioral movement was made official in law (PL 94-142). This mandate fell under the rubric governing the contents of individualized education programs (IEPs). All students receiving special education shall have written IEPs and
each IEP shall contain "annual goals and short term instructional objectives." Not only must the educational program contain instructional objectives but further the annual evaluation of the program must assess the "degree to which short term instructional objectives have been met." There is no mention of evaluating goals or that one cannot possibly wait a year to evaluate a given short term instructional objective. Further, there is no evidence that anyone who wrote the regulations understood that it is virtually impossible to write in any document all the instructional objectives attempted in one week, much less one year.

Pandora's box was opened. We all began to write books on how to write IEP's and instructional objectives. We have trained teachers to write and measure objectives for every goal. We have learned to reward and withhold rewards, to modify student performance, to decrease "bad" behaviors and increase "good" ones. We use stickers and grades and points and tokens, free time, parties and field trips to urge students to meet objectives.

You can just imagine what happened to social and affective goals such as "improve self-concept." Those teachers who are brave enough to try to write observable behaviors for these areas come up with such absurdities as "Decrease the number of self-derogatory remarks to one-per-day." We find we can make the student silent but silence does not mend self-concepts. However, once silent, the problem is generally forgotten. Alas, the technology does not fit the problem; the problem shall be ignored.

We have just as much difficulty defining behaviors representing meaningful conceptual skills as affective ones. Our 665 sequential reading skills contain very few references to comprehension and none for enjoyment. The few objectives directed at comprehension measure the student's ability to regurgitate the correct response to teacher selected materials, or worse, district
selected ones. "Correct responses" are equated with the answer recorded in the teacher's manual. No consideration is given the possibility that two very different persons from very different backgrounds might not legitimately "get" the same main idea from the same passage. There is no way to define or measure degrees of relevance or abstraction.

Thus, today our learning disabled students learn to "call words" because calling words is what we can best define and observe. It is not uncommon to see learning disabled children who have no idea that the purpose of reading is something other than the pronunciation of sequences of words, or worse, letter sounds said "fast."

We define written expression exclusively by easily observable mechanics—handwriting, number of words produced, grammar, spelling, sentence construction, punctuation and capitalization. To make matters worse, these mechanical skills are tested and taught separate from expression. They are taught with worksheets where sentences have already been written. In a classroom last May, a youngster delivered his writing assignment to the teacher's desk. She glanced it over and handed it back saying, "Why don't you take it back to your desk and check it over for capitals and periods." The student returned the paper several minutes later "corrected." Each first letter on the left hand side of the page had been erased and made a capital and each last word on each line of print was followed by a carefully drawn period.

Are we saying the Behavioral Model doesn't work. No, unfortunately it does. The hidden agenda of this model is far more devastating than the psychological process model because (1) it works, (2) it's simple, (3) it raises certain test scores, (4) it provides materials and (5) it's legislated.

Our lives are simpler. Wonderful materials have been developed—self-correcting, computerized, programmed, standardized and criterion-referenced.
The special education teacher today can literally "program" students' entire days from beginning to end and hardly ever interact with them. Computers automatically record scores of competency tests and then, with the press of the terminal return key, print out new instructional objectives ad nauseum. Almost every large special education program in this country dreams of the day when computers write virtually all IEPs. Many already own such programs. There are special education programs where every special class in the district has one to two terminals for teacher and child use. These classrooms hum with the sounds of students responding to synthetic reading, writing and math skills. We call this progress, individualized instruction and mastery learning.

From our experience in learning disabilities with behaviorism, I'd like to suggest to you that anything that can be defined behaviorally and administered and/or scored by a computer is not worth teaching!

The problems and the concerns I have just mentioned are not unique to special education or learning disabilities. The terminology just used, are key words in virtually every school system in this country. All of us in education are fast becoming dupes of the materials industry--test scores, computerized instruction, contingency management and numbers of objectives. We have lost sight of the whole while teaching the details. Managers of records and numbers run our schools as though our products were mechanical appliances. We test every part in order to assure a working machine. We have management and middle management creating and assessing useless objectives so we can obtain that long sought after "management by objectives." These systems may work for dealing with money and machines. They will not work for the administration and management of good teaching or the education of children.

We deny our own insights, our own intuitions in this age of behaviorism and management. We underestimate the integrity of the human mind and the
children who possess them. Do we really believe there are 225 instructional objectives to all good writing? Do we really believe children learn to read then write, punctuate or spell before they express their thoughts in writing? Observant parents know they do not. They know language does not precede reading nor does reading precede writing. They know at the same time their children learn to talk and walk, they also learn to "read" by mimicking their favorite storybook and learn to "write" scribbled messages that say, "Melissa, I love you," or "keep out." These scribbled messages look remarkably similar to the cursive writing of their parents. Their reading of favorite story books gradually approximates, closer and closer, the actual text as interesting, unusual words and phrases are recognized.

In learning disabilities, we have trained a group of children with specific skills that have no meaning. They have not generalized these skills nor applied them to their lives. Yes, the behaviorists could fulfill every promise but one. The accumulation of specific behaviors or subskills into meaningful growth and achievement has not happened. Learning specific sequences of academic or social behaviors does not improve overall school performance. It will improve test scores only as long as tests are as mechanistic as our objectives and our instruction. Learning disabled students are not getting better in any meaningful way.

**Learning Disabilities Reconsidered**

Let's stop for a moment to consider the learning disabled students of whom we often speak. Many of the students we presently call learning disabled are not handicapped. However, the term "learning disabilities" represents a legitimate handicapping condition. Handicaps are pervasive and life long. We should not apply this label so capriciously. Perhaps, as many as two-thirds
of the students in learning disability classes are (1) from different cultures and/or speak different languages, (2) poorly taught, and/or (3) not interested in the traditional curriculum. Mild to moderate academic under-achievement or behavior problems do not make a handicapped person. I am reminded of Herbert who said:

> There is no reading problem. There are problem teachers and problem schools. Most people who fail to learn how to read in our society are victims of a fiercely competitive system of training that requires failure. If talking and walking were taught in most schools, we might end up with as many mutes and cripples as we now have non-readers.

Many of the students called "learning disabled" simply lack the experience that promotes good school performance. Piaget was fond of criticizing Americans for always trying to speed up normal development. If we were patient enough in the schools to provide some of these experiences and if we could wait for maturation and experience, most students we now call learning disabled would succeed. Instead, our impatience creates many, if not most, of our "learning disabilities."

What can we say about the truly neurologically handicapped learning disabled students—that one percent of the student population that has significant and severe problems in the acquisition and use of oral language, reading, writing and mathematics? What are the alternatives to the traditional curriculum provided them?

There are no alternatives provided them. In fact, we have required their participation in traditional programs though our recent efforts to mainstream. Another legislated misfortune in special education. We so value normalcy and traditional curriculum that we mandate it!

We still require that most information in the schools be obtained only through independent textual reading. A student who cannot read Shakespeare in text never becomes acquainted with Hamlet. This is true despite the fact that
there exists literally hundreds of excellent tapes and films on the subject. We still act as though we believe given our labors, all students will learn to read at the end of school. They will not.

We know there are better ways to teach the learning disabled. We know we are not doing very well. So we are rethinking and recreating our assumptions about what we believe and about what we do. The questions we are asking ourselves in special education today are not unlike those addressed by this entire conference. These questions and others will form what I believe will be our next and most dynamic model—the Holistic Model.

The Holistic Model

Our new assumptions about learning disabilities are just beginning to emerge. Under this new model three strong concerns are being proposed. First, we suspect that the learning disabled student approaches academic tasks passively. They are inactive in their attempts to learn new concepts. They even appear to believe that their efforts have little to do with whether or not they succeed. Rather than being a characteristic of these persons, this lackadaisical attitude may be a defense mechanism created as a result of too much failure and not enough success. They lack the strategies that other students seem to develop naturally. If this passivity in academic tasks is the case, a priority in our methodology will be to use methods that build on students' natural areas of interest, methods that encourage their becoming actively involved in various educational experiences.

Secondly, we have begun to accept the notion that learning disabled students lack interest, as well as expertise in traditional school content. They seem to be best at the exploration of the mechanical, action-oriented world rather than the linguistic world. They are attracted by art, music,
or specific science content (not science in the textbook). It is clear that if we are to begin to provide alternatives, then we must alter their school experiences to include non-traditional curriculum. This will be difficult because it will involve a change in the "basic" values of education, e.g., reading, writing, and arithmetic.

Additionally, we are beginning to admit that not all students will learn to read print nor communicate in writing. However, they do learn and do it quite effectively and efficiently. Contrary to popular belief, learning disabled students are good listeners and observers. Brian may not know what you just said to the class but he knows perfectly well what the principal just said to your colleague out in the hall. He knows what tools the custodian uses to fix a flickering light.

Several questions remain to be answered regarding our willingness to change school experiences for handicapped pupils. Do the writings of Dylan Thomas, Langston Hughes, D. H. Lawrence, and Gabriel Garcia Marquez contain important enough messages to cause us to share them with the non-reader? Shall dictating machines become acceptable modes of communication? Will calculators be appropriate means for solving one's own problems? Is it OK to excel only in art or math or music, instead of being generalists in the basics?

We have entered an age when the values and tasks in the traditional schools, i.e., the basic skills, are not as they seem. That is, they are not nearly so basic to survival as we have imagined. For instance, when was the last time you were asked to solve written math problems or answer a written multiple choice question or not allowed to use a calculator or hire a secretary? There are many different ways to acquire information and there are many different bits of information to learn, as well as many ways of
showing you've learned it. But we have not changed our schools, we have not even changed our special education classrooms to accommodate new technologies.

**Summary**

In our 20-year experiment we have learned many things from our errors in learning disabilities. We have learned that we are no different from the regular classroom. But there is always our nagging conscience that tells us—we should be.

We have learned that mastery learning by object is no panacea. We have learned that behaviors defined too specifically and taught too separately are useless.

We have learned we cannot afford to separate student interest from classroom objectives. In doing so we lose all credibility with those we teach.

We have learned that "the mainstream" is not always the best placement. For many of our students the regular classroom is far too restrictive.

We have learned that some students do not learn to read. Some never learn to add. From this we know there must be alternatives.

We realized that we can't train neurological pathways. Since no one really knows what goes on in the brains of individuals our quest was folly. We are educators—we need not know what goes on in the brain.

We have observed that even handicapped students learn despite us. They come to school knowing a tremendous amount of information about the world, and we must begin to attend more to that natural learning process.

We have determined that learning is rarely sequential. We know that oral language development does not precede reading and reading does not precede writing.
Alas, we have learned that all people are not created equal. We do not all learn the same things or at the same rate, but we have still to dispel the belief that schools teach students to compete in the world. When was the last time you competed with those in your own elementary school classes who went on to become truckers, physicists, mechanics and professional artists? You don't, I don't—we compete with teachers, our imagined peers. The only time all of us of a single chronological age compete is during elementary and secondary schooling.

Despite our mistakes, the outlook is good for all of us. The holistic model is dynamic and gradually gaining acceptance. Students will be given a chance to become actively involved in learning. Their interests and strengths will be developed. Strengths, not weaknesses, will be the guiding force of their "special" education. The world, not the school, will become the testing ground.

We simply must try it, for we must stop climbing every tree (meeting every criterion test objective) in our efforts to cross the forest—to allow students to learn to read, write, and live. We must be patient.
1. For a review of the history and research of this model see:


2. For a discussion of this model see:


For a critique of the problems encountered with direct instruction see:


4. For a discussion of this emerging trend see: