Consequences

What It Meant To Teachers

The Teacher Evaluations section of Chapter 3 contains a sampling from the Reading Program evaluations sent to the Center from every one of the 2,048 teachers who were using the Program in their classrooms. The same sampling also appears in the Teacher Reviews and Comments section of the Reading Program page on the Center's website. In both cases, the purpose of the evaluations was to share with people wishing to learn more about the Center's Program the feelings of teachers who had actually used it with their own students.

Teacher evaluations were also a part of every Mathematics Their Way and Mathematics a Way of Thinking workshop. As was true for all Reading Program evaluations sent to the Center, there was no preset form the workshop evaluations were to take. Each workshop participant was given a lined 5 X 8 index card and asked to write whatever he or she wanted to write about the workshop they had just experienced. Often, both the front and back of the index card were used, and occasionally more than one card was needed.

The workshops' instructors read the cards themselves and then sent the cards to the Center along with copies of the enrollment forms each participant had filled out on the first day of the workshop. In the early years, I read every single card from every workshop. However, well before there were 700 workshops and 21,000 participants in a summer, I had to settle for reading only a random selection from each workshop.

I still have copies of evaluations workshop participants wrote in the '70s, '80s, '90s, and beyond. Even though the number of Center workshops has declined since 1994, teachers' feelings about *Mathematics Their Way* and its importance to them as teachers have remained the same. Two of the evaluations I have picked to share below were written while I was in the process of writing this book. The reason I selected such recent evaluations is to show that what was true in the past is just as true now. I selected evaluation number three because it best represents what thousands of other teachers felt about their Mathematics Their Way experience.

Three Evaluations: Two Short

The short evaluations were included as comments in two emails I received as I was writing this book: one in May 2024 and one in July 2024. Both were written by retired kindergarten teachers.

May of 2024: It is so fascinating being able to communicate with you. You and Mary were my heroes when I was teaching because (in my

humble opinion) the Math Their Way program was the best thing in education that happened in the second half of the 20th Century.

July 2024: Thank you so much. You are a gem for spending this much time to help me out. I have a group of several ex-teacher grandmoms who want to use Math Their Way with our grandkids. We used it in our classrooms, and we know how well it works. But alas, our materials are long gone. We appreciate the pdf versions of the books and black lines online and are making use of that. I think every Pre-K and K classroom should be using Math Their Way. It was and is still the best.

One Long

The long evaluation is one I selected because it captures so much of what I have read in the evaluations from teachers who either took Center workshops or simply used the Center's books as their teaching guides. I have included the evaluation here exactly as it was written with two exceptions. I changed "he" to "he or she," and I replaced "Indian" with "Native-American."

When I began using Mathematics Their Way in my classroom, I hoped that I had found a way to really teach math well. I was tired of spending hours explaining my math units to my kindergartners, always feeling that two-thirds of them "got it", while the remaining third never had an inkling of what I meant for them to learn. I was discouraged when those who "got it" forgot what they had "gotten" three months later. I knew something was wrong, but I really didn't know how to improve the situation. I hoped Mathematics Their Way would improve my math program. I didn't expect it to completely change it. Now, I'm not surprised to see it changing the way I teach all day long.

This book has taught me how to teach "in reverse". I began teaching with the idea that my job was to put thoughts and ideas into the empty, waiting heads of children. It was a beautiful discovery for me when I learned that I could trust the children to have already assembled a considerable amount of useful knowledge on their own. The truth is, the raw materials for all the things we try to "teach" children are already in their heads. All we have to do is to supply a way for them to organize this knowledge and bring it out in a systematic, logical, usable form. Instead of teaching children, I find that now I am showing them how to learn. Once a child knows how to learn, he or she can tackle the whole world of problems around him or her. When we only teach him or her a skill, he or she is only equipped to handle that skill.

But more than this, I find my classes developing in so many ways. The world seems so arbitrary to a five-year-old. Nothing is guaranteed or certain. From the beginning of our pattern work to the end of our

numbers work, I can see the children gaining in something that really can't be taught. They are able to trust themselves to be able to know things about their world. To discover that we can know must be the biggest thing that can happen in our lives.

We do our children a disservice when we make ourselves the major source of their knowledge. Until they reach school, they have acquired much of their knowledge on their own. Sadly, we have to teach them to listen to and trust us as the fountain of all wise thoughts. They learn to separate school from the “real world" because the two seem to be so barely related. Now, by encouraging parents to do the same things at home that we are doing in school, by using "real" materials brought from home by the children, by leaving school to find newly acquired concepts in the "real" world (pattern, sorting walks), by allowing each child to learn from the materials he or she feels most comfortable with, by allowing him or her to talk with others about what he or she is doing, by using examples created by the children themselves to teach other children, we establish a relevancy of school to life skills that is altogether missing in most classrooms.

Another bonus from Mathematics Their Way is the way different "periods” of our day seem to interrelate. Once math becomes a study of the "real” world, it becomes a part of language arts, social studies, and art, and these all become part of math and of each other. The child who told me that the breast plate of a Native-American in a photograph was made in an AB pattern probably identified a little more closely with the chief than he would have if he'd just seen him as another Native-American in another ceremonial costume. The children who are encouraged to talk about how they are sorting come to language arts a little better armed with the ability to express their thoughts. I notice that after sorting objects, the children find it easier to understand how to separate themselves into groups without the “Where do I go?” from the past. How simple it was last Christmas to say, "The Christmas chains should be made of red and green in an AB pattern." And how exciting to see them all come back made the right way.

I expected to have a difficult time finding something to write about for this paper. Now I find I am having a hard time limiting it. The effects of Mathematics Their Way are far-reaching for me and for the children. I was going to say that it has broadened my outlook on teaching, but that seems to understate the fact. Learning is limitless. The more you learn, the more you learn there is to learn. Mathematics Their Way, for me, has taken away the neat boundaries we have arbitrarily and unrealistically placed around areas of learning. Patterns aren't just ways to string beads, sorting isn't just something you do with attribute blocks, learning number is more than circling a symbol under a picture of a group of

objects, and math doesn't begin at 9:00 and end at 10:00. The children knew this when they began school, why did we all work so hard to make them forget it?

The Victims Who Did Not Even Know They Had Been Robbed

Consequences. The textbook publishers' success had robbed teachers of a curriculum that had allowed every child to learn and to love learning. Every child, without exception. Rather than report the crime, the robbery victims had to pretend no crime had been committed. Instead, they had to gear their lessons to the textbooks and their standardized tests that served to teach so many children that they were not the learning machines they were born to be. Teachers were powerless to do otherwise.