# Ending Illiteracy in America Acceptance and Rejection

## Rejection by The Textbook Publishers

The 1993-1994 school year was the last year of our study. We spent the Spring and Summer of 1994 preparing our Reading Program presentation for textbook publishers. We focused on three things.

First, the proven success and nationwide acceptance of our math curriculum. In the Summer of 1993, we gave 702 week-long workshops across all fifty states to a total of 21,629 teachers. The total number of teachers who had taken Center workshops from the Summer of 1975 through the Summer of 1993 was 136,683. The Center had the names and yearly updated addresses of all these teachers and more. By the Spring of 1994, Mary's *Mathematics Their Way* had sold 449,204 copies, and many of the teachers purchasing the book had used the enclosed postage-paid postcard to add their names to the Center's database. These nearly half million teachers were a potential market in waiting for the Center's Reading Program.

Second, we had just finished a ten-year study of the Reading Program's effectiveness involving an estimated 308,700 children in 2,048 classrooms all across the country. The results: Every single child had learned to read with no exceptions. The Reading Program had the potential of ending illiteracy in America.

Third, the State of Alabama had already demonstrated the State or District adoption potential for our program. The last two pages of Chapter 12 – Don't Take Our Word for it include an article we shared with publishers as part of our presentation. The article was written by Dothan City Schools Director of Instruction and published in the December 1986 issue of the Alabama State Department of Education Newsletter, that was distributed statewide. Article's title: Fail-Proof Method Teaches Reading Fast. Sub-Heading: Every Child Learned to Read -100 Percent. The article itself provided a detailed and glowing review of the Reading Program.

The response from every textbook company to which we submitted our Reading Program for potential publication was complete rejection. The fact that our Program could teach every child without exception did not matter. Ending illiteracy in America was not any publisher's priority.

There were three reasons for the universal rejection. Two were spoken, one was hidden. The first spoken reason was that our kit was not suitable for publication because it was not consumable. It had no components that needed yearly replacement. For our program to be

considered, we would have to convert it to a textbook-workbook format. Second, our program was not part of a K-6 continuum. Children who used our materials would not be locked into a publisher's K-6 series of textbooks and workbooks for subsequent school years. Once they could read, they could read anything. There was nothing about our kit that would anchor children to the publisher's textbook series.

## Reason Number Three - The History of a Rise and Fall

The third reason why the textbook publishers did not want to publish the Center's Reading Program was the most significant one. I mentioned earlier that in the Summer of 1993, the Center had given more than 700 workshops for more than 21,000 teachers. What I did not know as we were making our presentations to textbook publishers in the Spring and Summer of 1994 was that the Summer of 1993 was to be the last of the Center's nineteen years of steady growth. 1994 was to be the first year of all the years of steady decline that were to follow.

Had we known in 1994 of the years of decline that were to follow and the reason for that decline, we would not have been so naive as to submit our Reading Program to the same textbook publishers who were in the process of orchestrating the Center's downfall. 1994 was the last year of the Center's ten-year study measuring its Reading Program's effectiveness. 1994 was also the year that the textbook publishers' efforts to stop the spread of the Center's mathematics curriculum that, unknown to us, had started years before, began to show their effect. Publishing the Center's Reading Program, regardless of how effective it might be, would give credence to the company whose math curriculum these same publishers were doing their best to suppress. Giving credence to the Center was a definite NO!

### An Unintended Consequence

In The Third Time Is The Charm section of The Book of IFs Chapter 8 - The Arithmetic Mistake and A Year Off From Teaching, Stewart Brewster of Addison-Wesley makes the decision to publish Mary's Book *Workjobs*. In The Miller Math Connection section that follows, Stewart recommends Mary as an instructor for Miller Math.

Stewart's reason for this was to introduce Mary to the 2,000 California teachers who would be enrolled in Miller Math that summer. These teachers represented every school district in the entire State. His goal was to make Mary known to this wide number of teachers in advance of her book's publication. The cover Stuart selected for *Workjobs* was chosen specifically to link Mary to the teaching of mathematics that was the focus of Miller Math.

Stewart was unaware of how little Mary knew about math. His incorrect assumption was that because of Mary's and my connection to Bob Davis, the head of the Madison Project, we were both familiar with its teachings. The Madison Project materials were at the core of what Miller Math was sharing with California teachers. Many of the Miller Math instructional staff were Madison Project instructors, as well. Had Stewart known how little Mary knew about teaching math or how terrible at math she was herself, he would not have suggested Mary as a Miller Math instructor.

For whatever reason, Leonard Warren, the head of Miller Math, wanted Mary as an instructor, even though she had told him she had not used ANY of the materials she would now be expected to teach. Mary's "Bob used that" response to every math material Leonard showed her at her job interview was her way of saying "I have no clue!" What should have been Leonard's reason for rejecting Mary was instead turned into hiring me as an instructor, sight unseen, just to get Mary to come.

Addison-Wesley was a textbook company. My commitment to myself as an intern teacher had been to abandon the textbooks and workbooks that I was given by my school and create my own curriculum. As the junior half of a team-teaching team in second-grade, Mary could not make a similar commitment. When Mary switched to teaching kindergarten, there were no textbooks or workbooks for her to abandon. Mary's *Workjobs* fit comfortably beneath the Addison-Wesley Innovative Division umbrella because it offered no competition to the textbook publishing business.

So, while not intending to, Stewart inadvertently caused me, a teacher who was creating a curriculum whose goal was to make textbooks obsolete, to become an instructor for a math program trying to revolutionize mathematics education in the State of California. This was definitely an unintended consequence.

## **Creating the Curriculum**

The math curriculum I had developed is what allowed me to be an effective Miller Math instructor. However, I had designed my curriculum for use by my intermediate-grade students. I had not given any thought to expanding its use for students in the primary grades. I also had no plans to promote my curriculum outside my own classroom. Miller Math and Mary changed all of that for me.

Mary was now a Miller Math instructor. That meant she was now expected to present math activities to her workshop participants with which she was completely unfamiliar. The Mary and the Miller Math Experience section of Chapter 11 – A K-6 Math Curriculum describes

how Mary went from knowing nothing about teaching math to creating her own curriculum.

The Miller Math program presented teachers with examples of great math lessons. However, it was common knowledge among the Miller Math instructors that very few of the teachers who had been sent to Miller Math by their school districts were actually using these lessons in their own classrooms. In Mary's and my view, this was because the lessons were not presented as a unified curriculum. Because the lessons were presented by the more than fifty math resource teachers who were serving as Miller Math instructors, who were not themselves classroom teachers, the lessons were not easily linked to one another.

The goal I had set for myself at the beginning of my teaching career was to make textbooks and workbooks obsolete in my own classroom. My ambition did not extend beyond my own class. Making textbooks obsolete at every grade was not something that could begin at fifth-grade. Making textbooks obsolete for all grades had to start in first-grade.

As a Miller Math instructor, Mary had converted my fifth- and sixth-grade textbook-free math curriculum into a first-grade curriculum. In doing so, Mary showed me that the curriculum I had created could be used in the lower grades, as well. What Mary also showed me was that making textbooks obsolete from the first-grades on was possible. I now knew that what Mary and I could do as the only Miller Math instructors who were actual classroom teachers was present these great teaching lessons as an entire curriculum. Our *Mathematics Their Way* and *Mathematics a Way of Thinking* books would become that curriculum.

### The Second Book

Because *Workjobs* was so successful, Addison-Wesley and Stewart were anxiously waiting for whatever book Mary might write next. *Workjobs* was first published in 1972. In the Summer of 1973, Mary and I began writing our two math books. Mary presented her second book to Stewart in 1974. This second book was part of a two-book package. Mary's book was for primary teachers, and my book was for intermediate teachers. If Stewart wanted Mary's book, then he would have to take my book as well. He accepted the two-book package.

Workjobs was a great book for an innovative department of a textbook company to publish. It was filled with activities that teachers could use with their students. More importantly, it did not compete with the sales of any of the company's textbooks or workbooks. Mary's and my math books were quite different from Workjobs. Our math books were written specifically, not just to compete with textbooks and workbooks, but to make them obsolete. Addison-Wesley was a textbook company, and I let

Stewart know that our two books were meant to be anti-textbooks. Stewart's response was, "You would have to bomb teachers to get them away from their textbooks." Anti-textbook or not, Stewart's Innovative Division definitely wanted to publish Mary's second book.

## Marketing

Question: Of the more than 100,000 teachers who had purchased copies of *Workjobs* before Addison-Wesley had even advertised it, how many names of those teachers did Addison-Wesley know?

Answer: Zero.

As a textbook company, Addison-Wesley directed its marketing efforts at schools and districts, not to individual teachers. At one National Council of Teachers of Mathematics (NCTM) meeting Mary and I attended, Addison-Wesley hosted a sit-down dinner for 3,000 of the NCTM conference attendees. The people at the dinner were the ones who made textbook purchasing decisions: School superintendents, principals, adoption committee chairpersons, and anyone else in a position to make book purchasing decisions. Of course, all the Addison-Wesley salespeople with whom these purchasers would be in contact were also present. Stewart had no need to feel worried by the existence of Mary's and my anti-textbook books. We would not be hosting any 3,000-person sit-down dinners anytime in the foreseeable future.

When I was in college, my father once presented my brothers and me with a marketing problem he had encountered at work and asked us how we would have solved it. He was surprised when I gave him my solution. He asked me how I had come up with that particular solution, since it was the same solution he himself had ended up devising. My answer to him was, "Because you're the one who taught me."

In the Fresno – Family Background section of the Book of IFs Chapter 2 - My Path to Becoming a Teacher, I said that my father was asked to transfer from my hometown of Fresno to his company's head office in San Francisco. He initially declined the offer, since he and his family were quite happy living in Fresno. The company then offered a very effective persuader, the tripling of his salary. The reason the company was willing to pay my father so much was because he was so good at marketing. I was a teacher now, but I had been raised with a background in marketing.

For Mary and me to begin the process of competing with textbook companies like Addison-Wesley, we needed to know the names of the teachers who were buying our books. The solution was simple. We would include a postage-paid postcard in every book. Stewart went along with this plan because I suggested we include two postage-paid

postcards in each book. One for our books and one for Addison-Wesley to use to advertise a product of its own. The book Addison-Wesley chose to advertise with their postcard was *Workjobs*.

To encourage the buyers of our books to send us their names, we added an incentive. To the teachers who sent us their postcards, we would mail a free question-answering newsletter four times a year. The postcards came in by the thousands.

## Workshop Hiccup

Mary and I envisioned our books as curriculum guides for participants in the Miller Math workshops and the Center for the Improvement of Mathematics Education (CIME) workshops that followed. We were Miller Math instructors for the summers of 1971 and 1972. We also became CIME instructors in the Summer of 1972. That summer was when the State funding of Miller Math came to an end. Leonard Warren, the Project's Director, Bob Davis, the Director of the Madison Project, and Robert Wirtz, the head of the Curriculum Development Associates, formed CIME to continue the teacher-training begun by Miller Math. Same philosophy, same instructional staff, now self-supporting, no longer State funded.

In the Summer of 1973, now as CIME and not Miller Math instructors, Mary and I began writing our curriculum guides. In August of that same summer, Mary and I ended up as unemployed teachers. (See the Promises Made – Promises Broken section of Chapter 9 in The Book of IFs to learn how that happened.) Mary's first *Workjobs* royalty check had come in September of 1972. The twice-yearly royalty payments we were now receiving meant that being so suddenly unemployed was not the complete disaster it might have been. Being unemployed simply meant we had more time to write our books.

Our books were being written to provide curriculum guidance to CIME workshop participants. However, in July of 1974, our time as CIME instructors came to an abrupt end when Mary quit. I did not need to quit. I had been quietly fired, which is what caused Mary to quit. (See The Start of the Center section of Chapter 9 - The Book of IFs)

Our books were to be curriculum guides to assist workshop participants in implementing the activities presented in their own classrooms. What we decided to do now was create the workshops our books were meant to accompany. In September 1974, we delivered the manuscripts for our books to Addison-Wesley. In December 1974, Mary and I co-founded the Center for Innovation in Education. The Center's purpose was to provide the workshops our books were written to support.

## The Center as a Workshop Giver

My original plan for myself as a classroom teacher was to be teaching at the same school for so long that the children of the children I had taught would be coming through my class. The New Dream section of The Book of IFs Chapter 9 - The Yearly History of a Change in Plans describes my new plan for my life.

In the summary of that section, I say: I lost the opportunity to teach at the same school until the children of the children I had taught were students in my class, I was given another opportunity instead – the chance to help children throughout the country and around the world feel better about themselves. The Center was my new opportunity.

When Mary and I were Miller Math and then CIME instructors, the lessons that we taught were of our own design. Apart from our lessons, though, we had no say in what was being done. Since we were now instructors for the Center, we were completely free to do everything exactly the way we wanted. There were three main problems with both the Miller Math and CIME workshops that we felt needed correcting.

First, if we truly expected teachers to change how they were teaching, there needed to be a curriculum guide that participants could take with them at the conclusion of the workshop. Workshops were great for demonstrating more effective ways of teaching, but a workshop's lesson cannot capture a whole year's continuum in teaching any concept. Classroom teachers would need a guide that they could turn to daily as the year progressed.

Second, nearly every Miller Math and CIME instructor was a math resource teacher. Resource teachers are specialists in the subjects they teach. However, the workshop participants were regular elementary school teachers. Elementary school teachers teach reading, mathematics, science, social studies, physical education, and anything else that needs teaching. Our belief was that elementary school teachers should be taught by other elementary school teachers, ones who have actually used the lessons they are sharing in their own classrooms. The requirement for anyone wishing to become a Center instructor was to take a Center workshop, use the ideas in his or her own classroom for a year, with all the support needed provided by the Center, and then apply to be an instructor. In short, our model was classroom teachers teaching classroom teachers.

Third, there needed to be follow-up support to answer questions that teachers may have throughout the school year as they were implementing this new way of teaching. The reasons the Center required teachers wishing to become instructors to have used the Center's

curriculum in their own classes for a year were so they would have firsthand knowledge of any difficulties teachers might encounter and how to overcome them.

The follow-up support the Center provided took two forms. First, for every summer workshop given anywhere in the country, a follow-up class would be offered in the fall. The Center's requirement for any request it received to conduct a workshop in a new area was that someone from that area had to travel to a currently available workshop location, take the workshop there, and then use the ideas in his or her own classroom for a year before requesting a local workshop. That requestor would then be the person in charge of conducting (with Center support) the follow-up workshop in the Fall. Once again, classroom teachers teaching classroom teachers. The question-answering newsletters the Center was already mailing four times each year to everyone who asked were our second form of follow-up support.

## **Twelve Not Twenty**

Addison-Wesley's directing its marketing efforts at schools and districts, and not to individual teachers, was the same marketing plan used by all other textbook publishers. We could not compete with 3,000-person sitdown dinners, and we had no national salesforce tasked with making presentations to state and local textbook selection committees.

Our marketing strategy was quite different. We focused all of our attention on our fellow classroom teachers. Classroom teachers teaching classroom teachers meant that classroom teachers would be our sales force. The requirement that all of our instructors be classroom teachers was a conscious choice we made. Classroom teachers were not the only ones asking to become instructors. We received requests to be trained as instructors from school principals, math resource teachers, and even an occasional college professor. In our view, though, the very best person to share our curriculum with his or her fellow teachers was a teacher who was actually using our curriculum in his or her own classroom.

I estimated that it would take at least twenty years for enough teachers who had passed through our workshops to rise up through the ranks and use their elevated positions to put us on an equal footing with the textbook publishers at adoption time. My twenty-year estimate was too pessimistic. Twelve years were enough.

In 1988, twelve years after Mathematics Their Way's 1976 publication, the State of California's Textbook Adoption Committee asked Addison-Wesley to formally submit *Mathematics Their Way* to their committee for consideration. *Mathematics Their Way* was then officially adopted as a textbook available for use by any public elementary school or school

district in the State of California that chose to do so. *Mathematics Their Way* was now a textbook that could be purchased by schools and districts using their state-allocated textbook funds. What made *Mathematics Their Way* so unique as a state-adopted textbook was that traditional textbooks were purchased one per child. *Mathematics Their Way* would be purchased one per teacher, instead. No books or workbooks for children required at all.

## **Textbook Publishers Reaction**

I had informed Addison-Wesley's Stewart Brewster that *Mathematics Their Way* was an anti-textbook book. Stewart's response had been, "You would have to bomb teachers to get them away from their textbooks." Stewart's bomb had now exploded.

California teachers now had the State's permission to choose between a traditional textbook for use in their classrooms or Mary's anti-textbook instead. The Center and the textbook publishers were now on equal footing, and the Center had not had to host any 3,000-person sit-down dinners to achieve this equality.

The response of many textbook publishers was similar to the response by Scott Foresman and Company. Scott Foresman prepared and distributed a guide linking its 1988 textbook series specifically to *Mathematics Their Way*. The guide's front page and three-paragraph introduction are shown below:

Research & Information

SCOTT, FORESMAN AND COMPANY

Correlation of

Scott, Foresman INVITATION TO MATHEMATICS, c. 1988

Kindergarten - Grade 2

with.

MATHEMATICS THEIR WAY

by

Mary Baratta-Lorton

Research and Information Scott, Foresman and Company

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#### INTRODUCTION

In the following pages, Scott, Foresman INVITATION TO MATHEMATICS, copyright 1988, K-2, is correlated with MATHEMATICS THEIR WAY by Mary Baratta-Lorton. At each grade level, page references identify the places where major teaching toward each objective occurs in INVITATION TO MATHEMATICS and in MATHEMATICS THEIR WAY. Citations fit both the Teacher's Edition and the student text of INVITATION TO MATHEMATICS, since both books have the same pagination.

INVITATION TO MATHEMATICS offers a comprehensive skills program with systematic instruction in the mathematical strands of Numbers and Numeration; Equations, Expressions, Integers; Whole Number Computation; Decimals; Fractions; Measurement; Graphing, Probability, Statistics; Geometry; Ratios, Proportions; Percent; Estimation; Pre-Algebra; Mental Math; Calculators; Problem Solving; and Applications.

This correlation is not intended as a complete representation of INVITATION TO MATHEMATICS, but demonstrates the way in which the manipulative teaching approach of MATHEMATICS THEIR WAY can be used with the new INVITATION TO MATHEMATICS, copyright 1988, a program that includes a variety of hands-on manipulative components.

## NCTM Standards and Mathematics Their Way

In 1989, the National Council of Teachers of Mathematics (NCTM) published its *Curriculum and Evaluation Standards for School Mathematics*. In the preface to its 258-page *Standards*, the NCTM states: The Standards is a document designed to establish a broad framework to guide reform in school mathematics in the next decade. In it a vision is given of what the mathematics curriculum should include in terms of content priority and emphasis. The challenge we issue to all interested in the quality of school mathematics is to work collaboratively to use these curriculum and evaluation standards as the basis for change so that the teaching and learning of mathematics in our schools is improved.

The purpose of the *Standards* was to encourage changes in teaching methods and curriculum that would lead to better teaching of mathematics nationwide. NCTM board members then spread out across the country, conducting meetings with teacher groups to encourage universal adoption of its *Standards*. The message being spread by at least one NCTM board member in all his talks with teacher groups was, "If you want to see what the *Standards* look like when they are put in practice in a classroom, look at *Mathematics Their Way*."

President Clinton was so impressed with the NCTM *Standards* that he proposed adopting the *Standards* as national guidelines for the teaching of mathematics in schools all across the country. The Republicans in Congress nixed that plan. What they had in mind would wait for President Bush's time in office and its effect would be the opposite of what the *Standards* had been written to accomplish.

## The Year 1993

I mentioned earlier that we had only given workshops where we were invited, and by 1993, we had been invited to all fifty states. The year 1993 also marked an achievement that we and others in the California teaching community had been working towards for years. It was hard to convince all teachers to try new ways of teaching when their success or failure would be measured by the standardized tests written by the textbook publishers that only measured how much of the textbook's contents their students had retained. Our goal had been to have the tests used to assess students measure their actual understanding of mathematics, and not just their ability to parrot back rules. 1993 was the first year California made use of a new test, the purpose of which was to measure children's actual understanding of mathematics, with no parroting required.

Coincidentally, the year California's test of understanding was introduced, my godsons were takers of the test. I had been serving as a volunteer classroom helper on a weekly basis ever since they began school. In their fourth- and fifth-grade years in school, I was permitted to be their math teacher one day each week. Their school principal was impressed with how well the students in my godsons' class had done on the new test. When she asked the students where they had learned the mathematics the test was measuring, they all told her, "Bob taught us."

### 1994 and Beyond - A Forgotten Dose of Reality

In 1994, we were taken by complete surprise when the conservative California State Board of Education, appointed by California's conservative Governor, threw out the new math test and forbade its ever being used again. California math educators had spent years working to gain acceptance of a test to measure student understanding of mathematics, and just like that, the test was gone. We were surprised, but in retrospect, we should not have been. We were surprised because we were so naive.

I mentioned earlier that every single year from 1975 through 1993, the Center saw growth in workshop attendance. I also mentioned earlier that 1994 was to be the first year of all the years of steady decline that were to follow. The first concrete evidence we had of what would soon become a yearly downward trajectory was the quick removal of the newly

introduced California test. Our downward slide first made itself apparent in the Summer of 1994, but its cause had started much earlier. Its starting point had been the State of California's adoption of *Mathematics Their Way* as a textbook in 1988.

Stewart Brewster did not have any concern about Mary's book when it was first published. Other publishers did not have much concern either until Mary's book was adopted by the State of California in 1988. The textbook publishers' first reaction was to put out guidelines just as Scott Foresman had done, showing how their textbooks were compatible with Mary's. However, thanks to *Mathematics Their Way*, textbook sales in California and elsewhere were now declining. That is when the text publishers began exercising their power.

Once textbook sales began their across-the-board decline, the publishers turned to their customer base to counteract the *Mathematics Their Way* effect. Their customer base was the school superintendents, principals, adoption committee chairpersons, and everybody else who made textbook purchasing decisions. Yes, *Mathematics Their Way* was now technically on a par with the books the publishers offered. However, purchasing decisions still had to be made.

The most commonly used measure of the effectiveness of mathematics instruction in school is the administration of a standardized test to students at the end of the school year. The standardized tests used are ones developed by the textbook publishers themselves. The tests do not measure mathematical understanding. They measure how much of what has been taught in the textbooks the students have retained.

California's 1993 test was designed to assess students' understanding of mathematics. It was not tied in any way to any publisher's text. The tests in the years before it and in the years that were to follow were once again the tests the publishers wrote to measure how well students could remember the lessons in their books

To counteract the popularity of *Mathematics Their Way* with teachers who liked teaching mathematics in a way every child could understand, the publishers began using their influence with the people who had power over teachers to make the measure of success as a teacher, the success of their children on the publisher-produced end-of-year standardized tests. The more standardized tests became the measure of a teacher's success, the more teachers were required to abandon *Mathematics Their Way* and return to using the adopted textbooks.

### Textbook Publishers' Dream Come True

Earlier, I said President Clinton proposed adopting the NCTM *Standards* as national guidelines. The Republicans in Congress nixed that plan. What they had in mind would wait for President Bush's time in office, and its effect would be the opposite of what the *Standards* had intended.

When President Bush took office, Congress passed his "No Child Left Behind Act." The main focus of No Child Left Behind was requiring all public schools to measure student performance through standardized tests. If performance did not reach certain levels, the entire school would be subject to successive punishments. The consequences didn't only apply if the entire school was falling behind. They also applied if a subgroup of students didn't make progress: students with disabilities, students from low-income families, students learning English, or students from a particular racial group.

Tens of thousands of schools ended up facing No Child Left Behind's sanctions. By 2012, more than 6,000 schools were being restructured, meaning they'd made it all the way through the penalties without improvement. Thousands more schools had been required to take some of the less drastic steps.

Its focus on high-stakes testing and the pressure on schools to raise test scores led to teachers "teaching to the test" as opposed to providing a well-rounded education. President Bush's No Child Left Behind left thousands of children far behind. The textbook publishers' dream came true, but not without consequences.