

A TRIBUTE TO MARY

This newsletter is dedicated to Mary Baratta-Lorton (1944-1978) and to all teachers who share her love for children and her desire to let them learn in “their way”.

Bob Baratta-Lorton

Mary started the *Mathematics Their Way Newsletters* because she wanted to provide support and encouragement to teachers sharing her philosophy of activity-centered, child-centered learning in the classroom. This support took the form of answering teachers' questions or of sharing some activity newly invented by Mary or other members of the Center staff. This issue has the purpose of consolidating all past issues into one convenient source of reference. What follows immediately, however, is a story I wrote about Mary which was first published in the fall of 1978.

I would like to share with you a little of the Mary I knew and loved so that you might know both why she was so unique and why she also had so much in common with all the teachers she came to represent.

Before I begin my story of Mary, I would like to share with you one of Mary's and my favorite stories of a teacher we both knew. The story is true and both Mary and I felt we learned a great deal from it. The story is as follows:

I earned my teaching credential through an intern program that, in effect, bypassed my student teaching year and placed me directly in a regular classroom with full responsibilities. The only student teaching experience we interns had was obtained in a four-week summer school. One of my fellow interns, a fifth grade teacher like myself, asked me to come in and observe her first solo

lesson. We didn't know each other too well, but she felt I would give her a much more honest evaluation than her master teacher would.

I was in the room in advance of the class' return from recess. When the bell rang, the students came in in their usual manner with some noise, but heading for their seats. The intern teacher came in with half the class still behind her and half the class in various stages of getting seated. Speaking to the children nearest her in a voice I could barely hear, she said, "All right, let's form a circle in the front of the room with our chairs."

Those few that heard obediently got their chairs and began pushing their way through the children who were still coming in. The children coming in could see some students walking with their chairs and some sitting down. They asked their classmates what they were to do, and depending upon the person asked, each got a different answer. Those who were sitting down thought this was the order of the day and passed on that news. Those who were up with their chairs relayed a different set of orders. My fellow intern teacher was standing in the midst of this growing confusion looking very nervous. Lacking further instructions and seeing so many people still seated at their desks, some of the students, who had only received a second-hand opinion about forming some sort of circle, lost heart and decided to return to the security of their own

desks. This created a two-way flow of chair traffic and the resulting collisions raised the noise level considerably. In a voice gaining volume but losing strength, the fledgling fifth grade teacher said, "Everybody form a circle in the front of the room!" This instruction, which almost all heard, caused the seated students to move their chairs and those who had been returning, to re-route themselves, either by their own volition or by the shouts of people coming the other way, "Teacher says to form a circle!"

There were thirty children in the class so there would be thirty people gathered in the eventual circle. A circle only one row in circumference would have taken up most of the room, and this was the circle the students were attempting to form. This process, however, was complicated by the fact that the teacher (who really only wanted a semi-circle but thought the class knew what she meant) was taking people from one half of the embryonic circumference and sending them to the other half. Well-meaning children, bent upon forming the asked-for circle, kept filling in the spaces as fast as the teacher emptied them. They had nearly finished the forming of this gigantic circle when my intern friend threw up her hands in exasperation bordering on anger, and with a tremor in her voice, told everybody to stand still. She then took each child in turn and placed him or her exactly where she wanted them and admonished each not to move from the spot on fear of extinction.

When the class was finally seated, there were three concentric semicircles, ten students to each

curve. One might wonder what thoughts would pass through the mind of a child who had been trying to form a circle and ends up in a choir row, especially when the teacher had as a final admonition scolded them with, "Can't you even form a circle?" Nevertheless, the class was quiet and attentive and it had only taken about fifteen minutes to get into position.

The intern teacher was going to read a story to the children, which was, by the way, why they had been clustered in the semicircle in the first place. The story could just as well have been read to the students as they sat at their own desks, but then it's always easy to see what might have been.

Unfortunately for the teacher, the only two boys who had been roughhousing at all during the confusion that existed since the class had come in from recess were now seated right next to each other. Their desire to hear the story was not as great as their desire to jab each other. Before page one was finished, the boys began poking one another, mostly in fun, but at an increasing level of hardness that would soon have produced a fight. The teacher stopped her reading and had one of the culprits sit alongside and slightly behind her to stop further attacks. Since the teacher was facing the entire class, so was her prisoner. The temptation for him was too great. As the teacher again started to read, he made faces; first at his original adversary, and when this drew mild laughter from others, at the whole class. This meant, of course, that the audience was laughing in the wrong places in the story, which seemed very rude indeed. The teacher, obviously displeased,

asked them if they wanted to hear the story or go back to their desks. Oh yes! They did want to hear the story! The teacher began again and the class tried to contain itself while the prisoner expanded upon his earlier successes as an attention-getter. His talents were greater than the class' collective ability to resist them and again children laughed at the wrong place in the story. The teacher stood up, banged the book down on the table and said, "If you aren't going to listen, then I won't read to you!" And so the lesson went.

By the time the period was over and the class had been dismissed, this once hopeful intern teacher was leaning dejectedly, head bowed against the wall. Her words to me were, "I'll never make a teacher! I'm going to quit!"

You may have guessed by now that my story of Mary has already begun, for Mary was the fifth grade teacher intern I have been describing.

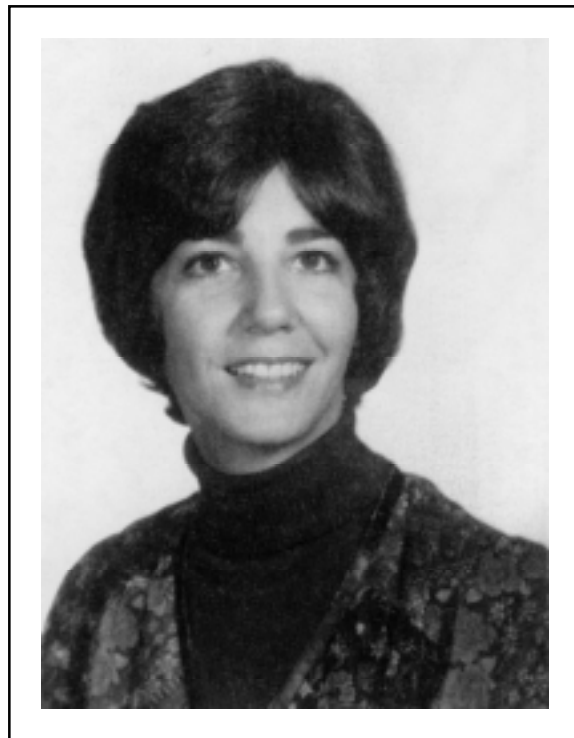
This teacher leaning dejectedly against the wall wasn't the Mary most people knew. Most people, even many of those who worked closest with her, only knew the super woman who had written *Workjobs* at 23 (though it wasn't published until she was an ancient 27) and had added the books *Workjobs for Parents*, *Mathematics Their Way* and *Workjobs II* by her 34th birthday. To accompany her *Math Their Way* book, this same super woman created both materials and the curriculum for a six-day workshop, and managed to train more than thirty other

teachers from several different states and Canada as instructors for the workshop. When she was just 31, Mary co-founded the Center for Innovation in Education. And, although she did not live to see it published, Mary's proudest accomplishment was the co-creating of the reading program that came to bear her name. Mary had done so much in so little time that people meeting her for the first time were surprised not to see a white-haired, little old lady.

Mary's accomplishments were and are impressive. It is through these accomplishments that you have come to know her. Equally useful to know, however, is what led to these accomplishments. I would like to share with you how the person whose first hour of teaching left her with eyes filled with tears wanting to quit, and whose supervising professor placed in her permanent file a letter stating, "Mary will never make a good classroom teacher ...she is insensitive to the needs of her children...", could be the same person who would have had such an effect on all of our lives. We have all benefited from Mary's achievements. It is my hope in sharing her struggles as well, that we may all gain something equally as useful from Mary's life.

Mary and I met in the teaching internship program at the University of California at Berkeley. The purpose of the intern program was to train us as teachers in inner city or Chapter I elementary schools. The philosophy of the

intern program was that what was being taught in the schools wasn't helping inner city children learn. Therefore, we as interns were to try different approaches to learning until we found things that did help children learn. To ensure that we wouldn't simply fall back into traditional patterns of teaching, one of the criteria for our selection as interns was that



none of us could have any prior education courses or training. Our intern professors couldn't really offer us much help in what would work, but they definitely taught us what wouldn't work, which was anything already being used. They also taught us to believe that if a child wasn't learning, it was the fault of the materials being used and not that of the child. These teachings were and are the foundation of all the contributions Mary and I may have made in education.

Mary was the last intern admitted to the program. One student who had been accepted as an intern and who had already begun attending our meetings had, at the last minute, been denied admittance to the overall graduate program at the University. Interns needed to be accepted as graduate students as well, so this student was dropped. Mary was the first person on the waiting list that our intern supervisors could contact who had not already made other commitments for her summer.

I was very pleased when Mary walked into our third meeting. I had already surveyed the other female interns and decided it was going to be a lonely year. (Life isn't all education, you know!) Mary was an attractive new addition who seemed at once serious and full of fun. Though she regarded me among other things, as a bit too cocky, she was willing to forgive my faults and count herself as my friend if I would promise always to keep in mind that she was semi-engaged to the boyfriend she had had for the past five years. Since she was semi-engaged, I semi-promised. Besides, he was off in Colorado at Med school and didn't believe in writing letters to Mary or calling her on the phone.

We planned our lessons together, helped set up each other's classrooms, went out shopping and off to movies together, and did the other usual things friends do with and for one another. At one point, as Mary's friend, she had me take her checkbook away from her. She

was bouncing checks at an embarrassingly rapid rate and had first asked me to go to the bank for her and straighten things out. Among other things, what I discovered at the bank was that Mary wasn't using prenumbered checks and she also never numbered any of them on her own. This meant she had no way of knowing how many of the checks she had written had not yet been cashed. This "not knowing" was compounded by the fact that Mary often forgot to write down either to whom she had written the check or for how much. Mary thought the balance on the bank statement at the end of the month accurately reflected how much money she still had left in her account against which to write checks. She thought the bank somehow knew when she wrote a check and automatically deducted it from her balance right then. Mary's problems were additionally compounded by the fact that she could not, with any reasonable rate of accuracy, subtract one number from another. She didn't know many of her multiplication facts either, but that missing talent didn't affect her checkbook as much. Mary was flat out awful at arithmetic. She had so little patience with numbers, which didn't make sense to her anyway, that she simply gave me her checkbook and said, "Take care of it ...I don't want to know how, just take care of it!" In the 12 years I knew Mary, she never was able to understand how a checkbook worked ...so I always "Took care of it."

Mary's problem of check bouncing was made worse because she and a handful of other interns were making about half the money the majority of us were being paid. As

intern teachers we were assigned to regular classroom teaching positions for the school year. Since we were regarded as regular teachers, we received the same salary that would have been paid an ordinary teacher. A few interns who were judged by our supervisors as not having the full potential to make it on their own were not given their own classrooms. Instead, they were placed on fellowships and matched with other interns for experience in team teaching. This meant that in some cases, two interns were assigned to teach one class. One intern was on full salary. One earned about half the salary for identical work in the same room. Mary was picked to earn less.

The school to which Mary was assigned was Verde School in North Richmond. Only three of the twenty-six teachers on the Verde staff had been there long enough to be tenured. The vandalism cost for the year before, excluding burglary losses, had been in excess of \$75,000 (in 1966 dollars, this was equivalent to the beginning salaries of fifteen teachers). Of all the schools to which interns were assigned, this was the bleakest.

Mary had wanted to teach fifth grade but her team teaching assignment placed her in second. She was afraid of second graders because they were so little and they didn't know anything. She wanted to teach, though, and this was the only opening.

Mary had unbounding enthusiasm. She showed her love for her students and for teaching in the usual ways. She made games for her students which she hoped would improve their learning but

which usually didn't. She worked with them individually on her own time both at school and in their homes. She took them places after school and on weekends so they would have a chance to see more of the world than North Richmond represented. She even formed a Brownie troop for all the girls in the class, and among other things, took them camping overnight. I went along for the camping trip to act as male chaperone and bodyguard against things that go bump in the night. Many of Mary's bounced checks were a product of her trying to brighten the lives of her students.

About halfway through our first intern year, a kindergarten vacancy occurred at Verde School. The principal was impressed with Mary's enthusiasm and offered her the job. Mary was not content with team teaching and wanted to have her own classroom, with full responsibility. Actually, the kindergarten job meant two classrooms of her own, because at this point in California, kindergarten teachers taught both a morning and an afternoon session. Mary was afraid of teaching kindergarten because kindergarten children were really little and really didn't know anything! She wanted her own class, though, and this was the only opening that had presented itself.

Mary told our intern supervisor of the wonderful opportunity she had for her own classroom. He said he would not allow her to switch out of her team teaching situation. His reasons were that she was too weak a teacher and that he had gone to a lot of trouble to get the fellowships for the University and didn't want to have any of the fellowship funds

go unused. Mary was heartbroken. She asked me to talk to him for her. When our supervisor and I finished our chat, Mary was a kindergarten teacher.

Mary had more than enough energy to handle two classrooms of kindergarten students. She had picnics and circuses and all kinds of excitement. She and I and one other intern once took all 60 of Mary's kindergarten students to a Saturday afternoon play. We used my fifth grade students to watch Mary's two classes of five year-olds. This meant 90 children and only three adults to follow the herd. We knew we had to be crazy to do something like that ...but how much fun is good sense anyway?

Despite all her enthusiasm and circuses and picnics, Mary was very concerned at how little academic background she was providing her students. Many of her second graders hadn't been able to read or do much arithmetic, but Mary and her team teacher had been making learning games which they hoped would supplement the state-adopted texts. This approach had not been successful, but at least Mary felt she was doing something. In kindergarten there wasn't anything to supplement. The most constructive thing her students did was play house and play store.

By this time Mary's boyfriend, who still hadn't learned to write letters or use the phone, was quietly fading away. Even though Mary's parents still hadn't been told I even existed, we were spending most of our time together. The water polo team for which I sometimes played was to begin spring practice one night a

week. The practices were about an hour's drive from Berkeley. Mary wanted to keep me company on the drive, but she was too restless a person to sit through the actual workouts. To pass the time, she decided to find an extension class at a site near my practices. She found a course to be given on the philosophy of some person we had never heard of, called "Piaget". This class was supposed to relate to early childhood education and its meeting site was right on the way to practice, so Mary enrolled.

As we drove back from my practices each week, Mary shared with me her excitement about her course. She was so enthused about Piaget and his beliefs that when my practice was switched to a different evening, we made the drive twice each week ...once for practice and once for Piaget.

Mary had been looking for help or guidance in meeting the needs of her kindergartners. Learning what Piaget had to say about the developmental levels through which children passed made sense to her. The emphasis on learning through experience and through manipulating concrete objects appealed to her at once. This was how she learned best. But the course on Piaget was only theory. Mary wanted more than theory. She wanted something practical she could use on Monday morning. She wanted something that could help her students gain the academic background they did not now have.

After one of her Piaget class meetings, Mary came to meet me with a sketch she had drawn as she had been listening to the lecture. She had thought of an

activity that might help her students relate more concretely to the concept of size. She could hardly wait to get to the hardware store the next day to assemble her materials. That evening she carefully glued together and tested out her very first "Workjob". Since it was the first, it was always to be her favorite. She called it a "bolt board" for the obvious reason that it was made of bolts glued to a board. (Her bolt board is shown on page 30 of *Workjobs*.)

Before the glue had dried sufficiently, Mary whisked the board to school to try it on her students. The few who got to try it before all the bolts came loose loved it. Mary took it with her to her extension class. Her instructor was impressed with her inventiveness. He was even more impressed that she had translated the theory of his lectures into a practical classroom teaching device.

The bolt board opened a floodgate for Mary. If she could make up one activity, she could surely create more. If a student could do the bolt board, then what would be the next challenge to give the student? If there were students who could not do the bolt board, what kinds of experiences should they have passed through first? How could the board itself be made more challenging? What would happen if a student were blindfolded? Would that make the activity only slightly more difficult, or would it involve a different kind of learning altogether? What kinds of questions could she ask the students so that she could find out what they were learning while they were doing the activity? Maybe asking questions could prompt them to learn even more!

Mary's evenings became filled with making. While I was sitting at my desk deciding what on earth I would teach for math or reading the next day, Mary was busy on the floor hammering or pasting or cutting away at something that, at the end of the evening, she would hold up and pronounce "done"!

She was receiving a constant flow of positive feedback, both from her own students through their new-found excitement about learning and from her extension instructor. Her two kindergarten classes a day became a decided advantage. With two classes, Mary could introduce a new activity twice in the same day and have double the feedback. She could change an activity from one class to the next if it hadn't gone well and have an immediate second chance to test it out. Each activity Mary created was always given to the children as the only test of its worthiness. If it helped a child learn, it was good. If it didn't, it was changed until it did or it was tossed aside. The time spent making an activity was never used as a basis for judging its worthiness, only its effectiveness in allowing children to learn.

Mary's enthusiasm for what she was doing was a pleasure to witness. Our intern professor, who was eventually to give her such a poor evaluation, continued to offer no positive response to all of her efforts, but the principal of Verde School gave Mary an "outstanding" in his evaluation of her. She was the only intern teacher to receive that high a rating from a principal.

Mary used her Easter vacation to journey to Colorado to break up with her old boyfriend. We were

married in June.

Our summer was spent enjoying each other's company and busily readying ourselves for the next year's teaching. Mary continued making the activities that would in the coming year be given the name "Workjobs" by one of her students. At this point Mary was performing a role essentially the same as that acted out by thousands of creative, energetic teachers before and since. She was using her imagination to invent teaching activities to counteract the vast empty space left in the learning lives of children when textbooks are the only material provided as an educational tool. The children in her class, her school principal, her extension instructor, (and I, of course) were providing Mary a constant flow of feedback. However, others felt all the energy she was expending making things for her classroom was only a new teacher's enthusiasm and would soon burn itself out. All new teachers were enthusiastic and full of ideas, but their energy wore itself out in three years at the most. She had only to wait and see. Nevertheless, she kept on making and creating for the children in her classroom. If she only had three years, she might as well make the most of them.

Life is a series of turning points that we find much easier to identify in retrospect. One such turning point occurred for Mary at the beginning of her second year of teaching. When she returned to school to ready her room for the fall, she found something called a K.E.L.P. kit in her classroom. Quick investigation revealed that the school district had purchased enough K.E.L.P. kits, at \$125.00

each (at a time when ice cream cones were still only 10¢), for every kindergarten classroom in the district. Mary's summation of the kit was that it was "Five dollars worth of junk in a dollar's worth of drawers!" I'm not exactly sure what K.E.L.P. stood for, but in Mary's mind it stood for a waste of money which was supposed to be spent to benefit children. Mary refused to use the kit. That in itself was not remarkable, for most of us have placed some never-to-be-used material provided us at district expense on some high shelf where it quietly gathers dust. Mary refused to play this game, however. This refusal marked the turning point.

Mary was so incensed at the waste of money the purchase of this kit represented, she called the district office and told the kindergarten supervisor she would not use it and wanted the district to return it to the publisher for a refund. Mary wasn't particularly brave. She definitely wasn't a tenured teacher. She wasn't well known in the district and certainly had nothing resembling political clout. All she had was the knowledge that her children could not defend themselves from such waste. If she didn't stand up for them and speak out for them, who would? To speak out was scary, but for Mary there was no other choice.

The district supervisor came out immediately. Upstarts had to be put in their place! But, fairness was possible too, for the supervisor was willing to hear what Mary had to say against the kit. What Mary had to say did not impress the supervisor nearly as much as the wide array of hand-made educational games and activities that filled her classroom. The

district had purchased the kits in the hope of giving teachers a tiny (though expensive) start in a direction Mary was clearly traveling at a rate far greater than the supervisor had even dreamed was possible. Mary's K.E.L.P. kit was taken back. But that wasn't the end of the supervisor's visit. She was so impressed with Mary's "Workjobs" that she sent as many people as she could to see Mary's classroom to share what Mary was creating. Mary's willingness to stand up in defense of her children had brought her something she hadn't expected. It had brought her recognition.

With this recognition came a steady flow of encouragement from the visitors to her classroom to share her creations more widely. The most common way suggested to share her ideas was to put them in a book. Mary had no concept that anyone outside the few visitors to her classroom really cared about her ideas. Her children loved them and learned with them and that was enough. But, as part of the master's degrees we were earning in the second year of our internship program, we had to write a thesis. Gentle prodding convinced Mary that she might at least write about her ideas for her master's thesis.

Mary cared very much about her students and their learning. She had only been a fair student in school and had never really learned that much. She was diligent enough to struggle through, but much of school hadn't made sense to her at all. She had always needed to see or to manipulate to understand. School didn't allow the "seeing" or "manipulating" which Mary had since learned through study-

ing Piaget was so important in developing understanding. Although she didn't think her ideas would interest anyone else at all, her desire to share with other teachers who might be interested, the ways she had found to make learning a more meaningful and more enjoyable experience for her own students, allowed Mary to be persuaded to at least submit her masters thesis to various publishers for their opinion.

Mary sent copies of "Workjobs" to every educational publishing house for which we could find an address. Every publisher dutifully sent the manuscript back with a very nice but very frustrating letter of rejection. Mary was not surprised that her manuscript was rejected, because she already believed her ideas weren't all that unique anyway. They were just little things she made to share with her children. Anyone could do that.

Barbara Beatty, a woman who worked for Addison-Wesley Publishing Company, had seen Mary's manuscript and thought it was special. Although Barbara couldn't convince Addison-Wesley to accept Mary's work, she did share her enthusiasm and optimism with Mary. Barbara told Mary to make a few specific changes and resubmit the manuscript. Mary continued to have no faith that anyone at all would care about her ideas, but she also continued to be persuaded that if anyone might be interested, it was worth the effort for the children Workjobs might reach. So, she rewrote "Workjobs" and resubmitted it to Addison-Wesley. Again it was rejected. This time, however, they were willing to take

parts of it and tack it onto a workbook series. Mary was anti-workbooks and anti-textbooks, so this offer was rejected at once. Barbara did not give up. She offered Mary more editorial suggestions and said, "Try again". With encouragement, persuasion and gentle pushing from those around her, Mary gave it one more try.

Persistence matched with good fortune is a winning combination. While Mary was revising her "Workjobs" manuscript for a third submission, there was a change in the structure of the publishing company. Addison-Wesley had begun as a small, innovative company and had become the third largest educational publishing house in the country. As they had grown in size they had also grown away from their innovative beginnings. To recapture some of their original spirit, the decision was made to create a small separate subdivision to be known as the "Innovative Division". It was just as the Innovative Division began their search for something "innovative" to publish that Barbara Beatty brought them Mary's third "Workjobs".

The head of the Innovative Division was Stuart Brewster. I don't know if Stuart and Mary liked each other at once or grew to care for one another, but each knew the other was a special person and it showed in their relationship. They treated each other more like father-daughter than publisher-author. The respect they shared for one another was to be an important part of the process of creating Mary's books.

The Innovative Division had a small budget and very little staff.

This new and as yet unnamed book, therefore, was to be subcontracted to the necessary photographers, editors, designer and so on. Mary had no belief that anyone would buy her book and absolutely no knowledge of how books were put together. She did know, however, that if her name was going to be on it, it had to reflect what she felt and no one else. This meant Mary wanted to be involved in every step of the publication process, even if it meant she would or could often be accused of being a “know-nothing” who was just in the way. Even though she had no experience, Stuart let her participate in the process as actively as she wanted. This meant, among other things, that Mary was allowed to stage all the pictures which were to become such a vital part of the book.

Addison-Wesley had hired a professional with years of experience to design the pages of the book. Mary saw the design and knew it was wrong. The pictures of the activities were the size of snapshots. Mary felt the teachers who bought the book would want the pictures to cover the full page. The sample questions for teachers to ask had been edited out. The designer said, “Teachers can make up their own questions. Sample questions are an insult.” Mary knew teachers would need this assistance. The book was designed to be printed economically by eliminating much of the white or empty space. Mary thought the pages needed to be less cluttered. Mary’s battle with the designer was interesting to observe. Mary was truly convinced her book would sell zero copies. Mary also knew even more strongly what she felt was right. She knew if she were a teacher buying her book

what design elements would make the book most helpful. She would not let the book be designed any other way.

Once an author signs a contract with a publisher, the manuscript belongs to the publisher. Stuart Brewster did not have to accept a single one of Mary’s suggestions. The designer was convinced Mary was wrong and said so in no uncertain terms. Mary was only a kindergarten teacher, and not a very experienced one at that. But Stuart sided with Mary on every point, as he nearly always did, not because he had to, but because he believed in Mary and was willing to risk following her suggestions. He even accepted her title for this new book, though his comment was, “What kind of a name is that? No one will know what it means!” *Workjobs* was the result.

Once again Mary had taken an active stand for what she believed was right. This time her stand was for teachers. This stand, too, was a turning point. Without Mary’s personal efforts, the ideas she had to share would have been buried in an unappealing little book of snapshots and small print. Instead, the concern for the need of her fellow teachers is reflected on every page and makes *Workjobs* one of the few books which is regarded as a classic in education.

Mary’s relationship with Stuart brought her another opportunity she really wasn’t sure she was ready for. At that time in California there was a state-funded teacher inservice project called “Miller Math”. It was named after the legislator who had introduced the bill in the State Senate. Miller Math represented an opportunity for selected elementary school

teachers from all over the state to attend a two-week inservice training session on the use of manipulative materials for teaching elementary school mathematics. The selected teachers enjoyed an all expense paid, two week live-in workshop experience, and in addition, were given one hundred dollars worth of manipulative materials to take back with them to their classrooms. Stuart described Mary’s creative approach to teaching to Leonard Warren, the director of the project. Leonard in turn dispatched Marilyn Burns, one of his staff members, to visit Mary’s classroom. Marilyn was impressed enough to suggest to Leonard that he fly Mary to San Diego for an interview as a potential instructor. Neither Mary nor I had ever heard of Miller Math, so we decided Mary should go through the interview to learn more about it.

During the interview, Leonard asked Mary about her experience in using materials such as pattern blocks, geoboards, Unifix cubes, and so on. Mary had never used any of these materials, but she kept saying “Bob uses it... Bob uses it... Bob uses it...” until they felt required to ask her who “Bob” was.

Marilyn had been impressed with Mary as a classroom teacher and Leonard was impressed with Mary as a potential instructor but Mary was panicked by the whole idea of teaching teachers. Her constant reference to “Bob” left the interviewers with the distinct and accurate impression that there was no way Mary was going to be an instructor for something she hadn’t even taken as a student if she had to go alone. For some reason neither of us could clearly

discern, they wanted Mary badly enough that they decided to take me as an instructor, too ...without even going through the formality of sending anybody to look in my classroom.

Mary and I already had the hope that someday we would be able to share what we were learning in our own classrooms with other teachers. Our intern training had been instrumental in providing us the incentive to develop alternate methods of instruction which made the learning lives of our students more successful. We knew how many hours each evening and each weekend we had devoted to creating our own curriculum. We knew, too, that many of our fellow teachers shared the desire to teach differently, but simply did not have the time available to them that we did to invent alternative approaches. We wanted to share what we had learned with them so they could benefit from our experiences without having to pay the same price in time and energy. We hadn't expected to have an opportunity to share so quickly. Collectively, we were pleased and excited to be given the chance to instruct ...though for Mary the pleasure and excitement existed more in theory than in reality.

The closer our summer instructing assignment came, the more truly fearful Mary became. In the time since she had taken *Workjobs* to Addison-Wesley, we had changed schools and districts and Mary was now teaching first grade. At each successive grade switch, from fifth to second to kindergarten and then finally to first, Mary was concerned about how her new students would be to teach. Now she was going to teach

adults. Adults were much too big! They knew too much! She would even be expected to teach fifth and sixth grade teachers, not just kindergarten and first grade teachers like herself. She couldn't subtract, she couldn't multiply, she couldn't divide either, but that followed from the rest. She hadn't even used any of the materials she was supposed to teach about. She'd seen my sets of pattern blocks, and my geoboards, and so on, but all she did in her class was *Workjobs*. *Workjobs* wasn't out as a book yet, so no one would know what she was talking about when she tried to explain what she did. On top of all that, the leader of the instructional team with whom she would be working had let Mary know that she (the lead instructor) was not at all excited about having a member of the team who was, in effect, a trainee. It was made clear to Mary that she couldn't turn to the leader for help if she got in trouble. Mary simply had to pull her own weight.

With this as background, it's easy to see why Mary spent a good part of each night of the first two-week workshop in tears. She knew she was awful in math. She knew she didn't have any idea what she could possibly teach the next day. But, she knew, too, that she really wanted to share with her fellow kindergarten and first grade teachers those activities she had created that made learning fun and exciting for children. Mary often felt like quitting, because she felt so ignorant and out of place. But she also believed that what she had to share with teachers might make it so that their children didn't end up feeling about themselves as Mary had been made to feel about herself as a student.

So, through her tears and anxiety, Mary doggedly worked at planning her lessons. Because she had no background in mathematics, planning each new lesson took hours. Before Mary could develop a lesson, say with pattern blocks, she had first to become a child again and learn with the material herself. My contribution was to sit with Mary each night and guide her through the learning experiences she needed to understand enough mathematics to share with the Miller Math participants the next day. My reward was watching Mary fall in love with mathematics and all its wonderful patterns as she passed, childlike, through all the learning experiences we shared together each evening.

I guided Mary through the experiences she needed to understand the secrets the materials had to share with her. I did not plan lessons for her, however. Once she understood what the materials offered, the same stream of inventiveness that had created *Workjobs* created an endless variety of child-like, child-centered activities to go with each new material encountered. Mary had always needed the presence of some form of concrete representation in her learning. In her own schooling, real objects weren't a part of her environment. Now they were. This meant that Mary as a teacher had been allowed to find the key to her own learning that had eluded her as a student. All the activities she created reflected both her own thrill at discovering all there was to learn that she'd never learned before, and her personal conviction that children now should be allowed to learn in "Their Way".

The fears Mary faced as an inservice instructor did not end as a result of the experience she gained with Miller Math. Each new workshop she gave or speaking engagement she accepted brought with it a new rush of doubt about why anyone would want to hear her say anything. She once persuaded a math conference in Virginia for which she had agreed to provide a keynote address that what they really wanted was to split their audience and have two addresses: one for primary and one for intermediate. The intermediate address was, of course, to be given by me. Mary was afraid to go to Virginia and face all those people alone. Mary's desire to share always outweighed her corresponding fear that no one would care what she had to say. There was one unique experience, however, that caused Mary finally to learn that people really did care.

Mary had flown to San Diego to make a presentation at an early childhood conference on the reading program we had both been developing. When she found there were 400 teachers scheduled to attend her talk the next day and not the 50 she had expected, she asked me to fly down and help her with the presentation. My "help" would consist of running the slide projector. This was the first time Mary was to speak at a conference that wasn't strictly a math conference. The 400 people in the room weren't there to hear Mary. The main speaker was an elderly woman who apparently had written many books on early childhood education. Mary and two other speakers were simply the follow-up acts. Mary's name was on the program, but not the name of the only book she had

written at that time. When the main speaker had finished her talk, Mary was introduced. The introduction went as follows: "Our next speaker is Mary Barratta-Lorton ... Author of *Workjobs*". From the 400 people, as if they were one, came a low, beautiful, loving, "ooooooh!" It sent chills up my spine and brought quickly hidden tears to my eyes. Mary rose, visibly affected. She smiled and said "I feel I'm among friends". She was ... and always had been. The struggle was worth it!

There's more to Mary's story, but the message is the same. Each new choice to be made brought with it fear and anxiety. But each new choice was prompted by her clear desire to make learning more meaningful for her children and to share what she had discovered about this learning with those of her fellow teachers who might care to hear. The Miller Mathematics model of inservice was an excellent one, but there was no structure established for providing teachers support throughout the year as they struggled to implement the ideas from the summer in their classrooms. Mary believed strongly enough in the need for providing this continued support that she broke away from the security of the Miller Math model, co-founded the Center for Innovation in Education, and began giving inservice workshops of her own ... with the follow-up support she believed to be necessary. Mary wrote *Mathematics Their Way*, the most difficult and draining project she ever undertook, because she wanted to share with teachers what she had learned about mathematics through the pain of her Miller Math teaching experience and the

joy of implementing her new-found knowledge in her own classroom. The newsletters and materials, which she made available through the Center, were a product of taking responsibility for the teachers who used her books, just as she took responsibility for the children in her own classroom. *Workjobs II* is a classic example of the wonderful mixture of craziness and love that was Mary. The book would have been enough, but Mary organized the gathering and assembling of all the materials used to make all the activities and placed them in a kit, which she made available to anyone who did not have the time to do his or her own gathering. The reading program which bears her name was her longest-running project. Begun in 1972 and (except for the manual) finished in 1976, Mary regarded the reading program as the greatest contribution she had made to the learning lives of her students. This struggle, too, was worth it.

There is much more that Mary would have done with her life ... but nothing she would have undone.

Struggle was part of Mary's existence, but there was more joy to her life than struggle. The importance of remembering the struggles now is so we don't make the mistake of setting her apart from ourselves. Mary was like all of us. Her room was a mess. She usually could not find her car keys. She fell asleep in front of the TV. She was afraid of spiders. She thought keeping track of summer workshop expenses meant writing down what you bought, not how much it cost. She wished she was better looking and more intelligent. She loved country music and

thought her feet were too big. She was human.

Maybe what we can learn from Mary's life is that what little separated her from many of the rest of us shouldn't be a separation at all. Mary wasn't brave, but she took risks. When she did take risks, it was to stand up for the children. She didn't have all the answers. She searched constantly and doubted constantly. But, she would only teach what she felt was right for the children. She believed she was the spokesperson for her children. If she didn't stand up for what was right for them and protect them, who else would?

Mary is gone.

Who will protect the children now?