Learning Together

Children and Adults in a School Community

Edited by

Barbara Rogoff
Carolyn Goodman Turkanis
Leslee Bartlett

Becoming an Adult Member in a Community of Learners

Eugene Matusov, parent

I thought it would be relatively easy for me, with my six-year background of high school teaching and tutoring of math and physics, to co-op in the OC classroom with my first-grade son. I was both right and wrong. Indeed, my teaching experience and professional knowledge as a graduate student in child psychology helped me design activities suitable for first- and second-grade children. However, in terms of philosophy of teaching and organization of learning activities, my experience with traditional schooling was more harmful than helpful.

My previous experience prepared me for delivering a lesson to a whole class or an individual. I was used to controlling children's talk, which was supposed to be addressed only to me, and my students had learned early on in their schooling that they could talk legitimately only to the teacher and only when it was allowed *by* the teacher. The teacher was supposed to be the director, conductor, and main participant in classroom interaction.

In the OC, I was shocked to discover that this traditional format of instruction was actively discouraged by teachers, co-opers, and children. This kind of teaching was not supported by the children in their interactions or by the classroom structure, with its small-group organization, children's choice of groups, and nonsimultaneous rotation of the children from group to group. However, I did not know how to teach any other way.

A First Try: Lesson Plans

At the beginning of the school year I planned an activity that I called Magic Computer. It was designed to teach the reversibility of addition and subtraction as well as reading and computational skills, and it had worked beautifully with first- and second-graders in the past. The activity involved moving a paper strip

that carried "computer commands" ("Think of a number. Add five to it. Take two away from it," and so on) through an envelope with a window, to see one command at a time. The commands were designed so that addition and subtraction compensated for each other; therefore, the last message was "You have got your initial number!" The children's job was to discover addition and subtraction combinations that cancel each other out and write them down on the paper strip, line by line. In my past experience, first- and second-graders were fascinated by the "magic" of law-governed math, which returned children to the initial number after it was changed many times.

I talked with the teacher, Pam, about my plan, and she liked the idea. Thus encouraged, I prepared all the envelopes and paper strips for the children (to minimize cut-and-paste activity), along with a few examples of the Magic Computer.

In morning circle, when Pam gave me the floor to speak, I presented my activity: I showed an example of the Magic Computer and demonstrated how it worked. Because of my teaching background, this whole-group presentation worked very well for me-1 controlled the conversation and was supported by the teacher, the parents, and the children in doing so. Many children volunteered to come to my activity; I chose five kids for the first group and said that I expected to see the other kids in my activity later in the morning.

I planned to start by explaining the principle of addition-subtraction compensation. Then the children were supposed to create different combinations of addition-subtraction compensation in their Magic Computers. After they had practiced enough, I wanted them to summarize the principle. Then I would be ready for the next group of children to repeat the activity and instruction.

My plan started falling apart during the very first phase of trying to explain addition-subtraction compensation to my group. I did this by demonstrating the addition and subtraction of stones in an opaque jar, but the children were puzzled about how this stone-and-jar business related to the Magic Computer that I had demonstrated in the morning circle. Vivid impatience to start working on the Magic Computer showed in the children's body movements. Spurred on by the children's impatience, I quickly linked the stone example with the principle of the Magic Computer and distributed materials to the children.

The children worked with enthusiasm. Many of them started copying math instructions from the example that I showed them. After they finished making their own "computers," they started playing with them and with each other. Many first-graders were faced with computational problems, and they could not correctly add or subtract. I tried to help them, but I felt myself getting lost in the chaotic, children-controlled communication. During instruction with some children I was often interrupted by other children; I was reactive, and buffeted by the children's demands.

As the activity progressed, I felt more and more irritated. Three main things bothered me. The first was that the children controlled the communication and I could not provide guidance to children who needed it because of parallel demands from other children. The second thing was that the children redefined the activity that I had brought. In my design, they were supposed to work on the

principle of addition-subtraction compensation, not on modifying the Magic Computer. The children tried to modify different parts of the "computer" by painting, cutting, and reshaping it, but I had designed this activity for math and not for crayons-and-scissors art. The third problem was that the children were often not focusing on the task that I wanted them to focus on. They spent too much time talking with each other and demonstrating their "computers" instead of working on new compensatory combinations. My interventions to fix all the problems either were ignored by the children or led to disciplinary problems or even mild conflicts with the children.

However, the real disaster was still to come, when there was a transition from one group of children to another. My model of group rotation-one group goes, another group comes—failed from the beginning. New children wanted to join my activity before the initial group had completed it. Some children who had finished the activity (from my perspective) wanted to stay longer, and others left the group "early." After a while, I had some new children, along with children who kept working on their Magic Computers. They were a mixed group in terms of knowledge about the activity, problems they were experiencing, and the kind of help they demanded from me. My explanation of the compensation principle was rushed, often interrupted and fragmented by the children. The disciplinary problems were exacerbated, accompanied by my growing coerciveness. I ended the activity deeply dissatisfied. I thought that the children did not learn much from my activity and did not like the activity or working with me.

I was wrong. During recess, I shared my feelings with the teacher. To my surprise, she was pleased with my activity. She told me that she had observed that the children were really engaged in the activity, felt comfortable, and seemed to learn a lot. I mentioned that I did not complete the lesson because we did not review the principle of addition-subtraction compensation that the children were supposed to learn. "That's okay," responded the teacher. "We can finish up the review session in our circle after recess." In circle, the teacher asked the children from my groups what they did and learned with me and how they liked the activity. To my great surprise, the children demonstrated that they had indeed learned a lot and grasped the principle I tried to teach. Moreover, they liked the activity and asked the teacher and me to establish an independent center where they could keep working on the Magic Computer while I was not in the classroom during the week. Frankly, I was puzzled by the dissonance between the children's and my experience of the activity.

A Second Approach: Relaxing Control

After a few more weeks, I came to the conclusion that I was overcontrolling my interaction with the children. I waited for an opportunity to experiment with relaxing my control. The opportunity came soon, when at the beginning of a morning circle the teacher suddenly was called by the school office. She glanced at the four co-opers in the classroom and asked me to replace her while she was gone. I was panicked, of course, and surprised that the teacher chose me because

I considered (and still consider) other parents to be more skillful than me in leading the children's morning circle. Besides, I suddenly realized that I did not remember the whole structure of morning circle very well. It was supposed to be a discussion of the calendar and what day today is, about children's home and school experiences of the previous day, possible lost teeth, and so on. I did not know how to start or how to proceed. The teacher did it so smoothly and naturally that I never noticed how she actually had done it. The only thing I remembered was to try not to overcontrol the discussion.

I breathed in and said to the children, "You know, kids, I am not a teacher and I forgot what I should ask you about the calendar, about what happened with you yesterday, and about your tooth loss. Can you help me?-can you remind me what questions I should ask you?" I had not expected how successful my move would be. The circle went very smoothly. The children and I felt comfortable communicating with each other. The children easily took responsibility for asking "the teacher's" questions and responding to them. My role was to direct and facilitate the discussion, For example, when a few children tried to talk at the same time, I asked the children about their rules and norms in this situation. So they disciplined themselves. After the teacher was back, she did not take over, but allowed me to finish the circle. I could not convince the teacher and the three other co-opers in the room that this was not my teaching trick but an honest confession to the children of my ignorance of the morning circle structure.

I learned a great deal from this experience. I learned to relax my control and to trust that the children could lead a discussion. I found that they could teach each other. "Aha," I thought, "this is how I can solve the problem of new kids joining my activity group. I'll use the kids who have already been in the group as teachers!"

I started redesigning my activities. First I abandoned my three-step lesson plan: instruction, practice, review. That structure required too much control by me that was not suitable for the OC environment.

Instead, I designed a two-step activity in a such a way that there was a place for me in the activity as a participant, so my instruction was embedded in the activity. Because I presented the activity in the morning circle for the whole class, we could start the activity without other preliminary instruction. I clarified emerging issues while the activity was in progress. Thus, during the activity, my role was as a partner in the activity and as a facilitator and instructor. This format allowed the children to freely interact and help each other.

In the second step, when new children would join the activity, I planned to remove myself from the activity, allowing new children to take my place in the activity as partners and "old" children to take my role in the activity as instructors. When I felt comfortable that the activity worked well enough and could be sustained without me, I left the group. This sustainable activity structure allowed me to both assess the children's learning (if they can teach other children, they have learned themselves) and effectively teach all the children without meaningless reciting and reviewing.

After I left the classroom, the materials were available for the children for a few weeks so they could continue to explore the activity. Basically, I saw my new

role as a co-oper who would initiate math-related independent centers with the children. It sounded good and worked well.

However, after a while, I found two big problems in my new approach to co-oping. First, I was bored doing nothing after I left the group to allow new children to come. Second, I noticed that I was still needed by the children, even if the activity could be sustained without my presence. However, it was difficult to re-enter the group after I left it, because the children did not want to be interrupted to explain their progress, problems, and history of decision making to me, and I was impatient and unskilled in participating without full knowledge of what was going on. These two problems pushed me to revise my co-oping strategy again.

A Third Approach: Designing Activities for Mutual Involvement

I realized that I needed to design the activity to secure my participation in all phases of it. This did not mean that I had to be in the group all the time. On the contrary, I had to have an option to leave the group if I saw that the group needed to take full responsibility for the activity. The point was to make my leaving the group a teaching option instead of being a part of a rigid structure like my previous two-step model of co-oping. I also realized that in pursuing the idea of a sustainable activity, I went too far by deliberately excluding myself, as an adult guide, from this process. The adult's role also has to be sustainable in the classroom activity. Realizing that, I started reconstructing my co-oping model to open it up for a sustainable role for myself in the activity.

The activity wasn't designed with "steps" anymore. New children could join the activity anytime. However, my role shifted from being a partner among other partners to being a participant with a special function. In the newest design, it was my job to formulate children's contributions on a common board. This special role was supplemental to the activity, so the activity could continue without me. At the same time, it allowed me easily to enrich, guide, and extend the activity.

An example illustrates this approach. The following year, in the second/third-grade classroom, the parents and the teacher had decided to focus on helping the children memorize the multiplication tables. I prepared sheets of paper, each with a big lo-by-lo square and digits from zero to nine on two perpendicular sides, for the children to fill out with the results of multiplication. In multiplying digits from the two sides and writing the product in the appropriate place in the square, the children also learned the Cartesian system of coordinates.

Of course, it was possible to fill out the Multiplication Square in many different ways, and the children did so, noticing patterns of increment or decrement of the results, using symmetry of the square, exploiting the numbers that were already in the square, and so on. My job was to write down all these strategies, patterns, and approaches on a special classroom board that could be seen by everyone. It was not boring, because I was helping the children to express and

extend their ideas, After a while the children shifted from just filling out the square to seeking new strategies and thinking of patterns of the square. When I came back in a week, I found that the list of the children's discoveries had tripled. Some children were working on the task not only at school but also occasionally at home.

The children discovered some very sophisticated patterns. For example, they noticed that each time the digits are sequentially multiplied by 9, the last digit of the result gets decreased by 1 (9, 18, 27, 36, 45, 54, and so on), and each time the digits are sequentially multiplied by 8, the last digit of the result gets decreased by 2 (8, 16, 24, 32, 40, 48, and so on). For 7, there is decrement by 3 (7, 14, 21, 28, 35, 42, and so on). Thus, each time the decrement increases by 1. This pattern goes on until 5, when the decrement suddenly transforms to an increment that gets decreased. This is a rather complicated and nontrivial pattern that the children discovered and I had not known before.

Looking at the list, I noticed that some patterns and strategies were written by the children and some by co-opers or the teacher. I think that the adults' role was more than writing down children's strategies and patterns on the board; it was providing the children necessary help as well. Children knew whom they could ask for help if they got stuck, and adults could supervise and provide help when necessary. The format of guidance was open and flexible. For me, this was a good example of learning where both the activity and the adult's role were sustainable.

In reflecting on the merits of my experience, I think I reached a "better" teaching technique. In addition, the whole exploration process was valuable. What drove me to experiment was a desire to organize teaching and learning in a way that would be comfortable for all the participants, including myself. I came from an environment where teaching-and-learning comfort was associated with re-spectful adult control over the learning activity. Very quickly I found that this kind of organization did not fit the OC environment and participants. So I moved back, being ready to withdraw from the activity, deciding to give all the control of the activity to the children. I swung from the idea of adult-run activity to the idea of children-run activity, like a pendulum. However, what I came to was more than finding a middle point between control and withdrawal; it was a third po-sition-mutuality.

This third approach nurtures collaboration between the co-oper and the children in which guidance emerges from collaborative participation, shared in-terests, and mutual respect. Preliminary planning of the activity by the co-oper has a very general outline rather than a detailed character, anticipating children's contribution in planning the activity as well as modifying it. Children's and co-opers' participation in the activity is active in that it includes not only negotia-tion of the children's involvement in the activity but also the co-oper's expecta-tion of such negotiation. Mutual negotiation of responsibility is a type of interaction that, I found, fits the OC. Moreover, I discovered that it fit me as well.

Reflections on Processes of Adult Learning

I have changed since my son and I came to the OC for the first time. The story I presented here reflects only a portion of all the changes that I underwent. It leaves aside my discussions and disputes with other co-opers, my wife, teachers, my parents, and friends about philosophy of teaching and learning. It leaves aside many aspects of my back-and-forth swings from adult-directed to child-centered philosophy and my final abandonment of both. It leaves aside my observations of children, parents, and teachers in the OC, my reading, discussions as a graduate student in developmental psychology at the university, and, finally, changes in my attitudes and beliefs that go far beyond just finding more effective teaching techniques or a comfortable organization of co-oping in an OC environment. The changes have been about a type of interpersonal relations (not only with children) based on respect, mutuality, and trust in other people that I have started valuing more than I did before.

The third model of co-oping that I presented is not the final model by any means. After our second year of being in the OC, my family moved to another state and, hence, another school, so I could not continue my development as an adult member of this community of learners. I am sure that if I stayed longer in the OC community, I would have changed a lot more as an OC co-oper, for two reasons. First, when I left the OC, I did not consider myself to be an experienced co-oper; rather, I had a flavor of the OC way of co-oping. Second, I believe that learning, as life, does not know the limits of perfection.

When an OC teacher, Leslee Bartlett, read a draft of this essay, she asked me, "Could the classroom teacher or other co-opers have saved you some of the agony of this discovery? I'm wondering how much of that process you truly needed to go through to learn it-or if we could have hastened it?" In this question, she points to two important aspects of adult learning and development.

First, her use of the word "agony" to refer to my process of discovering an "OC way" of co-oping highlights the fact that developmental processes for adults to change their fundamental ideas can be uncomfortable. I agree that this problem exists; however, I do not see the solution as one of speeding up the developmental process. Despite the real qualitative changes that adults undergo (as I did in the OC), learning and development are a way of life in the OC community rather than temporal moments in preparation for completion. I think the developmental process of adult learning should be recognized, appreciated, and expected, not hastened.

I offer two metaphors of how to facilitate adult development to make it a welcome and pleasant experience. The first one focuses on handling the discomforts of development, recalling the custom in the United States when children lose their baby teeth. Kids might experience gum bleeding and discomfort, or even pain and the potential psychological trauma of losing a part of the body. U.S. culture has developed a special folklore of a "tooth fairy" that prepares kids for this potentially unpleasant developmental process. The tooth fairy folklore

turns the psychological consequences of tooth loss around and welcomes the process (which can bring the opposite problem of kids trying to speed up the process!). Stages in children's development (intellectual as well as dental) receive some support from cultural folklore; however, little such support is available for adult learning. In institutions such as the OC, where adults are expected to change their way of thinking, it may be helpful to develop folklore to provide adults with an appreciation of the developmental process that they undergo.

This leads me to my second metaphor, building on the revision process in writing. Good writing involves revising drafts before a manuscript is ready for publication. Inexperienced writers view writing drafts as a painful but necessary process that can be overcome with experience. They write their first draft as if it is the final draft, using expectations of the final product (derived from reading completed pieces of literature) as a guide for writing the first draft. Of course, they usually fail, because nobody can write a perfect manuscript at the first attempt. A few such failures may kill future attempts and the desire to write. However, a master writing coach can help new writers develop an appreciation of the process of writing drafts. The master sets expectations for draft writing-criteria for a good first draft (perhaps setting down a few ideas), what it takes to shift from first to second drafts (such as beginning to organize the ideas), and so on. In this example, draft writing is not an intermediate, annoying process but a necessary and pleasurable process-indeed, it is writing. Similarly, for adults developing their ideas of the learning-and-teaching process, it would be helpful to have greater recognition of the nature and phases of the process so that it can be recognized and even enjoyed.

Combining the two metaphors, I would suggest that in a community of learners-with newcomers struggling to move beyond the model of teaching and learning that they bring with them—folklore could provide a chain of positive constructive expectations for newcomers. The folklore should not fixate on the mismatch between the newcomer's model and the community model but should focus on how to provide a level of comfort in newcomers' participation. OC teachers already provide such support by trying to help newcomers relax about "covering the curriculum" and concentrate on the excitement they share with the children in the classroom. They seek ways for parents' personal excitement to define their area of co-oping, try to limit the number of children in small groups to parents' current level of comfort, and ask children in circle to comment on what they learned from the co-opers' activities, providing catalysts for co-opers' growth and confidence in themselves and the program.

However, newcomers could be further aided by folklore that helps them expect the developmental process. Pendulum swings from adult-run to children-run approaches should be expected, and even encouraged, because through this kind of experimentation with their own teaching, newcomers have an opportunity to experience the "learning moments" that are the quintessence of the OC educational philosophy. Supported by folklore, newcomers could look for emerging problems as learning opportunities rather than stiffen with the pain of educational failures that are inevitable in the process of learning.

Children Learning from Adults Who Are Learning

Some parents in the OC (especially new ones) wonder if the children's education would be better if only experienced co-opers with sophisticated OC collaborative teaching skills were in the classroom. Although on first glance this idea looks attractive, I would argue that it would be counterproductive for children's learning.

Whether they understand principles of learning in a community or not, all co-opers have numerous strengths: They are experienced parents, they are interested in and care for the children, they are generally interested in the activities they design, and they bring skills and resources into the classroom. These strengths make it possible for the children to learn firsthand from caring adults who are active and interested participants in many activities.

New co-opers usually are kind and generally effective in more traditional ways of teaching and are a resource to the children, though they may not yet epitomize the OC collaborative philosophy. They may have difficulty recognizing the great teaching and learning moments in their activities, but they nonetheless provide children with many successful learning opportunities-as with my Magic Computer, which I, as a new co-oper, considered a failure but the children and the teacher viewed as a successful math lesson.

Furthermore, parents' learning how to teach in a collaborative way magnifies the teachers' and the whole school's efforts to educate children. Many parents report that their participation in the classroom makes them more respectful and collaborative within their families. When faced with problems like children not helping with chores, they share the problems with the children rather than attempt to just fix the problem or coerce the children with rewards and punishments. Participation in their children's learning processes in the OC community becomes a cultural "incubator" and "amplifier" of family development for OC families. It also enhances the connection between school and home, as families and teachers understand each other better.

Children also learn about the learning process itself by having opportunities to observe and participate in how adults learn to handle situations when their way of doing things does not fit the situation. The adults' struggles to transform their teaching give the children a chance to learn how adults recognize their problems, ask for and use help from other people, and experiment to improve. The children have the experience of helping others learn, which aids them in learning about teaching and leadership. In this way, parents' learning and development contribute to the process of children's learning as well as to the creation of the social fabric of a community of learners.