Newcomers and Oldtimers:
Educational Philosophies-in-Action of Parent Volunteers in a Community of Learners School

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Running head: NEWCOMERS AND OLDTIMERS

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Abstract

We examined the use of contrasting educational philosophies-in-action by 45 parent volunteers, with differing extent of experience, as they worked with small groups of elementary school children in a U.S. school organized as a community of learners. The findings suggest that in this school, many parents make a transition — over the course of several years' participation — from a one-sided educational philosophy-in-action (with either adult-directed or child-directed organization) to a collaborative philosophy-in-action (with collaborative guidance and shared responsibility for learning) that constitutes a community of learners. The study uses a combination of qualitative and quantitative methods that validate each other's findings. A pedagogical implication of the study is that putting progressively minded and involved parents in the classroom does not automatically produce a change in educational practices. Parents should have opportunities to explore and learn new educational philosophies as they work with children. A successful innovative educational institution should expect and promote ways of becoming for its new members.

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In discussion of an educational reform, there are voices proposing stronger parent involvement in classroom instruction. Epstein (2001) reported a high degree agreement between parents and educators about importance of school-family partnership for children, schools, and families. There is an expectation among educators that an innovative educational institution can be built by teachers and parents having a similar vision (Fullan 1993). However, many of such efforts to build innovative teacher-parent cooperative failed (Firestone 1977) because of philosophical disagreements among the participants. Here we propose that rather than a common vision, an innovative educational institution can be based on recognition and support of developmental processes requiring for many new members of community to learn a new practice.

This article reports on a study that examined variations in educational philosophies-in-action of new versus oldtime parent volunteers in an innovative school, in order to infer developmental changes in philosophy of practice that newcomers undergo with experience participating in the school's practices. We focused on educational philosophies-in-action – educational philosophies that people actually do – rather than on their declared (espoused) philosophies because finally it is philosophies-in-action that define educational practices and affect on children's learning. This public school program (known as the "OC")[1] in Salt Lake City, Utah, was initiated by parents two decades previously as a community of learners; it requires parent participation in instruction (three hours per week) and emphasizes collaboration among children and adults in learning, decision making, and guidance.

Parents and teachers in this school regard it as a challenge for newcomers to learn how to participate in ways that are consistent with the school's philosophy — collaborating with the children rather than directing them or treating them in a laissez-faire fashion. Participants characterize the necessary learning as involving a conceptual shift to the underlying educational

philosophy of the school, from contrasting educational philosophies with which newcomers often arrive (Rogoff, Goodman Turkanis, and Bartlett 2001).

In this setting, what is meant by educational philosophy is acting according to the school's principles in classroom interactions, not formally stating principles of teaching and learning — although the parents and teachers have created written philosophy statements and engage in many discussions about principles. For many parent volunteers, their educational philosophy of practice is largely implicit. However, teachers and more experienced parent volunteers commonly observe and comment on the educational philosophies of other participants that are visible in classroom interactions. We focus on these philosophies-in-action — regularities in approaches to instruction that are observable in participants' ways of interacting with the children – in particular, collaborating with them, directing them, or treating them in a laissez-faire fashion.

Our focus on participants' philosophies-in-action is consistent with work that suggests that when people join institutions, they may learn not only new skills but also new *philosophies of practice*, encompassing new skills, relationships, values, tools, and systems of belief (Erickson and Mohatt 1982; Hareven 1982; Heath 1989; Lave and Wenger 1991; McDermott 1977; Rogoff 1990, 1994; Vinovskis 1988; Wapner and Craig-Bray 1992). A "philosophy of practice" is a rather cohesive unity that guides and organizes people's participation in sociocultural practice. Philosophy of practice goes beyond participants' declarations (both ideological and reflective) about their philosophy or their practices — or what Argyris and Schön called "espoused theory." It also involves the general coherence underlying a person's approach to participation in a practice, similar to Argyris and Schön's (1978) notion of "theory-in-use" and Lewin, Lippett, and White's (1939) definition of "philosophy of leadership." Paradise (1994) reviewed the importance of this idea in the work of numerous anthropologists, citing especially LeVine's reference to this sort of knowledge as involving basic assumptions that are more fundamental in the organization of ideas than what people can verbalize.

The process of learning a new philosophy of practice may require changing worldviews and transforming personal identity (Lave and Wenger 1991; Mezirow 1975; Osborne 1985;

Rogoff, Baker-Sennett, Lacasa, and Goldsmith 1995). As noted in the literature on adult workplace learning, there are important distinctions between minor modifications of individuals' activity or skills and deeper transformations of attitudes, values, skills, and expectations (Argyris and Schön 1978; Forman 1994; Marsick 1987). Such deep transformations may occur when many U.S. middle-class adults join a community of learners, as they learn unfamiliar practices based on an educational philosophy that is distinct from their prior traditional schooling (see Argyris and Schön 1978; Rogoff 1994).

The *collaborative* philosophy of this community of learners school contrasts with the transmission model of education, where adults are in charge of learning activities — an *adult-run* model that characterizes the traditional U.S. schooling of most of the parent volunteers. The collaborative philosophy also contrasts with an alternative that is sometimes suggested — a *children-run* approach in which children are given control (Rogoff 1994; Rogoff, Matusov, and White 1996). Both of these approaches involve *one-sided* interactions, contrasting with the collaborative approach emphasized in this school. These are the philosophies-in-action on which our study focuses, examining whether newcomers are more likely to employ one-sided approaches and oldtime parent volunteers are more likely to employ a collaborative approach.

One-sided and Collaborative Approaches in Schooling

In traditional U.S. classrooms, children's learning is presumed to be based on the teacher's provision of information. This adult-run model has been compared with assembly-line factories because the children are seen as receivers of a body of knowledge but not as active participants in learning (Callahan 1962; Freire, 1986; Rogoff 1994; Rogoff, Matusov, and White 1996). The adult "transmits" skills, preplans the learning activity in detail, controls activities and communication in the classroom, and motivates students to attend to the teacher (Gardner 1983; McRobbie and Tobin 1994; Mehan 1979). These features are consistent with recommendations given by researchers working for improvement of the outcomes of adult-run instruction (Good 1979; Rosenshine 1982) and with reports of the National Assessment of Educational Progress (Applebee, Langer, and Mullis 1989).

In reaction to the adult-run model, some scholars have proposed a self-directed model of children's learning (Firestone 1977; Graubard 1972; Holt 1967; Katz 1971; Neill 1960). The children-run model requires adults to refrain from active guidance and involvement in activities, limiting participation to providing an enriched environment and minimal guidance when asked for help. Children are seen as constructors of knowledge on an individual basis and adults are viewed as potential hindrances to learning by limiting children's creativity and exploration.

Both adult-run and children-run approaches involve a one-sided philosophy in which responsibility for learning is assigned either to adults or to children (see Silberman 1971). Pendulum swings between the adult-run and children-run poles of the one-sided philosophy characterize many reforms of U.S. schooling (Gold and Miles 1981).[2]

Such pendulum swings seem to have contributed, for example, to the short lifetime of many attempts to democratize US schools by establishing parent cooperatives in the late 1960s and 1970s (with an average lifetime of only 18 months; Firestone 1977). In the reformist efforts to get away from anything resembling a traditional (adult-run) structure, it was difficult for innovators to find an alternative to one-sided approaches to teaching and learning. Many participants did not seem to appreciate the developmental processes required to develop an alternative educational philosophy. Rather than attending to the process of developing new pedagogical principles, they seemed to expect immediate switches in the participants and the institution (Firestone 1977; Johnston 2001).

Developing a collaborative philosophy-in-action seems to require moving beyond the idea that either adults or children need to be in control (Rogoff et al. 2001). The collaborative approach in a community of learners is not "on" the one-sided continuum between adult-run and children-run approaches. Rather, both the children and adults are active in structuring inquiry — they share responsibility for managing learning activities, group relations, guidance, and planning of activities. In the collaboration, adults assume responsibility for guiding the process and children learn to participate in the management of their own learning (Dewey 1916; Newman, Griffin, and Cole 1989; Rogoff 1994; Tharp and Gallimore 1988; Wells, Chang, and Maher 1990).

A Study of Philosophies-in-Action of Newcomers and Oldtimers in the OC

The OC, an innovative public elementary school program in Salt Lake City, had functioned for 16 years at the time of the study (1993), when it included six classrooms of mixed grades of about 28-30 children each. The school was started by a group of white middle-class parents and teachers who were dissatisfied with traditional public education and who did not want to start a private school. Their efforts were supported by a superintendent who helped them to find a space and provided with necessary autonomy to establish a parent-teacher cooperative with democratic self-governance. In a way, this parent-teacher cooperative was a prototype of a chapter school. After several migrations, the school found its place in another elementary school in a low-income part of the city. Two schools shared administration and had good symbiotic relations of supporting each other's activities and programs.

From the start, a central feature of its philosophy was collaboration between teachers, parents, and children, with all participants learning from each other (Rogoff et al. 2001). Based on recommendation of the superintendent who helped to start the school, parents commit to three hours per week (per child) of classroom instruction, as "co-opers." The OC provides new co-opers with an orientation and many efforts are made by the New Families Committee, Curriculum and Philosophy committees, and classroom teachers to help co-opers understand the program's collaborative philosophy and practices.

The main question of this study was whether parent volunteers who are *new* to this community of learners school show more *one-sided (especially adult-run) approaches* in how they organize learning activities, and whether *oldtime* co-opers show a more *collaborative approach* with the children, marked by shared responsibility and flexibility, consistent with a community of learners philosophy. This study examined the relation between parents' years of experience "co-oping" (i.e., involved in classroom instruction) and how they worked with their small groups of children. This cross-sectional approach (using the term of quantitative methodology) of comparing novice and oldtime parent volunteers does not longitudinally follow changes across time of particular individuals; however, it is a common method for inferring change in populations, widely used in developmental psychology.

To supplement the videotaped observations of the parents' approaches to teaching, we also asked the parents for a self-evaluation of their grasp of the "OC way of co-oping" and we asked the teachers to evaluate the co-opers' understanding of the OC instructional approach, based on their observations of the co-opers' everyday classroom participation. We also considered possible contributions to co-opers' learning from co-opers' increasing comfort and their interactions with the children and the teachers. Finally, we considered the community ecology (Fein, 1971) of the profile of how co-opers' approaches to teaching relate to their supportiveness with the children and the developmental suitability of their activities for the children's learning.

Videotaping and interviewing were done by two researchers, one of which was a parent volunteer in the program an academic year before the videotaping and the other was not known at the OC. Parents, teachers, and children recognized the first researcher (Eugene Matusov) as a former OC member at treated this research as "internal" aiming at helping to improve the program, specifically work of parents, and enrich knowledge about processes going on at the OC. The transition from being a parent volunteer to a researcher in the eyes of the OC community members was rather smooth although there were a few attempts to use the researcher as an "expert on pedagogy" that the researcher diplomatically rejected as not being a educational practitioner. The other researcher developed many lasting friendships with some teachers and parents during this data collection.

Our questions as well as our categories for coding parents' approaches to teaching are based on psychological, anthropological, and educational literatures. In addition, they were informed by our own experience as co-opers and researchers in the OC over 7 years (Eugene Matusov) and 17 years (Barbara Rogoff) and by ethnographic data from our larger project focusing on the school's development (including participant observations; interviews and discussions with parents, children, and teachers; a survey of parents; archival documents; and audiotapes of many parent and teacher committee and classroom meetings over a 7-year period). The purpose of the bigger project is to examine how the innovative institution develops and

maintains itself with new members joining the institutions and changes in political, economic, social life of a bigger community.

The methodology of this study was based on combination of qualitative and quantitative methods. Through qualitative methods involving videotaped and direct observations and interviews, we developed patterns of parents' philosophies-in-action. Using quantitative methods we explore how these patterns were distributed across groups of parents with different teaching experiences in the OC school. Qualitative and quantitative methodologies help to validate each other patterns and our findings. Interviews with OC members, direct and videotaped observations helped us to construct and abstract distinguished patterns of parents' philosophies-in-action. We used quantitative statistic methods to check if these distinguished patterns of parents' philosophies-in-action were differently distributed between novice and oldtime parent volunteers. Finding statistically significant differences supported observations that it took time for many parents to learn collaborative philosophy of teaching promoted by the school.

Videotaping Parents Teaching

The participating OC families were primarily European American from a wide spread of middle SES backgrounds, professions (e.g., chefs, car dealers, university professors, small business owners, carpenters, paralegal clerks, computer programmers, teachers)[3], and a diversity of religious backgrounds (e.g., Mormon, Jewish, Protestant, Catholic, atheist). Insiders characterized the OC community as liberal. The co-opers that we observed were mostly mothers (37 mothers versus 8 fathers, with similar distribution of genders across the years of experience in the OC[4]; no gender differences in the parents' approaches were noted).

We videotaped naturally occurring interactions of 45 parent volunteers (one session per parent) teaching small groups of two to six children as they worked within an all-program six-week theme on "Inventors and Inventions." This theme was developed by OC members during several parent-teacher classroom and committee meetings and teacher meetings, and discussed with the children in the classrooms as a part of the OC curriculum. (All-program studies of this sort typically occurred several times per year).

Each co-oper was usually responsible for preparing a 20-40-minute activity and working with a small group in activities such as inventing a map of "troll town" with kindergarten children; inventing pet toys with first and second graders; and inventing new dictionary words, their definitions, origin and context of their usage with fifth and sixth graders (please see Figure 1.) In addition to the information on the videotapes, background information about the specific activities was available from co-opers' explanation of their upcoming activity to the class, as they recruited volunteers, and from our clarification questions with co-opers right after the activity.

----------Insert Figure 1 about here-------

Children generally worked in mixed-gender, blended-grade groups (as usual in this school).

Determining Educational Philosophies-in-Action

Our coding system employed qualitative pattern analysis (Rogoff et al. 1993) to abstract the coding categories through close observations of the activities, attempting to describe the events in terms that reflect the meaning to participants. This approach is consistent with methodologies that take advantage of explicit evidence regarding the meaning of actions that participants provide to each other in jointly created discourse and action (Bremme and Erickson 1977; Cazden, Cox, Dickinson, Steinberg, and Stone 1979; Cicourel 1974; McDermott, Gospodinoff, and Aron 1978; Mehan 1979; Rogoff and Gauvain 1986; Wells 1992).

Determining educational philosophies-in-action requires contextual examination of the whole activity (see Bateson 1987; Cole 1995; Cuban 1984; Leont'ev 1981). Simply counting discrete utterances or other actions would have fallen short of grasping a co-oper's teaching approach as it played out over time (see Crow 1994). Almost any discrete statement or move could fit any of the three teaching approaches in some context. For example, a co-oper who lets children work independently with no guidance may exercise an adult-run approach if the co-oper has assigned the children to do what they are doing, a children-run approach if children are left to their own devices, or a collaborative approach if children are trying the activity on their own to assume more responsibility for their learning before asking a co-oper for help.

To aid in deciding whether a co-oper used an adult-run, children-run, or collaborative approach, coders made descriptive notes of the following aspects of the co-opers' activity:

- how the co-oper helped children and shared responsibility for help with the children;

- who was responsible for handling problems and uncertainties that emerged during the activity;

- how the co-oper organized space, materials, and seating arrangements;

- how progress in the activity was monitored and the goal revised if it became unrealistic given the time, materials, and other constraints at hand; and

- how children were motivated to join and stay in the activity.

Using these notes to support their judgments, coders decided whether the co-oper substantially used an adult-run, children-run, or collaborative approach, or a mixed approach.[5]

The *adult-run approach* involves a unilateral chain of decision making by the adult,[6] who controls the activity definition and the activity, taking the role of transmitting knowledge. The adult provides closely controlled guidance requiring detailed preplanning of the activity, and pre-empts children's inquiries and addresses them in a unilateral way. The activity settings are designed to facilitate the adult's control over the children (e.g., removing distractions by moving objects in and out of the activity space and blocking children's movements), even at the expense of students' interest and active participation. The co-oper also assumes all responsibility for fixing problems and treats uncertainty in the emerging activity as an obstacle to overcome (which could have been anticipated by "better" planning). The following vignette illustrates the adult-run approach:

A second year co-oper prepared a social studies activity of "Cooking Inventions" in the first/second-grade classroom. She brought in foods that pioneers might have eaten (biscuits, beans, deer and antelope meat); the children helped cook the meat, sampled the goodies, and voted on which tasted best. The co-oper seemed product-oriented, prioritizing the outcome of the cooking. She assigned the children small "hands-on" operations in the meat preparation (e.g., turning a piece in the frying pan). She lectured the children about pioneers

and antelopes without checking with the children what information about pioneers they might want or need to know.

The co-oper took full responsibility for all emerging material problems from looking for necessary utensils to searching for something lost by one girl. The co-oper tried to control the children, positioning herself above them, often asking them to sit and not move around, and controlling all materials and books. She was fully responsible for management — when recess approached, she almost physically moved children along in the activity. She struggled to keep the children in the task, and tried to make them work by referring to the structure of her activity, being nice, or simply commanding them. She was frustrated throughout the activity and was tense. In the follow-up interview, the co-oper described her learning activity as "hands-on" and "informative."

In the *children-run approach*, the co-oper allows the children to control the activity definition and the activity, leaving them with minimal, reactive guidance. The co-oper might simply observe the children or follow their direction, or be uninvolved with the children, staying available only for minor help. The co-oper provides an enriched environment, but does not otherwise contribute to the ongoing activity. This approach treats children as discoverers, with the co-oper not sharing his or her own inquiries, ideas, or interests with the children.

A ninth year co-oper introduced "Inventing with Blocks" in the fourth/fifth-grade classroom. The co-oper oriented the children to build creative marble tracks using wooden blocks which she brought, demonstrating how some blocks could be connected. Then she sat aside and let them explore without interference, watching as groups of children built with the blocks, interacting only reactively when the children asked for help (such as when one child complained that another took blocks from him). It was reactive guidance. She brought an enriched environment, introduced the children to the blocks, and let them explore without interference. After a short time, she totally withdrew from the activity. It was up to the children to work on the marble track or just entertain themselves by any means. When children came to her for help, she provided enough help to move them in their activity. She articulated her approach in the interview, "What I want them to do is to manipulate with

physical objects, create something, experiment with it, and change it, move it around instead of just [working] conceptually... or on paper..."

The co-oper left all responsibility for problems to the children unless things escalated out of control and then she stepped in to help the children work it out. There were no limitations on using the blocks or any other objects in the classroom; the children freely moved in and out of the activity (some went to play with costumes), while the co-oper sat on the periphery watching or left the classroom from time to time. The co-oper seemed to transfer all responsibility for management to the children. Motivation to be involved was left to the children; they could work on the marble track or just entertain themselves by any means available in the classroom, or physically leave the activity. She was relaxed and tolerated a lot of noise, disruptions, and even minor fights among kids, monitoring their conflicts without intervention.

The *collaborative approach* involves guidance emerging from shared participation and interests, with mutuality between the co-oper and the children, who share the opportunity for learning, participating actively together, and assisting each other, with direction and anticipation provided by the co-oper. Preliminary planning by the co-oper has a general outline rather than a detailed character, anticipating the children's contributions in planning and modifying the activity. Problems and uncertainties emerging in the activity (including interpersonal conflicts, lack of materials or time, or unexpected events) are to be expected and welcomed as learning opportunities rather than seen as obstacles to be avoided or overcome.

A fifth year co-oper engaged the children in "Inventing Words" in the fifth/sixth-grade classroom — children invented their own words and their definitions. The purpose of the activity, according to the co-oper, was "to experience creative language;" she supported the activity with the book *Jabberwocky* (Carroll, Bantock, and Meyer, 1991) and dictionaries. Her instruction was embedded in children's inquiry with flexible planning. The co-oper did not allow shallow contributions from the children; she helped them to elaborate and extend ideas and the activity (e.g., asking for pronunciation of the invented words, their possible

origin, context of use). She was supportive of students' contributions and asked for children's help in defining words, and she redirected children asking for help to other children.

When problems emerged, the co-oper treated them as shared opportunities for learning -- she helped the children use dictionaries or turned spelling questions back to them, and when they were out of supplies (e.g., pen, dictionary), she discussed where and how they could get them. The co-oper sat at the same level as the children, around a big table at which all could easily communicate with each other; materials were moved freely on the table. She was relaxed, comfortable, and playful with children at times. When the teacher announced that recess was in 5 minutes, the co-oper asked the students whether they could finish or stop at some step to finish later. The co-oper tried to help each child to manage his/her own learning, assisting them in moving into and out of the activity by discussing when they might join or leave the activity and why.

There was an emphasis on process in the collaborative activity, with a kind of communication that relates individual contributions together through sharing and integrating ideas. The collaborative building of ideas is illustrated in part of another example:

In a science activity of inventing clay boats to carry as much cargo weight as possible, one child commented that he could not put more cargo on his boat because there was no more room on the boat. The co-oper asked the other children how they were dealing with that problem, and a few students showed their boats. The co-oper used this opportunity to discuss the importance of the boat shape as a relevant variable in the children's experimentation. One child suggested using a heavier type of block, so fewer cargo blocks would be needed. The co-oper commented that this was another, complementary way of solving the problem, and asked the children what kind of cargo could be used to make a heavier cargo load. The co-oper used a variety of collaborative means including asking for help and sharing, comparing, and bridging ideas to integrate at least five themes: shape as a variable, how to place cargo on the boat, how to make more room on the boat for cargo, how cargo and boat space "interact," and what is the best cargo to provide weight with minimal space.

Evidence of Parents' Learning of the Collaborative Educational Philosophy

To examine whether the more experienced co-opers more commonly demonstrated collaborative approaches and newcomers more often showed one-sided (adult-run or children-run) approaches, we first examined the seven possible patterns of the three teaching approaches and their combinations (see Figure 2). On the basis of similarity, we grouped the 45 co-opers into two experience groups: *Newcomers*, who were in their first or second year in the OC (N=21) and *Oldtimers* who were in their third or later year in the OC (N=24).[7] We also reduced the seven combinations of the three teaching approaches to five mutually exclusive groups by making one category ("mixed one-sided & collaborative") out of the three rarely observed categories that mixed adult-run and/or children-run approaches with the collaborative approach.[8]

-----------Insert Figure 2 and Table 1 about here-----------

As expected, use of the collaborative approach was judged more common among more experienced co-opers than among less experienced co-opers (see Table 1 for significance levels). The collaborative approach was coded for only 10 percent of the newcomers compared with 46 percent of the oldtimers. Figure 2 suggests that the increase in the collaborative approach jumps with co-opers' third year of experience in the OC.

One-sided approaches were more common among new co-opers than oldtime co-opers. A one-sided philosophy (adult-run, children-run, or both) was coded for 76 percent of the newcomers but only 34 percent of the oldtimers. The difference was mostly due to the extent of adult-run approaches, which were coded for 33 percent of the newcomers but none of the oldtimers (see Table 1 and Figure 2; Fisher's Exact test was significant at the 0.005 level). The other types of approaches (the children-run and mixed categories) did not differ significantly with extent of co-opers' experience.[9]

Specific activities seemed not to determine the teaching approaches. Of ten co-opers who engaged in the "same" activity — helping children fill out "patent" forms for the Invention Convention, the main event of the activity program, — four used the collaborative approach, two mainly used the adult-run approach, three used the children-run approach, and one used a mixture of all three. For example, in a collaborative approach, one co-oper discussed with the

children what other people might want to know about their inventions and how to make the description of the inventions more comprehensible and attractive. In an adult-run approach, another co-oper was mainly concerned with filling in the form correctly, with proper spelling. In a children-run approach, another co-oper treated the activity as a "free" activity where the children wrote or drew whatever they wanted while the co-oper was available to answer questions.

We interpret the differences in the teaching approaches of the new and oldtime co-opers as indicating a shift toward collaborative teaching as co-oping experience in the OC increases. Of course, these data are cross-sectional, so the idea that the variations across experience groups represent co-opers' *learning* is an inference. We cannot rule out selection effects, such as the possibility that parents with one-sided approaches who are dissatisfied with the program might simply leave it. (However, only one parent out of the 45 withdrew from the OC the next year because of disagreement with the OC teaching philosophy.) We also cannot rule out the possibility that different numbers of parents with one-sided or collaborative approaches might have joined the OC in different years, creating different distributions in different cohorts. However, these explanations are rendered less plausible by converging evidence suggesting that the differences between newcomers and oldtimers are a function of learning with experience.

Our interpretation that the results suggest learning by the co-opers is supported by co-opers' self-reports in an earlier survey of most of the co-opers in the OC (Rogoff, Matusov, and White 1996; see also Rogoff et al. 2001). In response to a written question "Did you feel like you didn't know what you were doing at first?" most co-opers answered "yes." They referred to difficulties in understanding the structure and processes of the OC classrooms, their own role, and how to organize collaborative guidance with the children. Some (one-sixth of them) reported beginning to feel like they knew what they were doing in their first year, one-third reported the transition in their second or third years, and one-sixth said it occurred after their third year in the OC (and for some newcomers and oldtimers it had not happened yet). These self-reports are consistent with the suggestion from our data of a difference around the second and third year, and the observation that not all of the oldtimers were coded as using collaborative

approaches. They are also consistent with our follow-up questionnaires of co-opers and teachers.

Co-opers' and Teachers' Judgments of Co-opers' Understanding of OC Co-oping

In follow-up questionnaires, both the teachers and the co-opers themselves judged most of the co-opers to be OK or model co-opers (teachers judged only seven of the 45 co-opers to be having difficulty; only eight of the 39 co-opers responding judged themselves to be having difficulty). Their judgments of which parents were having difficulty lend support to the idea that co-opers develop understanding of the OC philosophy of practice with greater experience (though of course, these are also cross-sectional data).

Newcomers were more likely to represent themselves as not having a clue about the OC way of co-oping, struggling to understand it, or just beginning to grasp it, than were oldtimers (38 percent vs. 9 percent, χ^2 (1) = 4.8, p < .05). Oldtimers were more likely to represent themselves as seasoned co-opers who understand the OC way and can fill various roles in the structure (65 percent vs. 12 percent, χ^2 (1) = 10.7, p < .001).

Similarly, the teachers reported that there were more model co-opers among oldtimers than among newcomers (54 percent vs. 24 percent, χ^2 (1) = 4.3, p < .05). They also reported that more newcomers than oldtimers were having difficulties (beginning or struggling to understand the OC way or in the dark about OC co-oping; 29 percent vs. 4 percent; χ^2 (1) = 5.1, p < .05). The teachers' and co-opers' judgments about the co-opers' teaching support the idea that many new co-opers learn to teach in ways that are more compatible with the OC philosophy while co-oping.

Relation between teachers' and co-opers' judgments of quality of co-oping and our coding of co-opers' philosophy-in-action. The teachers and parents showed some agreement regarding which co-opers were the model/seasoned co-opers (χ^2(1, N=39) = 4.2, p<.05). However, they seem to have used somewhat different criteria in their judgments of which parents were having difficulty (their agreement was not high; Kappa = .33, p<.05). Although both groups seemed to associate non-model co-oping with one-sided approaches, the co-opers seemed

more favorable toward children-run approaches and more critical of adult-run approaches than were the teachers.

Most of the co-opers who were reported by teachers to be having difficulty used the children-run approach in the videotaped activities (four out of seven co-opers; χ^2(1, N=45) = 4.8, p<.05). But almost all of the co-opers coded as using the children-run approach judged themselves as "an OK co-oper, who basically understands the OC way" or "a seasoned co-oper, who understands the OC way and can fill various roles in the structure" (eight of the nine co-opers; χ^2(1, N=39) = 4.8, p<.05). [Of the eight co-opers who judged themselves to be having difficulty, only 1 had been coded as using the children-run approach in the videotapes; the remainder were spread in the other teaching approaches.] Co-opers' judgments of not being seasoned co-opers were associated with using the adult-run approach in our videotaped observations (χ^2(1, N=39) = 4.4, p<.05). This pattern supports the idea that co-opers develop away from adult-run approaches of traditional schooling toward children-run approaches (in a classic pendulum swing), and with greater experience become more collaborative.

Possible Contributions to Co-opers' Transitions

The OC has several formal mechanisms for aiding newcomers in understanding how to co-op, including provision of written materials (a manual, handouts that sometimes accompany the newsletter to parents, and books available in the Parent Resource Library), philosophy and curriculum workshops, and a committee to orient new families. Here we discuss several other possible contributions to the co-opers' development: the children themselves, the co-opers' own increasing familiarity and comfort with co-oping, and interactions with teachers.

Informal observations of our videotapes suggest the importance of children's contributions to co-opers' approaches (see also Rogoff et al. 2001). Some co-opers who generally demonstrated the children-run approach switched to the collaborative approach with children who insisted on collaboration with them. Some children even seemed to induce the collaborative approach across different co-opers who were generally judged to use a one-sided approach. For example, a boy in the first/second-grade classroom seemed to contribute to shifting a few co-opers who worked with him from mostly one-sided approaches to a more

collaborative approach by using collaborative means. With a co-oper mainly using the children-run approach, the boy asked many questions about his own clay project and interpreted the co-oper's answers in a way that moved the co-oper to elaborate more. With a co-oper using the adult-run approach, this boy involved the co-oper in considering modifications to the co-oper's assignment of inventing cookie recipes — for example, by asking how a cookie is different from other food and considering broadening the conventional definition of cookie.

It also appears that a co-oper's familiarity or comfort with an activity can shift their teaching approaches. In separate data, we happened to observe one co-oper three times over his first month in the OC. For this co-oper, familiarity or comfort with the activities seemed to contribute to a shift from a children-run to a collaborative approach. In the first observation, the teacher asked him to facilitate an activity of inventing new board games. The co-oper stayed at the periphery of the children's activity, spending most of the time observing the children and helping them when asked, in a children-run approach. A few weeks later, the teacher asked him to help the children disassemble old equipment so the children could use the parts for their inventions. The mechanical work of disassembling seemed more comfortable for the parent than inventing board games. At the end of the third observation, he easily extended and elaborated questions that children asked him and initiated his own topics of discussion in a collaborative approach.

The role of co-oper comfort and interest in their contributions to instruction is supported by teachers' organization of co-opers' activities. Carolyn Turkanis[10], a seasoned teacher, told us that she sees her role as helping co-opers "connect to something they enjoy doing" (personal communication July, 20 1994). To plan the classroom structure in a way that fosters and builds on co-opers' interests and comfort, at the beginning of the school year, she interviews the co-opers about their subject areas of co-oping and the number of children they work with comfortably. In the classroom, OC teachers often ask co-opers how many children they can handle in their activity, assisting them in working within a comfortable zone.

We observed a few cases where co-opers switched their co-oping approaches from collaborative to adult-run apparently because they could not manage a big group of children in a

collaborative way. In one case, a co-oper worked collaboratively only with one child, while rigidly assigning work to other children to put them on hold to ensure collaborative interaction with the target child. Another co-oper worked collaboratively only with a small group of two-three children — she easily incorporated children's different suggestions and tracked the development of themes — but when the group increased and children's communication intensified, she switched her role to acting as a "filter" that unilaterally defined which of the children's suggestions were acceptable without providing the rationale of her decisions to the children.

In addition to being sensitive to particular co-opers' comfortable group size, often the teachers provide tried-and-true activities that allow newcomers to engage in effective instruction without needing to devise the activity. The teachers observe the co-opers' activities over time, giving them opportunities to try new things and encouraging greater responsibility when they judge that a particular co-oper is ready. The teachers thus ensure that the children benefit from the contributions of newcomers as well as oldtimers, and support the co-opers in their own learning.

The teachers aid co-opers' development by consulting with them collaboratively. Their assistance does not preach one approach, but builds from the co-opers' perspective. Leslee Bartlett, a seasoned OC teacher, reported that she uses the co-oper's point of view and philosophical model when she helps a co-oper — asking how the co-oper perceives the problem, how to solve it, and how the teacher or somebody else might help (personal communication July, 20 1994).[11] By helping the co-oper within the co-oper's own teaching approach, the teacher opens a channel of collaboration and learning, which paradoxically may lead co-opers into the collaborative approach of a community of learners. The teacher involves the co-oper in a collaborative process of thinking about why, for example, there was "a disciplinary problem" (from the co-oper's adult-run perspective), and through this collaboration with the teacher, the co-oper has the chance to participate in a collaborative model of teaching and learning that may extend eventually to their work with the children.

The Ecology of the Teaching Approaches, and the Role of Heterogeneity

In this concluding section, we argue that the particular teaching approaches that we studied need to be understood in the context of the overall ecology of the school (Fein 1971) and its surroundings, and that despite the need for many newcomers to learn to function within a new philosophy-of-action, there is room for heterogeneity in the overall profile of such a school community.

For some newcomers to a school like the OC, the collaborative approach may not require a philosophical shift from one-sided approaches. In societies such as Japan where a community of learners model of education may be common in elementary schooling (Chikako Toma, personal communication November, 12 1994), a collaborative philosophy-in-action would presumably be congruent with many participants' prior educational experience. This seems also to be the case for a few newcomers who join the OC already familiar with a community of learners model from their own schooling experience or from volunteering in some co-operative preschools.

Co-opers unfamiliar with the collaborative approach may yet make important contributions to instruction. To examine this idea, we coded the videotaped interactions in terms of the emotional supportiveness of the co-opers with the children and the developmental suitability of their activities for fostering children's involvement in learning. We compared the prevalence of these aspects of co-oping for co-opers using the one-sided approaches (adult-run, children-run, and their mixture; N=24) and collaborative approaches (collaborative and mixture of collaborative and one-sided; N=21).

<u>Supportiveness of the co-oper's relations with the children</u>. Most of the co-opers demonstrated primarily or partially supportive relations; only 1 session was judged as involving adversarial relations and only a few were judged as involving unilateral relations. (In supportive relations, the co-oper promoted respect, used compromise to solve interpersonal problems, and often prevented problems from becoming overwhelming by changing the emotional climate or the topic or tempo of the activity; the co-oper appeared nurturing and secure, acknowledged his or her own mistakes, and made suggestions with justifications and openness. In unilateral

relations, the co-oper was strictly task-oriented, constantly reminding the children of rules, physically moving objects or children to solve problems, and directing children without providing rationales.)

Supportive relations with children occurred in 100 percent of the sessions using collaborative approaches, suggesting that they are part of the definition of the collaborative approach in the OC. Supportive relations were also used by 79 percent of the co-opers using one-sided approaches, not a significant difference from the co-opers judged as using collaborative approaches. An example of a co-oper using the adult-run approach and engaging in warm and friendly interpersonal relations was one who thanked each child at the end of the activity for the child's willingness to "work for" her.

However, compared with co-opers using collaborative approaches, co-opers using one-sided approaches were more likely to use unilateral relations. In the five sessions (21 percent) with mainly unilateral relations, all involved co-opers whose teaching was judged as one-sided (see Figure 3).[12,13]

------------Insert Figures 3 and 4 about here-----------

Although the results indicate that in the OC, supportive interpersonal relations were associated with collaboration between the co-oper and the children, the one-sided approaches did not necessarily involve nonsupportive relations with the children.

Developmental suitability of the activity was a judgment of how effective the co-oper's activity was for children's engagement in learning.[14] Here is how we define the coding categories for the coders:

Low suitability involves insufficient challenge or support, with expectations that are too high or low. The activity could be too familiar for the children or the co-oper could fail to communicate the challenge of the activity (see Lave, 1990). The co-oper might "feed" the children factual nonproblematic information that requires only simple decoding, with shallow participation by the children. Alternatively, the co-oper might withdraw from active guidance, not providing elaboration and support. For example, one co-oper asked children to mix primary colors randomly without any reflection on the process or a system; some

children treated the activity as entertainment whereas others seemed to feel lost without clear direction.

High suitability activities are in the children's "zone of proximal development" (Vygotsky, 1978). They are challenging yet approachable for the children, encouraging them to elaborate ideas or themes or make links between ideas. For example, the co-oper in the Inventing Words activity (above) presented ways for the children to take the activity deeper, including how to make the definition sound more dictionary-like, possible language origins of the word on the basis of phonetic analysis, and possible contexts of usage of the invented word.

Almost all (95 percent) of the co-opers who used the collaborative approaches organized their activity with some or entirely high developmental suitability, whereas only about half (54 percent) of the coopers who used one-sided approaches provided activities with high developmental suitability, a significant difference (coefficient of contingency = .42, $\underline{p}$. < .005, see Figure 4).

The nearly 100 percent association of the collaborative approach with both high developmental suitability and supportive relations seems to provide a profile of the OC community's philosophy of practice — a coherent unity that many co-opers may come to use as they become more seasoned members of this community of practice.

In support of the idea that the philosophy-in-action is a coherent unity is the finding that co-opers' provision of activities that were developmentally suitable for children's learning was associated with the co-opers' teaching approach but not with their extent of co-oping experience (although teaching approaches varied with years of experience). Almost the same numbers of newcomers and oldtimers organized activities with high, mixed, and low suitability. The close association of the collaborative approach with high developmental suitability, and lack of association of years of schooling with developmental suitability, suggests that working within the OC philosophy-in-action — rather than simply number of years co-oping — is central to development as an OC co-oper.

At the same time, it is important to note that the collaborative approach was not the only approach in which co-opers were supportive with children and provided developmentally suitable learning activities. Most of the co-opers who employed one-sided approaches also used supportive relations with the children (and adversarial relations were almost never observed); about half provided activities of high developmental suitability during at least part of their sessions. (In addition, teachers judged only a few of the co-opers as just beginning to understand the OC way or struggling or in the dark; they judged 71 percent of the newcomers and 96 percent of the oldtimers as OK or model OC co-opers).

Compatibility of a co-oper's approach with the community's practices is based on a synergy of mutual tolerance and adjustment, multiplicity of community practices and values, and open-endedness in developing ways of doing things (Matusov 1996). This idea is consistent with efforts to extend the concept of "the zone of proximal development" to embrace diversity in community practices (Newman, Griffin, and Cole 1989; Rogoff 1990; Tharp and Gallimore 1988). Members of a community that is built on a collaborative philosophy might find an ecological niche where they can be supported by and contribute to the community while practicing different teaching approaches, including one-sided ones (as was the case for 34 percent of the oldtimers in our study). Other characteristics of the co-opers such as open-mindedness, comfort with the children, willingness to risk and experiment, and helpfulness might contribute to their being valued and effective OC co-opers.

It is possible that in other institutional and cultural settings, other approaches might have more "ecological validity" than the collaborative approach. For example, in a school where teachers and students expect and effectively employ an adult-run approach, the introduction of a collaborative approach might cause institutional backlash and resistance from the teachers, the administration, and even the students (see Fullan 1993).

The prevalence of the adult-run approach in U.S. schools emanates from a historical context that has prioritized bureaucratic efficiency, based on an industrial model — with a hierarchical organization of decision making — over the past century and a half, during which public schooling has become compulsory and widespread in the U.S. and other nations (Callahan

1962; Rogoff 1994; Rogoff, Matusov, and White 1996). The broader context of this model of instruction contributes to the everyday practices in many U.S. (and other) schools, although it contrasts with collaborative models that prevail in informal learning and schooling in some communities (Chavajay & Rogoff 2000; Erickson & Mohatt 1982; Hatano and Inagaki 1991; Lipka 1991; Macías 1987; Pelletier 1970; Philips 1972; Paradise 1991). Clearly, the value of diverse approaches varies with different communities' values and goals, and child and adult participants likely learn different 'lessons' from engagement in collaborative, adult-run, and children-run approaches (see Matusov, Bell, and Rogoff in press).

In sum, among oldtime co-opers in this innovative school, there was greater use of the collaborative philosophy-in-action, in which learning activities and guidance are based on mutuality between the adult and the children, and less use of one-sided approaches in which learning activities and guidance are mainly controlled either by the adult or by the children. Most newcomer parents — 76 percent of them — were judged to be using a one-sided educational philosophy-in-action. In contrast, most oldtime parents — 67 percent of them — were judged to be using a collaborative approach to teaching (46 percent) or collaborative mixed with one-sided approach (21 percent). We suggest that OC parents may be learning a collaborative approach to teaching as they participate in this community of learners, perhaps involving a transformation from their own schooling experience, which was likely to have involved an adult-run model of instruction.

This study addresses the development of adult participants in an innovative institution and, by extension, how a community of learners maintains and develops its philosophy of teaching and learning with inclusion of new generations of adults that need to explore the community's practice and philosophy. The community itself develops, in part from the process of assisting newcomers' learning and the resulting attempts to articulate its philosophy and practices (Fullan 1993; Johnston 2001; Rogoff et al. 2001), as well as by adapting to address the challenges presented by incorporating new generations in the community. Our study suggests that educational institutions seeking change of philosophies-in-action need to provide

opportunities and means for adults' development and learning that are embedded in the development of the institution itself.

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Table 1. Number (and %) of newcomers and oldtimers judged to demonstrate adult-run, children-run, and collaborative teaching approaches

Teaching approaches	Newcomers (n=21)	Oldtimers (n=24)	$\chi^2(1)$	p
Adult-Run	7 (33%)	0 (0%)	7.1	<.01
mixed Adult-Run & Children-Run	2 (10%)	4 (17%)	.1	n.s.
Children-Run	7 (33%)	4 (17%)	1.7	n.s.
mixed One-Sided & Collaborative	3 (14%)	5 (21%)	.0	n.s.
Collaborative	2 (10%)	11 (46%)	7.2	<.01

Endnotes

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[1] This acronym OC had lost its initial meaning coming from "open classroom." Children often explained newcomers that OC meant "Authentically Collaborative" (using phonetic spelling).

[2] Similarly, studying adult learning in business organizations, Argyris and Schön (1978) argued that people often treat unilateral control of the task versus refraining from guidance as the only alternatives.

[3] One common aspect of the parents' professions was that they allowed parents to come in the middle of the day for three hours to work in the classroom.

[4] This gender distribution across the OC parents in the study reflected the gender of parental involvement in the OC.

[5] For reliability purposes, all 45 sessions were coded by the primary research team of two people, and 23 sessions (51% of the data base) were coded by another team of two research assistants who did not know the experimental design or the questions of this study, and were unfamiliar with the OC. Cohen's Kappa ranged from .64 to .82, reflecting good agreement (Fleiss 1981).

[6] Here the terms "adult," "parent," and "co-oper" are used interchangeably.

[7] We also examined the data treating years as a continuous variable rather than in the 2 categories, and the results were similar.

[8] Chi-square was used to analyze differences between the two experience groups within each of the five teaching approaches, with Yates' correction for continuity and Fisher's Exact Test when the expected values were less than five.

[9] Co-opers' teaching approaches did not seem to be related to children's grade level, except for the adult-run approach (χ^2(1, N=45)= 4.2, p<.05) — all seven co-opers using the adult-run teaching approach were newcomers in lower grades, so we cannot tell whether the adult-run approach only occurs with newcomers in the lower grades. The collaborative approach and collaborative-mixed-with-one-sided approach were more common for oldtimers than newcomers in both lower and upper grades. In the lower grades, only 24% of the newcomers (versus 66% of the oldtimers) used the collaborative or mixed-collaborative approaches — the remaining 76% of the newcomers used one-sided approaches. In the upper grades, only 25% of newcomers (versus 67% of the oldtimers) used the collaborative or mixed-collaborative approach (and 75% of the newcomers used one-sided approaches).

[10] All names of teachers and school administrators used in the paper are real and used with permission of the participants. Anonymity of parents and children involved in the study was protected.

[11] See Tharp and Gallimore (1988) for a similar but more detailed description of how a seasoned educator collaborates with a new teacher to improve her teaching.

[12] Chi-square crosstabulation analysis yielded a coefficient of contingency of .31, significant at the .05 level. Tests of paired chi-square comparisons show that the children-run approach was more associated with supportive co-oper/children relations than was the adult-run approach, with a coefficient of contingency $\underline{C}$=.47, $\underline{p}$<.05 (see Figure 3).

[13] Use of unilateral relations was also more common among co-opers new to the OC. Five newcomers and no oldtimers showed mainly unilateral relations ($\underline{c}^2$ (1) = 4.2, $\underline{p}$ < .05).

[14] To make sure that coders' preconceptions did not link developmental suitability with the teaching approaches, developmental suitability was checked in an independent coding of 22 sessions by an assistant unfamiliar with the study's focus on teaching approaches and the co-opers' experience in the program. Reliability Kappa coefficients of this blind coder with the original coders were .65 for low developmental suitability and .64 for high developmental suitability — which, according to Fleiss (1981), reflect good levels of agreement — suggesting that coders' knowledge of co-opers' teaching approaches or experience did not affect their judgments of developmental suitability.