

INTRODUCTION: PROFESSIONAL DEVELOPMENT AND COOPERATIVE LEARNING

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"Cooperative learning." These two simple words have spawned many interpretations and models, and much debate about philosophy, research, and use over the last three decades. This volume describes different approaches to professional development for cooperative learning and how the use of cooperative learning for teacher learning is leading to new insights into professional growth in schools. The book has two main purposes: (1) to enable educators to make informed decisions and choices about selecting, implementing, and evaluating cooperative learning approaches with respect for the differences and diversity of goals among professionals, and the variations within school contexts, and (2) to consider the goals of teachers' professional development in the context of organizational reforms that foster systemic school change, such as the development of learning communities.

Connecting Professional Development with Cooperative Learning

Professional development conveys a commitment to high-quality learning experiences for all the adults who work with students on a regular basis, including administrators and other non-teaching staff. It reflects an important theme of the book: cooperative groupwork practices can inform educators not only about the goals of professional development, but how to actually organize and craft professional development experiences for adults.

Many of the contributors use the term "staff development" because it conveys specific developmental activities within a school organization. It is important, however, to cultivate long-term, sustained support between colleagues who act differently in relation to one

another than in traditional staff development efforts. Much staff development has taken the form of inservice training for teachers and administrators, and its aim is to equip teachers with new classroom strategies and experiences to assist the achievement of students. The experiences of the contributors (see also, Battistich & Solomon, 1995; Battistich, Solomon & Deluchi, 1993; Brody, 1992; Cohen, 1991/2; Dasho & Kendzior, 1995; Schmuck, 1991/2; and Watson, 1995), and others interested in teachers' professional development (Auer, 1994; Little, 1993; Richardson, 1994, 1996), however, suggest that simply providing information and experience results in only a minority of teachers who are still implementing the ideas and practices several months later.¹ Contributors will refer to "trainers" and "trainings," and we accept that language because it is still a reality; it communicates a particular kind of inservice education for teachers and administrators.

There is much that can be learned about good practices in the professional development of teachers and administrators from the consultants, teacher educators, and staff developers who for many years have been teaching classroom teachers and school administrators about one of the more complex instructional practices, namely, cooperative learning. The greater portion of this book, therefore, is devoted to approaches to cooperative learning and the authors' reflections about implementing good cooperative groupwork practices.

The book couples the ideas of professional development and cooperative learning because it is the relationship of the two that sustains not only good cooperative learning practices in schools and classrooms, but the larger goal of creating schools that are learning communities. Many of the contributors in this volume have evolved from focusing primarily on how to change teachers' classroom practices in order to improve student achievement, to considering factors that affect teachers' abilities to sustain new, more socially complex practices. This evolution reflects a trend in both the research and practitioner communities from positivist, out-side in, rule-based dissemination approaches which are acontextual, to approaches that account for context, and encourage teachers to situate their experiences and construct their own knowledge (Jacobs, 1997). Authors discuss aspects of the organization of schooling that are potential inhibitors and facilitators, or functions that affect teacher learning—the teachers' histories, their subject areas, grade levels, the culture of the school, the support of the principal, the district's commitment to professional development over time, and so on. The effect of sustaining this theme throughout the book is to communicate to all levels of educators the need for a shift in thinking about the questions:

Who is responsible for the continuing development of teachers? *What* is responsible practice for insuring continuous improvement in schools?

Importance of Learning Communities

There is also the recurring theme in this book regarding how and why teachers, students, administrators, and staff developers should collaborate, and that is to develop a sense of collegiality in the interest of restructuring schools as learning communities (Cooper & Boyd, 1994; see also Forest, chapter 15 this volume). In learning communities there is the expressed value and goal that every child and adult learns; members have access to information, research, and training so they can learn continuously. Parties from the larger community engage in discussions to determine what kind of schooling they want for their community. If school people are to generate systemic reforms toward becoming learning communities, the learning of teachers must be central to any discussion. Creating collaborative learning communities requires a different epistemology and even a reconceptualization of the very concept of teacher.

Teachers as the Focus for Developing Learning Communities

Teachers are the focus of this volume because we are interested in how classroom teachers construct knowledge and how this knowledge transforms their teaching and their sense of themselves as professionals. What is important about the selections in this volume is that they focus the discussions about cooperative learning on teachers and administrators and their professional growth and development. A highly effective way to create sustained implementation of cooperative learning, or any new approach for learning and teaching, is to focus on the teacher. The major work in transforming schools begins and ends with teachers because they stay the longest, have the most contact with students, and potentially have the power to change the social relationships of the school and classroom. Teachers' experiences in classroom life have been under-represented and ignored in the research literature, even through their experiences are very different from their students (Hargreaves, 1996). Educators have been increasingly interested in how teachers learn a new practice and how they adapt innovations through their own beliefs, conditions for teaching, and personal biographies (Connelly & Clandinin, 1990; Miller, 1990; Palmeri, 1996; Witherell &

Noddings, 1991). By inviting trainers, consultants and teachers who have worked systematically and carefully over the last three decades to tell us how they assist in teacher development for using cooperative groupwork effectively, we hoped to find more about teachers' experiences in adapting cooperative learning to their particular situations.

Cooperation as a Value

Another theme of this volume is that cooperation is a legitimate value to be examined in schools and classrooms (see Schniedewind and Sapon-Shevin, chapter 10, and Forest, chapter 15). Cooperation is one of the oldest concepts we associate with human and systemic survival. It is much more than a simple set of strategies and procedures for re-configuring students or adults in schools. Cooperation can be viewed as a deeply rooted set of values and principles that align overt practices with more covert attitudes and beliefs. To embrace cooperation as a value worthy of guiding student social, moral, and intellectual development in schools may require not only a shift in the way educators do things, but also significant changes in the way we think, feel, speak, and view others.

Cooperation is grounded in the human moral and social capacity to take the position of the other through numerous forms of reciprocity, mutuality, and give and take. From this point of view, we are equally concerned about the developmental aspects of authentic cooperation in children, adolescents, and adults, as well as the complexity of using mutuality and reciprocity as processes for academic ends. Cooperation is an outcome as well as an approach to planning, delivering, and sustaining our educational institutions.

Definitions of Cooperative and Collaborative Group Learning. There has not been a time in western education when interest in cooperative group work has been greater, certainly not since the progressive era, when the philosopher John Dewey encouraged educators to build learning communities based on democratic principles and productive work, grounded in respect for others and the value of cooperation (1916, 1938). The national curricular reform programs of the 1960s in science, math, and the humanities anticipated the need for a more sophisticated understanding of why and how learners achieve while engaged in small group problem solving.² Many of those programs failed to take root because teachers were not equipped to manage the complexities of ill-structured but highly engaging tasks with student-directed group learning.

By the early 1970s educators were building classroom models based on studies of human social interaction and group learning. These

pioneers of effective groupwork practices, for example, Ron Edmonds (1979), David and Roger Johnson (1970), Shlomo Sharan and Yael Sharan (1976), Robert Slavin (1983), Elizabeth Cohen (1994), and Patricia and Richard Schmuck (1968; 1997), stood on the shoulders of the research and theory of educators, sociologists, and psychologists such as Kurt Lewin (1948; 1951), Jacob Moreno (1953), John Dewey (1916; 1938), Ron Lippitt (1940; 1962), Morton Deutsch (1949), and Alice Miel (1952).³ This strand of work eventually led to the development of many of the approaches to cooperative group learning discussed in this volume.

During this same period other educators were defining another framework for groupwork practices derived from theories about the social nature of human knowledge. The different roots of constructivism from Lev Vygotsky (1978), Jean Piaget (1978), George Herbert Meade (1978), Thomas Kuhn (1970), George Kelly (1955), and Richard Rorty (1979) created a context for different claims and practices in collaborative groupwork and classroom instruction. For example, in the area of whole language, a literacy approach that enacts the theory that knowledge is based on socially-constructed agreements, the role of groupwork is to promote rich contexts for purposeful talk (Britton, 1970; Bruffee, 1993). Teachers consider questions about classroom management and motivation in a context that places the student at the center of control over the content and the process. When one compares the constructivist orientation of, for example, the Child Development Center Project (see chapter 7 this volume), with other approaches to cooperative learning (see Kagan & Kagan, chapter 5, for one example) the differences become apparent. Table I.1 demonstrates some of the epistemological differences in how each tradition could guide the framing of questions for teaching and learning in the classroom (Brubacher, 1991).

Each of the different frameworks for cooperative and collaborative learning generated different methods and research, and lived alongside one another without much connection or conflict until the 1980s, when educators began to understand the implications of different practices for the classroom. These terms draw from different traditions, speak to different subject fields, and yet overlap in terms of means and ends. Cooperative and collaborative learning now embrace wide variations in formats and applications, as well as differences in underlying philosophies and theories of learning (Brody, 1992; Matthews, et.al, 1995).

There are currently over 20 different cooperative groupwork models and methods that an educator can learn—tied together by the idea that all students can succeed in school, and by a loosely defined commitment to develop positive values and skills that promote democracy, equity, and productive interdependence through active involvement in small peer

TABLE I.1

Questions for Teaching and Learning in the Classroom

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- I. *Questions Teachers Ask From the Cooperative Learning Perspective*
1. How do we teach social skills?
 2. How can we develop self-esteem, responsibility, and respect for others?
 3. How does social status affect learning in small groups?
 4. How do you promote problem solving and manage conflict?
 5. Are extrinsic or intrinsic rewards most effective?
 6. How can we prove that cooperative learning increases academic achievement?
 7. How do we teach children to take on various roles?
 8. How do you structure cooperative activities?
- II. *Questions Teachers Ask from the Collaborative Learning Perspective*
1. What is the purpose of this activity?
 2. What is the importance of talk in learning?
 3. To what extent is getting off topic a valuable learning experience?
 4. How can we empower children to become autonomous learners?
 5. What is the difference between using language to learn and learning to use language?
 6. How can we negotiate relevant learning experiences with children?
 7. How do we interact with students in such a way that we ask only real questions rather than those for which we already know the answer?
 8. How can we use our awareness of the social nature of learning to create effective small group learning environments?
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Adapted from Mark Brubacher (1991).

group activities. From a macro-view, cooperative/collaborative learning is a system of organizing learning that changes student-to-student relationships, teacher-student relationships, the relationship of teacher and students to the school, the nature of knowledge and knowing, and students and teachers relationship to knowledge construction, as well as the locus of control, power, and authority in the classroom and school. On the micro level, cooperative/collaborative learning affects dimensions in the classroom depending on the level of use and complexity of the learning task, the physical organization of the classroom, teacher's instructional and communicative behavior, and student's social and academic behavior (Hertz-Lazarowitz, 1993). Cooperative learning most commonly refers to a method of instruction that organizes students to work in groups toward a common goal or outcome, or share a common problem or task in such a way that they can only succeed in completing the work through behavior that demonstrates interdependence while holding individual contributions and efforts accountable.

TABLE I.2

Common and Varying Attributes Among Major Cooperative and Collaborative Learning Approaches

Attributes Common to all Approaches

1. A common task or learning activity suitable for groupwork.
2. Small-group student interaction focused on the learning activity.
3. Cooperative, mutually helpful behavior among students.
4. Interdependence in working together.
5. Individual accountability and responsibility for groupwork outcomes.

Attributes that Vary Between Approaches

6. Procedures by which students are organized into groups, (e.g., heterogeneous, random, student selected, common interest).
 7. The value of and ways for structuring positive interdependence (e.g., goals, task, resources, roles, division of labor, or rewards).
 8. The value of explicitly teaching groupwork skills: e.g., communication, relational (social), group maintenance, and task skills.
 9. The use of reflection, processing, or debriefing among students and/or between teacher and students on communication skills, academic skills, or group dynamics.
 10. The value of classroom climate-setting through class-building, team-building, community building, or setting cooperative norms.
 11. Attention to student status by the teacher (identifying competencies of low-status students and focusing peers' attention on those competencies).
 12. The use of group structures for organizing the communication pattern within the group.
 13. The question of group leadership: whether responsibilities are rotated among students, shared by structures or roles, or not designated.
 14. The teacher's role in different phases of the lesson, unit, or process.
 15. Emphasis on the value of demonstrating equal participation by all students.
 16. The importance of simultaneous interaction among students in pairs or small groups.
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Adapted from Neil Davidson (1994). *Cooperative and collaborative learning: An integrative perspective*. In Thousand, Jacqueline; Villa, Richard; and Nevin, Ann. *Creativity and collaborative learning: A practical guide to empowering students and teachers*. Baltimore, MD. Paul H. Brookes, Co.

Table I.2 explains the common and varying attributes among major cooperative and collaborative learning approaches. The collaborative approach is prominently represented in perspectives from the United Kingdom. The editors have made a conscious decision to use the term "cooperative learning" as the generic concept to facilitate

reader understanding. Where it is appropriate, both terms will be used to convey the conceptual breadth of this idea.

Widely-Known Approaches to Cooperative and Collaborative Learning

There are many approaches to cooperative and collaborative learning. The most widely-known include Student Team Learning (Slavin, 1983; 1989), Learning Together (D.W Johnson & R. Johnson, 1987, 1989), Group Investigation (Sharan & Hertz-Lazarowitz, 1980, 1982, Sharan & Sharan, 1992), the Structural Approach (Kagan, 1993), Complex Instruction (Cohen, 1994), The Child Development Project (Watson, 1995), and the Collaborative approaches (Britton, 1990, Bruffee, 1993). Four of these main approaches are included in Part II and III of this book: Learning Together (Johnson & Johnson, chapter 11, and Linda Munger Chapter 14), The Structural Approach (Kagan & Kagan, chapter 5), Complex Instruction (Lotan, Cohen & Morphew, chapter 6), and The Child Development Project (Watson, et.al, chapter 7).⁴

There are other approaches that are adaptations of these main-line approaches for different audiences for specific outcomes.⁵ In this volume James Bellanca & Robin Fogarty (chapter 9) present an example of an adaptative approach in their cognitive model. Bellanca & Fogarty work extensively with middle and secondary teachers, representing the influence of cognitive psychology on organizing teacher learning (see also Davidson & Worsham, 1992). Other staff developers, such as Rolheiser & Stevahn (Bennett, Rolheiser & Stevahn, 1991; see also chapter 3) and Cooper & Boyd, (chapter 2) draw from several different approaches as the training situation determines. They represent new directions by staff developers and teachers who have learned the importance of situating knowledge for educators in demanding environments.

While all of the authors have evolved their approaches to cooperative learning training over many years, some consultants, teachers, and staff developers realized the effect of different requirements of grade level, subject-areas, and theoretical developments for their own work with teachers. Schmuck (chapter 12) built his work on the field of organization development. The considerations of subject matter pose adaptation questions for middle and secondary teachers in particular. The demands of mathematics teaching and the middle grades are thoughtfully represented in the work of Sydney Farivar and Noreen Webb (chapter 8) who developed their approach through systematic study of cooperative learning for mathematics (see also Davidson, 1990).

Two approaches may be more allied with the collaborative tradition: the constructivist developmental approach of the Child Develop-

ment Project (Watson, et.al, chapter 7), and Socially-Conscious Cooperative Learning (Schniedewind & Sapon-Shevin, chapter 10). The Child Development Project demonstrates the influence of a pro-social values stance coupled with the constructivist developments in child psychology. The work of Nancy Schniedewind and Mara Sapon-Shevin represents approaches that systematically question the nature of curriculum itself in teaching cooperative or competitive values.

A Framework for Understanding Conceptions of Cooperative/Collaborative Learning

Several authors in this volume refer to the variations in the epistemological orientations of different approaches to cooperative groupwork that affect both the selection of means as well as the aims of education. Brody (1992) adapted Miller and Seller's (1985) curriculum schema to assist in understanding general epistemological orientations and apply these to discern the value assumptions implicit in cooperative learning practices. In chapter 1 she defines these three orientations as transmissional, transactional, or transformational. Authors such as Cooper and Boyd (chapter 2), and Rolheiser and Stevahn (chapter 3) are examples of how experienced staff developers and consultants adapt and adjust their approaches to make sense to teachers who must be able to do the same with their own students.

It is important to resist the tendency to generalize and categorize approaches to cooperative learning because responsible disseminators learn from the teaching and training they do with teachers, and evolve programs and approaches over time. There is still, however, a distinction between approaches developed during the 1950s through the early 1980s when there was a need to create legitimacy for cooperative learning in the research community, and those that grew from the more recent developments based on social constructivist theory.

Approaches that grew out of the psychometric or social psychology tradition were deeply influenced by the need to create fidelity in the model in order to replicate results in the research related to student achievement (see Johnson & Johnson, 1987; Sharan, 1980; and Slavin, 1983, as examples of the research base). In order to conduct systematic research on the effects of cooperative learning on student achievement and disseminate widely to great numbers of educators, it made sense at the time to adopt carefully prescribed approaches to cooperative learning and staff development. The recent influence of constructivist theory in regard to student learning, however, provided a context for questioning large-scale dissemination models of any innovation, including cooperative learning (Jacobs, in press). Recent research about the effects

of large-scale, generic implementation of any innovation indicates that generic approaches produce only a modicum of school improvement (Clandinin, 1996; Elmore, 1995, Richardson, 1994, 1996).

Consequently, there has been a shift in professional development for cooperative learning in four directions:

1. Drawings from multiple approaches to cooperative learning and other related programs⁶ for responsible work with the particular requirements and differences in learning environments.
2. The evolution by those who have created “models” of cooperative learning, to shift their work with schools to longterm commitments over the course of many years (see Kagan & Kagan, chapter 5 and Johnson & Johnson, chapter 11; Bellanca & Fogarty, chapter 9; Munger, chapter 14; and Lotan, Cohen & Morpew, chapter 6 for examples of this approach to staff development).
3. The recognition that the whole school must be treated if there is going to be any successful change in student learning (see Part III and IV).
4. The understanding of and documentation through research of constructivist theories of learning for approaches that begin with how the learner—teacher or student—makes sense of an innovation or approach and learns through situation (Brody, chapter 1, Watson, et.al, chapter 7).

The Organization of This Book

This book can assist all levels of educators—teacher educators, university researchers, independent consultants, staff development personnel, curriculum specialists, school and district administrators, or fellow teachers—who hold responsibility for the continuing development of teachers, aides, and administrators. One of our goals is to continue the dialogue about the nature of professional development that supports systemic change and the creation of learning communities. Reflections on the larger aims of a learning community are combined with selected approaches to cooperative learning and what the authors have learned about effective professional development. This includes ways to enable teachers to direct their own development through collegial collaboration, as well as organizational factors that influence the outcomes of professional development efforts.

Our contributors consider ways to promote comprehensive, learner-centered professional development for teachers. They raise concerns about how to best support instructional change, the relationship

of adult learning and organization change to teacher beliefs, the research on teachers' adaptation of innovations, and the effects of differing cooperative learning philosophies and theories of learning on decisions about implementation. Each writer has made significant contributions in the fields of cooperative learning and professional development through research, writing, and consultation. The authors draw on their experiences to provide the texture and color for understanding the complexity of cooperative learning implementation. Their narratives help us to identify where there are gaps in our knowledge, and consequently, in well-grounded practices.

Part I: Begin With the Teacher: Focusing Professional Development for Cooperative Learning

We begin by directing our lens toward the teacher. This section focuses on reflective practices—by teachers engaged in cooperative learning and other professional development practices, and by staff developers who make decisions about how best to serve and support teachers. This section also considers professional collaborative relationships. By engaging in different types of collaborative activities, teachers can help one another function as career-long students of their practices.

Professional collaboration is somewhat different than cooperation. While cooperation is helpful for effective group work, it is only a "prerequisite to collaboration between professionals" (Henderson, 1992, p.8). Professional collaboration is a facilitative relationship between two people who are willing to support another's professional autonomy and celebrate their diversity in the context of shared consideration and critical examination (Henderson, 1996, p. 187). In this section the authors consider the importance of collaboration for successful professional development efforts. They also focus on reflection as central to effective collaboration.

Anning (1988) and Schon (1987) point out that experience is educative only with reflection. Reflective practices allow a teacher to clarify and recast situations, rethink the assumptions on which the initial understandings of a problematic issue were based, and reconsider the range of possible responses he/she might use. The authors describe the changes this process can bring about in teachers, namely the ability to identify specific ways in which their practice may become more consistent with their beliefs and values about what is educationally sound.

In chapter 1, *The Significance of Teacher Beliefs in Professional Development*, Celeste Brody discusses how teachers' beliefs interact with

instructional innovations such as cooperative learning, and how teachers reconstruct their assumptions and practices through reflective and critical approaches to professional development. Brody describes a schema that helps teachers understand where there are tensions and contradictions between their general epistemological orientations as teachers and those of the new practices that they are learning. Brody suggests a stance on the part of teachers, consultants and trainers who work in schools: by listening carefully to teachers and administrators we can begin to work “where teachers are” and validate what is important to them. In this way we will build our understanding of situated knowledge and adapt different cooperative/collaborative learning approaches to particular classroom contexts.

In chapter 2, *Creating Sustained Professional Growth through Collaborative Reflection*, Carole Cooper and Julie Boyd consider a rationale for inservice teacher professional development programs that cultivate collegial forms of learning implemented with and by teachers themselves. The authors discuss several different models that promote reflection through collaboration including partnering, small groups, and large group reflective practices. They describe the conditions that are essential for collaborative reflective practices that promote teacher growth and change.

In chapter 3, *The Role of Staff Developers in Promoting Effective Teacher Decision-Making*, Carol Rolheiser and Laurie Stevahn invite us to consider how to support teachers’ decision-making capacity while they are in the process of learning and adapting cooperative learning in the classroom. They outline four general guidelines that should direct leaders’ decisions and the conduct of training programs for cooperative learning. These will be echoed in greater detail by the contributors in Part II. Based on the premise that effective use of cooperative learning is effective decision-making, Rolheiser and Stevahn emphasize the role of the program leader in creating training conditions that foster teacher reflection. The goal of training is to assist teachers in making purposeful choices for context-specific implementation of cooperative learning.

Chapter 4, *Staff Development That Makes a Difference* by Pat Roy, invites the reader to consider the major research findings about effective staff development components and relates these to cooperative learning. Roy, who is a former president of the National Staff Development Council, discusses six approaches to staff development and describes how cooperative learning training would be handled within these approaches. She concludes with suggestions for selecting cooperative learning as a focus for teachers’ professional development. In so doing, she provides an effective transition to the next section of the book.

Part II: Lessons From the Field: Approaches to Cooperative Learning and Implications for Professional Development

The contributors in this volume were invited to reflect on the following questions:

1. How does the research on best staff development practices inform your selection and implementation of cooperative and collaborative learning?
2. What have you learned about professional development by working in the field of cooperative learning education?
3. What have you learned from working with teachers about cooperative learning that can provide better portraits of teachers' learning, and schools undergoing reform?

Contributors share their experiences and/or research on teacher implementation of cooperative learning, and the lessons they have developed through years of practical refinement that further informs their models. Contributors fall into two categories: they are either educators who conduct research on their approaches while they disseminate (Lotan, Cohen, & Morphew, chapter 6; Watson, et.al., chapter 7; Farivar & Webb, chapter 8; Johnson & Johnson, chapter 11 and Schmuck, chapter 12), or they are university-based or independent consultants who are primarily concerned with teaching and learning.

Three of the approaches in this section speak directly to the content of the curriculum: Lotan, Cohen & Morphew focus on the nature of the groupwork task and the challenges to teacher learning of creating rich, complex curricula. Schniedewind & Sapon-Shevin emphasize the importance of integrating the subjects of competition and cooperation into everyday curriculum. The approach presented by Sydney Farivar & Noreen Webb is an example of thoughtful adaptations to specific needs, audiences, and questions for inquiry in mathematics.

Spencer Kagan has developed what is often referred to as the structural approach to cooperative learning. In chapter 5, *Staff Development and the Structural Approach to Cooperative Learning*, Spencer Kagan and Miguel Kagan describe the basic principles of the structural approach, dubbed PIES, and how it is actually a curriculum in itself for teachers. It defines the content for staff development. The Kagans conclude with a review of four different models of training that vary from emphasis on individual training to district wide implementation programs.

In chapter 6, *Beyond the Workshop; Evidence from Complex Instruction*, Rachel Lotan, Elizabeth Cohen, and Christopher Morphew explain

how their program for complex instruction employs cooperative learning as a key part of its instructional strategies for teaching in heterogeneous classrooms. The staff of the Program for Complex Instruction has carried out systematic sociological research on the effects of staff development and support from principals and other teachers on the implementation of this approach in the classroom. Using sociological theory they have also found some key differences between the elementary and middle school levels. They focus on those findings that can be generalized to other demanding strategies of cooperative learning.

The social constructivist approach to staff development and cooperative learning is exemplified in chapter 7, *A Social Constructivist Approach to Cooperative Learning and Staff Development: Ideas from the Child Development Project*. This is a carefully evaluated project, particularly in terms of students pro-social and moral development. Marilyn Watson, Sylvia Kendzior, Stefan Dasho, Stanley Rutherford, and Daniel Solomon are on the staff of the CDP. They have developed an effective approach to staff development and conducted research based on the principles of social constructivism with adult learners. The overall goal of the CDP is to help schools to become "caring communities of learners." The sense of the school as a community is the critical mediating variable in their model of program effects.

Sydney Farivar and Noreen Webb focus on a cooperative learning program that builds students' small-group communication and helping skills, and how four middle school teachers were prepared to implement the program in their mathematics classroom. In chapter 8, *Preparing Teachers and Students for Cooperative Work: Building Communication and Helping Skills*, they describe the theoretical and empirical basis for the cooperative learning program, how teachers are prepared to implement the program, the dilemmas they faced during the course of preparing teachers, and their reflections about preparing teachers for such a program in the future. This chapter contributes to the discussion about the particular instructional demands of and differences between the content areas, for example, mathematics and language arts. Middle and secondary level teachers need to see how cooperative learning approaches fit their understanding of their academic disciplines and the particular discourse structures of those disciplines.

James Bellanca & Robin Fogarty add a unique dimension to this volume. In chapter 9, *The Cognitive Approach to Cooperative Learning: Mediating the Challenge to Change*, they discuss how they evolved the cognitive approach from several theoretical bases. They then worked to institutionalize it through a university-based master's program and a professional network. Both of these strategies hold useful lessons for local professional development efforts.

Nancy Schniedewind and Mara Sapon-Shevin, in chapter 10, *Professional Development for Socially-Conscious Cooperative Learning*, detail an approach to cooperative learning and professional development that creates links between cooperative learning in the classroom and broader, societal issues. Within this approach, called Socially-Conscious Cooperative Learning, cooperative learning is both pedagogy and content, and the strategies used are compatible with the broader goals of social justice and equity within a democratic society. The authors discuss the rationale, ways of working with teachers to enhance their full understanding of the potential of cooperative learning and critical pedagogy, examples of ways in which teachers have implemented such a model, and samples of materials for use in such training. They consider the complexities involved in helping teachers to embrace a more holistic, inclusive vision of cooperative learning and cooperative classrooms, and strategies for overcoming resistance and limited implementation.

Part III: The Learning Community: Cooperative Learning and Organizational Change

In the third section contributors consider the effect of the whole on its parts: how does an organization support cooperative learning at each level—faculty to faculty, faculty to administration, and administration to staff? The questions arise from the structural problem of how to fit opportunities for professional development to a principled redesign of schooling, not simply how to organize training and support to implement a program or set of transferable practices (Little, 1993, p. 132).

Section three begins with David and Roger Johnson's chapter, *Effective Staff Development in Cooperative Learning: Training, Transfer, and Longterm Use*. In chapter 11 the Johnsons outline the requirements of professional development sessions to promote effective longterm use of cooperative learning. They review those studies that involve cooperative learning implementation and discuss these in the context of their 30 years of training teachers and trainers. They may be best known for their cooperative learning model, *Learning Together*, but they also function as the major disseminators who have implemented organizational change programs to support longterm use of cooperative learning in the schools. The Johnsons relate closely to the literature on innovation in education.

In chapter 12, *Mutually-Sustaining Relationships Between Organization Development and Cooperative Learning*, Richard Schmuck positions professional development and cooperative learning in context with organization development. Schmuck considers empirical relationships between organization development for the school staffs and use of cooperative learning in the classroom. He offers data from case studies on

how OD interventions increase readiness for teachers to risk trying cooperative learning strategies in their classrooms. Conversely, schools in which a critical mass of teachers are already trying cooperative learning, are ripe environments for organization development endeavors with the adult staff.

Chapter 13, *Faculty Development Using Cooperative Learning* by Susan Ellis, describes a systematic program to teach cooperative learning structures to a school faculty to enable them to address and resolve school issues. The faculty experience a variety of cooperative activities to promote team-building and solve problems that they have identified, and they reflect on ways they can use these procedures with their students to address both social and academic issues in the classroom. Ellis reviews specific strategies for instructing adult groups in how to use cooperative structures to solve problems.

Linda Munger offers a case example in chapter 14, *Developing a Collaborative Environment through Job-Embedded Staff Development: One District's Journey*. Through this narrative Munger details how to make significant changes in many schools and classrooms when there is a district-wide commitment to professional development and cooperative learning. Munger's work adds another piece to the cases about structuring initiatives that make significant learning demands on teachers, and she adapts several approaches to cooperative learning as she evolves with her staff.

Part IV: Return to the Vision of Community

Liana Forest's chapter 15, *Cooperative Learning Communities: Expanding from Classroom Cocoon to Global Connections* is positioned carefully to re-focus the reader on the larger vision of this book: imagining the future and the place that learning communities have in creating contexts for teachers and students to be learners together. Forest tells the story of her evolution from anthropologist to teacher who tries continually to see the world through the lessons of her early field work in a communal society. This chapter typifies the evolution of many consultants, teachers, and trainers who began working with teachers in classrooms but soon confronted the problems of and obstacles to longterm implementation—the lack of a coherent organizational context to support the classroom community and the need to address the effects of the larger society on the school as a learning community.

In the *Afterword: Promising Practices and Responsible Directions*, the editors return to the goals of this book, reflect on how the central ques-

tions were addressed, and identify areas that have not been discussed by the contributors. They point to promising lines of inquiry and suggest how teachers' classroom research could be better supported for finding situational answers to some of these questions. They reflect on the challenges in professional development for teachers, administrators, and staff developers who are working to restructure schools toward becoming learning communities.

We hope our readers will find this book intellectually rich and practically oriented so that they can participate knowledgeably in the dialogue about how best to reform education.

Notes

1. For more discussion of this topic, see the *Cooperative Learning Magazine*, particularly, Staff Development: Building Communities of Learners, 12 (2), 1991/2.

2. The Curriculum Project, *Man a Course of Study*, developed at Harvard University under the leadership of Jerome Bruner was an example of this difficulty. While this curriculum came under attack for numerous reasons, among them the nature of the content itself, the inquiry approach required a new set of strategies for teachers, and the support for learning these was not often available.

3. See Schmuck & Schmuck, 1997, for a complete discussion of these influences.

4. More than 25 developers of approaches to cooperative/collaborative learning were invited to contribute to this volume. Many declined to write because of time constraints. No one was omitted due to philosophical differences with the editors.

5. There are many approaches that have been important to the development and dissemination of cooperative learning not included in this volume. For example, see Aronson, et al., 1978, Clarke, Wideman, & Eadie, 1990; Dalton, 1985; Gibbs, 1987; and McCabe & Rhoades, 1990.

6. See also Albert, 1989, and Freiberg, in press, as an example of a program in classroom management that addresses the trend toward approaching discipline as school-wide, and requiring the adoption of care and cooperation as central values.

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