

Chapter 2

Beyond the Classroom and into the Community: The Role of the Teacher in Expanding the Pedagogy of Cooperation

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Abstract The chapter presents four systemic cooperative learning (CL) long-term programs conducted in northern Israel, with Arabs and Jewish schools in mixed cities or neighboring communities. In each of those programs the teachers-educators expanded their roles implementing reforms based on cooperation. The first program extended the classic method of Group Investigation (GI) to Innovative Technology (IT) sites of learning. The second program expanded the “face to face” model of “The Six Mirrors of the Classroom” to classrooms using complex investigations in the open spaces and the highway of technology. The third broadened the role of teachers to become facilitators of a CL school-family partnership within the school and across schools. The fourth, formed a principals community of leaders, who based on cooperation transformed their vision, skills and knowledge to generate a vision of critical cooperative pedagogy aimed to empower and bring equality to the schools and the community at large.

2.1 Introduction

This chapter presents the position that teachers roles can be expanded to realize broader visions of bringing Cooperative Learning (CL) into the future. The work was conducted in northern Israel, where Arabs and Jews live in geographical proximity to one another in either mixed cities or neighboring communities. Many teachers and principals were highly motivated to make a critical change in their schools and beyond. They had a vision and a mission to make a difference in their deprived communities and to use CL as a vehicle for empowerment and greater equality (Hertz-Lazarowitz 1999, 2005).

Four paths are suggested for restructuring CL into new challenges. The first is extending the classic method of Group Investigation (GI) to Innovative Technology (IT) sites of learning, where the teachers and their students are the designers of the future GI classrooms and the IT curricula for computer-supported cooperative learning. The second path is expanding the “face to face” model of “The Six Mirrors of the Classroom” to include learning at the open spaces and the highway of technology, using cooperative learning. The third path is broadening the role of teachers to become agents of a school-family partnership within the school and across schools, thereby reducing national/religious segregation and creating a mixed community. The fourth path – and the most challenging one – is principals’ commitment to use the vision, skills and knowledge of CL to become agents of critical cooperative pedagogy aimed at decreasing injustice in schools and in society at large. These four paths were systemic-and holistic reforms, based on cooperation, positive interdependence and a community approach. Each of the four paths described in the chapter demonstrate how CL can inspire and revolutionize educators’ roles.

From the basic Group Investigation (GI) practiced by individual teachers in CL classrooms, teachers in their peer learning communities (TPLC) moved to design the method (GI) based on the “six mirrors of the classroom model” to the classrooms of the future using complex technology as additional source for investigation. Then the teachers and the principals moved beyond the classroom to School-Family Partnerships to include families of the children in all the schools in the community in large. Finally the same systemic holistic approach based on cooperation, created a community of principals leadership that transformed the educational vision of the system.

During 1993–2004, the implementation of Cooperative Learning was intensively applied and researched in Arab and Jewish schools in Acre, a mixed Arab-Jewish city, as well as in other cities in northern Israel. The methods integrated elements of Group Investigation into Slavin’s method of Success for All (SFA) and into the Israeli program for literacy development (ALASH) (Hertz-Lazarowitz 2001; Hertz-Lazarowitz & Schaedel 2003). During these years, the working models expanded the scope of CL beyond the classroom and the school, empowering teachers and principals to transform their knowledge and vision of cooperation to their own communities. Innovative methods of GI and complex classroom contexts were introduced in many Arab and Jewish schools on all grade levels and in various subjects.

2.2 The Technological Innovative (TI) Group Investigation Model

Group Investigation (GI) was a milestone for CL in Israel and was considered a revolution because it went against the traditional teaching methods that were rooted in the national ideology of creating a new nation of Israeli-Jews in the homeland (Hertz-Lazarowitz & Zelniker 1995). The former methods were not sensitive to the diverse ethnic groups within the Israeli-Jewish student population and were unjust to the Arab citizens of Israel (Al-Haj 1998; Azaiza et al, in press).

Values of cooperative investigation are deeply rooted in the cultures of both Jews and Arabs. For the Jews, the old Talmudic saying of “Chavruta or Mituta” translated to “learning with a partner or death.” The Arab culture is also based on collectivism, closeness, and cooperation (Dwairy 2004). GI is ideologically different from the CL methods developed in the USA (Lazarowitz & Hertz-Lazarowitz 1998; Sharan & Sharan 1992), which were based on behaviorist approaches, packaged curricula, external rewards, and competition between groups (Johnson et al. 2000; Kagan 2001; Slavin et al. 2003).

2.2.1 Teachers as Peer Learners

Group Investigation was a major source of influence on working with Teachers as Peer Learners with Computers (TPLC) in their professional development. In GI teachers are perceived as facilitators of intellectual and social development of the students (Almog & Hertz-Lazarowitz 1999; Gillies & Ashman 2003; Gillies & Boyle 2005). The goal of TPLC was to create a curriculum for GI in the new complex learning environment. The Group Investigation process was restructured into six stages and revitalized as a main model in the cooperative learning movement in many cultures (Hertz-Lazarowitz & Zelniker 1995; Joyce & Weil 1986). Four major features characterize GI: investigation, interaction, interpretation, and intrinsic motivation. The unique character of GI lies in the integration of these four basic features within the meaningful context of an issue worthy of investigation (Sharan & Sharan 1992).

Investigation refers to the general orientation toward learning adopted by the teacher and student. When a group of learners is carrying out a group investigation project, it becomes an inquiry community with a common purpose, and each participant serves as an investigator who coordinates his/her inquiry with other members of the group. Thus, in Thelen’s (1960) words, the class is both an inquiry community and a community of inquirers.

Interaction is essential to the successful use of group investigation. Students and teachers need to learn and practice effective interaction as they work in groups. Peer learning in GI is the vehicle by which students and teachers encourage one another, elaborate on each others ideas, help each other to focus on the task, and confront

one another's ideas with opposing points of view. Intellectual and social interactions are the means by which learners rework their personal knowledge in light of the new knowledge gathered by the group in the course of the investigation.

Interpretation of the combined findings is a process of negotiation between personal knowledge and new knowledge, and between ideas and information contributed by other members of the group. Facilitating the process of interpretation through group interaction is consistent with Dewey's view (1927) of education, as well as with the constructionist approach to cognition (Vygotsky 1978). Group Investigation provides learners with the opportunity to interact with others who have investigated different aspects of the same general topic and who have contributed different perspectives on that topic. Within this context, interpretation is a social, cognitive, and intellectual process par excellence.

Intrinsic motivation in GI refers to the way that GI motivates learners to take an active role in determining what and how they will learn. It motivates students and teachers to choose investigation issues that are connected to their own needs, experiences, feelings, and values that are relevant to the general community. The decision of the topic for GI is a social act that can empower thinking and critical perspectives among the GI participants. A meaningful investigation is an expression of a choice.

2.2.2 *The GI Model*

The classical GI method, as proposed in Israel in the late seventies, was implemented at all levels of schooling in Israel. Research on GI indicated positive outcomes in general in academic, cognitive, social, and emotional aspects as compared to other methods (Hertz-Lazarowitz 1992; Hertz-Lazarowitz & Schaedel 2003; Lazarowitz, 2007; Sharan & Hertz-Lazarowitz 1981; Sharan et al. 1984).

In the new learning environment, investigation can occur over a wide range of topics by using advanced technology, promoting peer interaction, constructing interpretation, and bringing social and moral perspectives to the learning environment. However, the process of GI needs to be updated for use in the future, with its complexity of technological developments and multi-faceted environments and communities. Still, we shall argue that its six-stage model is generic enough to guide the process of social investigation in the TPLC and in the classrooms.

2.2.2.1 **The Six Stages of the GI Model**

Stage 1: Class determines sub-topics and organizes into research groups.

Stage 2: Groups plan their investigation.

Stage 3: Groups carry out their investigation.

Stage 4: Groups plan their presentation/feedback.

Stage 5: Groups make their presentation.

Stage 6: Teacher and students evaluate their project.

2.2.3 *Curriculum of the TPLC*

The intent of the TPLC curriculum was to help teachers prepare for the classroom of the future. In the project (Almog & Hertz-Lazarowitz 1999; Salomon 2002), the investigation topic chosen was *Planning the City of the Future*. The investigation of this topic had two phases: studying an existing city – in our case, Haifa – wherein most of the participants lived, and then, based on this phase of the investigation, planning the city of the future.

Teachers in the TPLC program shared motivation to implement this educational innovation (Abrami et al. 2004). The teachers participated in 11 sessions in which they researched and learned new, complex interdisciplinary topics using advanced technology (word processor, multi-media software, and data banks) and worked in cooperative and collaborative investigative working teams. A typical session usually lasted 3–4 h and can be described according to the following four areas: cognitive, social, technological, and curricular. (1) the cognitive area, which included generating questions, clarifying concepts, and working on research; (2) the social area, which included helping by mutual explanation, talking and reflecting with peers about mistakes, and taking roles to facilitate group work; (3) the technological area, which included defining key terms for searching databases, revising a written text with a word processor, and preparing a multimedia product; and (4) the curricular area, which included deciding on resources, learning diverse content related to urban life, and planning an interdisciplinary unit.

The goal of the TLPC was to give the teachers the knowledge in the mode that will afford their experiential learning as teachers and as students of GI.

2.2.4 *Steps of GI in Teachers Peer Learning Professional Development Curriculum*

The 11 steps presented in the paragraph are corresponding to the six stages of the GI method.

Step 1 and step 2 are introductory practices related to the organization of the classroom, the practice of the social-academic skill needed to start CL, and introduction to the use of advanced technology.

1. Cooperative learning: Ways of dividing the class into learning groups; obtaining skills in cooperation and in prosocial behavior such as: information exchange, active thinking by exchanging ideas, effective communication, tolerance, openness, sensitivity, and the ability to admit mistakes.
2. The Use of advanced technology: Learning to use the computer, work with multi-media software and data banks (local and abroad).
3. Formulating the topic for investigation and dividing it into sub-topics: Brainstorming; discussing ways of dividing complex subjects into sub-topics; and defining methods of organizing topics and sub-topics hierarchically.

4. Raising questions for investigation and problem solving: Arranging the questions hierarchically and, according to related topics, exchanging questions with peers and discussing ways of obtaining answers.

Step 3 and step 4 begins the GI method – It corresponds to the first stage of GI “Class determined sub units and organize into research group.”

5. Creating and planning a work program: Discussing decisions related to scheduling; dividing tasks; and assigning authority, responsibility, and roles to team members.
6. Gathering information with advanced computer-network technology: Conducting academic investigation using various resources and computerized data banks; making judgments about the information; and expanding and reducing the information.
7. Dealing with nontextual information: Working with maps, tables, graphs, and photographs.
8. Analysis and comprehension of texts: Working on academic and scientific literacy; discussing a variety of text structures; strategic reading aimed at formulating questions; abstracting; distinguishing main issues; and identifying key terms as a guide for further research.

Steps 5, 6,7, and step 8, correspond to the third stage of GI: “Group carry out their investigation”. This stage is the heart of the GI method and is done in the topic that the interest groups chose. Technology was one of the tools the students used.

9. The writing process: Approaching writing as a process, including drafting, reviewing, editing, peer reviewing, and publishing. The final product should be a multimedia and written professional product.

Steps 9 correspond to the fourth stage of GI: “Groups plan their presentation/feedback”

10. Preparing and presenting an oral report: Working on the structure of the report for the TPLC and examining in what ways it differs from a traditional written presentation; skill-building for a multimedia presentation, emphasizing the rhetoric of presentations and the use of audio-visual devices.

Step 10 correspond the stage 5 of the GI; “Groups make their presentation”

11. Evaluation: Developing criteria for creating a variety of ways to evaluate each teams multimedia products and sub-products. The evaluations take place within groups, between groups, and with experts in the community.

Step 11 corresponds to the sixth stage of the GI method: Teacher and student evaluate their project. The project is a group cooperative outcome.

The TLPC workshop was a year-long process, while the teachers served in two roles – the first as a community of peers and the second as implementers of the TI Group Investigation in their classrooms at the junior high school level in northern Israel. This inquiry project followed former models of teachers as a community of

peers that were developed in elementary schools (Hertz-Lazarowitz & Calderon 1994; Sharan et al. 1984; Slavin & Calderon 2001). Those models showed positive outcomes for teachers and students.

2.3 The Six Mirrors of the Classroom: Into the Future Classroom

The work with teachers and students in the transition from the traditional classroom to the GI classroom in Israel demanded contact and ongoing observation and conceptualization of the dynamic between teachers and students in the classroom. During this process, a long-term plan of observational-process studies was conducted to describe the six-mirror model of the classroom (Hertz-Lazarowitz 1992). The model consists of six “mirrors,” a term chosen to portray the view that the dimensions which characterize the classroom are interrelated and reflected in one another: Structure and activities in one dimension have implications for what is possible in another dimension.

In the model, harmony among the mirrors and the levels within each mirror positively affect the social and cognitive development of the students. For example, if the teacher maintains central control of the classroom (mirror three, level one), and asks her students to work cooperatively (mirror six, level three) on a given learning task, this creates a disharmony between the mirrors and will be reflected in students’ behavior, as the students will be unable to engage in multilateral investigation. However, if the learning task is designed to bring together the parts of a horizontal work division and then to find a creative solution for the problem – such as in the planning of a future city – while the teacher aims her instructional behavior at supporting and helping different groups, then there is harmony between the mirrors and the learners will be engaged and observed in performing a high level of academic and social behavior (mirrors five and six)

The model has served as a conceptual framework enabling teachers to analyze the mirrors and to be trained to gradually design their classrooms to become a CL and a GI learning environment. The development of innovative technology has made attainable what was once merely a dream – the use of the computer as a personal tool, much like a notebook and pen (Hertz-Lazarowitz & Bar Natan 2002). Likewise, every new technological development can be expected to interact with and change some basic features in the learning environment. *Technological development, with scaffolding cognitive aspects of students thinking*, has the potential to eventually revolutionize the classroom (Lockhorst 2004; O’Donnell & King 1999; Resta et. al. 1999). However, this revolution for future learning/teaching environment has to take place with an integrative understanding of the interdependence of the different mirrors, and specially to work on the advancement of students’ academic-social skill in CL. The design of the learning task will be mostly affected by technology (Ronen et al. 2006). However, the parallels of discourse between the mirrors of teachers’ instruction and students’ behavior, will continue to be a significant factor in the future classroom (Webb et al. 2006).

The possibility of turning a classroom into a community of peers and computers will allow a dynamic presentation of information and products involved in learning projects. The change in instruction and learning will have to be followed by changes in the design and architecture of other rooms and spaces in the school, such as teachers' rooms, laboratories, and libraries.

2.3.2 Mirror Two: Learning Tasks – Using Peers and Computers as Thinking and Investigation Resources

Teachers, alongside their students, and sometimes following them, are learning to use the computer as a tool to develop skills in thinking and reflection. The computer can help to organize and carry out efforts of high-level learning and teaching and can engage students and teachers in challenging tasks. The computer's power lies in the access to rich and complex bodies of information that can be used to construct meaningful knowledge by investigation. Peers working together with computers interweave interpersonal and task-related learning, which facilitates the exchange of information through communication with other learning teams and with experts beyond the school walls.

The claim that “learning tasks vary in levels of complexity determined by the pattern of division of the tasks and integration of the learning products” (Hertz-Lazarowitz 1992; p. 76) is still relevant. The creation and design of the learning task was and still is the most significant role of the teacher in the “face to face” cooperative learning process (Gillies & Ashman 2003), and will be even more so in the future learning spaces with computer technology. The primary role and responsibility of teachers remains that of facilitating and supervising the quality of students' learning, as reflected in the processes and products derived from the tasks assigned to them.

2.3.3 Mirrors Three and Four: Teachers as Initiators, Producers, and Communicators of Learning

The role of the teacher is presently undergoing major changes. Whereas teachers' roles were traditionally based on historical definitions, such as “the sage on the stage,” they are gradually becoming partners in a community of teachers and are increasingly immersed with students as partners in learning – the “guide on the side”. The role of teachers as active initiators and actors in the “show of learning and teaching” will be influenced by the metaphor of theater production and interpretation (Schonmann 2006). Teachers will become producers of new classroom curricula and programs, in which new technology and sophisticated teaching materials play an ongoing part. Multidisciplinary teaching, in addition to mono-disciplinary teaching, will become a central part of learning in schools, which in turn will require the establishment and cooperation of multidisciplinary teaching teams.

2.3.4 Mirrors Five and Six: Academic and Social Communication and Behaviors

Open electronic communication with the outside world will expose teachers and students to peers from other schools and cultures. Through computer-mediated communication on the information highway, every classroom can become a real-time, on-line information center. Schools will familiarize their students and teachers with the many services of social institutions, such as research centers, laboratories, banks, newspapers, stock market information, and various resource centers. The small team within the classroom will become the primary social unit of learning. Students will be able to interact with on-line information and to share and discuss ideas and thoughts with a broad community. Examples are: in economics classes, to analyze the latest foreign currency data; in citizenship classes, to review last night's public opinion surveys; in sports, to follow the results of the latest games in various states. In these interactive knowledge-seeking contexts, students will master the most significant academic and social skills needed for citizens in the next century: working with people and on-line information in order to cooperate and collaborate with other people for actual learning, analyzing, and decision making.

The teacher in this classroom will need to be a skilled computer user and well versed in complex and varied information networks. This teacher will also need to be able to guide students to use technology in an enlightened way. Transforming information into knowledge in a context of moral and ethical dilemmas previously unknown to the teacher can be eased by working in teams and communities of teachers and by establishing such communities in the classroom. Writing is the powerful force for students and teachers working as communities through the use of telecommunication and intensive peer interaction (Morton 1996).

Many of the CL and IT innovations might fail because teachers make sporadic and partial changes. The model gives teachers a deep understanding of the whole learning environment and enables them to apply the principles of designing the mirrors so that they can create a powerful learning context. We found that this holistic perception transforms teachers' actions and positively affects students' development. Teachers in various educational settings have reported that the model created a multidimensional vision of their work and made them think and work simultaneously on the six-mirror dimensions.

Since the summary of research (Hertz-Lazarowitz 1992), the two models; the GI model and the six mirrors of the classroom model were combined in our field work. It has been used in Computer Mediated Instruction in junior high school social studies curricula (Almog & Hertz-Lazarowitz 1999; Salomon 2002); in cooperative methods of writing and literacy development (Hertz-Lazarowitz 2001; Hertz-Lazarowitz & Bar-Natan 2002; Hertz-Lazarowitz & Schadeal 2003). CL based on GI was implemented in science education at the secondary level of schooling (Lazarowitz & Hertz-Lazarowitz 1998). For example: Science-Technology-Environment and Peace Society (STEPS) was studied by Khalil & Lazarowitz, (2002) with ninth grade Arab and Jewish students in neighboring communities in the Galilee. Salit Ron

used the Jigsaw-GI combined method with 11th and 12th grade students to study the complex subject of evolution (Ron & Lazarowitz 1995). The field work and research using GI in biology at the secondary level are summarized by Lazarowitz 2007.

Recently a new computerized system Collaborative e Learning Structures (CeLS) was developed in Israel, (Ronen et al. 2006). CeLS is a web-based system designed to create and reuse collaborative instruction by creating and conducting structured asynchronous collaborative activities and incorporate them in the existing instructional setting for all subjects and levels.

CeLS is currently under experimental implementation with communities of teachers, that search for existing activities, or create new collaborative structures using basic building blocks to suit their specific needs and instructional goals.

2.4 Into the Community: Teachers' Role in School-Family Partnership

Teachers in Israel extend their roles into the community. In 1998–2000, a two-year School-Family Partnership (SFP) program was implemented in Acre, a mixed Jewish-Arab city in Israel, to promote parents' role as the facilitators of their children's literacy development and to advance coexistence between Arab and Jewish parents. The SFP program was part of a five-year (1995–2000) holistic project designed to bring about a systemic change in Acre (Hertz-Lazarowitz 1999; Zelniker & Hertz-Lazarowitz 2005).

Two studies were conducted within the SFP program. In the first (1999), 174 Arab parents and 111 Jewish parents of first-grade children responded to a 31-item Parents' Literacy Questionnaire. In addition, interviews were conducted with mothers, teachers, and children. The questionnaire (Hertz-Lazarowitz & Horovitz 2002), yielded seven factors related to parents' perceptions and attitudes: (a) encouraging reading; (b) school assistance; (c) enriching the home literacy environment; (d) keeping the School-Family Partnership; (e) teachers' providing of support for their child; (f) parent-child interaction; and (g) knowing the CL method used in school for reading and writing.

In the second study (2000), 120 Arab parents and 30 Jewish parents responded to an Inter-group Coexistence Questionnaire. The 34 items related to five domains: parents' exposure to media in Hebrew and Arabic; parents' acceptance of Arab definitions of identity; readiness for relations; contact; and equality demands.

2.4.1 SFP Workshop Activities

Epstein's model of School-Family Partnership (Epstein & Sanders 2006) served as the basis for the program. A novel element of coexistence was introduced by the teachers and the principals in Acre by bringing together Jewish and Arab parents and teachers across schools for a year of structured workshops on themes

of literacy development and inter-group contact. The coexistence component was suggested by the principals and teachers of several schools, as it was necessary and critical for advancing inter-group relations and equality in Acre's educational system. In order to achieve this purpose, the work was planned and implemented jointly by Arab and Jewish participants in cross-school and cross-national workshops focusing on literacy development and coexistence issues. Workshops conducted during the two-year period were documented as written protocols, as well as less formal reports including written and oral feedback provided by participating parents and teachers.

Literacy-Related Activities: Literacy-related activities took place within the SFP program as well as in the classroom. There were two main settings for training parents of first graders: one consisted of bi-weekly meetings of parents and teachers in each school, which served to strengthen the contact between the classroom teachers and the parents as well as to inform parents about the SFA program and its various components. The second setting consisted of monthly workshops in which parents and teachers across schools practiced and discussed literacy-related activities in the two cultures.

Within the literacy-related workshops, parents were encouraged to advance literacy at home by assembling a small library with books recommended by the teachers and by reading stories to the children on a daily basis. In addition, parents were encouraged to get involved with and help their children with their homework and to initiate discussion of various topics, such as cultural events and holidays and stories about the city. Parents were also encouraged to learn about the SFA program by visiting the classroom and joining a group of volunteer teacher's helpers in the class. Parents and teachers exchanged written communication by means of information and feedback sheets.

Once a month, there was an open day when teachers presented parents with activities related to the curriculum, such as parent-child cooperative writing of a family story. Other activities practiced and/or discussed on the open days and at the workshops included reading and writing with the children in their first language, discussing literature from each culture, meeting authors of Jewish and Arab literary works, listening to storytellers from each culture, telling about their group's history in Acre, and bringing more technology to the classroom.

Coexistence-related activities: Coexistence-related activities in the parents' workshop included the use of expressive means to increase personal closeness and mutual acceptance, such as singing, dancing, telling personal stories about their own and their children's education, sharing memories, sharing past and present experiences of coexistence in Acre, and building shared visions for the future of inter-group relations and education in Acre. In the workshops, parents discussed municipal resource allocation and policies of equality and discrimination. Parents formulated the construction of joint educational task forces and education-related plans for Acre, such as getting more instructional help for Jewish and Arab at-risk children and adding a wing to the Arab school building. Parents were interested in advancing positive inter-group relations and were encouraged to engage in joint civic activism to benefit both Arab and Jewish children in Acre.

In addition to the workshops, there were numerous open days when parents came to school, participated in classes with their children, and took part in activities shared with their children and the teachers. According to the teachers, the parents' participation and involvement was greater than in the period preceding the SFP program. As stated by one of the teachers, Miri Yunger, "Since the implementation of the School-Family Partnership program, the parents have become more involved. Many parents have become aware of the importance of literacy at home and the encouragement of literacy development at home."

Overall, the findings indicated that the Arab parents perceived themselves as learning to become more effective facilitators of literacy development for their children than the Jewish parents, as well as more effective facilitators of coexistence than the Jewish parents. The teachers in Acre expanded their role and added the mission of working with parents in their school and across segregated schools throughout the country. The School-Family Partnership positively affected the home literacy of the parents and created a bond between parents-teachers and the children, and a peaceful community of Arab and Jewish parents (Hertz-Lazarowitz 2004; Zelniker & Hertz-Lazarowitz 2005).

2.5 Teachers and Principals Transform CL to a Critical Pedagogy for Civil Action

In the work in Acre (1995–2000), a city-wide plan was developed in which different Investigative Task Forums (ITFs) were created to increase the participation of all members of the community. Each ITF was based on the GI structures: The group in the ITF had to engage a community-related problem, brain storm, investigate, discuss, suggest solution and present plans for change by action. The ITF represented the highly diverse groups within this mixed city – Arabs and Jews, religious and secular, public and private schools (Hertz-Lazarowitz 1999).

Among the ITFs created were a forum of principals and a forum of teachers-leaders, which were the most active of all the bodies that were established in the city. Those two forums, mainly the principals' forum, were analyzed (Eden & Hertz-Lazarowitz 2002) for their potential of becoming a critical force for change in the city. The holistic project and the CL program (SFA and ALASH) were implemented in Acre for one purpose, namely, professional growth that would advance the children and the city (Gordon 1996). The teachers and mainly the principals perceived the ITF as an opportunity to become organized and to establish several forums to advance their own purposes of achieving educational-political power in order to generate social change in the city. In so doing, they were transformed from professional leaders with rational-technical skills to avant-garde intellectual agents for change in the community.

One of their main goals was to change the nature of their dependence on the municipality against which they acted. The internal factors that helped them to attain their goals were the ability of the teachers and principals to organize due to

their vision, skill, and level of education. In the process of their struggle, the members became aware of the political nature of their work. As a result, they redefined their role and degree of commitment from one of “narrow egoism,” serving their own schools and causing them to compete with each other, to a “wide [holistic] outlook” of commitment to the entire educational system. By cooperating in this way, they brought the whole system under their aegis and thus gathered strength. For the first time, they were able to act according to their belief that “if there is no progress in education, there is no progress and prosperity in the city.”

The principals and the teachers gathered to create a professional body with the aim of improving their function. Dialectically, they evolved from a body aiming to improve its professional-objective performance to one of intellectual change agents who understand that their work is not only pedagogical, but rather dependent on a wider social context requiring their acting as a local political leadership group aimed at improving the entire community (Giroux 1988). They showed that from a system in deep crisis, which was blamed for the poor academic achievements of students, the principals and teachers could come forward, assume leadership, and transform not only the educational system but the entire community, thus changing patterns of relations between bodies within the educational system and with other societal institutions.

The principals saw their greatest achievements in the following areas: *collecting debts* which had accumulated over eight years and had not been paid by the municipality; *openly obtaining information* about their financial situation from the municipality for the first time, allowing them to plan maintenance and renovation work within the framework of the budget; *supporting individual schools with their unique problems*, such as in the case of an affirmative-action strike in an Arab high school; *mediating between disputing principals* in order to positively impact the culture of work relations; *allocating resources for the schools* to provide for greater equality, especially for the Arab schools and the ultra-Orthodox Jewish schools (partially State-run schools) that had been discriminated against for many years; and *supporting city-wide processes of evaluation* so that information about each school’s academic outcomes will be open to the community (Eden & Hertz-Lazarowitz 2002; Hertz-Lazarowitz 2004).

2.6 Future Prospects

In its essence, CL is a critical pedagogy because it raises basic questions regarding our nature as social beings. CL is based on perceiving the human being as a positive social being that is driven by cooperation and pro-social and humanistic motives (Deutsch 1973). According to this pedagogy, every child and every teacher has a voice and a contribution to make and can fulfill their potential within pro-social and caring schools (Aronson 2000; Kohn 2000).

The Cooperative Learning reform in Israel was the first critical pedagogy to be implemented in the State schools and was successful in changing two major injus-

tices within the Israeli educational system. First, CL advanced social and academic integration and greater equality in the educational experience and outcomes for the different Jewish ethnic groups. Second, CL decreased the full segregation between the Arab sector and the Jewish sector in many communities due to the collaborative efforts of Arab and Jewish educators (Azaiza et al, in press; Hertz-Lazarowitz & Schaedel 2003).

GI work began with a commitment to apply the method in the classroom through complex models, and it was transformed to a vision of creating a critical pedagogy of cooperation in schools, cities, and regions that will make a difference. The teachers and the principals contributed to the growing awareness of multiculturalism due to the fact that CL was the first pedagogy to be implemented and researched in the Arab schools alongside the Jewish schools in northern Israel. Turning CL into a vision of a critical pedagogy may be the result of the unique structure and characteristics of Israel. The country is small, young, and has a highly diverse population, with multiple religions and multiple cultures living in an intractable state of conflict and war, but still looking for coexistence (Al-Haj 1988; Hertz-Lazarowitz et al, 2004).

The expansion of the roles of teachers in Israel is derived from genuine professional and personal contact between communities of Arab and Jewish educators, many of them women who were influenced to become a political-educational force that can make a difference in their various communities (Oplatka & Hertz Lazarowitz 2006). They perceive cooperation from a broader perspective as a lever and a vision of greater commitment, recognition, sensitivity, and concern for minorities and different cultural and religious groups in Israel (Azaiza et al, in press).

Five years of continuous work and research validated the positive impact of the work that the teachers invested in students' academic outcomes. A high quality of implementation of the cooperative learning methods resulted in higher academic achievements among the students (Hertz-Lazarowitz 2001, 2004; Zelniker & Hertz-Lazarowitz 2005, 2006). Our follow-up studies indicated that in about half of the CL schools, the teachers and principals continue to work with parents, with teachers across schools, and with the community at large, as it has become part of their professional roles. The principal forum is still active as change agents.

The principals and teachers in northern Israel have shown that educators can free themselves from technical-objective thinking and can view education as a political matter related to the power structure of society. But their liberation is not complete. It will only be so when the relationship moves beyond functional cooperation and is transformed so that all people are emancipated from boundaries that cause hostility and are truly treated as part of the community. Power is a requisite for social change, but cooperation and emancipation means a different view of human relations, which many principals and teachers have yet to attain.

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