

# Kurt Lewin's contribution to the theory and practice of education in the United States: The importance of cooperative learning

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*Many African societies divide humans into three categories: those still alive on the earth, the sasha, and the zamani. The recently departed whose time on earth overlapped with people still here are the sasha, the living-dead. They are not wholly dead, for they still live in the memories of the living, who can call them to mind, create their likeness in art [photography, sic], and bring them to life in anecdote. When the last person to know an ancestor dies, that ancestor leaves the sasha for the zamani, the dead. As generalized ancestors, the zamani are not forgotten but revered.*

Loewen (1996)

## Introduction

The above description of the *sasha* and *zamani* are particularly relevant to the purpose of our coming together in Bydgoszcz, Poland to celebrate the life of Kurt Lewin and dedicate a memorial in his childhood home of Mogilno. The three of us (Lawrence Sherman and Richard and Patricia Schmuck) owe a great debt to Kurt Lewin and his theories and research, and appreciate partly repaying that debt now in 2004, because like many other American social psychologists, we are acknowledging several important anniversaries this year: Fifty years after the famous *Brown v. Board of Education* Supreme Court decision in which public schools were required to desegregate the races; at Miami University the Fortieth anniversary of “*Freedom Summer*” was remembered (where civil-rights demonstrators were trained to desegregate lunch counters and assist in voter registration throughout the Southern United States; and for those of us who are members of the IASCE, the twenty-fifth Anniversary of the founding of the *International Association for the Study of Cooperation in Education* (IASCE), a professional association of educators worldwide who are dedicated to the study and practice of cooperation in schools. All of these seminal events, including the present conference, are closely related to Kurt Lewin and to his commitment to democratic social change. As we make our tributes to him, we continue his status as a *zamani*, one who is revered.

Our purpose in this paper is to focus on Lewin’s influences upon American education, especially with regard to a pedagogical practice known as “Cooperative Learning”. Cooperative learning occurs when two or more students work together to learn the same subject matter. We also wish to acknowledge that Lewin’s theories go beyond cooperative learning and have influenced many other current educational practices including “action research”, classroom management and discipline, leadership, and the psychological ecology of schools and their classroom settings. We consider those several aspects of education as strongly related to one another. And, the social psychologists who have been most influential in advancing American educational practice were students of Kurt Lewin, primarily when Lewin was at the University of Iowa from 1935 to 1944, which was obviously when he was still among the living. Nevertheless, most direct influences on us took place after 1947 (the year of his “initial” death) when he took on the status of the *sasha*. It was his former students and colleagues (Roger Barker, Morton

Deutsch, Leon Festinger, Jacob Kounin, Ronald Lippitt, Herbert Wright and many others), who in the last half of the 20<sup>th</sup> century made many important contributions to our understanding of children and educational practice.

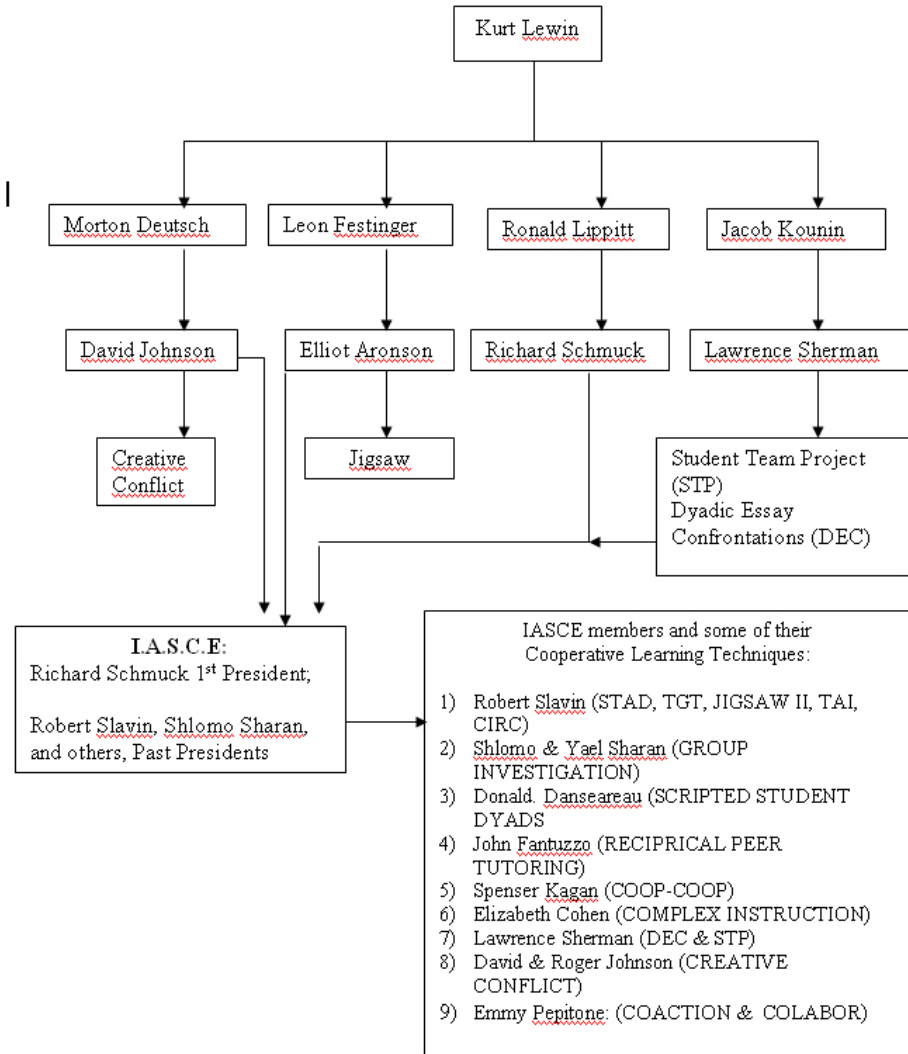
It is important to remember that Lewin had considerable interest in the lives of children including their responses to frustration-regression, leadership styles (democratic-autocratic-laissez-faire), unfinished tasks, closure, and recall, and on children's levels of aspiration, satiation, co-satiation, etc. Thus, children were an important focus of Lewin's research even when he was a practicing researcher in Berlin before coming to America in 1932 [Lewin, of course, was one of many European intellectuals "*Exiled in Paradise*" (Heilbut, 1983; Duggan & Drury, 1948). His interest in children is also reflected in the fact that the first two American academic positions he held were in university departments that were concerned with children and families: Cornell University and the University of Iowa (Ash, 1992). It was not until later in the mid 1940's, however, when he went to Massachusetts Institute of Technology that Lewin created the Research Center for Group Dynamics, a topic for which he became well known worldwide. Indeed, many presenters at this conference have emphasized this "group dynamics" aspect of Lewin. And we wish to point out that research on group dynamics is particularly relevant to children, especially children in classroom settings. Thus, for the three of us in American education we wish to reflect on these important contributions. Larry Sherman (a former student of Jacob S. Kounin) will focus his discussions on the influences of Kurt Lewin in the world of Cooperative Learning, classroom management and discipline, and classroom behavior settings. Richard Schmuck (a former student of Ronald Lippitt) will focus his discussion on the role of Action Research. Patricia Schmuck (also a former student of Ronald Lippitt) will focus her discussion on the work of Ron Lippitt and the Science Research Associate's (SRA) published texts on social science curriculum for elementary school students.

## Cooperative Learning: Lawrence Sherman

To give "cooperative learning" some context within the larger field of American education a few important events should be mentioned. Lewin's colleagues in the organization *Commission on Community Interrelations (CCI)* of the American Jewish Congress made highly influential testimony to the United States Supreme

Court's *Brown v. Board of Education* hearings (most notably Kenneth Clark, Isador Chein and Stuart Cook) (See *American Psychologist*, 2002; and more specifically Clark, Chein & Cook, 2004) resulting in the decision of the United States Supreme Court that "Separate" or segregated schools, were NOT equal. This resulted in the *Brown II* (1955) Court's decision to "...proceed with all deliberate speed..." in desegregating American schools. For detailed discussions of the 1955 Court decision, see Bell, 2004; Kluger, 2004; Philogene, 2004; Sullivan, 2004; *Monitor in Psychology*, 2004; and *American Psychologist*, 2004;). In 1966 the *Equality of Educational Opportunity Report* (Coleman, et. al, 1966) also suggested that desegregation was not being achieved in fact in the nation's schools, bringing about several new attempts at desegregating American schools. The challenge of fostering more positive interpersonal relations among diverse groups (especially Black minority and White majority students) became a major focus for research after the desegregation plans were put into effect during the late 1960's and 1970's. During the 1970's several independent research groups engaged in "action research" that was designed to establish classroom behavior settings and pedagogies that might have a more positive effect on interpersonal relations in the classroom. Schofield & Hauamnn (2004) reference several "cooperative learning" research articles which address those issues. At the end of the 1970s David Johnson (a student of Morton Deutch), Elliot Aronson (a student of Leon Festiger), Richard Schmuck (a student of Ronald Lippitt) and Larry Sherman (a student of Jacob Kounin) came together to discuss their "cooperative learning" solutions at the first international conference on cooperative learning in Israel in 1979. They all presented data to demonstrate that cooperative learning contributed positively to the integration of Black and White students. At that initial meeting the International Association for the Study of Cooperation in Education (IASCE) was founded and Richard Schmuck became it's first President. Soon many others joined the IASCE as well; the earlier history of cooperative learning has been detailed by Emmy Pepitone (1980). Her descriptions of the genesis of cooperative learning point out the strong links to Lewin's earlier theories. And, most recently at the 25<sup>th</sup> International IASCE conference in Singapore the last 25 years of cooperative learning are discussed (Brody, et. al, 2004). Not surprisingly those second-generation individuals and groups were strongly influenced by Kurt Lewin's original students as noted in the parentheses above. These intergenerational relationships are detailed in **Figure 1** where we

have attempted to construct a genealogy of Lewin's influence on us and on the cooperative learning movement in education.



**Figure 1.** A Genealogy of Kurt Lewin's Influence On Cooperative Learning in American Schools

We might add that our interactions with Dr. Bertram Raven at this very conference (Bydgoszcz, Poland, 2005) has also revealed another interesting connection. Raven & Eachus (1963) published an earlier study on “cooperation and competition in means-interdependent triads.” Their study was supported by a grant from the “Group Psychology Branch, Office of Naval Research” thus indicating serious interest in cooperation even in the context of national defense. We believe that this also demonstrates wide spread interest in cooperation that has had considerable Lewinian influence. We might add that we are extremely grateful for Dr. Raven’s reminder us of Emme Pepitone’s (1980) earlier interest in cooperative learning. She was in attendance at the 1988 IASCE conference held in Tel Aviv, Israel.

There is a considerable literature on the positive effects of “cooperative learning” (e.g., Sharan, 1990; Slavin, 1995; Johnson, et. al., 1981). Much of that research grew out of Morton Deutsch’s seminal early studies (Deutsch, 1949a; 1949b). While there are many variations of cooperative learning structures, each associated with their originators, the five main elements that appear in all of them include:

**Positive Interdependence:** all group members share a common fate where they all gain or lose with the overall group performance. With positive interdependence no member is alone; all strive together for mutual benefit.

**Individual Accountability:** Each group member perceives that he/she is responsible for completing the assigned task.

**Face To Face Interactions:** Members communicate encouragement while providing each other with help and assistance. Members provide feedback to one another to improve performance on assigned tasks and responsibilities.

**Heterogeneous Grouping:** Members differ from one another in sex, attitudes, social class, cognitive perspectives, ability levels, and skills.

**Social Skills:** To achieve mutual goals, group members must communicate accurately, resolve conflicts constructively, trust one another, and accept and support one another.

The various cooperative learning structures include such names as *Jigsaw Puzzle Technique* (Aronson et al, 1978; Aronson, 2000), *Creative Conflict and Controversy Procedure* (Johnson & Smith, 1987), *Group Investigation* (Sharan & Sharan, 1992), *STAD* (Student Teams and Achievement Divisions), *TGT*

(Teams Games Tournaments), *TAI* (Team Accelerated Instruction), *CIRC* (Cooperative Integrated Reading and Composition)(all described more fully in Slavin, 1995), *DEC* (Dyadic Essay Confrontations, Millis & Cottell, 1998 and Millis, Sherman & Cottell, 1993), *STP* (Student Team Projects, Sherman & Woy-Hazelton, 1988), *Complex Instruction* (Cohen, 1994), and many others. Slavin (1995) provides descriptions and guides to implementation of many of these techniques, most of which are designed for use in elementary and secondary education settings. In addition for an excellent conceptual overview of Cooperative Learning see Johnson & Johnson (1994).

Many of these techniques are used in higher education as well (See Millis & Cottell, 1998; Sherman, 1991). For instance, at Miami University there is an interdisciplinary graduate program in environmental studies in which the first year of the program makes use of "Student Team Projects" (STP). The STP (now known as the CTP or "Community Team Projects" is a direct outgrowth of Lippitt's earlier work (Lippitt et al., 1958) at the University of Michigan (see Sherman & Woy-Hazleton, 1988).

A large body of research exists on the positive effects of cooperative learning; these studies indicate enhanced academic achievement, more supportive and trusting intergroup relations, and greater individual self-esteem. Slavin (1995) reports a variety of other important educational outcomes such as "...liking of school, development of peer norms in favor of doing well academically, feelings of individual control over the student's own fate in school and cooperativeness and altruism."

In summary, Kurt Lewin's *zamani* status has been very influential in the cooperative learning educational community. Emerging from his direct descendents (Deutsch, Lippitt, Festinger, Kounin) cooperative learning originated in their students (Johnson, Aronson, Schmuck, Sherman) solutions to improving human relationships. We believe that his concern for improving intergroup relations has been realized through the implementation of cooperative learning pedagogy. As a means to "resolving social conflicts," (Lewin, 1948), cooperative learning has been one of the great success stories in American educational practice, so much so that it is generally considered as one of those "best practice" approaches to structuring classrooms for effective learning.

## Other influential areas

We would be remiss if we did not also mention other direct influences of Lewinian Theory. The work of Roger Barker and Jacob Kounin are also important examples of research effecting American education. Barker's (1963; 1968;) psychological ecology research established the importance of "behavior settings". His work with Paul Gump (Barker & Gump, 1964) was especially important in establishing relationships between population density of high schools and the variety of behavior settings they offered to their students. In general smaller schools offer students greater opportunity for individual expression than do larger schools. In the earlier Iowa years Barker worked closely with Jacob Kounin (Barker, Kounin, White, 1943). Gump worked with both Kounin and Barker (Barker & Gump, 1964; Kounin & Gump, 1961 & 1974). Together these three individuals fostered considerable research into the interdependence of environmental interactions known as psychological ecology. Kounin was located at Wayne State University in Detroit, Michigan, while Roger Barker and Paul Gump were at the University of Kansas in Lawrence, Kansas. Fritz Heider, a close personal colleague of Kurt Lewin's was also at the University of Kansas. Both Barker and Gump were Directors of the "Midwest Field Station" a project which was originated by Herbert Wright. They did much of their research in a small Midwestern town, Oskaloosa, Kansas, where the two of them lived. Kounin and Gump coined the notion of "exploratory ecological research," a pioneering use of video recording of behaviors in natural settings to determine emerging interdependencies. That research resulted in several classic studies focusing on the management of children's behaviors in classroom settings. While many educators focused on "discipline" in the classroom, Kounin and Gump's research pointed out the important influence of managing those behavior settings and the signal systems that drove them (Kounin, 1970; Kounin & Gump, 1974; Kounin & Sherman, 1979). While this research was accomplished throughout the 1960's and 1970's, to this day there is hardly an introductory educational psychology text that does not mention many of his key concepts: the "ripple effect," with-it-ness, transitions, overlapping, and group focus (contemporary examples might be Sternberg & Williams (2002 or Eggen & Kauchak, 2004).

## Action Research: Richard and Patricia Schmuck

Lewin and his student, Ronald Lippitt, shared a strong interest in how adult leadership affected children's attitudes and behaviors. In their classic study of leadership, along with Ralph White, they studied three types of leadership in boys' clubs. Alex Bavelas also assisted in the research but never became a co-author. The autocratic leader kept and used all of the legitimate power that was given to him, directing the boys in what they should do and how they would do it. The democratic leader distributed power throughout the group, encouraging the boys to make their own decisions about their activities. The laissez-faire leader abdicated his authority and performed little actual leadership. The boys who constructed Halloween masks behaved very differently under the three types of leadership. The democratically led boys were productive in the mask making, enjoyed the experience, and wanted to make masks again. The autocratically led boys, although productive, did not like the experience, had pent-up anger, and did not want to make masks again. The laissez-faire led boys were least productive, felt bored, and did not wish to duplicate the experience. For more details about the Lewin, Lippitt, and White research, see Chapter 8 in Schmuck and Schmuck (2001).

Lippitt composed his doctoral dissertation, with Lewin as chair, on the autocratic and democratic styles of leadership research and from that experience commenced a career interest in the social psychology of children. Later, with Ralph White, Lewin and Lippitt created the laissez-faire style of leadership in contrast to the autocratic and democratic styles. Moreover, Lippitt adopted Lewin's central interest in action research (the study of real social situations with a view to improve the quality of actions and results within in them and applied action research to public schools in working with teachers and administrators to improve students' attitudes toward school and their academic performances. It was in that context of research that we, Richard and Patricia Schmuck, worked with Lippitt on action research in schools.

Action research in education aims to improve teachers' and administrators' ability to achieve desirable educational goals by helping them to use data for continuous problem solving and positive change in classrooms. Action research

entails the use of Lewin's Force Field Analysis to understand the many factors that can effect situations for student learning and Schmuck and Runkel's STP problem solving paradigm which helps teachers pinpoint their situation (S), target (T), and plans (P) to move from the situation to the target. (For details about the STP see Chapter 6 in Schmuck and Runkel, 1994).

Action research is similar to traditional research in that both entail data collection, systematic inquiry, and problem solving. They differ in that **traditional research** focuses on (1) what others are doing, (2) seeking explanation and truth, (3) striving for knowledge, and (4) being removed from the research site, while **action research** focuses on (1) what one is personally doing, (2) seeking continuous change, (3) striving for development and planned change, and (4) being personally involved. While the traditional researcher seeks to explain how classrooms and schools function, the action researcher is concerned with intervention for continuous classroom and school improvement. Traditional researchers seek to build a body of knowledge about classrooms and schools; action researchers try to foster development and self-renewal in classrooms and schools. Traditional researchers collect data in controlled field studies in schools; action researchers collect data on multiple perspectives of teachers and students in their own school. Traditional researchers strive to create universal theory; action researchers hope to increase local classroom and school effectiveness.

After studying with Ronald Lippitt, Richard developed two models of action research, one of which (responsive) grew directly out of the previous creations of Lewin and Lippitt. The other, (proactive), Richard created after working on action research with hundreds of teachers. Action research as Lewin and Lippitt conceived it, is responsive to data because data collection, which they saw as diagnosis, necessarily precedes action. Lewin and Lippitt conceived of action research as alternating cycles of diagnosis and action, with the initiation always entailing diagnosis. In the Lewinean tradition, it is assumed that effective "social engineers" diagnose their clients' problems and the dynamics of their situations before they act. (To read more about how Lippitt conceived of action research, see Lippitt, Watson and Westley, 1958).

The steps of **responsive action research** are:

Collect data

Analyze the data

Distribute the data and announce changes

Try a new practice  
Check others' reactions  
Collect data

**Proactive action research** grows out of professional reflections and learning experiences that encourage trying a new practice. The steps are:

Try a new practice  
Incorporate hopes and concerns  
Collect data  
Check what the data means  
Reflect on alternate ways to behavior  
Try another new practice

For a more complete understanding of both models of action research and how they can be applied in working with young children in schools, read chapters 5 and 6 of Schmuck (1997).

Patricia's collaboration with Lippitt was built on their mutual interest in improving elementary school students' classroom experience. They created a social science curriculum for 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> graders in which the students learned how to use scientific data collection methods such as observation, interviews, and questionnaires to study interpersonal differences in the classroom, the sources of friendly and unfriendly behavior, differences between deciding and doing and the processes of influencing each other. Each lesson entailed data collection in the class in the style of students doing responsive action research on themselves. Science Research Associates (SRA) published the social science curriculum in the 1960s. For a useful guide to how teachers might use social science activities with young children, read Lippitt, Fox, and Schaible (1969).

Alongside work on the social science curriculum Patricia also collaborated in the Lippitt group at the University of Michigan, as well as at the National Training Laboratory in Bethel, Maine on peer tutoring and cross age learning.

## Some personal thoughts

I (Lawrence Sherman) worked with Jacob Kounin throughout the 1960's and 1970's at Wayne State University in Detroit Michigan. This university also had many other important faculty who were either directly or indirectly associated with Kurt Lewin's theories including Abraham Citron, Fritz Redl (both of whom

were members of Lewin's CCI group in the late 1940's) and William Wattenberg. Even Ronald Lippitt was associated with this group (Lippitt, Polansky, Redl & Rosen, 1952). I was quite fortunate to have been part of the Wayne community as a graduate student (Jacob Kounin Chaired my Ph. D. Dissertation Committee and Fritz Redl and William Wattenberg were the other two members) and later as an instructor at Wayne State University and then research project director for Kounin during the 1960's and early 1970's. Thus, a fairly close community of American Lewinian's continued his work with a special focus on children, especially in classroom behavior settings. It did not seem unusual to me to have embraced cooperative learning in the 1980's, having been influenced by such an important group of first generation Lewinians.

We, Richard and Patricia, worked with Ron Lippitt from 1959 to 1965 at the University of Michigan which housed the Institute for Social Research (ISR), which included the Survey Research Center (SRC), the Research Center on Group Dynamics (RCGD), and the Center for Research on the Utilization of Scientific Knowledge (CRUSK). Lippitt chaired the Program on Children, Youth, and Family Life, which cut across all three parts of ISR. We were fortunate to have experiences in the Survey Research Center with Daniel Katz and Robert Kahn on the social psychology of organizations, the Research Center for Group Dynamics with Dorwin Cartwright and Alvin Zander, and in the Center for Research Utilization of Scientific Knowledge with Robert Mann. Ronald Lippitt was the catalyst to the broadening of our graduate education. It was understandable that we dedicated our professional careers to planned change and action research in schools, following on in the Lewin and Lippitt tradition.

In summary the three of us strongly believe that it is important to know and acknowledge our common heritage in the theories of Kurt Lewin. We have been particularly impressed with the breadth as well as depth of Lewin's social psychological ideas and research. While we have focused primarily on our common roots in the areas of cooperative learning and action research many other closely related areas are acknowledged, including psychological ecology, conflict resolution, frustration, level of aspiration, etc. This conference has been an excellent opportunity for us to renew our awareness and to relate and pass on our knowledge and understanding of Kurt Lewin's considerable influence. We opened this essay by mentioning an African definition of varieties of death. Certainly the entire conference would be an excellent example of Kurt Lewin as both the *sasha* and the *zamani*.

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