In this essay, I present a framework for assessing conflict resolution programs and indicate how practitioners or educators can do research which will enable them to productively reflect on their practice. There are many kinds of research, all of which have merit. They have different purposes and often require varying types of skills. There is a tendency among both researchers and practitioners to derogate research that does not satisfy their specific needs or does not require their particular expertise. This is a profound mistake since both professional researchers and practitioners have much to contribute to the development of knowledge about conflict resolution programs.

Types of Research

I now turn to a discussion of several types of research that are relevant to the development and assessment of conflict resolution programs: basic research, developmental research, field research, consumer research, action research, experience surveys, and research for self reflection upon one's practice. Although the insights and cooperation of the practitioner are valuable in all forms of research, the skills of the professional researcher are particularly needed in basic, developmental, field, and consumer research.
Basic Research

There are many unanswered questions basic to knowledge and practice in the field of conflict resolution. To illustrate just a few:

- What are the reliable, valid, and reasonably precise ways of measuring the knowledge, attitudes, and skills involved in constructive conflict resolution?
- What are the basic dimensions along which cultures vary in their response to and management of conflict?
- What determines when a conflict is ripe for intervention or mediation?
- What are the important similarities and differences in conflict processes at the interpersonal, intergroup, and international levels?
- What are the intervening psychological processes that lead to enduring and generalized change in managing conflict, and what are the psychological and social consequences of such change?
- What differences exist among people with different types of personalities in their styles of conflict management?
- What type of value system is implicit in the current practice of conflict resolution?

These are only a few of the important questions that must be addressed if we are to have the kind of knowledge that is useful for those interested in making conflict constructive—whether it be in school, the family, industry, or community. These sort of questions require systematic, extended research which is directed at developing theory
and the knowledge that would be useful in developing as well as assessing conflict
resolution programs.

**Developmental Research**

Developmental research is concerned with helping to shape effective educational
and training programs. Such research is concerned with identifying the best ways of
aiding people to acquire the knowledge, attitudes, and skills necessary for constructive
conflict resolution by answering such questions as: How should something by taught (for
example, using what curriculum)? For how long? These best ways are apt to vary as a
function of the age, educational level, cultural group, and personality of the children and
adults involved.

There is a bidirectional link between development and basic research. To assess
and compare the changes resulting from various educational and training programs, it is
necessary to know what changes these programs were seeking to induce and also to
develop valid and reliable measuring instruments and procedures for measuring these
changes.

I note that there has been very little of the kind of research suggested here. Some
evaluation research has indicated that conflict resolution training (CRT) is viewed as
worthwhile by its consumers; some has demonstrated that such training has worthwhile
effects on self-esteem and on reducing destructive forms of conflict (Lam, 1989; Deutsch,
1993). We are now at the point where we need to go beyond demonstrating that CRT can
be worthwhile; we have to start studying what types of training are most effective and
most efficient.
Field Research

Field research is needed to identify the features of political systems, cultures, and organizations that facilitate or hinder effective CRT. Can CRT have desirable effects with inner-city high school students living and studying under adverse circumstances? What kind of culture is most favorable to such training, and what kind makes it unfeasible or ineffective? Which levels in an organizational hierarchy must be knowledgeable and supportive of CRT for it to be effective? In schools, what type of CRT model should be employed: extracurricular activity, a specific course in CR, an infusion model in all school courses, use of constructive controversy, or all of the above? Is cooperative learning a necessary precondition or a complement to CRT? Who should teach CR: a specialist in CRT, a teacher, a student, or a parent? What criteria should be employed in selecting CR trainers?

Most of these questions have to be asked and answered in terms of the specific characteristics of the individual school, taking into account the resources, organization, personnel, student body, and social setting. Little if any research has been done on questions of this type because it is difficult and expensive to do direct research on them. In a subsequent section, we discuss experience surveys as an alternative, feasible approach to such issues.

Consumer Research

It would be valuable to have periodic surveys of where CRT is taking place, who is being trained, what kind of qualifications the trainers have, and so on. Also, it would
be good to know how CRT training is evaluated by its recipients, immediately after training and one year later. In addition to studying those who have had CRT, it would be useful to assess what the market is for CRT among those who have not has it.

Most of the research on CRT in schools and other organizations has been essentially study of “consumer satisfaction.” The research has usually involved studying the effects of CRT in a particular classroom, workshop, or school. Results are quite consistent in indicating a considerable degree of approval among those exposed to CRT, whether in the role of administrator, teacher, student, or parent of a student (Lim and Deutsch, 1997).

**Action Research**

Action research is a term originally employed by Kurt Lewin to refer to research linked to social action. To be successful, it requires collaboration between the action personnel—the trainers, school personnel, and practitioners—and the research personnel. What the action personnel do can be guided by feedback from the research concerning the effectiveness of their action. To study the process involved in successfully producing a change (or failing to do so) in a well-controlled, systematic manner, the researcher depends on the action personnel being cooperative. Most research on CRT in the schools—no matter how it is otherwise labeled—is a form of action research.

There are many potential sources of difficulty in this collaboration. It is time consuming and hence often burdensome and expensive to both the practitioners and researchers. Also, friction may occur because of the disparate goals and standards of the two partners: one is concerned with improving existing services, the other with advancing
knowledge of a given phenomenon. The practitioner may well become impatient with the researcher's attempt to have well-controlled independent variables (e.g., that the CRT program is administered essentially the same way in every classroom), and the intrusiveness involved in extensive measuring of the effects of the CRT program on the student's knowledge, attitudes, skills, and behavior. The researcher may become exasperated with the practitioner's improvisation and reluctance to sacrifice time from other activities to achieve the research objectives. In addition, there is often much evaluation apprehension on both sides: the practitioners are concerned that, wittingly or unwittingly, they will be evaluated by the research findings; the researchers fear that their peers will view their research as not being sufficiently well controlled to have any merit.

**Research for Self-Reflection**

Although it is impossible for a self-reflecting practitioner to assess whether a particular conflict resolution program is generally effective (e.g., effective when used by other teachers, or with other students, or in other school cultures), she may want to find out what effects the CRT program that she is using has on the students she is teaching. To do this well, she will need to ask herself such questions as the following:

... What are my objectives in using this program? Do I want it to help in establishing a peaceful, orderly classroom? To help students manage their conflicts more constructively—in school? at home? in their everyday lives? to improve their grades?

... How will I know if my objectives are achieved? What kinds of information will I need to collect and how will I collect it? Is there a decrease in negatives (such as fights, bullying, victimization, verbal abuse, hurt feelings, antagonisms, discrimination,
and disorder) and an increase in positives (such as willingness to face problems openly, maintaining respect for the other during conflict, working cooperatively to resolve conflict, listening and communicating with the other, confidence in ability to deal with problems or better relations with peers, teachers, and family members, as well as increased harmony and order in the classroom). How will I use my observations, self-reports by students (obtained through interviews, questionnaires, or diaries), and reports by others about the student (e.g., by other students, other teachers, parents, staff) to provide me with the information I need to assess what changes, if any, have resulted from the CRT?

... If the CRT does not achieve my objectives, how can I determine the reasons for the failure? Are other teachers having similar results with the CRT or are some having better results? If poor results are common, are they due to inadequacies in the CRT program which you can describe, to inadequate training or support for implementing the program successfully, or to countering influence in the school, families, or neighborhood? If your poor results are not common, are there important differences in the way you and successful others implement the CRT program or are the differences mainly in the nature of the student groups being taught?

... If the CRT program appears to have achieved its objectives, is it because there has been a real change in the students (e.g., they have decreased their negatives and increased their positives from before to after exposure to the CRT) or because the students were good conflict resolvers prior to their CRT? If there has been a desirable change, is it due to the CRT or to some other factor such as the increased maturity (age)
of the student, or the introduction of some other change in the curriculum, school, or neighborhood?

A self-reflecting teacher or CRT trainer will, hopefully, be aware of the natural tendency to think that what one does has desirable effects, and will be appropriately skeptical and aware that she needs specific evidence that whatever positive effects have occurred are, in fact, due to her efforts.

**RESEARCH STRATEGIES**

Many factors make it very difficult to do research on the questions outlined in the previous sections, particularly the kind of idealized research that most researchers would prefer to do. For example, it is rarely possible to assign students (or teachers, or administrators) randomly to be trained (or not trained) by randomly assigned expert trainers employing randomly assigned training procedures. Even if this were possible in a particular school district, one would face the possibility that the uniqueness of the district has a significant impact on the effectiveness of training; no single district can be considered an adequate sample of all or other school districts. To employ an adequate sample (which is necessary for appropriate statistical analysis) is very costly and probably neither financially nor administratively feasible.

Given this reality, what kind of research can be done that is worth doing? Here I outline several mutually supportive research strategies of potential value.
**Experimental and Quasi-Experimental Research**

Experimental research involves small-scale studies that can be conducted in research laboratories, experimental classrooms, or experimental workshops. It is most suitable for questions related to basic or developmental research, questions specific as to what is to be investigated. Thus, such approaches would be appropriate if one sought to test the hypothesis that role reversal does not facilitate constructive conflict resolution when the conflict is about values (such as euthanasia) but does when it centers on interests. Similarly, it would be appropriate if one wished to examine the relative effectiveness of two different methods of training in improving such conflict resolution skills as perspective taking and reframing.

This kind of research in most productive if the hypothesis or question being investigated is well-grounded in theory or in a systematic set of ideas rather than when it is ad hoc. If well-grounded, such research has implications for the set of ideas within which it is grounded and thus has more general implications than testing an ad hoc hypothesis does. One must, however, be aware that in this type (as well as in all other types) of hypothesis-driven research, a hypothesis may not be supported--even if it is valid--because implementation of the causal variables (such as the training methods), measurement of their effects, or the research design may be faulty. Generally, it is easier to obtain nonsignificant results than to find support for a hypothesis. Thus, practitioners have good reason to be concerned about the possibility that such research may make their efforts appear insignificant even though their work is having important positive effects.

The logic involved in true experiments assumes that complete randomization has occurred for all other variables except the casual variables being studied. But human
beings have life histories, personalities, values, and attitudes prior to their participation in a conflict workshop or experiment. What they bring to CRT from their prior experience may not only influence the effectiveness of the CRT being studied but also be reflected directly in the measurement of its effects. Thus, an authoritarian, antidemocratic, alienated member of the Aryan Nation Militia Group may not only be unresponsive to CRT, but also independently of this, score poorly on such measures of the effectiveness of CRT as ethnocentrism, alienation, authoritarianism, and control of violence because of his or her initial attitudes. Such people are also less likely to participate in CRT and be responsive to it than democratic, nonviolent, and nonalienated people are.

With appropriate “before” measures and correlational statistics, it is possible to control for much (but far from all) of the influences of initial differences in attitudes on the “after” measures. In other words, a quasi-experiment that has some resemblance to a true experiment can be created despite the prior histories of the people who are being studied.

Causal Modeling

Correlations, by themselves, do not readily permit causal inference. If you find a negative correlation between amount of exposure to CRT and authoritarianism, as I have suggested, it may be that those who are authoritarian are less apt to expose themselves to CRT, or those who have been exposed to CRT become less authoritarian, or the causal arrow may point in both directions. It is impossible to tell from a simple correlation. However, methods of statistical analysis developed during the past several decades (and still being refined) enable one to appraise with considerable precision how well a pattern
of correlations within a set of data fits an a priori causal model. Although causal modeling and experimental research are mutually supportive combinations, causal modeling can be employed even if an approximation to an experimental design cannot be achieved. This is likely to be the case in most field studies.

Consider, for example, a study we completed several years ago on the effects of training in cooperative learning and conflict resolution on students in an alternative high school (Deutsch, 1993; Zhang, 1994). Prior theoretical analysis (Deutsch, 1949, 1973; Johnson and Johnson, 1989) as well as much experimental and quasi-experimental research (see Johnson and Johnson, 1989, for a comprehensive review) suggested what effects such a training could have and also suggested the causal process that might lead to these effects. Limitation of resources made it impossible to do the sort of extensive study of many schools required for an experimental or quasi-experimental study, or to employ the statistical analysis appropriate to an experiment. So we created a causal model that, in essence, assumed training in cooperative learning and/or conflict resolution would improve the social skills of a student. This, in turn, would produce an improved social environment for the student (as reflected in greater social support as well as less victimization from others), which would lead to higher self-esteem and more sense of personal control over one’s fate. The increased sense of control would enhance academic achievement. It was also assumed that improvement in the student’s social environment and self-esteem would lead to an increased positive sense of well being as well as decreased anxiety and depression. The causal model indicated what we had to measure. Prudence suggested that we also measure many other things that potentially might affect the variables on which the causal model focused.
The results of the study were consistent with our causal model. Even though the study was quite limited in scope—having been conducted in only one alternative high school—the results have some general significance. They are consistent with prior theory and also with prior research conducted in very different and much more favorable social contexts. The set of ideas underlying the research appears to be applicable to students in the difficult, harsh environment of an inner-city school as well as students in well-supported, upper-middle class elementary and high schools.

**Survey Research**

This form of research is widely used in market research, pre-election polling; opinion research; research on the occurrence of crime; and collection of economic data on unemployment, inflation, sales of houses, and so on. A well-developed methodology exists concerning sampling, questionnaire construction, interviewing, and statistical analysis. Unfortunately, little survey research has taken place in the field of CRT. Some of the questions that could be answered by survey research have been discussed earlier, under the heading of consumer research.

**Experience Surveys**

Experience surveys involve intensive in-depth interviews with a sample of people, individually or in small focus groups, who are considered to be experts in their field. The purpose of such surveys often is to obtain insight into the important questions needing research through the experts’ identification of important gaps in knowledge or through the opposing views among the experts on a particular topic. In addition, interviewing
experts, prior to embarking on a research study, generally improve the researcher’s practical knowledge of the context within which her research is conducted and applied and thus helps her to avoid the minefields and blunders into which naïveté may lead her.

Most important, experts have a fund of knowledge, based on their deep immersion in the field that may suggest useful, practical answers to questions that would be difficult or unfeasible to answer through other forms of research. Many of the questions mentioned earlier under the heading of field research are of this nature. Of course, one’s confidence in the answer of the experts is eventually affected by how much they agree or disagree.

There are several steps involved in an experience survey. The first is to identify the type of expert you want to survey. For example, with respect to CRT in schools, one might want to survey practitioners (the trainers of trainees), teachers who have been trained, students, or administrators of schools in which CRT has occurred. The second step is to contact several experts of the type you wish to interview and have them nominate other experts, who in turn nominate other experts. After several rounds of such nominations, a group of nominees usually emerges as being widely viewed as experts. The third step is to develop an interview schedule. This typically entails formulating a preliminary one that is tried out and modified as a result of interviews with a half dozen or so of the experts individually and also as a group. The revised schedule is formulated so as to ask all of the questions one wants to have answered by the experts, while leaving the expert the opportunity to raise issues and answer the questions in a way that was not anticipated by the researcher.
WHAT TO MEASURE

The objective of most CRT programs is to affect the knowledge, attitude and emotions, skills, and behaviors of the participants so that when they are involved in a conflict, they are more likely to initiate and develop a constructive process of conflict resolution. Thus, in assessing a CRT program, one may measure the effects of the program on knowledge of conflict processes, on the orientation, attitudes, and emotions toward a conflict, on the component skills involved in constructive conflict resolution, and on behavior in diverse conflict situations. Below, we briefly outline some of the variables that might be measured.

Knowledge

Here one wants to assess whether the student has acquired knowledge of: (1) the typical steps involved in both constructive conflict resolution and mediation processes, and (2) basic concepts--such as reframing, cooperation, competition, active listening, responsive cooperation, mutual problem solving, the distinction between needs and positions, taking the perspective of the other and role reversal, ethnocentrism and cultural differences, misperceptions, and “hot buttons” in self and other.

Orientation, Attitudes, and Emotions

One wants to know whether the students have acquired the orientations, attitudes and emotional responses to conflict which facilitate constructive rather than destructive conflict resolution. Here, I refer to whether the students have developed a cooperative (win-win) rather than a competitive (win-lose) orientation to conflict, with positive
(hopeful, interesting, creative) rather than negative (fearful, anxious, avoidant, antagonistic) expectations and feelings about the conflict processes and outcomes. One might also want to know something about the effects of the CRT program has on such social attitudes as: alienation, trust, suspicion, ethnocentrism, authoritarianism, and power-orientation.

**Skills**

The ultimate test of the effectiveness of a CRT program is whether the participants have acquired the skills that are involved in constructive conflict resolution and whether they use these skills in the conflicts they experience in their daily lives. Below I list skills that are the focus of many CRT programs.

... Being able to “break the ice,” reduce tension, find “common ground” between oneself and the other, establishing a friendly working relationship.

... Reframing the conflict so that it is viewed as a mutual problem to be resolved cooperatively.

... Active listing to the other which involves understanding the meaning and emotions involved in what the other is communicating and checking with the other, the correctness of your understanding

... Effective and responsive communication to the other and checking to see that the other correctly understands what you mean and what you feel.

... Perspective taking and role reversal which involve empathic understanding of the other’s situation and social cultural context as well as his position and underlying needs.
Being able to differentiate between "position" and "needs" and to identify the underlying needs in oneself and the other.

Problem solving skills such as being able to diagnose the nature of the conflict, to creatively generate potential solutions to it, and to evaluate the alternative solutions in the terms of their feasibility, durability, desirability, and justness.

Skills in supporting, encouraging, and enhancing the other.

Self-control of one's impulses (e.g., to be overly angry, over-conciliatory, ethnocentric, to overreact when one's "hot buttons" are pushed, to be defensive).

Skills in responding to the other's emotional outburst, attacks, ethnocentrism, "hot buttons," and defensiveness.

Skills in dealing with "dirty tracks," "deception," and the other's unwillingness to cooperate.

**Behavior in Different Situations**

People are sometimes more able to employ their knowledge, attitudes, and skills to manage their conflicts constructively in some types of situations than others, with some types of people and not others, and about some types of issues and not others. It is useful to know what types of situations, people, and issues are problematic for the student. It is impossible here to set forth a comprehensive classification of types of situations, people, and issues so I list below some distinctions that are relevant to the ease of difficulty of resolving a conflict.

It seems likely that the learnings acquired in the CRT can readily be transferred to situations which are characterized by strong norms of cooperation and also
such values as reciprocity in fairness, human equality, shared community, recognition of
personal fallibility, and nonviolence (see Deutsch and Coleman, Chapter 2). One would
expect that if a situation is characterized by radically different norms and values a
transfer would be difficult. Thus, if the school culture is authoritarian and competitive, it
may be difficult to make the transfer from the more cooperative, egalitarian culture in a
classroom of CRT. Similarly, the likelihood of the transfer from CRT in the classroom to
conflict in the family, work, or community settings will be affected by the norms and
values in these different settings.

...Also, with regard to the other with whom one is in conflict, if the other
approaches conflict with the norms and values underlying constructive conflict
resolution, transfer is likely—providing one’s relations with the other does not lead one to
abandon these norms and values. There has been no systematic research in this area, but
it seems likely that transfer is more apt to take place in conflict with peers than with
superiors or subordinates and with people whose personalities are compatible with one’s
own rather than incompatible.

...Issues that threaten personal or important group identities, esteem, security or
survival are difficult to resolve constructively as are issues that have a long history of
contentious, unresolved dispute. In addition, conflicts over basic values, relative power,
relative status, possession of limited resources vital to security, esteem, identity, or power
are difficult to resolve constructively unless the parties involved in the conflict are highly
skilled and are strongly committed to the norms and values underlying constructive
conflict resolution.
HOW TO MEASURE

There are a number of different forms of measurement: observation, interviews, questionnaires, diaries, and records.

... Observations of actual behaviors in real conflict situations is probably the most persuasive but also the most difficult and costly form of data collection. However, teachers who have continuing contact with their students may be in a good position to observe changes in behaviors in their classrooms. Because observation of real conflicts is difficult, observation of "simulated conflicts" is commonly used as a substitute. Here, the teacher assigns students to take a given role in a situation that simulates a real conflict (e.g., a conflict between two friends, a parent and child, a student and teacher) and observes the behavior in a simulated conflict.

... Interviews and questionnaires involve obtaining reports from the students being studied about their own knowledge, attitudes, skills, and behavior or obtaining such reports from others (e.g., fellow students, neighbors, friends, parents, teachers, supervisors, and subordinates) in a position to observe the student's behavior. Interviews with individuals or in focus groups are a much more flexible way of obtaining useful information but also much more costly and time-consuming.

... Diaries in which the student records his daily experiences with conflict can be of considerable value especially if the student is given a framework or set of questions to ask about the conflicts that are experienced.

... The data found in records of various sorts can also be useful. Is there a decrease in violence, delinquencies, vandalism, disciplinary cases, absenteeism or truancy, health complaints, depression and neurotic symptoms or an improvement in
school grades, in voluntary actions to help the class or school, in cooperative activities among teachers, and so forth.

**RESOURCES**

For someone who wants to be a self-reflecting practitioner, there are several types of publications that may be useful: those dealing with learning through reflection; those focusing on research methods; and those describing research that has been conducted and research methods that have been utilized in evaluating conflict resolution training. Below, I indicate some valuable references in each of these three areas.

...**Learning through reflection.** Marsick and Sarquet (2000) have written an excellent chapter on this topic and their list of References contains such additional useful reading as Marsick and Watkins (1999), Mezirow (1991), and Schon (1987).

...**Research methods.** The classic textbook on research methods by Judd, Smith, and Kidder (1991) contains excellent chapters on all aspects of research, including interviewing, questionnaire construction, observation methods, as well as other forms of data collection. The monograph by Robinson, Shaver, and Wrightsman (1991) contains descriptions and examples of a great number of widely employed measures of personality and social attitudes; some of which may be influenced by CRT.

...**Research studies of CRT.** The authors of the various chapters in The Handbook of Conflict Resolution (Deutsch and Coleman, 2000) make reference to a wide variety of studies that are relevant to CRT, which contain specific measures for assessing the effects
of CRT. In a section of Chapter 27, it also provides a summary of research findings on CRT. Bodine and Crawford (1995), in a chapter entitled “Research Findings on What Works” also present a relevant summary. Also, see Lam (1989) for a review of the impact of conflict resolution in schools, and Elliot, Hamburg, and Williams (1998) for a review of research on programs to prevent school violence.

In addition, there are a number of recent, well-designed studies which have employed measurement instruments that are appropriate for students at different age-levels. For pre-schoolers, Sandy and Boardman (in press) have described various ingenious measuring instruments that they have employed in The Peaceful Kids Conflict Resolution Program as well as the measures they employed with parents and the Day Care Staff. Dr. S.V. Sandy can be reached at the International Center for Cooperation and Conflict Resolution, Box 53, Teachers College, Columbia University, New York, NY 10027.

Johnson & Johnson (2000) have described a series of studies with students ranging from kindergarten through ninth grade, in their “Teaching students to be peacemakers: Results of twelve years of research”. Their measures are briefly described in this paper. Professor David W. Johnson can be contacted at the University of Minnesota, 60 Peik Hall, Minneapolis, Minnesota, 55455.

Aber, Brown, and Heinrich (1999) have conducted systematic research, using very interesting measures, with children in elementary grades. Professor John L. Aber can be reached at the National Center For Children in Poverty, Joseph L. Mailman School of Public Health of Columbia University, New York, NY, 10032.
Professor Tricia S. Jones (1997) has done extensive research, using a variety of well-developed measures, on students in elementary, middle, and high schools. She can be reached at the Department of Communication Sciences, Temple University, Philadelphia, PA, 19122.

Professor Peter Coleman and his workgroup (Coleman and Lim, in preparation) have constructed systematic questionnaires for evaluating CRT for use with adults who were trained and other instruments for use with people who know the trainees well, who can report on changes in the behavior of the trainees. Professor Coleman can be reached at the same address as Dr. Sandy (above).

**SUMMARY AND CONCLUSION**

In this paper, I have presented a framework for thinking about the assessment of conflict resolution programs. I have briefly discussed different types of research and research strategies as well as ways of measuring the kinds of effects one might hope to achieve from such programs. Although a self-reflective practitioner will not often have the resources nor the advanced training in research methods to do much of the research outlined in this paper, his or her self-reflection can become deepened and more systematic by careful consideration of the issues presented here.
REFERENCES


Johnson, D.W. & Johnson, R.T. (2000). Teaching students to be peacemakers: Results of twelve years of research. University of Minnesota, 60 Peik Hall, Minneapolis, Minn. 55455.


