Dissatisfaction with schools results directly from the failure to explain, understand, and change educational practice within a critical theoretical perspective. School renewal and the potential for change must be based on critical inquiry—a technique which utilizes qualitative and quantitative empirical procedures as catalysts for formative, critical reflection. This methodological approach integrates three general orientations of systematic inquiry: the scientific method, naturalistic methodologies, and dialectical reason. "Doing" critical inquiry can be likened to wearing three hats at the same time: (1) a top hat representing critical inquiry, explaining and understanding only within a normative perspective that maintains a continued dialectic between schooling practices and human interests, (2) a middle hat representing hermeneutical/interpretive inquiry dedicated to understanding the conditions of schooling in the terms of historical and current school events and people's experiences of those events, and (3) a bottom hat representing empirical analytic inquiry and a dedication to the usefulness of descriptive (survey-type), experimental, and/or quasi-experimental methodologies to yield potentially valuable information. The content of critical inquiry cannot be determined by collaborators but must emerge from their interactions with those in the setting and consist of the reality of the setting itself. Two interconnected processes—exploration and action—constitute the activities of those involved in the change effort. (RM)
An Immodest Proposal: From Critical Theory to Critical Practice for School Renewal

Jeannie Oakes
Laboratory in School and Community Education
and
Kenneth A. Sirotnik,
Laboratory in School and Community Education,
and
Center for the Study of Evaluation
University of California, Los Angeles
1983

*This work is based upon a larger monograph referenced herein. Prior drafts of this monograph were jointly supported by the Laboratory in School and Community Education (under a grant from the Charles Stewart Mott Foundation) and by the Center for the Study of Evaluation (under a grant from the National Institute of Education, Department of Education NIE-G-80-0012, P3). Current modification and revision efforts (including this paper) are supported entirely by the Laboratory in School and Community Education (under a grant from the Charles Stewart Mott Foundation). A number of people have generously given their time to insightful reviews of this paper and the aforementioned monograph. In particular, the detailed comments and suggestions of Maxine Bentzen, David Ericson, Seymour Sarason, David O'Shea and Robert Wenkert have been most useful. Responsibility for the contents herein, unfortunately, still remains with us.
Introduction

After spending at least a quarter of a century and billions of dollars on school improvement efforts, the gaps between what school professionals intend to do, what the public expects to have happen in schools, and what actually goes on in them seem to grow increasingly wider. Dissatisfaction with schools, of course, is a recurring public pastime. But, as Goodlad (1981) has noted, it is taking a more serious turn:

The public school system of the United States is experiencing a series of shock waves of such proportions that it may not recover. Our school system has had troubles, real and imagined, before. It is essential, however, to recognize the difference between yesterday's and today's malaise. Yesterday, the attacks usually were against the people who ran the schools -- their wrongheadedness or their mindlessness -- but rarely against the institution. Today, as often as not, the attacks are against the institution itself, not just those who run it.

To put it another way, Silberman's (1970) "crisis of the classroom" has become a full-blown crisis of schooling.

Why? Certainly, the lack of school improvement does not stem from a lack of trying. Rather it is our belief that the crisis results directly from the failure to explain, understand, and change educational practice within a critical theoretical perspective.

The purpose of this inquiry is to illuminate this rather obscure and cryptic answer. But first, by way of introduction, consider just one relevant theme that is revealed through the critical evaluation of current schooling practice.

Historically the stated goals for schools, supported by the public, have included four broad areas: 1) acquisition of fundamental academic knowledge and skills, 2) preparation for productive work and
responsible participation in economic life, 3) development of skills and understandings requisite for active participation in the complex social and political structures of society and 4) personal development toward individual fulfillment. 3 Yet the gaps between these intents and schooling practice can be readily inferred from observational studies of classroom practices since the turn of the century to the present. 4 Further that the loftiest of our traditional educational aims—the developing of all individuals to their fullest potential as literate, culturally enlightened, critical thinkers who will create a just and democratic society—is rarely articulated in regard to public schools provides additional evidence of an institution off-course, or, at minimum, acritical with respect to its own purposes and practices.

But the picture is larger than schooling itself. In our analysis complex cultural phenomena we call schools have evolved to their present forms precisely as adaptations to a socio-political context that is incompatible with the best of our educational intents. In other words, schools have yet another set of goals—usually unspoken ones—that place schools in a central role in maintaining society in its currently functioning forms. When we acknowledge this more implicit set of goals, schools' resistance to interventions becomes more easily understood. These goals that direct schools to maintain the societal status quo in many ways run counter to innovations directed at the development of individuals to their fullest potential. The creation of a literate, culturally enlightened, critically thinking citizenry might very well wreak havoc with our current political, social, and economic structures. Of course, philosophers and educators have debated
for centuries the extent to which education should develop the individual or serve the needs of the state. The conflict continues, of course, because nowhere yet has been developed the ideal just and democratic state that is best served by individuals developed to their fullest—academically, vocationally, socially, and personally. The usually tenuous compromise or resolution of this conflict is that individual development proceeds only to the point where it begins to threaten the status quo.

A major barrier, then, to innovations that attempt to bridge the gap between educational intents and school practice is that they run headlong into a dominant set of beliefs and assumptions that permeate society and dictate how schools should operate in order to maintain society as it is. While this is not a consciously mapped out conspiracy by the educational community, we are suggesting this socio-political phenomenon has a consequence of nurturing schooling norms that run counter to the best intentioned goals of education. And the problem is greatly exacerbated by an uncritical acceptance of these norms. Taking an acritical stance, we usually think of schools as neutral, non-political places that go about the business of educating children as well as they can. We assume they are eager for new practices that will enable them "to do better." Change attempts have rested on these assumptions and, as a result, have concentrated their energies on the development of better educational technologies. Little attention has been given to the examination of the values and beliefs on which school practice rests.

More than better educational technology is required for school change. School renewal, which we believe to be a fundamental
prerequisite for meaningful school improvement, requires the serious consideration of normative (as well as technical) questions as a legitimate part of the change effort. It is thereby, antithetical to the homeostatic mechanisms which schools and school systems have adapted. To the extent that this view is close to the reality of schools (and we will further argue that it is), it is little wonder that major school innovations have achieved little in the way of lasting successes. The sociologists and anthropologists who have intensively studied schools could probably have predicted this result. But perhaps it has been necessary to accumulate years of experience to verify this outcome and raise the consciousness of the research/evaluation community to new paradigms of inquiry.

What we will offer here may be an idealistic notion but, we submit, no more idealistic and, hopefully, more realistic than the notions that have guided past innovations and change efforts. In short, we propose qualitative and quantitative empirical procedures to serve primarily as catalysts for formative, critical reflection—a process that, in its entirety, we will call critical inquiry. At the heart of this proposal is a methodological perspective that embraces both traditional and alternative forms of inquiry while being driven by a critical theoretical perspective as the sine qua non for school renewal and the increased potential for school change. This perspective permits those in schools to know their schools in ways that provide both the impetus and direction for change. And this, of course, is what we envision as a renewing school. It is impossible to develop this thesis in a comprehensive way in this report. However, we will
separate conceptually and to operationalize via survey, questionnaire, test, structured interview, observation schedule, or any other standardized method of data collection. We are adopting, here, a very pragmatic stance, based upon a belief, rooted in experience, in the heuristic potential of data gathered in this fashion, so long as they are reasonably reliable and valid (according to traditional canons) and not over-interpreted under the guise of scientism. Our belief in the heuristic potential of this kind of information as the empirical "data-base" of a school, i.e., its ability to enrich the experiential basis for interpretation, understanding and normative critique, requires an exploratory stance on data analysis and interpretation.

Employing naturalistic methodology for the interpretation of phenomena provides a depth of understanding not permitted by the more positivist methodologies. This second approach permits adding the texture of individual meanings to the description of the context. This approach adds a sense of the whole in terms of how human beings within the context experience it. In other words, this methodological perspective attempts an interpretive understanding of the static properties, human behaviors, and feelings that make up the school setting.

Finally, the third approach places knowledge gained about the school setting within its social and historical context. Building on the "facts" and the personal meanings that are gathered, the critical process offers methods by which the social and political meanings of school events can be understood. Furthermore, norms for assessing these events and guiding future practice are embedded in critical methodology, providing a fundamental criterion for the direction of
of their environment. From the particular solutions that a group chooses from among its available alternatives come the particular organizational structures, patterns of behavior, and ways of interrelating which constitute a way of life that has meaning to that group. Included in these solutions, too, are the assumptions and belief systems that those in the setting come to hold about the nature of their environment and the people in it. Culture therefore, is more than simply a group's ways of doing things, it is also the meanings the group attaches to these ways. Important as well to the understanding of culture is the recognition that all of these elements—organizational structures, behavior patterns, underlying beliefs, and meanings—have both manifest and latent consequences for the members of the group and the events that take place in the setting.

We believe that this definition of culture provides the necessary perspective from which to view schools as changes are attempted in them. First, it leads us to see the organizational arrangements and activities of the school as purposeful; they "make sense" in the context. This is not to say that all schooling events can be justified, but rather they can be understood in the setting. Second, this cultural view demands that the school environment be approached as a whole—taking into account the interrelatedness of organizational structures, individual behaviors, and underlying beliefs—rather than as a collection of isolated or independent elements. Third, by considering underlying assumptions and belief systems as well as observable structures and behaviors, we are led to explore not only what school processes and outcomes are like, but also why particular organizational and behavioral alternatives and not others evolved as
appropriate in a particular setting. And fourth, the direction of our attention to the latent as well as manifest consequences of events in the school setting broadens our view of what might be considered outcomes of schooling and effects of change. When taken together, the elements of this cultural view of schooling compel us to approach schools and school change efforts with a sense of the wholeness and integrity of the system and permit us to take into account both sources of resistance to change attempts and the broadest range of effects such attempts might have. It is the kind of understanding that comes from this perspective that schools and those who are trying to help them need in order to change in fundamental ways.

One final point is important here. We recognize that a considerable sameness exists among schools—what we might call a general schooling culture—resulting from the fact that much of what happens in schools is a reflection of the larger society in which they are situated. Nevertheless, each school has a particular culture in which organizational arrangements, patterns of behavior, and assumptions have come into being in a unique way. While it is possible to describe cultural patterns likely to be found at all schools, these are abstractions. The local school is the setting where social, political and historical forces on schooling are translated into practice; at each school this is likely to happen in different ways. Change efforts based only on an understanding of a general (abstract) school culture, and not on its particular form at the local school, will ignore what is most critical, the particular structures, behaviors, meanings, and belief systems that have evolved there. These particular cultural elements—what Sarason (1982) calls
regularities—-are both the local manifestations of the general schooling culture and the accommodation of the school to the social and political pressures exerted by its particular community both historically and in their contemporary forms. These local school regularities constitute both what must be understood if change is to be achieved and what must be altered if change is to be anything but trivial.

But it is exactly these regularities that are overlooked in most change attempts. This overlooking most likely results from the powerful underlying belief that these regularities are natural. Because they are based on assumptions that are rarely made explicit, regularities are seldom recognized and alternatives to them rarely conceived. Further, as Sarason (1982) so clearly states:

"But here one runs smack into the obstacle of another characteristic of school culture: there are no vehicles of discussion, communication or observation that allow for variation to be raised and productively used for purposes of help and change" (p. 109)

Changing schools, we conclude, requires breaking through this "natural order" of things as it has evolved for the organization of schooling. The question is how? It should be quite clear that we believe it to be exceedingly difficult, if not impossible, to implement viable change efforts without ongoing and concerted renewal efforts at the local school. For reasons already mentioned, and for reasons yet to be mentioned, we feel an expanded methodological perspective driven by critical theory can provide the vehicles Sarason refers to and can facilitate the institutionalization of school renewal.
Three Faces of Inquiry

For many of us (educational researchers and evaluators) our methodological schooling has been largely in the tradition of the scientific method and the hypothetico-deductive paradigm presumably borrowed from the physical sciences. Although we often stretch and shape the steps of this traditional scientific paradigm to meet the exigencies of the social and behavioral sciences, we still think about the act of inquiry in much the same way as, say, a physicist attempting to support or reject a theory of motion, light, temperature, etc. This approach to inquiry derives from those "schools" of philosophical thought labeled variously as logical positivism, empirical analytic science, scientific empiricism, and so on.

But there are at least two other separate and general orientations for systematic inquiry with strong philosophical roots and demonstrable utility for the social/behavioral sciences. The more familiar is the whole class of naturalistic methodologies. The debate between the "naturalistic" vs. "scientific" modes of inquiry, of course, is an old one, often characterized by superficial distinctions between "qualitative" vs. "quantitative" and/or "subjective" vs. "objective" methodologies. As has been argued by others (e.g., Scriven, 1972 and Rist, 1977), these can be simplistic dichotomies that, without proper qualification, serve only to stereotype otherwise profound differences and similarities.

Although there are certainly notable differences in the array of naturalistic methodologies (e.g. phenomenology, symbolic interaction, and ethnomethodology), they are all essentially oriented toward the
interpretation and understanding of social events in the terms of the meaning for the participants in those events. The emphasis upon interpretation has led to the use of the term "hermeneutics" as a general descriptor for this model of inquiry which places a premium on interpretative understanding in contrast to the positivist tradition which focuses on explanation via prediction.8

The second major departure from the empirical analytic tradition is less well known and much more separable. Its roots are also in the hermeneutical tradition. But, as a philosophy of inquiry, it represents what might be thought of as an extension of interpretive inquiry. We are referring here to the critique of knowledge, that is, the application of dialectical reason to the explanations and understandings gained through predictive and interpretive inquiries. But inquiry does not happen in a normative vacuum as many traditional social scientists would have us believe. By definition, at the heart of dialectical reason is the search for truth through unrestrained discourse. And when applied to social inquiry, the political implications can be summed up in a word—emancipation. A social scientist who is committed to the critique of social knowledge, is therefore committed to the critique of ideologies.9

What, therefore, are the ideological interests implicit in the first two faces of inquiry? They can be many; but, if we accept the argument thus far, they cannot be emancipatory at a generic level. Look in any textbook in the traditional mode of empirical inquiry and you will find, in reference to the purposes of research (or "science"), that the aim of social science is to predict and control human behavior. "Understanding" is equated to empirical support of a theory.
But a theory is a "set of interrelated constructs (concepts), definitions, and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena" (Kerlinger, 1973, p. 9).

Although one has to work harder to dig them out, similar frames of reference can be found in the applied forms of phenomenology. For example, Blumer (1969) defines empirical science as "an enterprise that seeks to develop images and conceptions that can successfully handle and accommodate the resistance offered by the empirical world under study" (pp. 22-23). The methodology and epistemology of symbolic interactionists are in many respects worlds apart from those underlying the empirical analytic tradition. But the ideas of manipulation and control are inherent (if not intended) in the above quotation.

The most systematic development of the third face of inquiry has resulted in what has come to be labelled critical theory. At the core of this theory is a normative stance that eschews hegemony of any form and therefore demands unrestrained and undominated dialogue in the process of social and political critique. It is therefore an epistemology of transformative action, having its roots in the traditions of Kant, Hegel and Marx as interpreted more recently by the German philosophers Horkheimer, Adorno, Marcuse, Apel and Habermas. But there is also a strong Latino tradition behind the idea of a critical social science as reflected primarily in the writings and practice of Paolo Freire. Moreover, an American connection can also be made in the philosophical work of John Dewey. Although it can be argued that Dewey was not a critical theorist, per se, he certainly championed the idea of intellectual freedom and the democratic pursuit of values-clari-
fication vis a vis knowledge acquisition through experience and action. So as not to confuse matters here, however, we will save more in-depth discussions of Freire's and Dewey's contributions for subsequent sections. As usual, there exist strong differences in opinion and philosophical thought among these thinkers. However, these are overshadowed by the profound commonalities induced by their shared emancipatory interests. At least from a methodologically oriented perspective, Habermas (1970, 1971, 1973, 1975 and 1979) is among the most provocative and influential of these social and political philosophers/theorists. He has (among other things) raised the level of consciousness of many social scientists to the essential paradigm differences underlying the three faces of inquiry. According to Habermas (1971):

... There are three categories of processes of inquiry for which a specific connection between logical-methodological rules and knowledge-constitutive interests can be demonstrated. The approach of the empirical-analytic sciences incorporates a technical cognitive interest; that of the historical-hermeneutic sciences incorporates a practical one; and the approach of critically oriented sciences incorporates the emancipatory cognitive interest.

... In the empirical-analytic sciences the frame of reference that prejudges the meaning of possible statements establishes rules both for the construction of theories and for their critical testing ... Empirical-analytic knowledge is thus possible predictive knowledge. However, the meaning of such predictions, that is their technical exploitability, is established only by the rules according to which we apply theories to reality.

... The historical-hermeneutic sciences gain knowledge in a different methodological framework. Here the meaning of the validity of propositions is not constituted in the frame of reference of technical control ... For theories are not constructed deductively and experience is not organized with regard to the success of operations. Access to the facts is provided by the understanding of meaning, not observation.

... A critical social science, however, will not remain satisfied with this. It is concerned with going beyond this
goal to determine when theoretical statements grasp invariant regularities of social action as such and when they express ideologically frozen relations of dependence that can in principle be transformed. To the extent that this is the case, the critique of ideology ... [takes] into account that information about lawlike connections sets off a process of reflection in the consciousness of those whom the laws are about. Thus the level of unreflected consciousness, which is one of the initial conditions of such laws, can be transformed.

The methodological framework that determines the meaning of the validity of critical propositions of this category is established by the concept of self-reflection. The latter releases the subject from dependence on hypostatized powers. Self-reflection is determined by an emancipatory cognitive interest. Critically oriented sciences share this interest with philosophy. (pp. 308-310)

To be sure, this trilogy of isomorphisms between knowledge and cognitive interests has a good deal of seductive appeal, especially for those wishing for a strong philosophical basis for rejecting traditional science. But as we reflect upon these distinctions, they become increasingly blurred and we become increasingly sympathetic with critiques such as this:

It is a fiction—and not a useful methodological one—to suggest that there are categorically different types of inquiry and knowledge. But it is not a fiction—rather it is the locus of the most important controversies about the nature and limits of human knowledge, as it pertains to social and political inquiry—to see how the battle of competing technical, practical, and emancipatory cognitive interests continues to rage. (Bernstein, 1978, p. 43)

To put it another way, we suspect an epistemological trap can be created through assuming necessary and sufficient connections between method and the political content of cognitive interests. Conducting empirical analytic inquiry, for example, does not necessarily imply a hidden agenda of domination. On the other hand, a hidden agenda of domination cannot, in principle survive an inquiry based upon critical theory. And this, indeed, points the way out of the trap—a truly
practical unification of the three faces of inquiry requires the self-correcting epistemological stance that is made to order in critical theory.

The practical feature we suggest is this: The substance for critique by critical theorists traditionally derives from existing knowledge (and the interests underlying this knowledge) accumulated through other modes of inquiry. What we wish to suggest here takes this process a small, but we think significant, step forward. We propose the deliberate accumulation of additional explanations and understandings—by people in a specific setting, who wish to change that setting, and who determine what additional information may be relevant to change efforts—all for the expressed purpose of furthering critique in a constructive and critical theoretical fashion.

In other words, we are establishing an epistemologically valid basis upon which we (1) acknowledge critique as a legitimate method of inquiry, (2) acknowledge values and beliefs as an unavoidable medium through which inquiry is conducted, and (3) propose an inquiry approach, driven by a critical theoretical stance, that embraces appropriate information gathered from naturalistic and empirical analytic inquiries.

How is this "working synthesis" relevant for educational inquiry and school renewal? First, as logical empiricists, we can obtain a tentative description of those features of the school context that we see as crucial and are willing, for the sake of measurement, to separate conceptually and to operationalize via survey, questionnaire, test, structured interview, observation schedule, or any other standardized method of data collection. We are adopting, here, a very
pragmatic stance, based upon a belief, rooted in experience, in the heuristic potential of data gathered in this fashion, so long as they are reasonably reliable and valid (according to traditional canons) and not over-interpreted under the guise of scientism. Our belief in the heuristic potential of this kind of information as the empirical "data-base" of a school, i.e., its ability to enrich the experiential basis for interpretation, understanding and normative critique, requires an exploratory stance on data analysis and interpretation.

The payoff of the empirical analytic perspective is the serving up of a continuing common base of explicit descriptive material which can serve as a catalyst for further inquiry. While some of the information may be already known to all of the participants, and much of it known to some of the participants, a considerable portion of the information will be new to many. The discovery of apparent relationships among contextual elements should provide fresh insight to all participants about "the way things are" and stimulate moving to the next level of inquiry, i.e., enlightenment—making public the private frames of reference.

Employing naturalistic methodology for the interpretation of phenomena—provides a depth of understanding not permitted by the more positivist methodologies. This second approach permits adding the texture of individual meanings to the description of the context. Going beyond the "facts" yielded by the data collected in the empirical-analytic mode, this approach adds a sense of the whole in terms of how human beings within the context experience that context. In other words, this methodological perspective attempts an
interpretive understanding of the static properties, human behaviors, and feelings that make up the school setting.

The meanings that the setting holds for its participants may be sought by having outsiders make detailed observations of events within the setting and conduct interviews with participants (as is typically done in qualitative research). More appropriate, however, for school-based inquiry and improvement efforts would be the meanings elicited through reflection on and interpretation of properties and behaviors by the people in the school. This reflection and interpretation by individuals in the setting could be expected to add new dimensions of information not permitted by the conventional data collection process. These dimensions are not predetermined but emerge during the process of inquiry and include the valuing of the experience under scrutiny, making judgments about the intrinsic worth of phenomena and assessing their importance in relation to other ends. Importantly, since statements made during such a process would be supported by reasons, the participants' bases for making decisions, their underlying assumptions and belief systems, can become explicit and subject to scrutiny as well.

Finally, the third approach places knowledge gained about the school setting within its social and historical context. Building on the "facts" and the personal meanings that are gathered, the critical process offers methods by which the social and political meanings of school events can be understood. Furthermore, norms for assessing these events and guiding future practice are embedded in critical methodology, providing a fundamental criterion for the direction of change/improvement. In these ways critical inquiry makes possible a
much fuller consideration of the implications of what is done in schools. Those in schools can gain insight into why particular practices came into being and how human interests are served by them.

The methodology of critical reflection demands that participants attend to how educational structures, content, and processes are linked to the social and political forces inside the setting and to the larger social, political, and economic context in which the school is situated. Such questions as "What are the effects on participants of things being organized the way they are?" and "Who benefits from these organizational patterns?" force the examination of both the manifest and latent consequences of educational practice. Examination of latent consequences necessarily include a consideration of social, political, and educational, as well as purely intellectual, effects and benefits. By bringing these relationships to the surface, educational practitioners can become aware that patterns of events and their explanations are not merely common sense, neutral, or benign, but grow out of and, in turn, affect particular internal and external conditions.

During the process of critical inquiry, then, participants come to view schools from the kind of cultural perspective we suggested earlier is essential for change. They become conscious of how current ways of schooling are grounded in the larger historical and social context of the culture as well as in the particular institutional and social context of the culture of the school. It should also become clear that the range of educational alternatives that are ordinarily considered is limited to those that reflect the dominant social, political, and economic modes in the larger social milieu. This kind
of awareness, which has probably not been widespread so far in school planning and decision-making, should enable those considering improvement in schools to move beyond conventional and limited thinking. In short, critical inquiry looks at additional data, and so increases understanding of what is.

But inquiry driven by critical theory goes further than its attempt to free participants from the socially influenced and largely unquestioned assumptions that limit choices and actions. The basic concern of critical theory is movement toward an emancipated form of social life, the "realization of a truly rational society in which men make their own history with will and consciousness" (p. xi in McCarthy's introduction to Habermas, 1978). Critical theory embodies an ethical stance that directs change efforts toward fostering non-exploitative interpersonal relationships and placing human beings as conscious moral agents in the central role of determining the direction of social evolution (Coomer, 1982). Thus, critical theory is a social theory with a practical intention, that of the self-emancipation of human beings from the constraints of domination of whatever form and however concealed by social, political, and economic patterns and ideologies (McCarthy, 1978).

The relevance of such a potentially emancipatory and purposeful kind of inquiry to the process of school improvement should be self-evident. Both the process and aim of critical theory are consistent with what we most often claim to be the fundamental aim of education itself—the view cultivating the best in human beings so they may create a just soc...
that shapes their decisions, actions and rationales might enable those involved in the conduct of schooling to alter educational practice toward more humane means and ends.

The methodology of critique rests upon competent communication and on a belief in the potential of groups to reach a "justified consensus" about the truth of what exists, i.e., its meaning in relation to the larger social context, and to determine alternatives directed toward universal human interests. In Habermas' view, if discourse were to take place under ideal conditions, which include the suspension of all motives other than the intention of coming to an understanding about what exists and the determination of the best course of action, then the force of the better argument would permit reaching a justified consensus (Habermas, 1979). While the foregoing is a grossly oversimplified description of the process of critique, it should be clear that the basic requirement is the creation of unlimited opportunity for discussion, free of constraints from any source. Thus, the methodology of critique is inextricably tied to its aims. The ideal circumstances of life, i.e., freedom and justice, are also the characteristics necessary for a communication situation during which critical inquiry and decisions for change can occur. In this way, the means/ends dichotomy is eliminated in the theory and practice of critical inquiry.

If the idea of critical inquiry sounds suspiciously like Dewey resurrected, it ought to. Like good wine, Dewey gets better with age. But also with good wine, people seem reluctant to drink it too soon. Perhaps the time is finally upon us to act upon the intoxicating vision
created by John Dewey over sixty years ago in *Reconstruction in Philosophy:*

When philosophy shall have co-operated with the course of events and made clear and coherent the meaning of the daily detail, science and emotion will interpenetrate, practice and imagination will embrace. Poetry and religious feeling will be the unforced flowers of life. To further this articulation and revelation of the meanings of the current course of events is the task and problem of philosophy in days of transition. (pp. 212-213)

For Dewey, "philosophy" and inquiry are synonymous. And inquiry is barren -- is without practical value -- when devoid of "moral" considerations. He eschews the dichotomy between theory and practice and the "dualism which now weighs humanity down, the split between the material, the mechanical, the scientific and the moral and ideal" (p. 173). His conclusion, obviously, is that

...reconstruction can be nothing less than the work of developing, of forming, of producing (in the literal sense of that word) the intellectual instrumentalities which will progressively direct inquiry into the deeply and inclusively human--that is to say, moral--facts of the present scene and situation. (p. xxvii)

The key concept here is Dewey's use of the term intellectual. His proposed methodology for achieving the reconstruction is nothing more--or less--than shifting "the weight and burden of morality to intelligence ..... inquiry is intelligence" (pp. 163-164). Yet, consistent with his pragmatic and experiential stance, he rejects the idea of absolute or universal values and substitutes practical inquiry as the final arbitrator of morality.

Thus, Dewey was not a critical theorist. Although it may be a mute point when it comes to the compromises of practice, he failed (or was unwilling) to explicitly acknowledge the profound moral "pragmatic
universal" of his philosophy, i.e., unrestrained human reason as the backbone of experiential knowledge and action.

For us, there is no discomfort with Dewey's relativistic position, on the one hand, and a point-in-time stance on value-driven inquiry on the other. Fundamental value positions in inquiry need not be "god-given" -- but they need to be explicit and their consequences, reasoned. Presently, we see the dialectical tension between the critical and pragmatic perspectives as crucial to the inquiry paradigm proposed here. Although we will continue to rely heavily upon the methodological implications in the writings of critical theorists, there can be little doubt as to our indebtedness to the Deweyan intellectual tradition of critical inquiry.

Consider the implications for schooling if this kind of critical inquiry were applied to taken-for-granted school organizational and instructional practices, for example, norm-referenced testing, curriculum tracking, or competitive classroom reward structures. If these almost universal practices were to be the focus of discourse, wherein their histories and underlying assumptions were revealed, the kind of social reality they imply made explicit (e.g., the nature of man, society, and education), and the consequences for individuals and society that follow from their use uncovered, it is likely that they would emerge as being in conflict with educators' conceptions of humane and democratic schooling. The recognition of how these current practices serve to constrain the attainment of a schooling process that is in the best interest of every student might lead to alternative practices pointed toward actualizing ideal conceptualizations of what education should be. Such practices as criterion-referenced
measurement, mastery learning, heterogeneous grouping, and cooperative classroom learning might become newly valued as procedures more ethically defensible, given their human consequences.

All this, of course, is speculative. Consensus about the "truth" of current practice and decisions about desirable alternatives would come only from the engagement in the process of self-reflection and critical inquiry by those in the school setting and only then if the conditions for critical discourse were established.

For school people, then, participation in this process would mean the involvement of the school staff in communication characterized by free exploration, honest exchange, and non-manipulative discussion of existing and deliberately generated knowledge in light of these critical issues: What goes on in this school? Who benefits from the way things are? How might educational practice work toward liberation from exploitive relationships and the domination of social, political, and economic interests? How can schools help develop the capacity to make free and responsible choices about the direction of individual lives and the evolution of society? The potential contribution of this third phase of inquiry to significant educational change is promising, for the kind of emancipatory understanding that can come from critical reflection about the school within its society seems necessary to build a responsive, renewing climate in schools.

We argued at the outset of this section that the understanding of schools that is sufficient for fundamental improvement must come from a methodological approach that integrates these three perspectives. This entire process is, indeed, a renewing process. It leads directly to change that is aimed toward attaining a situation where choices and
behaviors are intentional, authentic, and free from constraint. But how can all this come about given the realities of schools and schooling?

**Doing Critical Inquiry**

It should come as no surprise that our vision of "doing" critical inquiry can be likened to wearing three hats at the same time: (1) a top hat representing critical inquiry and a dedication to explanation and understanding only within a normative perspective that maintains a continued dialectic between schooling practices and human interests; (2) a middle hat representing hermeneutical/interpretive inquiry and a dedication to understanding the conditions of schooling in the terms of historical and current school events and peoples' experiences of those events; and (3) a bottom hat representing empirical analytic inquiry and a dedication to the usefulness of descriptive (survey-type), experimental, and/or quasi-experimental methodologies to yield information of potential value not only to pedagogical improvement but also to furthering understanding and normative critique.

Furthermore, language and, more importantly, the competent use of language in social discourse, is indispensable to doing critical inquiry. By this we do not mean grammatical or syntactical competence. We are referring, rather, to the ingredients necessary to approach a mutual sharing of understanding, trust, and active engagement in the process of change. As we have discussed above, Habermans' (1979) notion of approaching an ideal speech situation provides the guidelines for this kind of competent communication. Taken together with the synthesis implied by the foregoing epistemological stance, these
Principles define an operating mode that must eventually come to be shared and internalized by all involved.

Yet this mode alone is insufficient to break through the barriers to change as we have described them for schools. Nitty gritty issues like content, intervention, legitimization, motivation, and individual differences, to name just a few, are of no small consequence to anyone attempting to practice critical inquiry in schools. Why?... because given the constraints in the social contexts of institutions, people do not generally interact with one another in the way we are suggesting they ought to. If they did, our proposal would be not only modest, it would be mundane; people concerned with schooling would be seriously considering the pedagogical implications of their educational beliefs, and renewal and change would be the "status quo" in schools.

This, of course, is the ultimate change dilemma. The very fact that a new perspective on inquiry and change is needed guarantees barriers to the cultivation of this perspective that are not neatly accounted for by the cannons of the perspective itself. Consider, for example, the following scenario taken from our recent experience in schools.

Las Montanas is a small medium-sized school district (2 senior high, 3 junior high, and 11 elementary schools) located in a suburban area adjacent to a major west coast urban center. The community residents range in economic status from the middle to lower levels with the median family income being approximately $15,000. Roughly half the community is of Hispanic origin, many recently immigrated from Mexico; less than 5% represent other minorities and thus Anglos comprise approximately 45% of the community.

The district is essentially centralized; the superintendent exercises a good deal of control through a highly bureaucratized organizational structure. All principals report to an assistant superintendent. Each principal is responsible for yearly school plans which are monitored by the assistant superintendent. Over the last several years, the superintendent has circulated position papers to all...
administrators and staff on the several principles of "school effectiveness" and has conducted a few in-service workshops on this topic. These were oriented around the identification of, and general definitions for, such notions as principal leadership, academic emphasis, learning expectations, discipline and control, and actively engaged learning time. Armed with this information, principals and staff were expected to put their schools on a direct course towards excellence. In accordance with school effectiveness theory, excellence was assumed to be manifested in improved standardized achievement rankings, particularly by comparison with other schools of similar demographic composition.

Different school staffs handled this mandate in different ways. For example, at one elementary school, banners were hung with the slogans "high expectations" and "emphasize academics" in the library room. Teachers also began to meet informally to attempt to figure out just what increased time-on-task meant and how they might recognize it in actual operation.

At Riverview elementary school, things went a little differently. The principal and staff seemed virtually paralyzed by what appeared to them to be directionless directives. Riverview had a particularly high Hispanic enrollment of nearly two-thirds with the remaining students nearly all Anglos. The ethnic composition of the staff was nearly the mirror image: three-quarters Anglo and one-quarter Hispanic (including the principal). Riverview's state achievement test scores were low, being either below or barely within their normed expectancy intervals in the basic subjects at both early and upper elementary levels. In fact, the district, generally, was barely "average" relative to other districts with its same socioeconomic characteristics. (Over the several years that Las Montanas' superintendent attempted the incultation of school effectiveness, achievement test score averages for most schools remained relatively unchanged.)

Let's assume that Riverview Elementary could be a more renewing place for teachers to teach in and for students to learn in—let's assume that there is ample room for school improvement and change and that our notion of critical inquiry as developed so far offers a viable way to go about it. How do we become aware of Riverview in the first place? How do they become aware of us? What makes us think they want us there or, for that matter, that they see a need for "collaborative intervention?" How are initial contacts made? Given our focus on the school as the unit of change, what (if any) sanctions and/or support at the district level are required? How are we (the collaborators)
initially legitimated or seen as credible by the staff? Even if the staff perceives a real need, how do they become motivated to participate in the effort? What are their rewards in this effort? **Will there be the necessary resources available, in particular, time?**

These are just some of the questions that come to mind as we think of trying out this proposal for inquiry and change in a school setting.

These questions are not meant to be rhetorical. They arise out of an attempt to develop a mode of practice that maintains a commitment to be consistent with our epistemological stance (and the principles and processes that flow from it) while taking into account the circumstances of schools and the obstacles they face in seeking to change.

And the list of questions grows rapidly larger as one envisions the operating perspective of critical inquiry doing just that--operating--in the setting of a school. What (if any) traits and/or skills are necessary for collaborators to have? When and to what extent is the critical inquiry process--and critical theory and communicative competence specifically--discussed in principle with staff? What is to be the substance of critical inquiry? Must this content always evolve under circumstances of total staff communication? How are socio-psychological individual differences handled in-process? At what points do empirical-analytic and naturalistic approaches to data gathering become appropriate? How are they organized and conducted? How are the data synthesized into the process of critique? When are collaborators no longer needed?

We do not envision answers to all these questions that can be neatly packaged and disseminated in workshops designed to train
"critical inquirers." Each situation will likely be different in profound ways and there will be a good deal of "seat-of-the-pants/feeling-the-way" while maintaining the requisite commitment to the proposed epistemology.

Interpreted broadly and expanded with what we know from the literature on working with schools, we can suggest some generic elements of a process that can eventuate in the establishment of renewal as an integral part of the culture of the school. Taken together, these steps constitute an operational process that 1) sees the school as the primary unit of change but recognizes that the school does not exist in a vacuum, 2) places school practitioners in the central decision-making role, 3) makes issues of values and beliefs of primary importance in schooling decisions, 4) emphasizes the usefulness of multiple sources and types of data (broadly interpreted to cover all three faces of inquiry), and 5) provides support from an outside collaborator while taking into account some of the difficulties an outsider faces in establishing the kind of relationship we propose with those who work in schools.

The field of education is indeed fertile ground for experimenting with an applied critical science, and we are certainly not the first to do so. See, for example, the beginning efforts by Coomer (1981) in educational evaluation, Foster (1982) in school administration, Gitlan (1982) in teacher education, and Lemish (1982) in curriculum development. Perhaps the most systematic set of implications for the practical application of critical inquiry comes from Paulo Freire's (1970, 1973, 1978) work in Brazil, Chile, and Guinea-Bissau while fusing "critical consciousness" with pedagogies of pre- and post-literacy and the ultimate goal of political awareness and empowerment.
Certainly it is unrealistic to expect that a wholesale adoption of critical methodology developed in rather blatantly oppressed "third world" nations would necessarily fit the exigencies of subtler (but perhaps equally powerful and destructive) oppressive elements in social systems such as ours. (See Giroux, 1981, Chapter 5.) Nonetheless, we can be encouraged by the limited "success" stories such as Shor's (1980) efforts at extrapolating Freirian ideas to effect community college reform in New York City.

Particularly useful Freirian ideas help resolve problematic issues relating to the roles of collaborator and content in the process of critical inquiry. Like Habermas' paradigm for communicative competence, Freire's (1973) concept of dialogical communication includes the reflexive properties of the ideal speech situation. Furthermore, like Habermas Freire is well aware of the utopianism inherent in the paradigm. But as he anticipates ideal interpersonal dialogue in the context of practice, he explicitly recognizes the need for democratic, pedagogical leadership. Someone (or group) has to enter and help dismantle the vicious circle of what Horkeimer has labelled "the eclipse of reason," i.e., the suppression (and perhaps repression) of human introspection that Shor (1980), building upon Aronowitz's (1977) analysis, laments as follows:

The powerlessness and confusion in daily life can only be understood through critical thinking, yet most people are alienated from their own conceptual habits of mind. How come? Why don't masses of people engage in social reflections? Why isn't introspection an habitual feature of life? What prevents popular awareness of how the whole system operates, and which alternatives would best serve human needs? Why is political imagination driven from common experience? (p. 47.)

Reversing this phenomenon requires pedagogical intervention and necessarily sets up an initial teacher-learner dichotomy. Freire
realistically reconciles this imbalance of power by demanding a "self-effacing" stance by the teacher--relinquishing ritualistic and symbolic authority games and integrating into the activities and substance of learning. Thus the teacher is part learner and the learner is part teacher. This departs considerably from the reflexive properties of the ideal speech situation yet is not incompatible with the psychotherapist-patient model used by Habermas for exploring undistorted communication. And it seems to us that replacing any notion of a spontaneous utopian interaction with the notion of a value-based catalytic intervention is a necessary prerequisite for beginning any kind of critical inquiry project like we are proposing here.

And as we effect the translation of Freire's "teacher-student/student-teacher" paradigm to one of "collaborator-teachers/teachers-collaborator," it is imperative that a primary educative function of the collaborator(s) is one of creative teacher enlightenment as to the philosophy of inquiry itself and the preeminent role of unconstrained, normative critique. This, of course, is central to Freireian pedagogy:

The prerequisite for (critical inquiry is) a form of education enabling the people to reflect on themselves, their responsibilities, and their role in the new cultural climate--indeed to reflect on their very power of reflection. (1973, p. 16)

"Reflection upon reflection" is not an agenda item; rather, it is a pervasive theme in the critical inquiry process and thereby maintains the connection with the operating principles represented in our epistemological stance.
The second important feature of Freireian practice—problematization—suggests some strategies for generating crucial content and conducting the never-ending activities of analysis, synthesis and action based upon content. Essentially, problematization is the engagement of the group in the reflective process of critically analyzing the totality of their experience leading to a critical awareness of it. This critical awareness empowers the group to alter their reality in fundamental ways. Traditional problem solving, on the other hand, fragments experience into discrete puzzles that can be solved provided that enough time, patience, and collective cleverness prevail. Further, it distances problem solvers (outside experts or the group itself) from their experience by considering these fragments in a purportedly objective and value-free process of problem definition, clarification, consideration of alternative solutions, decision-making on courses of action, evaluation, revision and recycling through the paradigm (See Schmuck et al., 1972). If one squints sufficiently to blur important features, this paradigm has all the ingredients of Habermasian and/or Freireian dialogical communication. But the likelihood for failure of school improvement efforts conducted in this way is apparent when one realizes the generic identity of the problem-solving paradigms and the technical assistance paradigms used unsuccessfully by school interventionist-innovators for years. Notwithstanding even the most well-intentioned needs assessments, explorations of viable alternatives, participant decision-making, and so on, these change agent models are essentially asymmetrical and anti-dialogical in theory and practice. To slightly paraphrase Freire (1978, p. 152), technical assistance paradigms of educational change and innovation anesthetize
school staffs and leave them acritical and naive in the face of their
educational-social context.

To reverse this state-of-affairs, Freire's concepts of tuning-in, limit situations and generative themes, codification, decodification and transformative action are powerful rubrics around which to effect the transition from critical theory to critical practice. Yet they must be reinterpreted to fit the exigencies of schooling. We have begun to consider some general forms these interpretations might take, using the slightly modified rubrics of breaking-through, content, exploration and action.

Breaking Through

While we are convinced that, with few exceptions, educators are eager to find ways to improve educational practice, the reality is that schools and the people in them are constrained both by their encapsulation in a political and bureaucratic system and by the assumptions embedded in their own cultures. Most schools have long histories of participation in in-service programs and workshops designed to provide "workable answers" that at best have resulted in temporary rearrangements of the familiar. School people know, too, that administrative policies prevent, for the most part, any radical alteration of the way things are done. And of course there are the constraining realities of time and rewards. Unless proposals for special improvement projects are accompanied by substantial provisions for both, teachers know full well that these efforts will be little more than pro forma exercises.

We suggest that the process of critical inquiry at schools not be considered as a special activity. Rather, with considerable school
time regularly scheduled for critical inquiry, both the process and its outcomes should be viewed as an ongoing part of the school's culture and necessary to maintain and improve the efficacy of the educational process. The reward accrues from the involvement of autonomous professionals in an activity that eventuates in their bringing about fundamental change and improvement.

The key to the provision of these kinds of time and rewards is, of course, administrative support at both the district and building levels. This support is crucial in engendering in school staffs the belief that the effort to be undertaken can result in significant improvement. This support, however, must be within the terms of a project which is truly generative, not one that represents the implementation of ideas pre-determined by those at the top. Most school staff members are acutely aware of the symptoms of the problems they face, but few have considered the bringing about of fundamental change an option available to them for solving the underlying problems in the organization and prevailing practices at their schools. We might see them much as Freire does Third World illiterates, as part of a "culture of silence." As Richard Shull expands in his introduction to Freire's Pedagogy of the Oppressed:

"... their ignorance and lethargy were the direct product of the whole economic, social, and political domination and of the paternalism -- of which they were the victims. Rather than being encouraged and equipped to know and respond to the concrete realities of their world they were kept 'submerged' in a situation in which such critical awareness and response were practically impossible. (p. 11)

We can recognize the domination and paternalism in schools in the centralization of governance and control in school and district administration."
There are two major obstacles facing a collaborator attempting to "tune in" to a school that has indicated some interest in an improvement project -- obtaining a genuine invitation to participate with the people there in a fundamental change effort and breaking through the "culture of silence" in order to begin to determine with them what the crucial problems they face are. Because these two obstacles are so closely intertwined, overcoming them is particularly difficult. Establishing rapport at administrative levels and securing support (or, at least approval) for collaborative change efforts, is usually a prerequisite. But then it is necessary to work toward a common understanding that the collaboration provides a serious and legitimate possibility for those at the school to have a central role in bringing about substantial improvement. In Saul Alinsky's (1971) words, "It is when people have a genuine opportunity to act and to change conditions that they begin to think their problems through -- then they show their competence, raise the right questions, seek special professional counsel and look for the answers" (p.106). If this kind of opportunity is provided, it is our contention that a genuine invitation to collaborate toward improvement in schooling will follow and the process of critical inquiry can begin.

Content

The issue of the content of critical inquiry is not one that can be talked about as if it conveniently came along at one particular step of the process. Rather the issue of content is a pervasive one. Moreover, the question of what content is appropriate is a vital one. Without succumbing to the usual tack of offering a new or better technology based on recent research and development, what substance do
collaborators have to offer for consideration that can be perceived by those in schools as valuable and practical and that at the same time will lead to fundamental change? The Freirian concept of generative themes provides the obvious answer. The content of critical inquiry cannot be determined by collaborators but must emerge from their interactions with those in the setting and consist of the reality of the setting itself. Through a joint investigation of the obstacles in the setting and of the contradictions between what is intended and what is practiced, the themes that will constitute the content of a dialogue of a school improvement program become evident. It is this pervasive focus on themes that begins to strongly differentiate this approach to school change from the more frequently used organizational development methods or other "value free" problem-solving models.

It is important to realize that themes exist wherever people attempt to make sense out of their reality, including in social institutions such as schools. Within these institutions, however, larger social themes may not be recognized as operating to direct and to limit the way humans structure their particular setting and interact with each other. This, of course, is an integral part of what we earlier described as the conservative nature of the culture of the school -- a milieu in which the most fundamental beliefs and assumptions on which practice is based go unrecognized and unquestioned. This lack of recognition results in an inability to see that what lies behind perceived constraints are more pervasive limiting themes. With the exploration of generative themes as the content of critical inquiry, those engaged in the process go beyond a superficial, uncritical determination of what the crucial problems facing a school
are. And in this going beyond— in the examination of fundamental assumptions and beliefs— school people are able to determine the actions which are likely both to transform the reality of schools and the perceptions they have about it.

Exploration and Action

Once a genuine invitation to collaborate has been extended by a school staff to an outsider, the dialogical process between them can begin. This process takes us first to a finding out about the reality of the setting and a search for generative themes, principally through collaborative investigation and analyses, and leads us through a series of cycles of action and reflection toward fundamental change. In schools, two interconnected processes—exploration and action—constitute the activities of those involved in the change effort. Interpreted broadly, but specifically for school settings, these activities include the creation of settings where communication approaching the Habermasian ideal can be engaged in; the conduct of inquiry incorporating both interpretative and empirical-analytical investigations; the critical consideration of concepts and technologies from funded knowledge about educational processes and schooling; and the maintenance of a critical focus on the normative issues that underlie schooling practices.

Exploration. The exploration phase of the critical inquiry process is a series of ongoing activities engaged in collaboratively. These activities include a wide range of possible inquiries into the school context and the interpretation of knowledge gained about it. These activities are carried out in a critically reflective way that lead cyclically to action and to further exploration.
One appropriate way to begin the exploration process is by decoding the setting as a whole. This involves breaking it down into parts and scrutinizing the characteristics and quality of everyday life. In schools this means a careful examination of things usually taken for granted—the day-to-day activities of the people who spend their time there, and the structures surrounding these activities. The intent, of course, is to begin to look at the school analytically in order to gain a new perspective on it and eventually to begin to see alternatives to the way things are done.

Decoding the school context includes both what we usually think of as data collection and data analysis. We envision that these activities must encompass a broad scope of inquiry—all the "faces" we have set forth earlier as required for an understanding sufficient to enable the conception of alternatives and the carrying out of fundamental change. Data collection, in this broad view, would range from attempting to measure what are apparently observable and separable characteristics of the school (student, teacher, or community demographics, organizational structures, instructional strategies, and student activities in the classroom, for example) to gathering the interpretations of individuals of the meanings that school processes have for them. But collecting data presumes some notion as to what phenomena are relevant data. Whether this takes the form of operationalism as in survey questionnaires and structured interviews or observational systems or the moment-to-moment inclusion/exclusion decisions as in loosely structured, anecdotal observation, some phenomena will be recognized as data, others will not. Although not intended to be restrictive, the perceived obstacles in the situation
and emerging generative themes must help guide the data collection process.

The data analysis part of decoding, too, would involve a wide range of traditional and non-traditional approaches. However, fancy multivariate analyses and/or structural modeling techniques will have very little payoff in an epistemological framework coordinating the three faces of inquiry. Most school staff are intelligent adults who are not trained researchers and statisticians. More importantly, just as we have argued the necessity for staff to develop and internalize the generative themes of their own circumstance, so it is necessary for the data related to these themes to be equally accessible and internalized. The power of a single percentage to stimulate productive dialogue should not be underestimated.

Codifications, the concrete presentations of themes or obstacles in the school setting, a second aspect of exploration, can both stimulate and result from decoding. Codifications are developed in such a way that they depict specific situations; they are also abstractions in that they represent larger patterns or themes in the more complex totality of the school. These codifications are used in the dialogical process as presentations of problems in the school that need to be solved, not as situations to be explained in the traditional didactic mode. This, of course, is quite different from the usual kind of needs assessments engaged in in schools consisting of an inventory and reporting of problems, rather than a critical dialogue toward their solution.

Thus the forms of codifications can vary. Graphic presentations of data, or a videotaped presentation of a classroom incident, or a
telling of a particularly provocative event, for example, might serve well to encourage participants to look not only at the superficial aspects of what is being represented, but to go beyond to investigate and reflect on the deep structure beneath them -- to consider questions of how practices came to be and whose interests are served by them educationally, socially, economically, and politically. Codifications, then, serve as catalysts for the continuance of the renewing process. Codifications lead a group in the dialogical process to decoding, to the taking of transformative action, and to codifications of the altered reality that results. In short, a codification is the challenge to the group to critical reflection and action.

Action. In schools, action must be an ongoing component of the critical inquiry process. This action must be integrated with reflection through the processes of exploration of the reality itself and the meanings attached to it and participants' perceptions of how it changes through action.

Actions that are most likely to bring about fundamental kinds of alterations are those that attempt to break through perceived obstacles. When seemingly insurmountable barriers are acted upon and the acts and subsequent changes are subjected to critical reflection, those in schools can begin to see themselves as directing events rather than being directed by them. Initially, the taking part in a concrete project that changes, even in some very minor way, the structure of the setting is very likely to create new perceptions, new expectations, even a hopefulness, about the possibilities inherent in the process underway.
Most often, the first action in a project involving school people is their active investigation of the school culture itself in an attempt to identify obstacles and themes that constrain what is done there. In other cases an obstacle may be acutely and widely perceived. "Trying out" a course of action in attempting to break through the perceived obstacle might then constitute the first transformative action in a school improvement project. In either case critical self-reflection must be an important aspect of the action itself. And, too, the action leads to dialogue, the sharing of perceptions and reflections about both the action itself and the changed reality that results from it.

The choice of actions to be taken in schools must be collaborative ones. Outside collaborators can in the course of dialogue push a school staff to reflect about what lies behind a situation that is troublesome and to act on that rather than to respond only to current symptoms of a more fundamental difficulty in the school's functioning. But staying within the understanding of the school staff is essential. Effective action and reflection cannot take place when proposed problems are not perceived as real by those in the school. In some instances it may take a series of cycles of action and reflection before basic school structures, organizational and behavioral patterns, or basic assumptions about schooling are seen as appropriate targets for change efforts. Saul Alinsky (1971) speaks to this aspect of the collaborative project. Alinsky, like Freire, suggests that the solving of a particular problem will give rise not only to new perceptions of reality but to the awareness of more fundamental problems as well. He writes, "...what we fight for now as matters of
life and death will soon be forgotten, and changed situations will change desires and issues" (p. 107) and that

An organizer knows that life is a sea of shifting desires, changing elements, of relativity and uncertainty, and yet he must stay within the experience of the people he is working with and act in terms of specific resolutions and answers, of definitiveness and certainty. To do otherwise would be to stifle organization and action... (p. 107).

What is absolutely essential is that school change efforts belong to the school staff itself, not to the collaborator. The staff must view itself as blending theory and practice, action and reflection toward transforming their school into a renewing place. They must always remember, as Dewey (1929) tried to tell us over half a century ago, that:

> Education is by its nature an endless circle or spiral. It is an activity which includes science within itself. In its very process it sets more problems to be further studied, which then react into the educative process to change it still further, and thus demand more thought, more science, and so on, in everlasting sequence. (p.77)

We would add, of course, that the "science" Dewey refers to be a critical one.
Concluding Remarks

We began this inquiry with a small critique of the socio-political context within which the "crisis of schooling" historically and currently exists. We continued this critique with a more specific analysis of the cultural circumstances of schooling and the ways in which schools have come to adapt to their context. School renewal and the potential for change, we then argued, must have its basis in critical inquiry -- an ongoing commitment to unrestrained discourse around existing and purposively accumulated knowledge. Finally, the practical realization of this feat, required the translation of these philosophical premises to human situations historically conditioned upon antithetical premises.

The result -- a set of working principles and processes striving to break through obstacles, generate content belonging to people, question beliefs and values, establish mutual trust and common understanding, and treat decision-making and action as formative processes. You ask: So what's new? Hasn't the last half decade or so of investigations into what went wrong with R & D-type interventions revealed similar implications for working with schools? Do not the findings from collaborative research studies essentially converge to these same recommendations?

Of course, the answers are both "yes." But it should be clear at this point that these "rules of thumb" in helping people help themselves need not be empirically discovered through trial and error.
implementations of technologically derived solutions for other people's problems. In fact, that this has been the road to discovery of these working principles only testifies further to the parochial avenues of inquiry along which educational researchers and practitioners have far too long labored. To be sure, it is satisfying to see congruity between recommendations from current struggles in collaborative research and postmortems on prior failures with those emerging from our critical analysis of schooling. But most importantly, these "rules of thumb" can now be seen as logical consequences of an epistemologically informed theory of practice.

Over ten years ago, in reaction to the previous failures of educational reform and in anticipation of the ones yet to come, the yearbook theme selected by the National Society for the Study of Education was the "philosophical redirection of educational research" (Thomas, 1972). Persistent views in this collection of essays centered around pleas for incorporating value judgments, normative-based paradigms, and the like, as fundamental ingredients in the conduct of educational research and change. Quotes by Dunkel and by Holms are illustrative:
Some kind of normative base must be found if education is to be more than a mindless technology, heeling in the breeze of every whim or rhetorical blast. The rather abortive state of curriculum and counseling -- to name only two educational fields -- is due in large part to their lack of an adequate normative base; once certain very proximate objectives are stated, discussions and arguments fade out or are converted into oratory. At present, educational psychologists, educational sociologists, and the rest tend to take their data from that general area of activity called education. But as the preceding pages have sought to show this stance construes both the "educational" of their title and "scientist" in a very narrow way.

(Dunkel, 1972, p. 93)

...if empirical studies are to be scientific and of practical value, empirical measurements presupposes theories. The latter help us to analyze, manipulate, and even manufacture "facts." The important theories in educational research are normative in that they imply conceptions of culture and society. An integral part of empirical research is, in my view, prior conceptual analysis of these conceptions and theories. Without this we are charlatans -- not scientists.

(Holms, 1972, p. 216)

Little in the way of redirection has occurred during the intervening decade -- if anything, there has probably been some regression back to the mythical sanctuary of the "hard" scientific stance. We hope that this paper can be added to the growing list of those offering sound conceptual and practical reasons for resisting this temptation and continuing the dialectic around more flexible, sensible, and practical methods of social inquiry and school renewal.
Footnotes

1. Much research and development effort has spawned potentially useful educational technology for school improvement—criterion-referenced measurement, mastery learning, and micro-computer applications, to mention just a few. And, in a relative handful of districts and schools, some of this technology has even been put into place—but only after years (usually over six and upwards of ten to twelve) of concerted effort, usually spearheaded by an "idea champion" who is willing to endure the entire span of developmental effort. (See the studies by Bank & Williams, 1980 and 1981.) But the larger picture of educational change and school improvement is a dismal one. See, for example, the conclusions of the Rand study (Berman and McLaughlin, 1978), which comprehensively and systematically documents the failures of the major, federally sponsored, improvement efforts driven by R & D perspectives on innovation and change.

2. We must strongly emphasize at the outset that our use of the term critical throughout this monograph is not meant to be criticizing or negative in function. Certainly we are unfavorably impressed with some crucial aspects of schooling, for we have undertaken this current effort. But the idea of critical inquiry, as we will develop it, can be equally positive or negative in principle. It depends upon the attitude of the inquirers. In practice, we prefer to see the cup half full rather than half empty.

3. See the analysis by Goodlad (in press).

4. For more documentation on this point, see Sirotnik (1983).

5. A more comprehensive presentation of our proposal for critical inquiry can be found in Sirotnik and Oakes (1983).

6. While the school must be viewed as the primary unit of change, this does not mean that individuals—students, teachers, administrators, support staff, district staff, parents, and other significant community members—are irrelevant to the change efforts. Rather, it means that for change efforts to be successful the critical dynamics in all levels of the schooling enterprise—individual, instructional, institutional, communal, and societal—must be confronted where they come together, at the local school. For a discussion of the genesis of this approach to renewal at the local school level see Heckman, Oakes, and Sirotnik (1983).

7. Kerlinger's (1973) presentation is representative of the hundreds of methods commonly referenced in educational research.

8. Originally, "hermeneutics" referred to the interpretation of historical text (especially biblical writing); but, philosophers
have argued its analogous usage for the interpretation of social phenomena (e.g., Taylor, 1977 and Ricoeur, 1977).

9. We use the term "ideology" here in the specific political sense referring to hegemony. In this sense, critical theory can then be said to be "nonideological." In the general sense of ideology, i.e., values and beliefs, critical theory is certainly value-bound to the concept of unrestrained or emancipatory inquiry.

10. The more outstanding differences include (a) complete rejections of traditional inquiry paradigms by some in contrast to a more tolerant (but critical) stance by others and (b) a position of universal or absolute truth held by some as compared with a more relativist stance by others allowing the possibility of truth to be determined by its historical context. Since we will be taking a "critical pragmatic" position, these debates are interesting, but irrelevant for practice.

11. We are not suggesting that this is Habermas' inclination. In fact, he has stated his intent as follows: "I am concerned with knowledge-guiding interests which in each case form the basis for a whole system of inquiries. In contrast to positivistic self-understanding, I should like to point out the connection of empirical-analytic science with technical interests in acquiring knowledge. But this has nothing to do with 'denunciation'... On the contrary, I regard as abortive, even reactionary, the attempts which characterized the old methodological dispute, namely, attempts to set up barriers from the outset in order to remove certain sectors altogether from the clutches of a certain type of research." (Habermas, 1974, as quoted in Bernstein, 1978, p. 194.)

12. One example of the blurred distinctions is in our analysis above pertaining to naturalistic/hermeneutic inquiries. For Habermas (1971), knowledge acquisition in this domain has a "practical" (not controlling) interest because of its potential to attain "action-oriented mutual understanding" -- the food for critique, but not critique itself. Obviously, however, the potential also exists for understandings that are obdurately resistant to empirical-analytic study to be powerfully predictive and controlling. Aspects of the inquiry and relationship between psychoanalyst and patient is a case in point.

13. During the writing of this paper, a new book by Ann and Harold Berlak came to our attention. The Berlak's volume Dilemmas of Schooling: Teaching and Social Change, like our work, approaches the problems of school from a critical perspective and suggests a collaborative approach to inquiry into these problems directed toward change. The Berlak's chief contribution is the explication of "sixteen dilemmas of schooling, making explicit the assumptions underlying them, and demonstrating their usefulness"(p. 25). The Berlaks propose the use of these dilemmas and "dilemma language" "for analyzing the origins and consequences of schooling patterns, thus the contributions of schooling to social continuity and
change . . . and for engaging in critical inquiry into the nature of the schooling experience and the possibilities and desirability of making changes in classrooms and schools" (p. 25). Our primary purpose here has been to establish the epistemological basis for the process we call critical inquiry and deriving the consequences for practice. Readers may wish to consult the Berlak book for an approach quite compatible with our inquiry perspective and purposes.

14. Although the following school and district scenarios are based upon the authors' experiences, all names and certain inconsequential details have been fictionalized.

15. See the "mutual adaptation" concept in Berman and McLaughlin's (1981) work and the comprehensive review of collaborative research principles by Ward and Tikunoff (1982).
References


Goodlad, J.I. Address before the 41st Annual Convention of the National School Boards Association. Dallas, Texas: April, 1981.


Heckman, P.E., Oakes, J. and Sirotnik, K.S. Expanding the concepts of renewal and change. Educational Leadership, in press.


Rist, R.C. On the relations among educational research paradigms: From disdain to detente. Anthropology and Education Quarterly, 1977, 8 (2).


