Educational researchers have neglected the need to involve public interest and support of educational research. Researchers must begin to deal with the real problems of education if they are to receive public support. This responsibility would include need assessment, information search, model building, research based on theory, and evaluation of these real problems. This activity should take place on all levels, from the local to the national.
The purpose of this address is to suggest a change in direction for AERA. We have to date been an organization almost solely concerned with increasing communication among ourselves. Now, I propose that we design a method of communication with others, those who must ultimately support and use our services.

The major activities of AERA, our publications and annual meetings, have met our needs (for the most part) to better understand each other and the dimensions of our growing discipline. Our limited resources have been well invested in such activity. But now there is some likelihood that these association resources will diminish as a function of reduced member research activity. The days of OE interest in broadly based research have passed. NIE has been born a cripple, and even NSF talks now of the importance of securing public support for scientific endeavors rather than training scientists.

We, too, then must recognize the need to establish a public interest in and desire to support educational research. It is no longer sufficient for us to be seen as a scholarly community concerned primarily with methodological questions. We must rise to the demands of Congressmen for data concerning the probable consequences of alternative legislation. We must satisfy the needs of State officials for comparative effectiveness of program information. We must provide School Board members, administrators and teachers with new kinds of technical assistance. We must, in effect, give of ourselves to get for ourselves. We must contribute to the solution of educational problems if we are to continue our
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study of these problems. We must explain our work first to those educators who are a powerful political constituency and then insure that they carry our programs to the Congress for legislative enactment.

We must use our new journal "The Educational Researcher" to organize the membership around politically sensitive issues. We must address ourselves to critical social questions and use research methods to solve them.

By now you can see that I am talking about a somewhat different kind of research than many of you may prefer. Its techniques are more those of anthropologist, historian and field methodologist than experimental psychologist. We are talking less about control over variables and infinitely more about understanding multiple and complex variables than are normally quantified in our typical studies. We are talking about research which must deal with classification problems rather than quantification problems.

We must not forget that the purpose of research is to discover generalizations and the essence of discovery is insight. Consider the research behavior of some of our exemplary members as models. Ben Bloom is not, and never has been, particularly interested in experimental design or statistical analysis. Instead, he has relied heavily on hunch and intuition before, during and after the examination of data; and has generally used correlation analysis to confirm rather than discover generalizable relationships. Ralph Tyler is basically a highly verbal and analytic man, who has used statistical analysis and research methodology on only rare occasions.
Even in methodologically rigorous natural sciences, Bronowksi writing in the October issue of "Harpers" says "What physics has done is to show that .... there is no absolute knowledge. All information is imperfect. We have to treat it with humility. That is the human condition, and that is what quantum physics says."

So it seems that on top of everything else, those of us who call ourselves educational researchers have an identity problem. Most of us teach and occasionally study relationships between variables or treatments and variables. Sometimes we devise new treatments aimed at serving time honored purposes like designing remedial instruction programs.

But for the most part we have for the past seventy years mimicked experimental psychology. The study of educational research has been pretty much the measurement and comparison of first, student behavior and more recently, teaching behavior and administrator behavior. Yet, the work of numerous social scientists, Benedict, Lewin, Parsons, and others, long ago established that human behavior is a function of rich contextual interactions which can be understood only through personalized valuing and unique experiencing. (It is precisely because Lewin's mathematical formulations failed that he contributes most to this conclusion.) That is, as the classical Gestaltists argued, situation defines figure. So, to know man you must know his culture and to study man you must study his problems.

For most of us then, educational research must not be lab experiments,
nor grandiose national studies. Instead it should be highly personalized involvement in small pieces of real world problem solving.

The focus for educational researchers and that which should distinguish him from other social scientists is that the object of his study should be "school problems." By this I mean real problems, the problems which arise in the minds of educators, parents, and students as they struggle to deal with their aspirations and reality in the context of a particular school situation. By responding to problems instead of student behavior, to values instead of theorems, we insure ourselves the minimum scope of effort essential to our success. We must work against the broad back drop and interact with the rich detail of the school environment if we are to create changes in people and their preferred problem-solving procedures as well as to solve discrete problems. We will know how to selectively choose and analyze data on the basis of what is valuable and what is possible for the people involved in the problem.

Educational researchers have been singularly ineffective in dealing with contemporary school problems. We can tell you how much better Japanese students are than American students in math and why. Or when and how to start teaching young children in math. But we have not on the average increased the math competence of those leaving our public schools. Nor, do we seem to have increased their commitment to the processes of a democratic society.

These rhetorical assertions need no proof. They ring true because
we know our schools are in the same jeopardy as the culture which supports them. What is important is that our schools as social institutions mirror the same problems as our larger society. We as educational researchers, must address ourselves to social problems. We have a role to play in cooperation with managers, teachers, students, parents and community leaders.

The educational researcher must respond to the real and pressing educational problems that he finds about him in his own institution, in his children's public schools, and in his own neighborhood and city.

He must help define and classify problems by describing the tension which exists between public expectation and attainment. He must help educators with problems, identify solution alternatives, their resource costs and consequences; he must help to create new solutions when they seem needed, and he must evaluate the effectiveness of an alternative once it is employed. Each of these kinds of help is a different kind of research. I call them needs assessment, information search or retrieval, model building and theory based research and development, and evaluation.

Above all, the educational researcher must recognize the difference in purpose and methodology required by each of these kinds of research and must insure that the various parties to any of these endeavors exercise their complementary roles. He himself must learn that in his role as evaluator he must not judge values or design alternatives, that in his role as model builder he does design alternatives, and in his role as assessor of needs he must question values. Often, necessarily, these activities
occur at different times and places depending on local circumstance. Sometimes they are concurrent. They may cut across a large geographic or ideological community or may occur in the mind of a single person. In any event, these same functions of identifying a problem, exploring a knowledge base for solution, choosing or discovering a solution, and evaluating the effects of that solution, are always discrete, always apply, and require management.

It should be apparent now that I am asking educational researchers to take on the responsibility for coordinating public school problem solving activity. This much needed role can take different forms: from educating educators in problem solving processes to directing and managing their team efforts.

But before we can help others, we must relearn for ourselves how social action problem solving proceeds in the real world: its conditions, our inevitable frustrations, and the need for those of us who have the essential rigor and detachment to do the job, to establish humanistic relations toward those with whom we will study and work.

Problem solving by its nature in a democratic society must involve all who are part of the problem. To solve the problem of the teacher who doesn't care, the student who won't learn, the board member who serves personal interest above group interest, we must involve them in the identification and solution of the problem.

What I envision then is that educators, students, parents and others will turn to the university based researcher for the help they need as they would turn to any other professional practitioner.
We must remember, they do not come for evidence that some new intervening variable can be found between a stimulus and response. Nor do they come for a better understanding of the relationship between human behavior and animal behavior, nor the influence of child rearing practices on teenage behavior, or the effects of adult role models on delinquent youth behavior, or a better way to teach reading, though all of this kind of information is, of course, germaine. Instead, parents, educators, students and all those who gasp for air just now in our constricting culture ask: why am I, why are we uncomfortable, what can be done about it, to whom can we turn for assistance, how do we start now to begin to change our conditions?

Short of revolution and the destruction of existing institutions, it is the American institution of public education which offers the greatest hope of responsiveness to these questions. As school served as a melting pot in the past, it must now be a crucible for teaching individuals, groups and communities the processes they need to control their destiny. This, of course, was John Dewey's great dream.

But why, you may ask, should society turn to educational researchers? Are not school teachers and administrators aware of the challenge and necessities of the task? This question is perplexing. Although many educators -- more than ever before -- teach and themselves employ problem solving skills, nevertheless, few academic programs are based on them and few school principals much less district superintendents use group problem solving as a management strategy. In the breach, participatory problem solving remains academic.
Although relatively few educators and far fewer interested citizens use problem solving processes to arrive at decisions, almost all recognize the value of information—either referenced or newly created. It is here that professor-researcher has been granted a key to the door of public problems.

To date, with few exceptions, it has been what the university professor might know rather than what he can do that has made him worthy of a limited amount of the busy manager's time. Now it is precisely because the educator-manager recognizes that he has not been able "to do" himself, that other action-oriented candidates for problem-solving management can be considered by our society. Above all, teachers and administrators fear they may lose their public mandate to act. They recognize their need for help—often in a forthright and non-defensive manner. And now, as never before, they appear to be ready to learn from, and be part of the action research process that some educational research practitioners have long advocated.

We must respond, as individuals, as a research association, and through local association chapters. Enumerable practical mechanisms as well as hard dollars are at hand to do the job. New educational legislation continues to emphasize the importance of program evaluation. By interpreting this mandate broadly, educational researchers in close proximity to hundreds and thousands of local project sites can begin to make a three-fold contribution: service to program, contribution to public awareness of the value of action research processes, and contribution to our own action research competence.
Research, development, and systematic information inquiry procedures should be a way of life for every school staff. Value clarification activity, goal setting, program selection, and evaluation should be a continuing responsibility in every community which supports a school. Students should be intimately involved in all of these processes, and when they are, will, of course, be engaged in education.

At the local level, committed professor/researchers can be the major resource. At the state and regional level, organizations both formal and informal, associational and entreprenureal, can, if properly staffed, be given major responsibility for coordinating research process functions across large and complex programs. At the national level, it would appear that only specially established government-supported networks, such as coordinated technical assistance units, can satisfy the management needs which exist if national programs are to improve through program redesign based on past experience. I do not know whether the labs and centers or some new NIE thrust can serve this purpose or not. To date, NIE's progress hardly looks promising. The agency seems bent on reliving all of OE's mistakes and making their own kind as well. But you may be sure that Federal interest in educational problem solving will remain high. It is for educational researchers to direct this interest toward productive and publicly valued areas of activity.

Here are some examples of such activity:

1. The systematic involvement of the entire population of a community in the delineation of realistic and varied expectations for public schools,
teachers and students.

2. The systematic use of these expectations pluralistic or otherwise as one basis for selecting and developing school programs.

3. The systematic use of those expectations as one basis for evaluating school programs.

4. The creation of political mechanisms to foster development of new local resources--particularly human and synergistic systems--which form a second basis for developing and evaluating new school programs.

5. The creation of a national educational evaluation institute composed of certified evaluators who monitor local public agencies for the public and whose methods and findings are verified in the same way as those of a certified accountant.

6. The establishment of local public media channels and personnel which regularly convey the nature of educational problems and the results of problem-solving activity to the general public in clear and forceful terms.

7. The creation of a national program and evaluation report information retrieval system that facilitates comparative analysis of educational programs and their effectiveness relative to local conditions--something ERIC does not and could not accomplish.

8. The creation of a national technical assistance network of specialized and qualified consultants available to local districts.

9. The national collection and dissemination of case studies which confirm the utility of using researchers as process managers to improve
school programs and emphasize methodological innovations.

I have been told any or all of this is beyond our organization's limited resources. But we all know our real resource is the highly trained talent of our members. It is only this resource, our resource which is capable of the task at hand. I urge that we try now to use it.