Many curriculum groups which I have visited during the past several weeks have raised questions concerning cooperative curriculum research. A variety of activities is under way. Each group is attempting to develop its own appropriate techniques. Actually, however, there appears to be great confusion in two areas: (a) many groups seem to have inadequate perspective as to the overall nature of educational research; and (b) many groups seem unaware of effective ways of designing a specific cooperative curriculum research project.

Many evidences indicate that groups are making real progress in starting with problems having local significance. The main difficulties which groups seem to face lie in the area of how to design the project so that it will result in valid generalizations and conclusions. We believe that as our perspective is broadened concerning the nature of educational research, we will also be making progress in sharpening research designs. Those who are especially interested in cooperative curriculum research may well give attention to several pertinent questions raised by Louis E. Raths concerning educational research in general.

ROBERT S. FLEMING

Questions Concerning Educational Research

WHAT constitutes proof in educational research? If, solely by observation of the behavioral symptoms of one or a few patients, a medical doctor should come to the conclusion that they had typhoid, and if he treated them for typhoid, and if they recovered—this recovery would be unacceptable to medical scientists as proof that they had typhoid. In other words, typhoid is associated invariably with the presence of a particular germ, and this germ must be present if typhoid is to be present.

In our work with children we have come to recognize that symptoms of certain emotional needs are associated with the blocking, thwarting or interference with learning. We hypothesize which needs are unfilled. We set up a program with a conscious intent to meet these needs. The behavior of the individual changes markedly; his relationships with other people improve; his learning spurts. In this sequence there is no proof of the existence of the needs to which attention was addressed.

In educational research should our attention be focused upon the kind of proof acceptable in the physical sciences? Are we in need of a different conception of what we mean by proof? Are we looking for something which resides within the body and which will turn out to be almost perfectly correlated with observable behavior? What kind of evidence will we accept as satisfactory in support of “a needs theory”?

In our educational researches we very frequently conduct “before and after” studies with a single group of individuals and, to test the effectiveness of the
experiment, we make use of statistical formulae. The most frequently used formulae are based on the assumption that the effect of the experimental variable should be approximately the same for all subjects in the experiment. As this consistency of effect is approached, the statistical significance of any change becomes greater. Many of us who have worked with children in widely different situations have come to expect that they will respond quite differently to different stimuli. How can we employ these commonly accepted statistical formulae when we reject a basic assumption implied by their use?

Theories of Power

A third problem of great significance to educational research at this time is concerned with theories of power in small and large group situations. We know that under some circumstances a particular group seems well integrated, gets under way quickly, works harmoniously together and completes its task effectively, with satisfaction and in a reasonable time. One theory suggests that this happens when the group constitutes representatives of the prevailing hierarchical system of society. There is the practical inference that if groups were constituted so that they represented a hierarchy, with respect to the primary qualities required for the group task, the group would do effective work.

Stated another way, the theory suggests that in group situations the status systems present within that group must be catered to. Moreover, the job will best be done if the qualities required by the job are represented within the group by stratification from high to low, and these terms are relative. What might be high for a particular group might be low in another group. The theory seems to require, however, that whatever the level, there must be different levels within the working group.

This theory is profoundly enmeshed with ideas of social changes and with the preservation of existing routine within social institutions. If the theory is at all sound we should be able to find ways of constituting a committee or any kind of working group, which might hold high promise for group production. Underlying the theory is the idea that power cannot be effectively wielded unless there are channels, and these channels are social statuses, and there must be a gradation of them in order for power to be most effective. This whole statement avoids the issue of the wielding of power where violence and force are concerned.

In recent years there has been a tendency in educational research to think of status as meaning a social class status. This preoccupation with a single aspect of status may close our eyes to many significant avenues of research. In the book, Power and Society, by Lasswell and Kaplan, eight status categories are presented as relevant in the study of power. Unless we enlarge the number of factors relating to status we are apt to give an emphasis to social class which is unwarranted.

Perhaps the largest issue with which we are concerned is related to the idea of applying scientific theory to the realm of morality and values. There is almost a revulsion against the examination of ever so many concepts which affect our daily life in hundreds of ways. The very idea that the theory of scientific method—which is the only self-correcting theory which we have—should be applied to our social and ethical problems meets serious opposition.

The role of the past in the learning process has not been clarified. We have scanty evidence on the determining in-
fluence of values and of cultural experiences as these are related to perception, to selection for emphasis, to insight into a whole, and to various types of learning. Learning "to belong" seems to be quite different from learning to read, or to hit a ball. In what ways past experiences are involved in various kinds of learning, is not at all clear.

As with nearly all middle-class investigators we have spent an enormous amount of our time and money on analysis of verbal materials. We have not begun to study the meaning of gestures, of certain kinds of glances, of humor and what is intended for humor, of smiles, of frowns and of silence—in a great, wide variety of circumstances.

Resolving Tensions

The concern with democratic purposes has led to a lack of concern about "elites" of any kind, no matter what status system is involved. Moreover, we have muddied up the role of the administrator and he is now as confused as we are about his functions inside the processes which we cherish.

Much of the research in psychology and education which relates to behavior is rooted in the assumption that practically all activity is grounded in efforts toward resolving tensions; we act in order to restore equilibrium to an organism-environment situation which is much out of balance. It is possible that such a fundamental assumption grows out of a world that has been in tension and conflict for decades. Notwithstanding its reasonableness I have grave doubts about the uncritical acceptance of such a major premise. Why should we assume that an individual would not act if there were no tension?

During the past three hundred years of efforts to distribute educational opportunity more widely, we have been very much concerned that young people should learn yesterday's truths. We have not been primarily concerned with freeing the individual to think about his own relationship to the universe. We seem to exhibit a lack of faith in the ability of men and women individually or collectively to think for themselves. Our educational machinery seems to be organized to perpetuate the past. Why we have such little faith in each other is a problem of tremendous import.

In terms of the total amounts of money which are spent for education in our country alone it is very depressing to reflect upon the very small portion that goes for educational research. In our literature and in our meetings we assert strongly our concern with the importance of community life, with the development of power to think and to plan, with the clarification of values, with the reduction of frustration, with the increase in happiness and in our research these central aims do not seem to be included. It is true that we do not have adequate measuring sticks and it is true that we are hampered by lack of intelligent research designs, but it is also true that we are insufficiently concerned about these areas. Perhaps the current generation, the potential leaders, will begin to attack these problems today and tomorrow.
