A college of education cannot, and should not, try to assume the total university responsibility for helping professionals and laymen understand what is going on in the important enterprise of education. The college can, however, be the antenna of the university in finding crucial problems and can encourage university scholars to collaborate in solving them. Much emphasis in this paper is placed upon gaining a better picture of educational situations and problems because the rapid changes in our society are creating the need for new educational tasks. Two major functions for a college of education are 1) to bring the relevant scholarship of the university to bear on the practices and problems of education, and 2) to play a major role in the preparation of education personnel. Four areas which could benefit from systematic studies by groups of university scholars are 1) dissatisfaction about the education of teachers brought about by confusion over the rapid changes in social conditions, curriculum outlines, and the characteristics of teacher recruits; 2) a need for involving a variety of university scholars; 3) the learning students require for acquiring and using appropriately the knowledge, skills, and emotional responses, and controls representing the important resources of a given subject; and 4) the kinds of constructive roles available for teachers. (JLF)
Colleges of education have not usually been designed and developed in terms of a conscious model. The concern of colleges and universities with the education of teachers for the common schools and with the building of a knowledge base for understanding and attacking the problems of schooling is a recent phenomenon especially when viewed against the millennia during which men have provided schools for the young. In America, the colleges of education were founded within the past century, largely in response to the pressures from outside the universities to raise the educational level of teachers and to give academic status to the teaching profession. In a few cases, as at the University of Chicago, they were founded to encourage the adoption of new conceptions or doctrines of schooling. The older university departments have often treated colleges of education as upstarts, unworthy of academic recognition, and have advised students not to enroll in education courses. This attitude has commonly been countered by regulations of state and local education agencies requiring education courses for certification, and certification in turn for employment in teaching, supervisory and administrative positions in the schools.
This tradition has usually resulted in the shaping of colleges of education so as to provide the formal requirements for certification and to meet through courses and consultation the pleas for help from school authorities to deal with difficult problems that they face. Only occasionally have efforts been given to searching more broadly for appropriate functions and roles of colleges of education. This is the subject I have been asked to present for further examination, reflection, and discussion. My analysis is derived from considering the unique resources of universities as well as the contemporary problems of education in schools and colleges. It has been aided by observing new developments in the study of educational problems as well as by reviewing analogous experiences of colleges of medicine.

Both traditionally and in current fact, universities have scholars in many disciplines who are seeking and acquiring knowledge that illuminates the dark regions of ignorance and misconception and furnishes new and broader perspectives on the situations and problems man encounters. For example, biologists, physicists and chemists are furnishing a more comprehensive understanding of what goes on when cancer develops in the human body and have enabled us to conceive cancer as a condition of abnormal growth rather than simply a strange, unknown and frightening malady. Anthropologists, economists, political scientists, psychologists and sociologists are currently producing knowledge about the delivery and utilization of health services that provide a rational basis for understanding the present crisis in the delivery and cost of health services, whereas, earlier, less helpful views of this problem area were guided largely by desire, hope and naive notions about the
behavior of different groups of prospective patients.

When Abraham Flexner reported in 1912 on the problems and prospects for medical education, he found medical schools devoted to passing on the lore of the medical practitioner without making use of the great potential of scientists whose scholarly inquiry could illuminate the situations and problems of illness in ways that would furnish new bases for understanding illness and develop more effective treatment of disease and injury. His vigorous attack upon medical education of that day and his demand that medical schools become integral parts of universities where they might share both in education and research the broad intellectual resources of the universities led to a striking reform of medical schools.

In America there is enough preliminary experience in a few universities and within the National Academy of Education to indicate that schools and colleges can benefit markedly from the work of scholars from a number of disciplines in furnishing educators and interested laymen with a more comprehensive basis for understanding the contemporary problems of education and for attacking them more effectively. Evidence is accumulating to show us such things as, that all children are learning, but only some children are learning much of what the school attempts to teach; that children's learning in school depends not only on the teacher's efforts but also on home influences and on the attitudes and activities of the peer groups which the learner admires and respects; that the investment in time and money by middle class parents in the education of their child is usually greater than the average per pupil investment of public funds in schooling. Other illustrations will come to mind, such as, the processes operating in schools are like those in the social institutions in developing a bureaucracy.
sensitive to its own desires and interests but becoming insulated from the needs and interests of its clients; the greater concern for education and the greater power of some sectors of the public bring continuing pressure on schools for greater educational opportunities for their children than for others; the organization of American schools and the methods of instruction are more effective as means for sorting children than for educating them.

These examples are presented merely to suggest that the universities have scholarly resources that are capable of adding greatly to our understanding of the processes and problems of education and schooling just as they have contributed enormously to our understanding of health and disease. Like the medical college, the college of education can help to marshal these resources and bring them to bear, both in research and in the education of school and college personnel. It is not essential or even desirable for the faculty of the college of education to include all of the scholars within the university whose work can contribute significantly to illuminating and attacking educational problems. The education faculty should include those whose major attention is focused on educational institutions, and their problems, or on educational processes. They are the ones to take responsibility for pointing out problem areas, for keeping in touch with schools and colleges, and for furnishing avenues of communication between other educational institutions and the university. They are the ones who can invite and encourage scholars in other departments to devote some of their efforts to the study of matters that seem likely to help in understanding educational problems. The scholar in a field other than education will not be asked to become a professor of education but instead he will be urged to look at the pervasive phenomenon of education from the vantage point of his discipline and to study what
seems important from this perspective. He can expect in this endeavor not only to illuminate educational situations but also to contribute to his own discipline as he pursues disciplinary studies in the important arenas of school and college. For example, the sociologist can not only help educators to see some of their problems as involving social mobility, but he will also gain a fuller understanding of social mobility as he studies it in school and college settings. It is possible and very desirable for a college of education to be a university center for mobilizing scholars from a variety of relevant disciplines in the university to engage in the search for knowledge that can aid educators and laymen to gain a more adequate understanding of educational processes and problems and of the functioning of schools and colleges.

The college of education can also make an important contribution by analyzing, synthesizing and interpreting the situations and problems of schools and colleges in its region in terms that are more realistic and comprehensive than the ways in which these situations are perceived by those who lack the broad perspectives of contemporary knowledge. That is to say, many of us view educational situations in simplistic terms or through the lenses of fantasy. We think, for example, of student learning as explicable in terms of good or poor students, good or poor courses and good or poor teachers. We have little understanding of several other important factors in the situation, such as, different expectations for education found in different families, different attitudes toward school learning held by different pupils, different ideas of teachers and pupils about what children are to learn, and so forth.

As another illustration, we often think of the difference between
a good school and a poor school, as primarily dependent on having attracted better teachers in the good school. We are likely to know little about the influence of the community organizations, the importance of the teacher's involvement in planning and assessing his work, the roles played by communication systems and reward systems within the school, and so on. The college of education can draw upon previous research to identify concepts and generalizations that have been employed effectively to define and explain other educational situations, but when they are used in a particular situation their validity and usefulness need to be verified by collecting the necessary relevant facts in that situation and seeing whether they are consistent with the explanation proposed.

I am placing so much emphasis upon gaining a more comprehensive and realistic picture of educational situations and problems because the rapid changes in our society are creating new educational tasks which are often not recognized or understood because we have assumed that the practices and doctrines in schools and colleges that have been in existence for many years are basically sound. When difficulties arise, we make relatively minor adjustments in our techniques, rather than seeking to reexamine our whole view of education, and the doctrines and practices that derive from it, or have helped to form it. As an example, current investigations are indicating that somewhere between 15% and 25% of American children do not learn to read. It is usual for us to assume that children learn to read wholly as a result of school instruction so that findings of this sort get us involved in heated controversy over the relative merits of different methods of teaching reading that are used in the schools. But, the work of university scholars is showing that most of the children who are making little or no progress come from homes where parents have had little
or no education and most live in the inner cities or in rural areas. Furthermore, the research conducted to appraise the relative effectiveness of several of the commonly used methods for teaching primary reading show little if any differences among these methods. From these findings, we are led to examine the various differences among children from different kinds of home and community backgrounds, and we find differences in vocabulary and the use of language, differences in experience with books, differences in attitudes toward the importance of being able to read, differences in experiences with abstract learning, and differences in the children's confidence that they can learn abstract things. This illustrates, I believe, the value to the educator and the interested layman in viewing an educational problem in larger perspective in order to understand it more adequately and see more fully some promising points for attack. The college of education can make a significant contribution in helping educators and interested laymen to gain a broader view of this sort.

The college of education can also help in analyzing a particular problem situation in the region served by the university so as to pinpoint the difficulties or aspects of malfunctioning that appear to be crucial there and to help in finding and constructing alternative attacks upon the problem. It can also assist the school or college to try experimentally one or more promising alternatives by helping to develop the plan, the implementation, the means for ongoing appraisal (formative evaluation), and the method of making an assessment of the effectiveness of each alternative after it has become fully operational (summative evaluation).

The preceding comments emphasize a major function of the college of education: to bring the relevant scholarship of the university to bear on the practices and problems of education. It assumes that those engaged in
educational practice in schools and colleges are far more familiar with the conditions and activities of their own work than professors of education. What the practitioner needs particularly in these periods of rapid social change is a wider perspective and deeper understanding of what is going on in education. It needs to be wider in including both the social and environmental context, and the historical antecedents. It needs to be deeper in the sense of identifying more fully the dynamic factors influencing aims, practices and outcomes relating to children, youth, teachers, supervisors, administrators, parents, taxpayers, social groups and organizations. The college of education should be the organization within the university to identify problem areas of education within the region served by the university and to identify within the university those scholars whose work could illuminate these problem areas, and to locate relevant material in the published literature. The college of education can also help in encouraging and assisting university scholars to work on these problems and to bring the results of relevant published material to the attention of the practitioner. Furthermore, it can help the practitioner make use of the ideas, concepts and generalizations in interpreting his situation more fully, in identifying the critical problems and in mounting intelligent attacks on them.

There are several avenues by which this function can be served. One is a seminar program in which practitioners are invited to participate with others in the study and interpretation of their own school or college situations. A second is the provision by the university of consultative services to schools and colleges. A third is a research program focused on significant educational problem areas in the region which involves scholars from several relevant disciplines including professors of education. A fourth is a program of interpre-
tation in which persons from the college describe and explain "what is going on" in a problem area by synthesizing and interpreting relevant published research. A fifth is a training program for experienced practitioners, in which they are active participants in analyzing and attacking problems in the light of this broader understanding. There are other possible ways by which this function of the college of education can be performed, but these five are likely to be acceptable and congenial to most faculty members. Systematically developed, they can make a great contribution to the development and improvement of education in the region served by the university.

A second function of a college of education is to play a major role in the education of personnel for schools and colleges. Most universities prepare secondary school teachers. Some prepare elementary school teachers and some offer programs for the preparation of supervisory, administrative and specialized school personnel. Although college teachers are almost wholly recruited from university graduates, few universities provide programs designed to prepare students for college teaching.

Currently there is great dissatisfaction about the education of teachers at all levels. Much of this is due to confusion and dysfunction brought about largely by rapid changes such as those in school clientele, the public's expectation of schools, social conditions, the increasing amount of accepted knowledge, curriculum outlines, the characteristics of persons who are recruited into teaching. Old patterns of teacher education are under heavy fire. New ones are rarely developed from a thoroughgoing analysis of the situation and a carefully designed procedure for appraising their efficacy. This is clearly an area in which a university could make a contribution analogous to that made by some medical schools in preparing physicians after the Flexner report.
Some of the unsolved problems encountered in the preparation of teachers may illustrate the need for involving a variety of university scholars. What is the content which a teacher is to teach? Children and youth while in school are expected to become familiar with those aspects of scholarship that can be resources for them in the various situations they encounter in life. The efforts of scholars have been guided by curiosity, seeking to gain fuller understanding of phenomena. Their work has identified problems, has developed ways of attacking these problems, has constructed concepts for making order out of the multiplicity of data observed, has obtained findings from studies and formulated generalizations that state relationships inferred from the data. Any or all of these may be a helpful resource for someone in carrying on his daily work, in understanding the situations he encounters, in gaining greater meaning and satisfaction in life. Which of these aspects of scholarship in a given field are likely to be most helpful to those who are not becoming scholars themselves? This is a question of continuing concern. Updating the content of a textbook is likely to be viewed by the scholars as a procedure for describing more accurately the present state of their ing and their knowledge rather than to face directly this basic question.

Another problem area relates to the learning that is required for students to acquire and to use appropriately the knowledge, skills, and emotional responses and controls that represent the important resources of the given subject. How do different kinds of students learn these things? What conditions encourage or inhibit this learning? How can situations be established by the teacher to facilitate learning by those who have difficulties?

This leads to another set of problems: what kinds of constructive roles are available for teachers? How can the influence on learning of parents, peer groups, older and younger children, other community members be constructively
utilized and developed? What are the roles teachers can play in helping other teachers to learn?

It has long been recognized in preparing physicians that the university's role is in helping students understand health problems and in developing an effective procedure for diagnosis and prescription. University courses do not take the place of the training in the day by day acquisition of habits and skills provided by the internship. On the other hand, medical schools have learned more recently the importance of the medical student keeping in meaningful contact with the work of the physician beginning with his freshman year, so that he can identify the relevance of what he is learning in anatomy, physiology and biochemistry, gaining greater motivation as well as better focus for his studies of the basic sciences. The problem of the relation of experience in school to the program of teacher preparation has not yet been satisfactorily solved. Few school systems have developed internships involving gradual induction into the critical and difficult tasks of the teacher. Furthermore, the proper role for the university in contributing to the teacher's education during his internship is a moot question.

These four unsolved problems are not all of the important ones that would benefit from thoughtful, systematic study by groups of university scholars, who would also encourage and help to guide experimental efforts to attack them. They illustrate the fact that universities can contribute to the education of school and college personnel in ways that go far beyond the offering of traditional courses and programs. In this area, the college of education should take responsibility for identifying problem areas, for encouraging scholars with relevant interests to join in their study, for participating in the study and for helping to arrange for the implementation of the study
recommendations. Faculty members in the college are also likely to be important participants in the programs of preparation that are developed. The illustrations presented are drawn from the area of teacher education. There are similar problems in preparing supervisors, administrators, and specialized educational personnel.

Two major functions for a college of education have been briefly outlined. Because these functions apply to a very wide range of educational situations and problems, they could serve as the chief purposes for a large college, a small college or all colleges of education in the nation. However, a particular college of education must focus its limited resources in ways that produce the maximum results. This, I think, requires planning that recognizes several criteria in choosing the fields in which it will seek to serve these functions. These are (1) the present interests and areas of contribution of the university scholars that are relevant to activities and problems of schools and colleges. It is an axiom that current resources be utilized as fully as possible. (2) The potential interests and contributions of the scholars in the university. This involves estimates of the interests of present scholars that might be aroused if they knew more about the situations and problems on which they could work and an inventory of the interests of scholars whom the university is planning to add to its faculty. (3) The interests, competencies and experiences of the present faculty members in the college of education. (4) The potential interests, competencies and experiences of persons whom it is planning to add to the faculty of the college. (5) The relative educational importance of each problem area in the region. (6) The feasibility of mounting an attack on the problem. This criterion involves the possibility of assigning sufficient resources (including faculty members) to produce an impact within three
or four years. By the use of such criteria even a small college of education can focus its efforts in ways to make significant contributions within the area or areas chosen.

In summary, a college of education cannot, and should not, try to assume the total university responsibility in helping the professionals and the interested and responsible laymen to understand in broader perspective and more fully what is going on in the terribly important enterprise of education, but the college can be the antenna of the university in finding crucial problem areas and it can encourage many university scholars to lend their hands. Furthermore, it can take responsibility for synthesizing and interpreting relevant scholarly knowledge in ways that can be understood and used by educational practitioners. Also, the college of education can stimulate and guide practitioners to attack their problems more systematically and in ways that include continuing appraisal and improvement. In addition, the college can play an important role in marshaling university resources to improve the education of personnel to work in schools and colleges.

I believe this model is a viable one because it respects and utilizes the contributions of all interested university scholars as well as those of the school and college practitioners. It is also likely to be viable because of the improvements that will probably result in several crucial problem areas when such efforts are seriously undertaken and sustained. The model involves real difficulties in becoming established because it requires respect and cooperation from professors in departments that have often in the past been in competition, it requires more team efforts than have been demanded of scholars heretofore, and it emphasizes an often neglected role of the university in synthesizing knowledge and interpreting it as well as in pursuing new knowledge. Although
establishing the model may be difficult, I think it is possible, and I am convinced that it can lead to significant improvements in the work of schools and colleges.