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ABSTRACT The consensus reached at a seminar of deans of schools of education was that inquiry and scholarship associated with the process of education undergird all other missions of schools of education. The terms inquiry and scholarship are interpreted to include research, development, evaluation, and dissemination as well as the responsiveness of academic programs to the emerging knowledge base. Factors that limit school of education involvement in inquiry and related activities include heavy teaching loads, the need to coordinate with field sites in clinical instruction, insistent pressures for curriculum revision, and low status given their research efforts by the parent institution. Emphasis is placed on improving the quality of faculty and students and on the responsibility of the dean to exert leadership. This report of the seminar is divided into three sections. Section One contains a statement of belief concerning the role of scholarship and inquiry in professional education. Section Two provides an overview of education research and development and a review of issues that should be considered in fostering a commitment of schools of education to inquiry and scholarship. In Section Three, recommendations for increasing the capacity of schools of education to engage in and support inquiry are advanced. (JD)

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INCREASING THE RESEARCH CAPACITY OF SCHOOLS OF EDUCATION:
A POLICY INQUIRY

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PREFACE

The future of professional education and the general state of the profession brought a group of deans of schools of education to a seminar sponsored by Oregon State University in August 1979. The conclusions reached at this and several subsequent meetings were:

- A profession is responsible for its own advance.
- Considerable progress has been made over the last decade in education and related research.
- Further advance depends upon systematic inquiry widely applied.
- At the present time the education profession is not so characterized.
- In order for the profession to acquire such an orientation, the institutions responsible for the training of professional staff must themselves model such behavior in their own institutional life.

The group of deans, holding firm to the conviction that the exercise of leadership can make a difference in the profession, decided that it was appropriate to undertake an inquiry that had as its aim the development of the capacity of schools of education to increase their commitment to a productive involvement in inquiry and scholarship. By schools of education we include all schools, colleges, and departments of education. The terms inquiry and scholarship we use very broadly to include research, development, evaluation, and dissemination as well as the grounding of academic and professional training programs on the emerging knowledge base. Our view of these activities should be seen as quite broad, inclusive not just of activities traditionally carried out by the academy, but rigorous work carried out in schools and the policy environment surrounding them. To undertake the intended study, a proposal was co-authored by the group and submitted to the National Institute of Education.

Nine meetings of the participants have been held since August, 1979. The group's approach to inquiry drew systematically on the extensive experience of its members. All participants contributed ideas and many drafted memoranda

I. STATEMENT OF BELIEF

Education and the democratic ethic are of one fabric. Our nation cannot survive unless its fundamental values are transmitted to the young. Our democracy cannot be secure unless its citizens acquire the skills necessary to participate effectively. Given the enormous social consequences and costs of education, a serious commitment must be made to improve it. That commitment must rest firmly on what we know.

As Deans of Education, deeply concerned with the future of public education, we state our unequivocal belief in the intellectual basis for professional education. We do not here speak to the universal issues confronting our calling. Rather, we focus on what must undergird all educational efforts--inquiry and rigorous scholarship.

The essence of the university is the search for knowledge. Whenever any segment of the university retreats, abstains or is prevented from meeting the ideals of inquiry, the foundation of the academy is threatened.

While many agencies have responsibility for enhancing the quality of education, a special obligation for leadership falls on schools of education. These institutions prepare virtually all those who staff the nation's educational system; they must continue to be a major source of new knowledge about teaching and learning.

There are tensions generated by the dual expectations of inquiry and training, but we see no fundamental conflict. Both can and should be characterized by a rigorous scholarly foundation. Too often we do not meet this ideal. We, therefore, call for the implementation of rigorous preparation predicated on first-rate scholarship. This is the standard against which any professional school must be judged.

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Not all effective practice flows exclusively from knowledge associated with university level activity. There is a practical wisdom in all human endeavor that is not dependent on information gained from formal inquiry. There is much of value not taught at the university. Teaching, however, has broad and deep intellectual foundations. Therefore, schools of education must be committed and central to the expansion and transmission of that base.

These points may be obvious to some and contentious to others, but our attention has been diverted in recent years. We have been preoccupied with new functions and regulatory processes as well as political and economic pressures which threaten the climate for inquiry. Public schools have become a major instrument for social reform, primarily as a result of initiatives by legislatures and the courts. In addition, proposals have been made that teachers be prepared by apprenticeship rather than in programs more reflective in nature. The intellectual caliber of new entrants to the teaching profession has been frequently questioned. In sum, all segments of education suffer an extraordinary distress bred of fiscal constraint, political conflict, and shifting expectations.

Cognizant of these and other pressures, we are united in this conviction: to leave these trends unchallenged is not in the nation's best interest. Academic leaders must reaffirm the university function that sustains all others. Inquiry and scholarship associated with the process of education undergird all other missions of schools of education:

There are clear implications for achieving this aim in the decades ahead.

Schools of education must:

- Recruit, support, and reward intellectually qualified faculty and students;
- Focus efforts on the discovery and application of knowledge relevant to theory and practice;

- Secure and reallocate resources for inquiry and scholarship;
- Serve as exemplars of theory and research-based instruction in all preparation programs;
- Strengthen relationships with the profession that test the relevance of ongoing scholarship.

It is to these goals we address this document.

II. THE PREDICAMENT

Introduction

In 1977-78, more than 1190 institutions of higher education awarded undergraduate degrees in education; 160 awarded doctorates. These figures suggest the diversity of schools of education. If nothing else, the institutions graduating these students vary significantly in size, resources, complexity, and mission.

Many aspects of the education enterprise form the context for the diversity indicated above and for our commitment of inquiry and scholarship in schools of education. That commitment, however, is voiced in a time of predicament. One aspect of the predicament is the rapid growth and development of inquiry bearing on the process of education. A second is the character of the present condition and context of schooling and teacher preparation. A third may be found in the role of research and its outcomes in professional education programs. Each of these elements forms a part of the context in which our statement of belief is advanced.

We are cognizant of the many factors that need to be addressed in making fundamental changes in the profession. Because we are in positions of leadership, we have a responsibility for doing something. We have concluded that the dilemmas of reform will never cease. Accordingly, we have focused on the contribution that schools of education can make that will significantly alter the profession; namely, a commitment to inquiry and scholarship.

This section makes no pretense at definitive treatment of the problems and issues confronting professional education generally. Our intent is to provide an overview of the predicament that the profession faces as it has, over the years, sought to increase the commitment to research. First, we present a brief history of the evolution of inquiry designed to improve

teaching and student achievement. Second, we view the present conditions and context in which schools of education find themselves. In conclusion, we discuss several emerging issues related to the role of research and dissemination in schools of education.

A. THE EVOLUTION OF INQUIRY FOR TEACHING AND LEARNING

1. To 1965*

Education as an object of inquiry emerged only in the latter half of the 19th century in this country. Major impetus came through Henry Barnard's American Journal of Education, a repository of educational information from all ages and places. Barnard's expressed purpose was to gather, systematize, and publish materials for a "science of education," to give policymakers and practitioners easy access to the educational wisdom of ancient and current times.

Barnard's influence went beyond the Journal. As much as any single person he was responsible for the creation and early shaping of the Bureau of Education (in 1867), the forerunner of the Office--and now Department--of Education. The purpose of the office was to collect statistics and facts to show the progress of education in the states and territories and to distribute information respecting the organization and management of schools and methods of teaching.

The 20th century brought important changes in styles of educational inquiry. Education became an object of scientific investigation, controlled experiment, and rational reform. During the first half of the 20th century pupil accomplishment became accepted as the fundamental test of educational program, as argument from a priori principle gave way to an appeal to evidence. Dewey, for

* The information provided in this section is selectively drawn from Cronbach and Suppes, Research for Tomorrow's Schools: Disciplined Inquiry for Education (Chapter 1) and Gideonse, Educational Research and Development in the United States.

example, established the Laboratory School at the University of Chicago in 1896 as a mechanism to test hypotheses in practice. During the first three decades of the 20th century the school survey became a central tool for detecting those aspects of school organization and curricula in need of reform.

In the latter part of the Great Depression through the Second World War and into the fifties, educational research assumed an even more pragmatic orientation. The empiricism of the 1920's led to a new conception of research as an engine of directed change. "Action research" became the watchword for a broad group of reformers and social activists who wished to midwife a new and better social order. The goal was not to publish but to change the practices of teachers.

Then, in 1954, the Congress passed the Cooperative Research Act authorizing the Commissioner of Education to enter into financial agreements with colleges, universities, and State educational agencies to support research, surveys, and demonstrations in the field of education. That same year, the National Science Foundation provided its first support for what became the Course Content Improvement Program. The combination of these two events marked a major turning point for educational research and development in the United States.

Four years later authorizations were approved by the Congress for research on the uses of new media and for foreign language studies. In 1963, two new areas were covered: vocational education and the education of handicapped children and youth. In the meantime, under the standing Cooperative Research Authority, the U. S. Office of Education had further diversified its approaches, supplementing project research, a curriculum improvement program, and a demonstration program with a new Research and Development Center Program.

In 1965, Lyndon Baines Johnson engineered the Elementary and Secondary Education Act of 1965 through the Congress. Title IV of that Act contained major revisions in the authorization under which the U. S. Office of Education's research programs operated.

2. Since 1965

The past fifteen years have witnessed many developments in research efforts sponsored by the Federal Government. Regional educational laboratories were created, facilities built, research training programs begun (and ended), ERIC and a host of other dissemination activities launched, and a wholly new organization, the National Institute of Education, created to serve as the lead agency for educational research and development.

The events leading to and flowing out of these changes are complex. Others have chronicled important elements in the story (see: Dershimer, 1976; House, 1974; and Sproull, Weiner, and Wolf, 1978).

The sixties and early seventies, for example, were the heyday of the Research, Development, and Dissemination (R-D-D) rational or technocratic model of educational change. As House (1974) shows us, everyone believed in the R-D-D formulation captured most succinctly by Guba and Clark (1965). Even though presented with important caveats (that everyone downplayed or ignored), the logical/linear sequence was captivating. A great deal of policy and program development rested explicitly or implicitly on the research-to-implementation conceptualization. There were, as would be expected in an enterprise as large and diverse as the Federal government, important contrapuntal themes, conceptions of inquiry and the change process that were based on somewhat different ideas of how inquiry and improvement might be brought into productive relation with one another. For example, an important element in the original conceptualization of the regional laboratory program was the idea

that the work had to be done much closer to the implementation sites and that the various actors in the education policy and practice arena needed to be responsible for identifying and sponsoring the R & D conjointly if the results were ever to find their way into practice.

As we look back over the past fifteen years of experience, what seems quite clear is that the various approaches, the modest successes, and the frustrating failures afford us a rich lode of experience. This experience can be a guide to the future.

3. Inquiry in Schools of Education

The authorities on the involvement of schools, colleges, and departments of education in "knowledge production" are Professors David Clark and Egon Goba of Indiana University. Their 1975-78 Research in Teacher Education (RITE) studies of levels of institutional productivity, numbers of producers, and kinds and quantity of products of educational research and development are the benchmarks in the field (see Clark, 1978).

Clark's results speak for themselves:

The median level of institutional productivity as assessed by the measures employed in the RITE study was ZERO!
(Clark, 1979, p. 2).

Startling as this low productivity level may seem, Clark is quick to point out that the finding does not mean that schools of education considered as a class are non-producers of educational research and development. It is only that what production there is, is concentrated in schools of education of a certain type. For instance, virtually all of the baccalaureate level institutions offering teacher education programs were non or low producers. Conversely, only eleven percent of the doctoral level schools of education were classed as non or low producers. This, really, is what one would expect, but suggests something about the environment in which a great deal of teacher education in the country takes place.

What that may mean in terms of beginning a teaching career in a non-inquiry environment, and what that will mean when practitioners are expected to relate closely to the policy and practice implications growing out of research, should be a matter of some concern. What are we to make of the tremendous growth and diversification of educational research, development, and related activities over the past fifteen years and the results of the RITE Study which documents the uneven distribution of research productivity in schools of education?

B. THE PRESENT CONDITION AND CONTEXT OF SCHOOLS, COLLEGES, AND DEPARTMENTS OF EDUCATION

1. Roles and Missions

Institutionalized teacher education in the United States is approximately 150 years old. In that period of time, teacher education expanded to include nearly 1400 schools, colleges, and departments of education.

From the 1830's to the present the mission of teacher education institutions has remained remarkably stable. The task, largely confined to the baccalaureate level, has been to provide pre-service and in-service personnel with understanding and skill directly contributing to their accomplishments as teachers.

While the mission may have remained the same, the role has altered as a function of a number of factors. The art and science of teacher education has evolved. State responsibility for education (including the formal certification of teachers and other school personnel) has expanded markedly. Society, itself, overall, has shifted from more local to State and national orientations. We have watched an increase in the importance of the behavioral and social sciences and the application of organized principles of innovation to developing and testing prospective improvements in school organization and practice. Finally, there have been important adjustments in the expectations

and aspirations for schooling stemming in no small measure from major changes in our society.

2. Demographic Impact

In the last few years substantial changes have occurred in the Nation's demography. Birthrates have declined very substantially. The need for teachers altered dramatically in a very few years from a condition of serious under-supply in the 1950's and 60's to oversupply in the middle and late 1970's.

In reality, the supply-demand picture in education is somewhat more complicated than the gross numbers would indicate. For decades, for instance, teacher education programs have served not only to train those interested in a career but also those who saw education as a temporary career on the way to some other role in life or those who saw teacher education as a way of collecting a certificate functioning in lieu of dowry. To the extent that teacher education programs have simply constituted an alternate route to a baccalaureate degree, they have always produced far more graduates than were required by the nation's schools. The difference in the 1970's was, therefore, a function of both reduced demand for teachers because of declining birthrates and a higher proportion of those completing the training seeking to use their certificates in employment. Both factors have been involved in the oversupply phenomenon we have recently experienced.

The change in the supply-demand picture and especially the publicity about it, has had profound effects on enrollment in teacher education programs. Indeed, the swing has been so dramatic that a mid-eighties teacher shortage begins to loom in front of us. The enrollment shrinkage also comes right at the beginning of the time when colleges and universities are beginning to worry about the projected national shrinkage of 25 percent in the pools from

which higher education traditionally has drawn its students. This background concern, coupled with the fact that budgets in higher education are ultimately always enrollment-driven, has created serious financial pressures on teacher education programs. Teacher education programs have experienced the most recent and recognizable enrollment declines, and they have become among the first to feel the effects of the new financial conservation rapidly (even if understandably) suffusing the higher education administrative community.

For all higher education programs the problem of contraction is that staffing is rarely perfectly elastic with enrollment. The phenomena of tenure and emerging specialties and competencies tend to create a situation in which shrinkage will occur--or will be most strongly felt--in precisely those areas of more recent hires. Those areas of teacher education constituting new requirements or professional aspirations are most likely to be affected by the coming strictures.

3. Political Climate

The political climate within which teacher education programs in schools of education operate is dramatically different from that of two decades ago. By this we mean not only that it has changed--that is to be expected--but that it has changed to become far more stressful and tension-ridden. There are a number of reasons for this.

The last fifteen years have seen the growth of teachers' and other professional organizations in education. This energy and militancy would have been difficult to predict in the fifties and early sixties. The great demands placed on schools and the education professions by court decisions (desegregation and right to education), the Congress (Great Society legislation and beyond), the consumer movement, and the like have all tended to have direct, and more or less immediate, effects on perceptions of how the profession

is defined, what its functions are to be, and how its members are to be trained or retrained. Accreditation and the role of State educational agencies in the definition and monitoring of teacher education programs have been two of the arenas in which this political turbulence has manifested itself.

4. Stature Within Parent Institutions

Whether we like it or not, one of the facts of life of our professional existence is the low or uncertain stature teacher education enjoys within the larger higher education establishment. There is more than one reason for this unenviable circumstance. Traditionally, society as a whole has not valued teachers especially highly. In addition, qualifications of pre-service students as measured by SAT or GRE scores consistently rank low. This translates into levels of talent entering the teacher education profession, on the average, and has its effects on the perceptions of our peers in the larger college or university environment. In sheer intellectual power, as a group, many school of education faculty are perceived as not being on a par with their arts and sciences colleagues.

However, these are not the only measures which should be applied. The mission of teacher education is not the same as other parts of the university. In the main, it has been more a service rather than a scholarship mission. Our orientation, therefore, has been outward rather than inward. Process skills and affective considerations tend to be more important, neither of which are anywhere nearly as highly valued in the more purely academic sectors of higher education. We are seen as politically weaker--and we probably are--because we have willingly accepted, even embraced, teaching loads and service responsibilities that other parts of the university disvalue or abhor. Nonetheless, much of education's low status is the result of prejudice and bias. Paradoxically, this low status has been something of a mixed blessing. Even as

it hurts, it has afforded us a measure of protection to do the kinds of things we needed or wanted to do. Our legitimate assertions of difference have enabled many of us to develop our own criteria for personal and professional reward. This has enabled us to serve aspiring teachers better than we would have been able to had we been more thoroughly imbued with traditional academic standards and expectations whose ultimate appropriateness for the human service role might be questioned.

5. The Focus for Institutional Energies

Summing up the present climate for teacher education programs, it is a fair assessment to say that the energies of by far the greater portion of us have been consumed by insistent concerns other than the support and pursuit of inquiry. For example, responses to the external demands on curriculum, demands far different from those pressing on our academic colleagues, has been one major commitment. The requirements of integration, cultural pluralism, the right to education movement for the handicapped, the struggle against sexism; the consumer movement, and the variegated pressures which might be summed under the heading of the press for accountability have caused education faculty to spend very large amounts of time on curricular design and validation.

A second major drain on institutional energies has been the expansion and diversification of practicum experiences in the training program. The recognition of the value of a sequenced and carefully balanced theoretical/practical training program has resulted in the need to invest both time and energy in the cultivation, coordination and proper use of field settings. The outward orientation stimulated by insistent curricular demands has been matched by obligations generated by the process requirements of field-based instruction.

Instructional requirements of a clinical training program constitute a third major demand on institutional energies. Apart from the question of

coordination with the field, any clinical training program as teacher education has clearly become, will place heavy burdens on the instructional life of its professoriate.

These three major demands, coupled with the pro-bono expectations for professional service that educators share with their faculty colleagues in other professional training areas of the university, constitute powerful explanatory reasons for the relatively low emphasis placed on the conduct of inquiry in teacher education programs.

6. Factors Limiting School of Education Involvement

A variety of factors limit school of education involvement in inquiry and related activities. Some of these have already been mentioned: heavy teaching loads as a function of a clinical instructional model; the need to coordinate with field sites; insistent pressures for curriculum revision, and low status in the parent institution. To these must be added; a prejudice in the Federal establishment against the encouragement of active involvement on the part of SCDE's. The prejudice seems born of an attitude that the "educational establishment" is precisely where the competence does not lie to generate the kinds of understandings and innovations that will correct the problems and difficulties confronting the educational systems of the nation.

Of course, this is a classic self-fulfilling prophecy. The "villains" are identified and excluded, and, being excluded, never gain the opportunity to become contributors. This bias is not always explicit or intended. While there have been persons in various parts of the Federal establishment who are a little short of contemptuous of the teacher education profession and most of the agencies in which such people are housed, the more common failing is inadvertent exclusion, which occurs as a function of operating according to expectations that schools of education in the main simply cannot meet.

Responding to requests for proposals is virtually impossible for most.

Except for the occasional entrepreneurial behavior of individual faculty, there are few mechanisms to generate institutional responses to calls for proposals. Thus, the work that is done tends to be highly individualistic and, if anything, only very poorly related to the primary missions of the school of education as an agency.

C. SOME EMERGING ISSUES

In establishing the National Institute of Education, Congress took pains to specify the new agency's primary goals. Included among those goals are the following:

- "(i) help to solve or alleviate the problems of, and promote the reform and renewal of American education;
- (ii) advance the practice of education, as an art, science, and profession;
- (iii) strengthen the scientific and technological foundations of education; and
- (iv) build an effective educational research and development system." (NCER, 1978)

In the context of the broad aims listed above, three key areas of concern seem appropriate for further attention here. One of these has to do with dissemination of educational research. A second concerns developing understandings about certain unique characteristics of behavioral and social inquiry that bear on how it is conducted, by whom, and in what settings. The third deals with the utilization of existing training programs to connect inquiry and practice.

1. Dissemination

In recent years there has been a virtual explosion of programs for and approaches to dissemination. ERIC, the Dissemination Review Panel, information packages, the National Diffusion Network, the Research/Development Exchange (RDx), and State Capacity Building Grants are just a few of the

activities that have spilled out in the past fifteen years. Most of these have been based, again either explicitly or implicitly, on the technological model of educational change based on research. The "seeds" are there and need to be "broadcast" on the "soil" (which may or may not need "preparation"), in order for the plants to "root" and flourish. There is even recognition that the seeds themselves may require some preparation (including actual modification) if germination and maturity are to be achieved. The terms of the metaphor used here are deliberately chosen and, admittedly, a little artificial. However, the underlying premises of much that has been done in dissemination are virtually indistinguishable from those of agriculture.

Adding to the problem has been a propensity to clothe dissemination rhetoric in often times impenetrable language. It is ironic that the jargon of the dissemination trade has been a serious impediment to communication.

These problems are not insurmountable. They do, however, suggest that if there are serious problems in reaching the practitioner community, then perhaps there are equally difficult problems reaching those who provide preservice training. This is especially true, if it can be demonstrated that the great majority of agencies bearing responsibility for training are themselves not involved in inquiry and related activities.

2. Values and Educational Inquiry

The second area where developments are occurring which bear on the role of schools of education is that of broadening interest in the valuational, political and cultural factors in behavioral and social inquiry (see Gideonse, Koff, and Schwab). Without attempting an exhaustive survey of the literature, it can be said that more than a few educators and policymakers are asking basic questions about the assumptions underlying this inquiry especially as those assumptions relate to possible value differences between the research

and practitioner communities. The value differences may render the results of work done in the research community unusable or unacceptable from inception. The very valuational milieu where the work is decided upon or done may hopelessly complicate the process of eventual implementation. Conversely, the inquiry may be based on models of innovation that, because of the vicissitudes of social and political change, will never yield as close and directed a fit between research and practice as the technological model of inquiry-based innovation seeks to achieve. Because of these developments, the question of the range and scale of inquiry and related activities in schools of education becomes a matter of critical importance.

3. Professional Training as Dissemination

From a total system perspective, many dissemination activities now under way are absolutely vital. Logic underscores the importance of the need to provide professional staff with information about the outcomes of inquiry.

However, a powerful case can be made that the most important dissemination responsibility lies with the initial training programs. The initial training of those entering teaching should be congruent with the current state of the art.

The relatively smaller number of individuals to train makes this argument stronger. Teacher educators are themselves a smaller population, relatively speaking, and, at any given time, the number of teachers in training will be far smaller than the number in the system as a whole. In addition, investment at this juncture will, over time, have a cumulative impact on the profession as a whole.

Unfortunately, if we examine the several dissemination programs within and without the Federal establishment, we will look in vain for a systematic attempt to respond to the implications of initial training. There seems to

be no sense that the training period is one of the most important foundation stones of the present and future relationship of the profession to the process and outcome of inquiry.

4. Consequences of the Low Connection to Inquiry

Consider the following circumstances. Schools of education are, by and large, not explicitly included in the larger dissemination function. Save for a handful of large and established institutions, inquiry is almost totally absent from the experience of faculty and, therefore, of students being trained in those institutions. This does not preclude awareness of inquiry on the part of either individuals or institutions, but clearly it cannot help.

The consequence of this low involvement of schools of education in inquiry and related activities is that professionals develop little readiness to attend to such matters. In these institutions individual faculty must rely almost wholly on their own initiative to see to it that what they are doing instructionally, both as to content and process, incorporates that which constitutes the state of the art. What might ending this situation of neglect mean?

5. The Potential Role of Schools of Education in Inquiry

Our deliberations and an examination of the RITE study suggest a state of affairs that must be reversed. We envision a future role of schools of education in inquiry that must be quite different from the norms at present.

Because of the diverse nature of institutions preparing professional educators, we would expect considerable variation in the nature of the involvement of those institutions in inquiry and scholarship. We would suggest, however, that persons prepared at the initial credential level should (a) understand and appreciate that inquiry and scholarship provide the essential knowledge base for all professional fields including education, (b) have had firsthand experience in using automated information retrieval systems (for

example, ERIC) and appropriate applied research journals in planning, preparing, and conducting their practicum experiences, and (c) understand that an individual teacher can use inquiry to study and improve classroom content and processes. Students completing graduate work in professional education should receive extensive experience in the use of inquiry resources and techniques applicable to their specialty. In addition, such students should have had experience using research journals basic to their field and in conducting applied research.

The larger the commitment to graduate courses in professional education, the more extensive should be the role of the professional education faculty in engaging in research and scholarship and reporting its results. Finally, we assume that all professional education faculty would come to demonstrate and be able to document that they meet the inquiry goals described for those completing initial credentials and graduate programs and that they utilize the available knowledge base in the content and procedures of preparation programs for which they are responsible.

Are there ways in which teacher education institutions might become more substantially involved in educational inquiry and related activities? Can their status as performers be enhanced? Are there ways to stimulate more active attention to the outcomes of inquiry in the daily conduct of preparation programs?

Are there ways to change the milieu and climate of teacher education institutions so that the relationship to inquiry--either for performer, analyst, or user--is more direct, more prevalent, and therefore more apparent to students? Can we thus socialize students to expectations about inquiry as a rich and continuing part of their forthcoming professional lives?

We believe there are affirmative answers to all of these questions. Addressing these questions is the agenda advanced in the last section of this document.

III. THE AGENDA FOR SCHOOLS OF EDUCATION.

Introduction

We have outlined the development of inquiry and research in education. We have emphasized the role of inquiry and scholarship as the sine qua non.

As a group representing many years of experience in universities and education, we are familiar with all the "yes-but" arguments related to our thesis. Indeed, a mere cataloging of all the arguments regarding the function of inquiry would require several volumes. We are especially aware of counter arguments which arise whenever a plea is made to change any component of a complex social system. These arguments frequently reduce themselves to the classic chicken/egg question. For example, some argue that teachers' salaries cannot be improved until the rigor and length of training are increased while others counter that the length and rigor of training cannot be increased until salaries improve.

Such arguments are essentially non productive. All variables are both the cause and effect of other variables. The difficult problem is determining which variable is likely to alter the most other factors. Our considered judgment is that strengthening inquiry and scholarship in schools of education is the single most powerful way of altering all other missions and practices. It is also a way of building on the tap root--the essence--of the academy.

A. Implications-Strategies

There is a wide range of strategies by which inquiry and scholarship can be strengthened in schools of education. Incremental strategies can be applied at individual institutions, within clusters of institutions and at the state level. Sharply focused initiatives by the Federal government and private foundations can play a major role in achieving our objective. Our goal here, however, is to determine a number of steps and strategies amenable

to the leadership responsibility of deans (by which we mean the head of a school, college or department of education):

We merely suggest directions and emphases because we have confidence in the acumen of our colleagues. Many persons with leadership roles in schools of education have the skills and commitments needed to strengthen inquiry and scholarship. We know from experience that recipes for change do not apply equally to all states, institutions, or within any given timeframe.

We recognize further that we speak to a process that will take decades to achieve. Changes can be accelerated, however, if far larger numbers of deans and other educational leaders commit themselves to inquiry and scholarship as the basis for all educational programs.

What is needed far more than strategy is concerted support for the fundamental role of inquiry in schools of Education.

B. Why We Focus on Deans

We repeat our assumption that deans of education ought to have the skills, knowledge and commitment required to improve the quality and quantity of inquiry in schools of education. Deans must carry the responsibility for the quality of programs in their institutions:

We recognize that the levers of power are hardly solely in the hands of deans. Indeed, inquiry and scholarship will not be increased unless large numbers of faculty and higher level university administrators actively commit themselves to that goal. Nevertheless, it is important to focus on the one academic role that has the greatest potential for supporting inquiry and scholarship.

Many deans have or can develop that potential and it is that group to whom this document is addressed. Being part of that group, we reflect both its strengths and weaknesses. Our call for the primacy of inquiry is predicated

on experience with our peers. Further, we observe positive signs that deans of education have begun to coalesce around issues of quality, not only in teacher education but also in the scholarship requisite to quality. If we are wrong in that assumption, we are wrong in all our arguments.

C. The Agenda for Schools of Education

Noted below are several agenda items which must be addressed if the ethos of inquiry is to permeate schools of education. The list is neither long nor all inclusive. We focus only on those goals consistent with arguments in this document.

Stating an agenda for 1200 institutions may be seen as presumptuous. Some will accept the agenda; others will argue it is incomplete, or that they could do better. We are aware of such criticisms and we have debated these matters with some intensity. We believe what we have stated is realistic.

Some will argue we are "elitists" since we emphasize terms such as inquiry, scholarship, research and rigor, but we do not perceive ourselves in that light. The thesis here is derived from the highest ideals of the university; the generation and testing of knowledge is central to our calling. We recognize and deeply value our teaching and service functions; we are concerned with creating positive linkages with the teaching profession. We recognize strengths in many schools of education that already serve as exemplars. We do not wish to limit access to the profession in our pluralistic society. A dozen other issues are important, but we are convinced all these missions can and must be predicated on a firm knowledge base.

We stand on many shoulders in making these assertions. Whatever the reactions, we believe the following goals comprise the agenda for schools of education if they are to emerge as first-rate professional schools:

Quality of Faculty

Recruit and reward faculty who demonstrate they are committed to inquiry, persons whose intellectual qualifications and training mark them among the strongest of their cohorts?

Quality of Students

Recruit students who demonstrate the intellectual capacity to master the knowledge base which undergirds the process of education.

Leadership

It is the responsibility of the dean to mobilize resources and exert the leadership required for schools of education and their faculties to be acknowledged as centers of inquiry and scholarship.

Translation to Practice and Policy

Building the knowledge base is not enough. Passing the knowledge base on to future and present practitioners is not enough. The institution must also engage in direct attempts to apply the knowledge base to educational policy and practice, especially in its own programs. Building relationships with the teaching profession is a vital part of this goal.

Promotion of Inquiry and Scholarship

Increase substantially the time and energy devoted to inquiry and scholarship in schools of education in both absolute terms and relative to the other missions of such schools.

Critical Mass

Schools of education must be of sufficient size to bring together the range of professorial and student resources vital to an inquiry based approach to preparation programs.

Quality

In the assessment of any school of education, the quality of scholarship and of inquiry-based programs must be the criterion from which all other assessments derive.

Standards

Support the development and enforcement of standards expressive of the aspirations contained herein, whether applied to schools of education, the certification and hiring of education personnel, or the operation of elementary and secondary schools.

D. Conclusion

When inquiry and scholarship become the central focus of schools of education, the quality of all educational programs will be greatly improved. The very character of schools of education will be altered and those changes will have a profound effect on the behavior of current faculty and new faculty, as well as our relationship with the total profession. The profession of teaching will be vastly strengthened when the knowledge base on which it rests is constantly tested and demonstrated in first-rate professional preparation programs. Nothing less is an acceptable goal. There are, of course, serious implications associated with the achievement of the goal. Those implications touch all the institutions presently engaged in teacher education. Those schools of education now engaged in inquiry must integrate its processes and products far more substantially than they have into their training programs. Those schools of education not now engaged in inquiry must learn how to do so. Those institutions of insufficient critical mass to encompass the range of resources required to undergird professional training programs must limit and ultimately relinquish their training responsibilities.

Achieving the inquiry goal over the next several decades will dramatically reduce the number of schools of education. We make this prediction with no pleasure. The burden will fall equally heavily, however, on those institutions who have critical mass whether they are currently engaged in inquiry or not. We would hope that all teacher preparation institutions, however, would achieve not only the commitment, but the resources needed to become centers of inquiry in their respective states. However, any objective appraisal of the present state of teacher education in the United States must demonstrate that this is not a likely outcome.

On the contrary, it is our discomfoting prediction that some number far less than the approximately 1200 preparatory programs can achieve the level of scholarship on which the profession must be built. As the number of teacher education institutions diminishes, it will be a positive sign that a true profession of teaching is emerging. Such changes will threaten many of us in the profession. It is a threat that must be faced. To do otherwise offers no alternatives but mediocrity.

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