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ABSTRACT

Included are presentations on (or entitled): (1) restructuring the teacher education curriculum (Frank B. W. Hawkinshire); (2) teacher education reform (Carol Weinstein); (3) "Comments on Excellence in Teacher Education" (Maxine Greene); (4) teacher education in and for the future (Lenore H. Ringler); (5) teacher education and technology (Cecily Cannan Selby); (6) role of higher education institutions in teacher education (Jeanne Silver Frankl, with an appended paper on needs of intermediate, junior high, and high school teachers by Mary Ellen Fahs); (7) teacher training (Boston Public Schools); (8) "Redesigned Undergraduate Teacher Preparation Program at the University of Maine, Orono: The Clinical Segment" (Anne E. Pooler); and (9) "The Quest for Excellence in Education: The Responsibilities of Institutions of Higher Education" (Paul B. Warren). (CB)

TESTIMONY PRESENTED AT AN OPEN HEARING OF THE NATIONAL COMMISSION ON EXCELLENCE IN TEACHER EDUCATION (New York, New York, October 18-19, 1984)

Volume II.

National Commission on Excellence in Teacher Education, Washington, DC.

Presentation of

Dr. Frank B.W. Hawkinshire

to

National Commission on Excellence in Teacher Education

October 19, 1984

Introduction

The reforms in the training of teachers need to be extensive if the recent challenges to improve education in this country are to be met. The evidence for a less than optimal level of teacher performance not only comes from the indirect data on student achievement but also from direct evaluations of the teachers themselves. It is my hope that the efforts of this commission may contribute to some of these needed reforms in the training of teachers.

Recommendations

It is my recommendation that changes must come in the design of the curriculum if the efforts to improve teachers' performance are going to be anything other than cosmetic.

The Challenge

When the challenge of redesigning the teacher training curriculum is mentioned, the typical strategy is to shift parts and/or add pieces to the existing design. The question that is not usually addressed directly is whether the structure of the curriculum is an appropriate one to produce competent and skilled teachers. It is my contention that some of the problems of teacher performance resides in the fundamental flaws in the curriculum design. Therefore, if a remedy is to be undertaken, it is necessary to accept the challenge and return to basic principles to develop a more appropriate design. I fully recognize that the complexity of the task makes it very difficult to do. Nevertheless, an unsystematic approach, with partial fixes, is not the way to deal with the need to improve the level of teacher performance. Moreover, the very nature of the problem requires a systematic method for both disaggregating and then ordering the multiple

elements of the curriculum. I propose some ways of disaggregating and reordering these elements.

Units for Disaggregation

In my thinking on curriculum design, I disaggregate the curriculum into three sets of units. These units are: molar (the basic assumptions), macro (the ordering of the units of knowledge) and micro (the details of the learning episodes). Because of time limitations I will only discuss one of the primary molar units. It is a primary molar unit, because it involves the major assumptions about the learning and performance process that shapes the practicentric curriculum. I use this primary molar unit as an example to illustrate what needs to be done when rethinking the curriculum design to train teachers.

Natural Versus Formal Learning

If learning is examined as a total event, then it is possible to extract clues from this process to structure the curriculum. I first contrast what is known about natural versus formal learning and then the differences between learning (formal and natural) and performance.

Definitions

Formal learning is the planned encounters that take place within the classroom around designated units of knowledge. On the other hand, natural learning occurs as part of the process of coping with the unplanned encounters of living. While the dichotomy between the two is sharply drawn here for the purposes of emphasis, they may not in fact typically exist in such pure form (See Table 1). In this selected comparison I have tried to show some of the ways that the patterns of natural learning are different from formal learning. The differences are highlighted so as to provide guidance for designing what the late W.H. Cowley of Stanford University called Practicentric (centered in practice) oriented curriculum. These five elements are some of the important aspects of natural learning that the designer must include if the level of teacher performance is to improve.

Table 1

Natural Learning	Formal Learning
1. Continuous events,	1. Discontinuous events,
2. Contextual relevance,	2. Contextual irrelevance,
3. Designated unit of learning is less time bound and is more task bound,	3. The designated unit of learning is highly time bound and less task bound,
4. Lower constraints on moving from learning to performance sequence, and	4. Higher constraints on moving from the learning through performance sequence, and
5. Knowledge acquisition is typically linked directly to knowledge utilization.	5. Knowledge acquisition typically separated from knowledge utilization.

Before illustrating how to use more natural learning patterns in curriculum design, the differences between learning and performance are considered.

Distinctions Between Learning and Performance

The differences between learning and performance are important enough to be made explicit in the design on the curriculum (See Table 2). Constrasting the characteristics of each highlights the differences.

These differences between aspects of learning and performance means that it is necessary to focus specifically on the details of learning or performance when selecting relevant activities. If the appropriate activities are not selected, then those which are effective for learning may be either inappropriate and/or inadequate for performance. Since both learning and performance activities are contained within each learning episode, careful attention must be given to how these activities are sequenced, paced, located, and timed (See Figure 1). If these four concerns are handled appropriately, then it is possible to have both types of events successfully within an episode. When these activities are interdigitated in the way, it is possible to enhance significantly the level of learning and improve performance as well. Examples are needed to illustrate how learning and performance are put together within the designated unit of knowledge (the subject matter being taught).

The Designated Unit of Knowledge

Since all learning episodes contain both learning and performance activities, the task is to select an appropriate way to organize them (See Table 3). The following four principles are used to do this organization.

Organizing Principles

First, the learning activity can be much shorter than the performance activities. Second, the events to be learned that are the same are grouped and subsumed together. Those groups that contain knowledge that are the same are learned first, those that are most different next, and those that are similar last.

Table 2

Learning	Performance
1. Occurs instantaneously or in a very short period of time,	1 A great deal of time required to reach a minimum acceptable level of performance (MALP),
2. The contiguity of events enhances the process,	2. Mass practice of the designated unit to be learned results in a set of non contiguous training events in the sequence,
3. The focus is on the integration of parts, relationships, and the whole, and	3. Decomposition to the level of the parts may obscure both relationships and the whole, and
4. The sequential ordering of events is less important. It is more important to start where the person is in the process.	4. Sequential ordering of events typically important to the process.

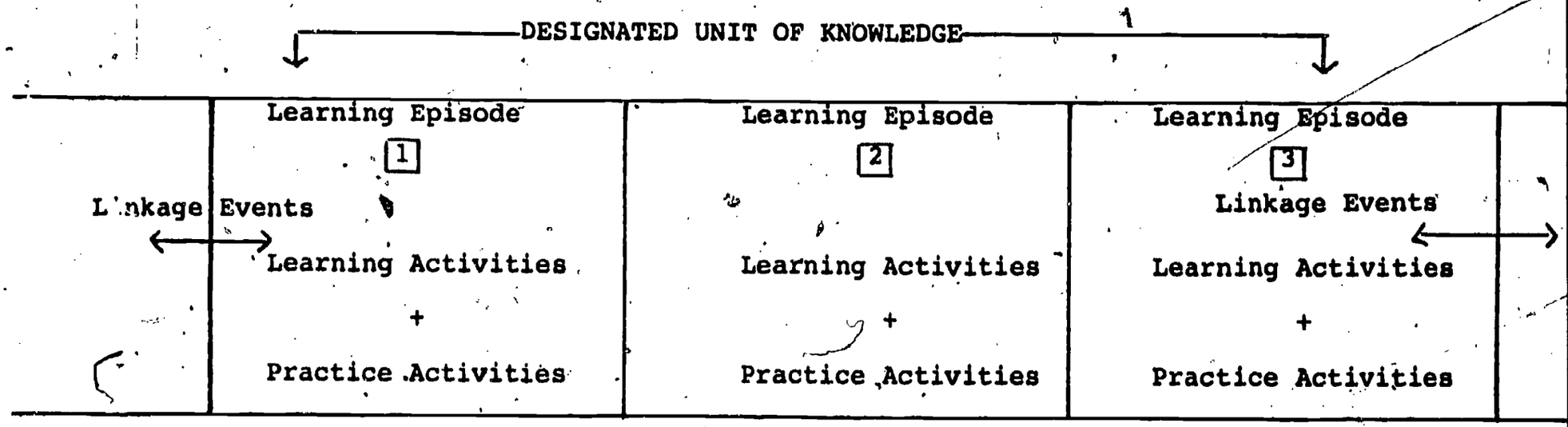
DESIGNATED UNIT OF KNOWLEDGE
Learning Episode
1
Learning Episode
2
Learning Episode
3
Linkage Events
Linkage Events
Learning Activities
+
Practice Activities
Learning Activities
+
Practice Activities
Learning Activities
+
Practice Activities

Figure 1

Table 3

Elements of Learning Episode

1. Theory and/or Model (Learning Activity),
2. Skills Repertoire (Performance Activity);
3. Linkage activities between theory/model and skills repertoire (Learning and Performance Activity),
4. Differential Diagnosis Prbcedures (Learning Activity), and
5. Assessment of conceptual and skills mastery (Performance Activity).

Third, the focus is on the identification of attributes of parts, their relationships to each other, and the whole. Fourth, establish a relationship between the new information and the person's existing knowledge base.

Application of Principles

To take these four steps, it is necessary to designate the specific unit of knowledge. Once a unit is designated, this converts a continuous event to a discontinuous one (See Table 1). To maintain the teachers'-in-training sense of continuity of the new material with the old, the linkages between the two are identified (See Figure 1). This allows the teachers-in-training to retain the sense of the continuous quality of the material while focusing on a specific learning episode. An example of specific content is used for this example. The focus of this designated unit is on the American colonial period of history. This period is taken out of the continuous events of history that came before, during and after this period. Placing the focus on the agricultural methods of the New England colonies is a selected learning episode within the designated unit of the colonial period. The linkage events on either side of this period are the historical themes taking place in both England and the post colonial period in America. These major themes from these two periods are made explicit in order for the learner to retain a sense of orientation to the continuous themes of history.

If the extraction of the designated unit of knowledge is done with care, then the teachers-in-training can retain the larger context of events that surround the designated unit. It is this larger context that helps the learners to see the relevance of a particular designated unit.

Since it is only possible to teach in a serial fashion, keeping the material in context provides an explicit sequence that the learner can recognize as the parts fit into an explicit endstate (the whole). This sequence must be re-enforced in the learner's mind multiple times during the practice phase so that the learner is not only clear about what is being mastered but also the reasons for learning the material. If clarity about

this sequence is maintained then it becomes self-reinforcing and thus pushes students towards achievement pleasure, which gives them a sense of closure. In this case closure comes from obtaining a specific endstate. If these learning-practice activities are carried through carefully, then the learning episode will remain intact as part of a continuous event in the learners' memories. In this way the designated unit of knowledge becomes a building block that the teachers-in-training use to move to the next level.

Implications for Restructuring the Practicentric Curriculum

If these primary molar issues of curriculum design are used to restructure the pattern of teacher training, then major changes in the educational process are required. The first requirement is that all of the designated units of knowledge must be specified and the relevant learning episode identified. The example used to illustrate this is of a teaching method as the designated unit of knowledge. The focus of study is on the patterns and dynamics of classroom group behaviors. Within this designated unit is a series of three learning episodes. When selecting the material from these learning episodes, no attention is given to the disciplines from which the material is taken. Therefore, it does not matter, for example, whether the content of an episode comes from psychology or sociology. In this case the learning episodes consist of 1) the relevant theories of person perception, 2) sociometrics and social interaction, and 3) the skills of observing the dynamics of a group. Once these themes are covered, then what was learned is used in a series of exercises. The teachers-in-training observe individuals of different ages and abilities, as well as small and large groups. These practice experiences allow the teachers-in-training to compare what is seen when observing a single person, person perception, to what can be learned when observing groups about sociometrics and social interaction patterns. When these three learning episodes are tied together in this way, then the theories provide a conceptual framework for additional observations in the classroom, on the playground, in the cafeteria, or during a tutorial session.

Once those series of comparative observations are made, then it is possible to address the issue of what the teachers-in-training have learned. The focus of this inquiry is on identifying the various social and physical forces impinging on their pupils from their surroundings that might influence their classroom performance.

Examples of the variety of behavioral settings that teachers-in-training could then apply their behavioral repertoire of skills to include:

1. The way students can develop new principles of distributive justice when sharing equipment on the playground.
2. How to alter the power structure operating in the seating patterns in the cafeteria.
3. What the carryover effects are in the classroom of coalitions formed in after school groups on the athletic fields.
4. Learning how to induce impulse controls in students when working on difficult assignments in tutorial sessions. In this way the students learn to cope more appropriately with reactions to failure, success, and mistakes.

Once the teachers-in-training learned about these theoretical notions and active techniques for observing, then the opportunity to practice these skills in a series of situations is required. The practice is done in similar as well as different behavioral settings to increase their level of performance (MALP). These repeated experiences are not, however, used for skill building alone. They are also used for developing acumen in making a <u>differential diagnosis</u> so as to know when to use and when not to use which methods.

Granted what was said about redesigning the curriculum the changes required in the pattern of teacher training needs to be stated as well. Some of these changes are:

1. A highly interdigitated sequence of designated units of knowledge and specific learning episodes are selected by all of the faculty.

2. All faculty members must be able to show how <u>all</u> of the relevant designated units of knowledge relate to what each member is teaching.

3. Each learning experience draws upon the same knowledge base with increasing depth.

4. Each learning experience would include both new and some recycled material. This would permit teachers-in-training to go through these same learning episodes several times but at a more sophisticated level with more complex theoretical concepts and skills.

5. The faculty would have to be exemplar teachers in this curriculum.

6. Added facilities and equipment such as observation rooms and video taping equipment are required.

As Cowley predicted, and I would agree, this kind of practicentric curriculum would produce significant increases in the performance level of teachers. The specification of the details of how to implement these changes can only be described when the macro and micro issues are addressed. There is no time to illustrate any of these issues.

Testimony to

The National Commission on Excellence in Teacher Education

New York University
October 19, 1984

This is an exciting time to be involved in teacher education. It is a time of unprecedented concern for education. We are witnessing a broad-based movement involving researchers, teacher educators, legislators, governors, chief state school officers, school personnel, and the public at large.

According to the report of the Education Commission of the States' Task Force on Education for Economic Growth (which summarizes the key educational reforms undertaken by each of the states in the last year), 46 states are working on comprehensive plans to improve education in public elementary and secondary schools. These reforms include many common goals: upgrading the curriculum, strengthening graduation requirements, promoting cooperative arrangements with industry, integrating technology into instruction and, most important of all, strengthening teacher certification requirements with a view to improving the quality of teaching in the schools.

As a member of the higher education community involved in teacher education, I am very excited by these reform efforts. But I want to provide words of caution that three points that particularly concern me. I fear that, unless attention is paid to these issues, the effects of the reforms will be limited, if not totally negated. My ideas are not new or unique; but I hope that they will serve to alert my listeners to certain dangers that lie ahead.

Incentives. All efforts at upgrading teacher education will be futile if we are unable to attract into the teaching profession the number and quality of people that will be needed to staff our schools into the 21st century. The first Gallup/Phi Delta Kappa survey of U.S. teachers' attitudes toward public schools showed that 37% reported that their schools have experienced difficulty attracting good teachers, and 48% report that their schools have had difficulty retaining good teachers. When asked why teachers are leaving their jobs, 87% mentioned low teacher salaries. The next highest category (discipline problems) was cited by a much lower 46%.

By contrast, when the public was surveyed in 1982, only 52% mentioned low salaries as one of the main reasons why teachers leave, whereas 63% cited discipline problems. Apparently, the Amnerican public is failing to realize the extent of teachers' dissatisfaction with the salaries they are receiving.

On another question, "Do you think salaries are too high, too low, or just about right?", 90% of all responding teachers said that salaries were too low. However, the American public thought differently. Only 37% said they were too low, while 41% thought they were about right.

Every semester I survey my introductory education students about why they have chosen teaching as a career, and whether they have faced opposition from parents or ridicule from peers. The results are always unequivocal (not to mention disturbing). My students report that they have enrolled in teacher education against the will of their parents, who want them to go into more lucrative professions.

Earlier this week, a young man sat in my office and talked about his desire to go into teaching. He had come to find out about a master's program that would lead to certification. He reported that his family and friends think he is crazy to leave his current, relatively well-paying job ($26,500) in order to go back to school to train for a low-paying profession like teaching. The man is an exterminator.

This month's Phi Delta Kappan contains an article by W. Timothy Weaver which carefully examines the impact of salaries on teacher supply. He reports that, because of demographic and labor market forces, by 1970, salaries of U.S. teachers had risen at a rate exceeding that of salaries paid to other workers in the economy. He writes: "Moreover, the average academic quality of individuals attracted to teacher education equalled that of any random sample of students entering four-year colleges. By 1980, however, the relative salaries of teachers compared with those of other professions had fallen well below their 1970 levels. By 1980, the academic quality of students attracted to teaching was also significantly below the 1970 level--and below that of the average four-year college student in 1980, as well" (p. 112).

Clearly, there is no way to get around the fact that, to attract good people, we need to provide better salaries and better working conditions. Until we do, we can implement higher admission standards, we can require more liberal arts, we can have stiff exit examinations, but we will not be able to attract the kind of people that we need into the teaching profession. AS WEAVER STATES, "SALARY IS THE SINGLE MOST IMPORTANT FACTOR IN ATTRACTING TALENT TO ANY FIELD."

The Role of Schools of Education.

While I welcome the reform movement, and am glad to see a broad-based thrust for improvement involving state agencies, school districts, legislators, etc., I am concerned that the movement for reform seems to be happening more outside Schools of Education than within. Two weeks ago, I was in Texas at the Conference on Policy, Practice, and Research in Teacher Education. I heard Billy Reagan, superintendent of the Houston Independent School District, describe his plans for improving teaching in his district. I listened to Philip Schlecty describing training for teachers through the induction years in the Charlotte-Macklenberg schools. I heard Garfield Wilson describe Florida's plan for evaluating and strengthening teacher performance. Finally, I heard Martin Friedman of New Jersey's Department of Higher Education describe the Commissioner's Alternative Route to Certification --a plan that bypasses the Schools of Education completely.

What is the role of the Schools of Education in all these reforms? What are they doing? Why are they not an integral component of the reforms? Should they be more involved? I will address this last question first. I am firmly convinced that Schools of Education should be the primary site of preservice teacher education, as opposed to school districts. Indeed, I agree with Joyce and Clift that "the administration of teacher education is the primary responsibility of scholars in the field of classroom teaching and learning process" (Educational Researcher,

April 1984, p. 9). For the first time, we have a body of educational research on the characteristics of effective teachers and effective schools. I believe that it is college-based teacher preparation programs that are in the best position to transmit this knowledge and to prepare reflective individuals who can draw on their intensive preparation to meet students' needs and foster individual student achievement.

Given this conviction, I am concerned with the number of proposals for reform emanating from places OTHER than teacher education institutions. Why are colleges and universities not involved in these plans? My guess is that they are too busy fighting for their own survival. Reeling from declining enrolments and the concomitant loss of resources, reorganizing, becoming smaller, consolidating, they are beset by internal problems. Nevertheless, it is they who can provide the leadership that is urgently needed NOW, if education is to meet the challenge of providing a new generation of qualified teachers gifted enough to raise student performance to the level the American people has a right to expect.

Some fundamental changes will be needed, if Schools of Education are to rise to this challenge. First, they must be recognized by the University community and the general public as what they are--professional schools. Faculty who collaborate with schools, engage in curriculum development, or supervise out in the field must be rewarded on the same basis as those who publish. Classroom teachers must be hired to team-teach courses with college or university faculty. "Research accomplishments" and "Scholarly/creative activity" must be defined more broadly to include curriculum development. Funds must be allocated for retraining college faculty (e.g. in the role of computers in education). Finally, the state must be prepared to pay for high-quality teacher education. As David Berliner writes, "At my own institution, the University of Arizona, we have found that it costs the state about $15,000 to educate a liberal arts undergraduate in, say, comparative literature, history, or psychology. To educate an individual for the vitally important profession of teaching, the state pays $2,000 less. I wonder what Arizona pays to train its medical doctors, nurses, computer scientists, and architects? I'm afraid that Arizona, like the 49 other states engaged in teacher preparation, gets precisely what it pays for" (Phi Delta Kappan, October 1984, p. 96). TEACHER EDUCATION BELONGS IN THE COLLEGES AND UNIVERSITIES. BUT IN ORDER FOR SCHOOLS OF EDUCATION TO FULLY PARTICIPATE IN THE REFORM MOVEMENTS, THERE MUST BE FUNDAMENTAL CHANGES IN THE FUNDING AND REWARD STRUCTURES.

Evaluation and Dissemination of Reforms

We all recognize that many of the issues discussed by educational reformers today are the same issues that were discussed in the 60s and 70s. In 1972, Romine identified the need for greater cooperation between schools and teacher education institutions, the need for more careful selection of students entering teaching, and the need for integration of educational theory into practice, improved procedures for the induction of new teachers into the profession, increased opportunities for early field experiences, and better followup of newly certified teachers' performance. In a 1971 study of teacher education in New York State, Fantini listed the following problems: Certification policies, academic vs. professional education, a continuum of training from preservice to inservice, training of supervisory teachers, cooperation between public schools and colleges, and other issues that now have a familiar ring. The incredible persistence of these problems is not for lack of reform efforts. So how are we to ensure that reports similar to the one this Commission is about to write will not surface again in 1994? Must we go on reinventing the wheel?

I think the answer is evaluation and dissemination. At the Teacher Education Conference in Texas, I heard Garfield Wilson of the Florida Department of Education Education report that the legislature has a built-in provision for the evaluation, of Florida's reform efforts. I live in New Jersey where one of the most radical reforms of all is being implemented--the Alternative Route to Teacher Certification. It is mind-boggling that no systematic evaluation has been built in to the alternative route. Unless individual researchers decide to monitor the outcomes, we will have no way of knowing whether the alternative route will in fact attract the quality of people it is intended to attract, what kind of teacher training they are receiving, whether they are successful in the classroom, or how they compare with teachers who have come through the traditional college-based route--or, indeed, any of the vital questions that need to be answered. I WOULD URGE THE COMMISSION TO RECOMMEND THAT ALL REFORM EFFORTS INCLUDE A PROVISION FOR EVALUATION AND DISSEMINATION OF RESULTS.

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Comments on Excellence in Teacher Education (October 19, 1984)

for the National Commission on Excellence in Teacher Education

by Maxine Greene, Teachers College, Columbia University

To speak of excellence in teacher education ought to take us beyond mainly instrumental and quantitative considerations. Excellence, as I view it, has to do with the ways in which persons conduct their pursuits of knowledge and understanding. It has to do with the ways in which what they come to know and understand feeds into their perspectives on things, informs their practice, and provokes them to go further than where they are. I do not want to repeat what has already been said about professionalizing teachers-to-be by equipping them to play more significant roles in curriculum development and policy making, important though these clearly are. Nor do I want to repeat what has been said about merit and mastery in teaching, about new career ladders, or about the necessity for building more bridges between teacher education and the schools. With what has been called the crisis of the professions in mind, I would prefer to propose three paradigms for graduate teacher education, somewhat different from those commonly in use.

By the crisis, of course, I mean the erosion of confidence in the professions and in professional expertise in general. I mean the growing awareness

of the unintended consequences of some of the new medical technologies, say, of the use of nuclear plants to solve energy problems, and (I would suggest) the dependence on technical models in the training of teachers. Where teacher education is concerned, the consequences have been a concentration on behaviors, on measurable performance, on discrete competencies and skills. Not only has there been a neglect of the interpretive context in which all this might be reflected upon and related to educational values and purposes. There may well have been an overlooking of critico-creative thinking, of the capacity for thoughtful and participant citizenship, and of the ability to cope intelligently with the bombardments of the media.

To rely on a model of technical rationality is to overlook the fact that teaching is always situation-specific. A teaching-learning situation, I believe, is not one to which the generalizations of applied science can easily be applied. This may be especially true at the present moment, when there is a growing recognition of the diversity of the populations thronging into high schools and elementary schools. Technical models or large generalizations make it difficult to attend to biographical particularities or to experiences alien to what is being conveyed in schools. Unpredictable elements enter at all levels; the very dissonance between students' lived worlds and what teachers take for granted may become the source of student confusion and error, something scarcely acknowledged or seen. There are the effects of family and social dislocations, few of which are encompassed or accounted for by research from without or by what Thomas Kuhn calls the "shared examples" (1970) so familiar to teacher educators today.

The first paradigm I want to propose is taken in part from David Schon's The Reflective Practitioner (1984), a paradigm of "reflection-in-practice" that poses a challenge to technical rationality. Another is an interdisciplinary paradigm adapted from work being done in the field of Women's Studies. Still

another is derived from aesthetic education and what is known about the modes of understanding made possible by an integration of cognitive, intuitive, and emotive "readings" of phenomena. None of them makes irrelevant or unimportant what is thought of as the knowledge base fundamental to teacher education. The idea, however, is not to apply segments of accumulated knowledge or research results in the process of sense-making with respect to practice; nor is it to draw logical inferences from knowledge claims. Teachers ought to be enabled to treat the forms of knowledge with which they have been engaged as sources of perspective, of "knowing how." They ought to be enabled to find in those forms of knowledge clues for the framing of hypotheses, for the posing of problems, for the stimulation of dialogue within the particular situations in which they are expected to do their work.

To educate for "reflection-in-practice," I am suggesting, is to empower teachers to develop a range of interpretive and, indeed, artistic capacities with regard to the fluid situations in which they will find themselves involved. Of course this means more movement back and forth between teachers colleges and the schools. It ought to mean an open, ongoing conversation as efforts are made to find adequate ways of sharing meanings with diverse and distinctive students, each of whose vantage points must be attended to and considered worthy of regard. It ought to mean a continuing and open consideration of norms and principles, not only those governing specific subject matters, but those that govern the ways in which persons come together and create "in-between" (Arendt, 1958) of significance for their learning and their lives.

As for the interdisciplinary paradigm taken from Women's Studies, I find suggestive the ways in which the "reality" of certain moments in history or certain cultural situations has been deepened and expanded through a viewing from unexpected vantage points. The insufficiencies of understanding due to the overlooking of women's experience are by now well known in several fields (history,

for instance, and developmental psychology). When inquirers look through the lenses of literature, anthropology, economics, and the visual arts as well as history, they are bound to see the Elizabethan period differently. When they consult literary narratives, diaries, life-stories written by women, while using the constructs of developmental psychology, not only is the conception of female experience enlarged; so may be the range of developmental psychology. There are possible analogies here for teacher educators concerned to empower teachers-to-be to "see" their teaching situations fully. To look from multiple angles is to be better able to select out dimensions of the situation (faces, voices, writing patterns, thinking styles, interchanges, and relationships) to which to attend. The implications for teachers colleges, I think, have to do with collaborative seminars among representatives of various disciplines, each committed to disclose what and why his/her particular ordering of concepts enables practitioners to see.

Finally, there is the apparently remote paradigm taken from aesthetic education. It is dramatically clear in this domain that the more individuals know (about the medium of an art form, about style, about expressiveness, about form), the more they are likely to see and hear and discover. The role of "tacit awareness" (Polanyi, 1958), the subsidiary awareness that feeds into and sharpens focal awareness; the relationships between cognitive and emotional capacities in attending to and intending something new; the importance of perceptual acuity; the significance of being personally present to what one is trying to understand: all these become highlighted when people are being empowered to engage knowledgeably with works of art. If only to enhance the power to make discriminations in teaching situations, to notice what is there to be noticed, to single out nuances that may serve as clues, some experiences with aesthetic encounters ought to be provided teachers-to-be.

My dominating concern is for an approach to teacher education that comes to terms with the complexities, the urgencies, and the understandings of our times. A society variously called an "information society," a "post-

industrial society," a society characterized by expanding high technology, a changing demography, moral and religious conflicts, and fears of Armageddon cannot be served by teachers who are functionaries or highly skilled technicians or effective managers alone. Excellence in teacher education means opening more and more intelligences to a changing world, empowering them to reflect in the course of action among other human beings, to engage (as they do so) in increasingly creative and critical dialogue to the end of provoking learners to think, to imagine, to notice, to be concerned, and-- in an increasingly indifferent world--to care. Appropriately or not, I want to end with a sentence from the last page of Albert Camus's The Plague, whose narrator is concluding his tale by saying it could not be one of a final victory. "It could be only the record of what had had to be done, and what assuredly would have to be done again in the never ending fight against terror and its relentless onslaughts, despite their personal afflictions, by all who, while unable to be saints but refusing to bow down to pestilences, strive their utmost to be healers." The pursuit of excellence is never ending. We can only strive our utmost and to try.

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NATIONAL COMMISSION ON

EXCELLENCE IN TEACHER EDUCATION

October 19, 1984

Statement by Professor Lenore H. Ringler

New York University

Although there are many important issues facing our schools and teacher education in particular, ranging from new career alternatives for teachers to the problems of teacher burnout (Boyer, 1983, Goodlad, 1984, Schug, 1983), I would like to focus on two specific issues from a literacy perspective.

1. The process of educating future teachers
2. The content of teacher education programs for a changing society

As technology increases the availability of knowledge and as this information reshapes the nature of certain occupations, students' ability to function in a changing society will depend on their ability to think critically and to use their knowledge in productive ways. Technology has provided us with capability to collect and organize extensive data bases. The challenge is to be able to use the data we have acquired to improve the quality of our lives.

"As individuals acquire knowledge, they also should be empowered to think and reason" (Glazer, 1984). When we describe, compare, contrast, discuss, criticize, explain, interpret, justify, evaluate, etc. we are using language to think and reason about some content. The connections between learning and language are evident. As adults we are all aware that we have learned or mastered some body of content when we are able to communicate our knowledge to others through speaking or writing. We may be less aware that the actual process of producing language in these ways is helping us learn as well as enabling us to share what we have learned.

The skills that we need to understand information and react to it are embedded in the communication processes of listening, speaking, reading, and writing. Oral and written language is the tool which enables us to use our knowledge in thoughtful and rational ways.

We know that teachers' prior experiences shape the decisions they make in their classrooms. Therefore, it is not only the content of teacher education programs that will make a difference but the process we use in educating prospective teachers for their difficult role. Prospective teachers need opportunities to use their language as a tool for learning, to learn through collaboration with peers, and to function in those internship/practicum situations which replicate the problems they will face as professionals.

Teachers need to be fluent readers and writers. What does this mean for teacher education? Throughout their training program they should be actively involved in learning about their field through their own listening, speaking, reading and writing activities. Through this process they will clarify their ideas and those of others in much the same way that we hope their students will. Having "real purposes" and "real audiences" for the expression of their thoughts will give prospective teachers the necessary experiences on which to base their decisions once they are in the classroom.

Understanding that learning on one's own and learning from peers, as differentiated from learning from an authority (i.e., the teacher or university Professor) is the key to continued or life-long learning is also a critical experience for teacher trainees. This experience along with the use of language

for learning should change the context or environment for learning that teachers will provide for the children in their classrooms.

Teacher educators in colleges and universities play a crucial role in the process of educating prospective teachers. They can create an environment for learning at the college level that fosters thinking, language, peer interaction in small and large groups and above all an attitude of mutual respect and professionalism. In this way the university professor becomes the model for those interactions and behaviors that they hope prospective teachers will internalize and use as they make critical decisions in their own classrooms and thus hopefully provide an environment in which children learn from each other, using their language facility and become critical thinkers and independent learners.

If the goal of education is to develop individuals who can think and reason about many issues and problems, then our teacher education programs need to stress the use of language across all curriculum areas. As we listen to others, read what others have written, and react through speaking and writing our ideas are sharpened and we learn how to learn. Teacher preparation courses need to integrate the knowledge base or content of a particular discipline with the use of language so that learning how to teach science, math, art, etc. would focus on learning how to help children use language to understand the content. Priority across all curriculum areas would be interacting with peers in thinking about content, expressing and reacting to ideas/knowledge through speaking and writing while simultaneously understanding the ideas of others through listening and reading. Prospective teachers would become knowledgeable about specific content but the content would be the vehicle for learning how to involve students in

language activities. This means, for example, that using writing to clarify ideas would not be limited to methods courses in Language Arts or English, but would cut across all methodology courses.

The stress in all teacher preparation courses would be on learning ways to actively involve students in learning, by using their own language (speaking and writing) as well as interpreting the language of others (listening and reading). Teachers would learn how to organize classroom activities, regardless of content, to facilitate language use. Methodology courses would stress the creation of a classroom environment which encourages language use to explore the ideas embedded in subjects such as science and social studies. How to set up specific language activities, such as group talk, or effective writing assignments, is common to all subjects and all stages of education (Toronto Board of Education, 1983).

Once teachers are in the classrooms they tend to function as situational decision-makers. The decisions they make influence the direction of the curriculum and are, as I remarked earlier, based on beliefs acquired from previous experience (Bolster, 1983). If in their decision-making processes children's language use is a priority, then the tasks they require of children will emphasize learning through the use of language. Teachers' thoughts and subsequent decisions will focus for example on a question like: "What writing activity can I use that will clarify students' concepts about the Civil War?" rather than "What do my students know about the Civil War?" Another example may help to clarify this point. A teacher may think about "What audience would be appropriate to listen to my students' discussion of the upcoming Presidential election?" rather than "How can I find out if my students know each of the candidate's views on taxation?"

To summarize this point, teacher education programs should train all teachers in methods for developing children's language potential, the critical factor in children becoming independent thinkers and learners.

The final comment I want to make with respect to educating future teachers relates to their exposure to schools and their interactions with parents, teachers, and administrators in the field. While there are many ideas about involving teacher trainees in schools earlier in their college education and changing some aspects of the practice teaching component, I only want to focus on the value of a collaborative approach between schools and universities in the design and implementation of the fieldwork experience. Whether we decide that prospective teachers should spend part or all four years of their undergraduate program in schools, or whether an apprenticeship system should follow university training, is I think less important in the long run than designing a fieldwork experience in which school-based supervisors, classroom teachers, and university faculty have cooperated. Our future teachers need a sense of cohesiveness in their preparation rather than the fragmentation that now characterizes many of their learning experiences (Joyce and Clift, 1984). Further, this collaborative effort would serve as in-service training both for school-based staff and university faculty, as both groups discuss and resolve mutual problems focusing on providing the best learning environment for our future teachers. If beginning teachers no longer reported that what they learned in university classes was terrific but not applicable to their current classrooms we would all feel a lot better. I know I would.

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Statement by

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To a regional hearing of the National Commission on Excellence in Teacher Education

N.Y.U.

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TEACHER EDUCATION IN TECHNOLOGY

The overall conclusion of the background research of The National Science Board Commission on Pre-College Education in Mathematics Science and Technology, which I co-chaired with Wm. T. Coleman was "At a time when we would like our total population to have some skills and understanding in areas of mathematics, science and technology, we have been most successful in discouraging general interest and achievement in these subjects." Although this Commission was the only one to focus exclusively on Mathematics, Science and Technology, comparable conclusions about all

subjects, with mathematics and science usually a particular concern, were reached by all studies, including that "A Nation at Risk", the report of the Department of Education.

The National Science Board Commission reviewed available information concerning student participation and achievement in mathematics, science and technology with respect to socioeconomic, racial and gender factors, with respect to the current and future needs in the nation's workplace, laboratories, military, classrooms and Boardrooms, and with respect to the achievement of the youth of other industrialized nations. We agreed on the following new objectives, not currently being met, for our educational system, both formal and informal:

Goals for Formal and Informal U.S. Education Systems

o To continue to develop and to broaden the pool of students who are well prepared and highly motivated for advanced careers in mathematics, science and engineering;

o To widen the range of high-quality educational offerings in mathematics, sciene and technology at all grade levels, so that more students would be better prepared for and have greater options among technically

oriented careers and professions; and

o To increase the general mathematics, science and technology literacy of all citizens for life, work and full participation in the society of the future.

Discrepancies between needs and realities are usually described as problems--and thus the rush is o to find proscribable solutions. The rush is good in that it points attention, energy and money to these issues. It is counter-productive when the solutions described are partial or superficial and when the effort stops short-term with simplistic approaches. Thus the current focus on traditional measureable actions to "raise the standards" of teachers and students by increasing course and/or graduation requirements and to increase achievement by increasing "time on task" is good provided it is accompanied by in-depth long-term work on improving the content and the process of the learning and teaching that occurs in this time.

Great progress state-by-state has been made just in the last twelve months to legislate more time in elementary and secondary curriculum for schooling in general, and

mathematics, science and technology in particular and more stringent requirements for both student and teacher education. Our expectatins for both teacher and student education have been too low.

But an overriding obstacle faced by those working to make these improvements is a lack of concensus and clarity about what learning in mathematics, science and technology should be promoted.

In fairness to all who have been laboring so hard in these vineyards, the objectives of general scientific and technological literacy ad of seeking talent within a total population are new; that the old ways cannot meet new objectives should not be surprising. To say that "mathematics and science and technology must move from the periphery of learning for all but a few to center stage for all"*, is a recent challenge.

To this challenge - a focus on all students - must be added additional critical new conditions for learning and teaching in mathemtics and science.

*Report National Science Board Commission on Pre-College Education in Mathematics, Science & Technology.

o Skills and understanding, not considered essential for all citizens in an agricultural and industrial economy, have become essential for all in today's post-industrial world. Workers must be protected against job redundancy and other changes in the workplace by a basic literacy that assists them to adapt and enlarge their skills as needed. All recent educational reports and recomendtions are agreed on this point. All recommended the equivalent of "higher order skills" for everyone. Today's technologist requires a general education including science, and scientists must be able to use technology We are no longer a society where a large sector of population can count on job specific skills for a lifetime, or where we can be satisfied with the pool of talents available in "elites" for our future leadership.

o Knowledge in science and developments in technology are expanding explosively; the mathematics needed to understand them is changing and developing. Thus changes must be made, subject to ongoing review, in what should be considered fundamental in the study of these subjects for both students and teachers. The conference Board of Mathematical Societies entitled their report for the NSB Commission (published in the second volume of the Commission report) "What is still Fundamental in

Mathematics and What is Not?" Science has been presented and organized within our secondary curriculum as the beginning of a pre-professional sequence, rather than as an integral part of a general education. In the elementary school the assumption (always wih notable exceptions) is that there is a certain amount of factual material and vocabulary to be "covered" rather than curiosity and habits of observation and analysis developed. A fresh look at what should be considered "fundamental" is required. Professional societies such as AAAS, ACS, APS and NSTA have initiated the necesary analyses in the study of technology their territories.

o The study of technology must be included now with the study of mathematics and science. The practical and the theoretical must be melded for all students, and in all subjects.

Technology must be thought of much more broady than generally today. Since the dawn of human history, man has extended his physical and mental capacities through technologies. He has organized and controlled resoures of the natural world to do work and make things. And yet the study of this man-made world, how and why it works, has ben neglected or misdirected in our national educational objectives.

Technology is generally identified with its artifacts and miscast as a form of applied science. As such, it has appeared to lie at the periphery of the main body of knowledge considered to be the substance of a general education. Not understanding, or simply avoiding, the depth and breadth of technology, the man-made world, most educational planners hve been satisfied with talking only about Science. Although scientific principles have derived largely from innovations in technology, they are taught, most commonly, as dissociated from their technological context. Technology appears as fragments of a course of study or of vocational education for which there seems, as yet, to be no whole.

The emotional and intellectual barriers that have separated technology from education and educators from technology must be broken down. As man is the creator of technology, so the study of man will be illuminated by the study of his works. The study of man's creative works will be enriched by understanding of his technological works--and vice versa.

Education has scarcely tapped the resources of technology in at least five (5) areas:

- as content for study
- as agent of change
- as a vehicle for integrated learning
- as a commodity of value
- as a tool for teaching

Content, is perhaps the most neglected area: the study of how and why the man-mde world works. Through doing what technology itself does so well--opening minds and senses to increased powers of perception--it should be possible to reach the imagination of the general public at all levels of education, and for all populatons.

Technology studies could include the study of how the blood gets around the body, how the subway system gets around New York, how electrons get around microchips, how sound moves from the artist to the audience,, how design is perceived, and how the microscope led to moleculor biology. There is ample evidence that we have been stultifying children's and teacher's natural curiosity through making science too elite and technology too common.

o There is much promise for improving education in cognitive and behavioral science studies of how people learn. Current research indicates how teachers can help

students build a marriage between their naive understanding of how the world works and the body of knowledge and analysis available through scholarly study. Teaching in these fields could be much more effective by incorporating such understanding. That the National Science Teachers Association publishes volumes entitled, "What Research Says to the Science Teachers", is indicative of the help teachers seek in current resarch. The Association of Cognitive and Behavioral Sciences contributed a valuable summary of the current state of their art to the NSB Commission Report. The unique value of "hands on" learning, learning with and through Technology, is reinforced by research in these fields.

o The availability of technological aids (computers, videodisk, telecommunications, and particularly, interactive combinations of these) to enhance and facilitate learning is escalating day by day. Combined with learnings from cognitive science and from artificial intelligence, these technologies can lead to improved teaching strategies which may be quite different from those typically used today. There is certain merit in learning about and through computers, but the potential for fundamental improvement in learning quality is to be sought in learning with computers, - expansion of the mind if you

will. Can technological aids move us closer to an equal opportunity for all children in the primary school to growth, to expansion of the mind if you will? Can technological aids move us closer to an equal opportunity for all children in the primary school to growth, to expansion of the mind? Some of us dearly hope so.

These new conditions mandate fundamental changes in what and how mathematics, science, technology, and how teachers of these subjects are taught - formally and informally.

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TESTIMONY OF THE
PUBLIC EDUCATION ASSOCIATION
Before the
NATIONAL COMMISSION ON EXCELLENCE IN TEACHER EDUCATION
By
Jeanne Silver Frankl, Executive Director
October 19, 1984

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It is a privilege to appear on behalf of the Public Education Association before this distinguished commission to discuss future directions for institutions of teacher education. PEA is a citizens group that has observed New York City schools closely for almost 90 years. Our program takes us continually into the city's school buildings. Staff, as well as trustees and volunteers with professional expertise and commitment have been engaged for the last five years in investigations and interactive research regarding high schools, junior high schools, community education, early childhood programs and special education. They have written and testified about our findings, most notably the exemplary success of programs where professional pursuit of new roles and flexible, humane approaches to working with youngsters facilitate learning for students of diverse needs.

Everyone is agreed today that there must be more such professionals in order for educational improvement to occur on the broad scale demanded by society, and that this means invigorating the teaching profession as a whole. The widely publicized problems in bringing this about include making the

profession more attractive to talented individuals, retaining such people; and preparing them for the requirements of a changing, increasingly demanding job. There are differences in viewpoint as to the roles of different institutions in solving these problems. PEA is convinced that while many factors must be brought to bear, including prompt improvement in professional salary levels, particularly at the beginning levels, schools of higher education have a crucial role to play. However, they must make dramatic changes in approach to their job in order to play this essential role.

Schools of higher education -- and I deliberately do not confine these remarks to teacher training institutions -- have unique capacities to influence the reshaping of teaching and the regard in which it is held by the community. They can, first of all, and perhaps single-handedly, add to the teaching career some of that panache whose absence discourages many excellent candidates.

The legal and medical professions, so often compared to teaching in a way that idealizes the former, draw much of their prestige from association with the law and medical schools of distinguished universities. Society's low regard for teachers, where it exists, is foreshadowed by the lack of interest and support for this profession among the publish-or-perish intellectuals in university liberal arts and other departments who denigrate teacher education and isolate themselves from collaboration with education departments and schools. No one who has studied the recent literature about good teaching can fail to appreciate the subtlety, complexity and sophistication of this calling or the intellectual challenge of new research through which we are beginning to understand what distinguishes excellent from undistinguished schooling. University interest and appreciation for

the discipline, and support for the education of its scholars and practitioners, is fully appropriate, as well as necessary to give teaching the prestige which will attract the ambitious and talented.

Universities and liberal arts colleges can help education departments and schools add another dimension needed to generate regard for this profession: a rigorous and respect-worthy pre-service curriculum. Since the days when I studied education in the summer to avoid the program in my liberal arts school, teaching courses have been regarded by students as boring and irrelevant to preparation for careers. At the same time, teacher colleges and education departments have been disrespected for the academic parts of their curricula. Universities must help improve the liberal arts components of the sequence for undergraduate and graduate education degrees as well as their own education courses, not only to provide better preparation for teachers but to help restore the teaching profession to respect.

Schools of higher education have another crucial role in direct recruitment of future teachers. Much has been made of the difficulty of enticing able high school and college graduates into education degree programs; somewhat less has been made of the need to assure that those who apply are appropriately inspired. Studies show that far too many young people undertake teaching careers for financial or other reasons without appreciating the profession's special demands for sensitivity, imagination and commitment. Yet those who stay in the profession love teaching. James Comer has suggested that part of the solution is to introduce teacher degree candidates to in-school practice early in their training and gradually weed out from continued education those for whom teaching would actually have little appeal. A ruthless screening procedure is certainly not what he has in mind. It is very important to avoid entry barriers which could discriminate against

against candidates whose self-awareness or potential is not evident at the early stages of a college career. It is appropriate, however, for colleges, which are the institutions in which sound career choices become both urgent and feasible, to make the recruitment of candidates who would flourish in teaching a major part of their mission, for the dual benefit of their students and society.

Ultimately, the most important responsibility of the higher education system must be the preparation and development of teachers and administrators skilled in meeting the needs of today's schools. While this should perhaps be obvious, it is, as you know, a premise that is currently called into question. Doubts about the rigor and relevance of contemporary teacher education have led some to suggest that the pre-service training for teachers should substantially diminish and that post-graduate credits required for certification and salary increments should be provided solely through in-service training provided in elementary and secondary schools. Moves in New Jersey to cut certification requirements, the curtailment that has already taken place in California and the forthcoming review of certification standards by New York State; New York City's emergency measure to hire new teachers with only liberal arts degrees; the strong support, which I must say we share at PEA, for first-year internships supervised by master teachers, as well as excellent staff development efforts in highly regarded union-run teacher centers and by innovators in our own City's Board of Education, fuel this nascent initiative.

There is another perspective, however, which we share.

We believe that quite apart from the issues of repute and professionalism already discussed, there would be serious loss in any approach to teacher preparation which weakened rather than revitalized the role of higher education.

There is, to begin with, a practical economic consideration. Amidst wide agreement that new demands on the teaching profession call for major staff development beyond normal professional renewal needs, there has been little financial commitment, in our state at least, to costly staff development programs. At the same time, well warranted demands for dramatically improved teaching salaries, higher staff student ratios, new programs in language, computers, the sciences and so on, make it doubtful that enough such money will ever be available. Faced with the prospect of a 40% teacher turnover in the next decade, it seems more than reasonable to institute as much staff development as possible when it would be most timely and cost the state nothing in new money, namely at the college and graduate level where student and state-supported tuition bear the program costs.

There are equally persuasive programmatic reasons for making higher education the linchpin of staff development strategies. Valuable as in-service training by master teachers can be, colleague-mentored experience cannot be expected to meet all of today's needs for professional education in the teaching craft. Teaching to today's expectations requires insight into an expanding body of knowledge about human development and cognitive characteristics, the skills and strategies for responding to diverse intellectual, emotional, cultural and linguistic needs, and ability to use a wealth of personal and technical resources available to support teaching and learning. It also requires the ability to employ exceptional interpersonal skills in working with students, colleagues and community. Even the "born" teacher, if there is one, can profit from background and orientation before being plunged into class the first time. For the average individual with teaching potential, and, one may add for his/her students, high quality, relevant preparation may be the difference between a passable first-year experience and near-disaster.

Ideally, pre-service training should lay the foundation for a supportive first-year experience. Currently, we know, it can be a very delicate matter to engage school staff in supportive activities either with their superiors or their peers. Listening, sometimes, to the reports of how teachers are beguiled into accepting assistance they later applaud, I am reminded of my shy baby brother who had to be lured into his grandmother's house by following a row of brightly colored buttons laid from the street, where he began his approach, across the sidewalk, up the front steps, and into the foyer. Many current teachers were not prepared in their earlier training for the notion of a collaborative learning process. Neither were they prepared for a job that society's commitment to educating all children now insists go beyond successful work with those ready to learn.

Pre-service education should cultivate a philosophy that this is the mission of public education, and recruit and prepare students to relish the challenge it will afford.

If this is to be their mission, most universities and schools of education will have to change their programs for future and current teachers. Some of these changes must be in the content, some in the mode of conducting their programs.

First and foremost is the need mentioned before to enrich the academic components. In making this recommendation, we specifically avoid becoming involved in certain structural questions which have been raised lately. We do not think it necessary to decide, for example, whether teacher education should occur exclusively at post-graduate levels or when, if it is part of the undergraduate curriculum, the education courses should begin. There may be advantages both in drawing the teaching staff from liberal arts graduates with post-graduate education training and in deferring undergraduate teaching courses until after the liberal arts sequence is thoroughly integrated. There may also be advantages, however, in a very early introduction to the classroom which begins to familiarize recruits with the issues and reinforces

or deters commitment to the career. In any case, it is of utmost importance that teacher training reform not become the occasion to create an elite pool of eligibles for preparation or service. The intelligence, energy, human warmth, and interpersonal relations needed in a good teacher exist no less among people who must move quickly toward careers in order to support themselves than among those who can afford to wait until after post-graduate study.

The higher education system, including but not limited to teacher training institutions, must take as its mission the preparation of teachers who have a deep feeling for the liberal arts and the history and sociology of American life. That can be done through collaborations which identify and provide excellent liberal arts courses to future education professionals at any stage of their schooling. Adding years to the pre-service curriculum may be a dangerous quantitative approach to a qualitative problem.

The second critical task of teacher training and related institutions is to revamp their professional training curricula. Understanding of what teachers and other professionals can do to facilitate successful learning for the full population of urban public school youngsters has been advanced by research and experience to accommodate new insights into professional competencies and training needs. In the Metropolitan Survey of the American Teacher, a majority of teachers are reported not to believe that the training and preparation received today prepares teachers for the classroom. James Comer reports a study in which 41% of a group of school administrators felt their pre-service administrative training had not helped them acquire the interpersonal skills needed to do their jobs. In PEA's own researches, we have observed the difference in school and teacher effectiveness when staff are involved in participatory skill development strategies that enhance their abilities to respond individually and differentially to students' personal needs

and learning syles.

Mary Ellen Fahs, president of PEA, participant in an interactive research program on stress in a New York inner city junior high school, and a doctoral student in psychology, made a statement before the Confederated Organizations for Teacher Education last spring (attached to this Testimony) which suggests specific innovations in course content and methodology. I need only make some generalizations.

A more responsive teacher education program would develop and build on closer acquaintance and relationships with local schools. These would be used to devise a pre-service curriculum very substantially experiential in character which addressed not only general developmental and cognitive issues and strategies but the specific kinds of problem that posed barriers to successful learning in the surrounding environment. Students would be prepared to understand and look forward to working with the students they might encounter. They would be familiarized with relevant research and successful experience in addressing similar groups of youngsters. They would observe and test strategies and resources for working with them, their communities and resource personnel in the schools.

The value in helping students by working with their parents, something many teachers actively resist, would be so thoroughly explored in pre-service training that it became a stock-in-trade for school professionals.

The teacher education curriculum would emphasize the personal relationships necessary to engage students' interest and commitment and foster a warm and supportive learning climate, as well as teaching techniques addressed specifically to academic needs. The academic emphasis would go beyond the basic skills to stress cognitive and problem-solving skills.

We know through Triple T and other performance-based programs that this kind of pre-service teacher preparation is regarded by providers and

beneficiaries as feasible, gratifying and effective. John Goodlad and others have suggested that higher education could play an equally formative role in the refinement of teaching skills, providing post-graduate credits to moderately experienced teachers. His recommendation that universities participate in the creation of lab schools that work with skilled teachers in exploring and evaluating new educational innovations is no less provocative. University involvement at this level would engage education scholars and dedicated teachers in collaborative problem-solving efforts at the school level: surely the best way both to sharpen teacher capacities and inform educational research.

Many have commented on the need for collaboration in the job of educational improvement. In this collaboration, the academic community has a central role to play. To meet the challenge, it must move from the ivory tower into the schools. Adherring to rigorous research standards, it must use the school experience to inform both inquiries and outcomes, while working interactively so that findings influence practice. This will help invigorate the teaching profession and foster models for broader educational reform.

Paper presented by Mary Ellen Fahs, President of the Public Education Association at the Annual Conference of the Confederated Organizations for Teacher Education April 26, 1984, Syracuse, N.Y.

As the Chairpersons of this conference have indicated, the spate of recent national reports present a challenge to the education establishment. Even more challenging, however, are the implications of the education reform bill passed last July in California. This bill which goes into effect in September, 1985, presents the real possibility that schools of education could be totally by-passed in the preparation of teachers in California. Clearly, a response is necessary.

Through our role as citizen monitors of the public school system and our work in the schools, we are convinced that the education of children, the satisfaction of teachers, the recruitment into and retention of talented people in the profession of teachers--and the very survival of teacher preparation institutions--will be enhanced by revisions in both the curriculum and methodology of teacher education. We have strong feelings that those who have equated excellence with higher standards in academic subjects alone are missing the boat in not realizing the relevance of the affective aspects of education. We believe that the climate of the relationships between students and teachers, between teachers and supervisors, and between school, family and community is crucial to the overall educational mission of our schools.

The recommendations that I am going to make grow out of our observations and research in alternative and traditional high schools and in junior high and intermediate schools. Some are not too different from proposals in the national studies, especially those of Goodlad (1984) and Sizer (1984). In the most effective schools we have seen, we have observed that the roles of teachers have been greatly expanded and diversified. We believe that the education of children and the teaching profession itself would be much

strengthened if all teachers were prepared to fill at least some of these new roles.

What are these roles? First, I would like to speak about the role of teachers as counselors. While it may be controversial to say so, there has been too great a tendency in this country to separate counseling from teaching. When I was in school, there were no guidance counselor but I could discuss anything I wanted to with my teachers. Since that time, we've gone through a period in which guidance and counseling have become increasingly professionalized; all counseling is supposed to be done by guidance counselors. Now, unfortunately in most NYC schools, there are no guidance counselors and teachers are not able, both for lack of training and time, to fill this role. This is not the case in London, according to Rutter (Rutter et al, 1979), where support and guidance are supplied by ordinary teachers, at least for children with the ordinary run of problems. It is also not the case in a number of the alternative schools in New York City or at the junior high school in Shoreham-Wading River where all the adults in the building serve also as counselors to a certain number of children. This is not to say that guidance counselors do not have a role. They are the ones to whom the more troubled students should be referred; and they should give support and advice to classroom teachers.

Why is counseling so important? From our research we have found that the main reasons that adolescents leave high school, even the alternative high schools, are that they are afraid of and/ or are not getting along well with their peers, that the school is an uncaring place and that the academic work is irrelevant to them. We have found in our project on stress in a junior high school that the most stressful aspects of school relate to poor peer relations and the possibility of academic failure. Adolescents need help in managing

their peer relationships and thinking about the relevance of their school work to their future life roles; they need guidance and support--often several times a day, not just by appointment with the guidance counselor once or twice a year. While this need is perhaps most striking in our junior and senior high school, students at all age leves need the emotional support that comes from more human bonds with their teachers.

I recommend therefore that counseling become a mandatory requirement in all teachers' courses of study. All teachers need to learn to engage in "dialogues that reach beyond the formality of roles and foster creative human relationships" (Foley & Crull, 1984). To strengthen this ability and make it appropriate to students at each level of the school system, all schools of education should offer courses in the whole spectrum of child development. Most offer courses in early childhood; but many, including the prestigious school where I am a doctoral candidate, will need to add courses in adolescent development. Finally, I urge that all teachers have the opportunity to learn how to conduct both formal and informal group guidance or social problem-solving sessions for use within the context of official class periods or during emergencies in subject matter classes when poor peer relations suddenly disrupt the learning process. I know of several such programs being tried experimentally in schools by the Psychology Departments of the University of Rochester, the University of Connecticut, Rutgers University and the University of of Nebraska. Training in these skills needs to move into the teacher education departments so that they become part of every teacher's repertoire. (Needless to say these skills could even help th adults in schools get along better with each other).

Another, perhaps even more controversial, role which teachers need to be prepared to fill, if only on a rotating basis, is that of a participating

member of the school's management team. The destructive "we-they" dicotomy between teachers and supervisors must be replaced by a new kind of teamwork; supervisors and teachers need to learn how to share responsibility with each other. Our studies of alternative schools identified teacher participation in school management, planning and curriculum development as essential elements of a support structure which fostered academic excellence (Foley & McConnaughy, 1983). Teachers were extremely enthusiastic about this role; among other things because it allowed them to grow professionally. In our junior high school project on stress, teachers have felt empowered and professionally enriched by their participation in the planning and implementation of the research.

I recommend, therefore, that schools of education add to their curricula courses that explore new school management configurations, such as those existing in some of the alternative school as well as possible adaptations of the Japanese management model. Opportunities also need to be made available so that school staffs can learn how to work as a team on needs assessments and how to develop the mechanisms for setting educational priorities in cooperation with parents and students, where approprite.

At the same time that teachers and supervisors begin to share responsibility with each other, they also need to learn to share responsibility with their students. Goodlad (1984) in his recent study found that a majority of class time is marked by passive rather than active modes of learning with teachers doing most of the talking. Teachers need to allow and encourage students to take a more active role in their own learning. Rutter and his colleagues (Rutter et al.,1979) found that where students were given more responsibility for their academic and social behavior, school climate was better, there were fewer discipline problems, and achievement was up. Training

for teachers in group guidance and social problem-solving as well as established, but little used, educational practices such as peer tutoring, peer counseling, and student self-management should therefore find its way into the curricula of teacher preparation institutions.

A third major role for teachers is that of facilitator for engaging parents in the education of their children. Children have always learned best when teachers were supported, if not actively helped, by parents. Ways must be found to help teachers help parents feel more comfortable in schools so that the concern that parents feel for their children's education may be utilized in a more active partnership between home and school. In addition, teachers and other school staff need help in learning how to use the many resources of the community--other agencies concerned with the health and welfare of children as well as local business and industries--so that the often too limited resources of the schools are expanded to meet the needs of their students.

Once again I recommend that strategies relating to the involvement of parents and the use of community resources, developed in cooperation with parents and other citizens, should be incorporated into relevant areas of the curriculum.

We have discussed a number of issues that we feel should be considered as the content of teacher education curricula is revised. I would like now to mention a few considerations relating to the practice or methodlogy of teacher education. I would like to submit that most of the teachers who were observed by Goodlad as lecturing at students too much probably came by that particular metholodogy very naturally and honestly--it was the way that they were taught themselves. We can't expect teachers to stop talking and encourage their students to engage in dialogue and initiate learning for

opportunities. I therefore urge that teacher training institutions get away from the largely exclusive use of the lecture method themselves and develop courses that encourage dialogue, role playing and student initiative as well as the acquisition of communication/interpersonal relationship skills so important to active learning/teaching situations. One such program has been pioneered at Eastern Michigan University (Thayer, 1981).

Secondly, I would like to urge that professors from the schools of education go into the schools, not just for visits and supervision of student teachers, but to engage in projects in which they will be involved in the daily efforts of students, teachers and administrators--I urge that they do this so that they may bring their expertise to practitioners who are often isolated and in need of encouragement and so that they can test their theories in the crucible of reality. As Thomas James, former President of the Spencer Foundation has said (James, 1982), educational research can provide the most effective single method of strengthening our schools. I would particularly agree with him if that research was of the interactive kind which actively involved university people with practitioners at the school site. Such an example is the PEA project on school stress which is directed by Joseph Grannis of Teachers College and involves several graduate students as well.

Thirdly, I urge that teachers who have been struggling with the day to day issues of teaching be invited back to the university if only as adjunct professors to share their very practical expertise with teachers in training.

Fourth, I would like to recommend that from now on teachers and other practitioners be actively engaged in any curriculum reform and development that takes place in the teacher training institutions. One of the biggest omissions in the spate of national reports is the perspective and expertise of teachers--everyone is talking about teachers and teaching--but where is the

voice of the teachers themselves?

Finally, I would like to elaborate on a point that my colleaue has made earlier. As we look to better coordination between all the members of school staffs, between regular and special education, between counseling and teaching, between home and school and community, I would like to recommend more coordination and cooperation between the various departments within teacher education institutions themselves. Lack of communication and understanding between teachers of regular and special education, of guidance and instruction, of those who are child-centered and those who are content-centered, does not begin in the elementary and secondary schools, it begins in our colleges and universities.

I submit these recommendations to you as someone who has observed the heroic and too often unsupported efforts of teachers who are trying to do a good job for children; I submit them as a representative of the citizenry of New York City which is concerned about the quality of our public schools; and I submit them as a doctoral student myself who would like the opportunity to get the training I feel that I need to grow as a professional.

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NATIONAL COMMISSION ON EXCELLENCE IN TEACHER EDUCATION

NEW YORK UNIVERSITY

October 19, 1984

On behalf of Dr. Robert R. Spillane, Superintendent of the Boston Public Schools, I want to thank you for your invitation to participate in the Learnings on Excellence in Teaching and Teacher Education. Public elementary and secondary schools which are the principal employer for your graduates have a vested interest in these deliberations; therefore, we feel that it is appropriate that representatives of public school systems play more than a secondary or passive role.

I want to open my statement with a request or plea and a critical recommendation. First, I urge you to re-examine the reports on the state of public education and shift through the emotion ladder claims of a human tragedy of national proportion or a total waste land, to examine again schools that work, and teachers who are providing effective instruction. I think that we have either ignored the significant lessons that must be learned from these schools, principals, and teachers, or the data gathered was not thorough enough. Second, I think that we must develop a new relationship between university teacher trainers and elementary and secondary school staff development people. Both groups tend to view the other with jaundice eyes, and this condition cannot continue, if we are to achieve excellence in teaching.

At the risk of straying from the commission's charge and my assignment, I must share an observation that I hope will provide a frame of reference for my comments and recommendations. If I have read the commission's charge correctly, the focus is on pre-service training, but for administrators in large urban school systems like Boston, the most pressing concern is how to stimulate, support, and re-energize its existing, veteran staff. Let me take a minute to describe our situation.

Beginning in the early 1970's, the direction of the Boston Public Schools was changed dramatically by new state and federal mandates and court orders. We had to implement a desegregation order that required a massive re-assignment of both students and teachers. We were also directed to increase our services to Bilingual, Special Needs, and Handicapped children. Boston is a major entry port for individuals who are seeking a new life in America, so that we serve more than twelve major language groups. During the period, there was a major exodus of students, mainly white and middle-class so that the minority became the majority, and their one common bond was their low socio-economic status. The City and School Department budgets which were hampered by proposition 2½, a major tax reform initiative, which put limits on the cities tax sources. To meet this situation, the School Department was forced

to make several major reductions in its teaching force, and our collective bargaining units forced us to use "seniority" on the sole determination. Today, Boston has an older and more experienced group of teachers and the vast majority of them will be with us through the mid-to-late 1990's. I must add that the system is committed to avoiding further lay-offs and to giving laid-off teachers priority for future vacancies. The point is, that we will have fewer opportunities to hire new and less experienced teachers in the foreseeable future. While we share your concern for improving pre-service training and attracting the brightest young people, we have the equally important, and certainly more immediate need to improve the skills and working conditions for our current staff.

The present profile for Boston teachers looks like the following: new teachers and those at the bottom of the ladder, and on the cutting edge for any future reduction in force, have at least thirteen years' experience. At the other end of the age spand, most of our teachers are ten or more years away from retirement. In terms of preparation, more than 60 percent have an advanced degree and additional hours of graduate study so that they are near or at the top of the salary schedule. As the profile has changed, so have the general public and system's expectations and this leads to my next point.

A second point which needs examination is the changing roles and expectations for public school teachers because they have serious implications for both pre- and in-service training programs. By June, 1955, the Boston Public Schools will have developed and introduced new and more demanding curricula in every subject area, a new testing program which gives teachers more information (both in quality and quantities) on their students, and a promotion policy which set uniformed standards across the city. But let me point also that major portions of our energy and resources are captured by non-instructional tasks. The Boston School Department operates the second largest transportation system in the City, serves more breakfasts and lunches than any other public or private institution or agency, maintains a major health service for the inoculation of children and preventive medicine, enrolls one quarter of the State's bilingual students, and while the litany could be continued, the point is that public schools have been asked to assume many new roles, without adequate support, and most of these are not covered in the traditional teacher training programs.

Today's teachers, particularly those in the larger and older metropolitan areas, must be prepared to work with a growing population of under-achievers, increasing numbers of students, who have severe emotional and other learning problems, students who need to be mainstreamed from Bilingual, Special Education, and handicapped programs. And, given the racial and ethnic diversity of our city and schools, we must have teachers who bring both skills and empathy to our students.

The challenge of the school reports is being addressed by the Commonwealth of Massachusetts and City of Boston. Let me begin with the state and a major legislative initiative, if enacted, could provide much needed leadership and tangible support for local school districts. House Bill 5704 was developed by the Joint House and Senate Education Committee with the close support and involvement of the Governor. For the purpose of today's statement, I will limit my comments to the section on Professional Development and the recommendations for pre-service training. First, the legislation would change the State's certification to place greater emphasis on preparation in an academic area for secondary teachers, and to a smaller degree for elementary teachers. The sponsors want teachers to have greater in-depth knowledge of their subject area and spend less time in methods and other fuzzy education courses. Second, teachers candidate would have to pass a pre-professional test in communication and language skills. I think the sponsors' concerns are obvious on this point. Third, the legislation would require more and longer periods for observation, practice-teaching, and other direct involvement in real schools and classrooms. This could require students to work in schools as early as their sophomore year. The sponsors want the practicum redesigned so that student teachers work in very controlled and closely supported situations under the guidance of real master teachers. Fourth, the legislation would redesign the provisional period for new teachers, so that during their first two years, they would teach a half to three-quarter load and participate in a mandatory seminar on lecturing and methods. Each district would then establish three-member evaluation teams to assess the provisional teachers' work over the two years and make a recommendation to the Superintendent requiring a permanent appointment, continued provisional status or termination. The sponsors want to close the gap between theory (the pre-service experience) and practice (teaching real children in a classroom), and they are dissatisfied with the lack of support that school departments give their new teachers.

As a member of the Professional Development Sub-Committee, I want to know most of our time was focused on how to nurture and keep good teachers once they have been recruited, trained, and placed. I think that we are attempting to address this concern in Boston, so let me move to a more detailed report on the Boston Public Schools.

The arrival of Dr. Robert R. Spillane in 1981, as the Superintendent, marked the beginning of a major effort to revamp and revitalize the Boston Public Schools. No program, office, school, or employee was omitted nor ignored. The School Effective Literature developed by the late Ron Edmonds provided the philosophy and strategy. We believe that all children can learn, and we expect all children to be taught. We have high standards, make demands on our students, and hold them and ourselves accountable for their results. As I indicated in my introductory statement, we have divided nearly all of our efforts to our existing staff, both principals and teachers. We are fortunate to be located in an area that has a large number of first-rate colleges and universities, and we have formal relationships with approximately twenty-eight(28) institutions of higher education. Let me hasten to add that relationships between the school department and higher education institutions required a new definition which stressed a peer-relationship between co-equal parties. To be specific we have to establish a new climate of mutual respect and appreciation (i.e., we could learn valuable things from each other); to develop new channels of communication (i.e, holding meetings in schools as well as on campuses); and to develop shared experiences that would foster a common vocabulary that would ensure that we were describing similar situations in the same manner and that we shared the same understanding for our terminology. The traditional student teacher arrangements continue, and Boston teachers still take courses after school and during the summer at the area colleges, but given the number of experienced teachers and the system's new and growing list of needs, we needed to develop new programs. The process involved the collaboration of the School Department and Universities to create special assignments for individual university personnel, and/or departments and the planning, teaching, and evaluation were carried but by teams of school teachers and university faculty working as peers. There has been an effective blend of theory and practice.

An important, and not to be overlooked outcome of the experience, was the identification of "Master Teachers" whose valuable experiences and in-sights to contribute to the universities and teachers in training. I think that we all recognize that isolation in the classroom and school is a major problem for our profession. Further, we lack the process that encourages and supports teachers to share their effective practices, and contribute to the professional information bank.

Boston has attempted to address these issues through the creation of a new central office unit called the Institute for Professional Development. The Institute's charge is to develop a comprehensive and coordinated in-service program for the Boston Public Schools' professional staff. As the first manager of the Institute, I was struck by the most requested topics for training by teachers - classroom management, reading in the content area, writing across the curriculum, holistic scoring, learning styles and cognitive mapping, computers as instructional tools - these topics, which veteran teachers feel are important, raise interesting questions about what is or should be offered in pre-service programs. My point is that a thoughtful review of in-service programs could provide important indicators of information on topics that should be covered in pre-service programs.

The Boston Public Schools and the Boston Area Colleges and Universities have developed several interesting programs that could be replicated in other communities.

The Boston Public Schools and University of Massachusetts/Amherst have sponsored a special graduate degree-granting program which encourages teams of teachers and administrators from the same school to develop school improvement plans which build on their graduate studies. The Boston Secondary Schools Project (BSSP), which is nearly ten years old, involves 150 Boston teachers from more than twenty-five schools or one-fifth of the system. The BSSP faculty includes both Boston personnel and university faculty.

The Boston Public Schools and the School of Education of Boston University are seeking funds to support a program that involves researchers (university faculty), documentators and teachers in training (graduate students) and practicioner (elementary and secondary school teachers) is a study of models of teaching - i.e., building on the work of Bruce Joyce and Beverly Showers. Teams of researchers, documentors, and practicioners will engage in observations and discussions of various instructional strategies, their philosophical base and impact on children. We hope the findings will help us to train other teachers to be more effective in their classes.

The Boston Public Schools has made a major effort to identify teachers who have proven records of effectiveness and to encourage and support their efforts to share their experiences with other teachers. In February, 1984, Boston established the IMPACT II Teacher Networking Program which offers modest grants to teachers to (1) develop their ideas; (2) document an effective practice, and (3) to adopt and adapt an effective program to their classroom. Our program is based upon a model developed by the New York City Public Schools. Its key features are teachers teaching teachers, peer review (or teachers evaluating the work of other teachers

and making value judgments), and it is very low cost.

Let me also mention that we have found support for our training efforts from area corporations and foundations, in addition to universities and cultural institutions. The Bank of New England has established a teacher fellowship program to acknowledge teachers with leadership ability and these teachers are given additional training in a summer institute which involves a consortium of area colleges and universities. The Bank of Boston and Fund for the Permanent Charities have established a 1.5 million dollar endowment fund to support school improvement programs that are developed by school-based teams; i.e, teachers, parents, and administrators. Our experience indicates that support for pre- and in-service training will be provided by external agencies if they see a well developed plan and are asked to participate.

Let me close with five points or recommendations:

First - In your efforts to improve pre-service training programs, please include public school development people, their insights can be very helpful.

Second - Look at some of the new training models that have been developed by public schools and corporations. The Pittsburgh, PA's Schenley High School Teacher Center is a bold and dramatic effort to reshape an entire school system.

Third - We must close the gap between research and practice; new relationships must be developed to establish material respect, creditability, and effective communications.

Fourth - We need to examine the school effectiveness literature and consider its implications for both pre- and in-service training.

Fifth - We must look at the experience of other professions to determine how they provide continuous evaluation of this training.

Thank you for giving me this opportunity to participate in this very important study. Our future depends in large measure on the final product that is produced by the Commission.

National Commission on Excellence in Teacher Education

Redesigned Undergraduate Teacher Preparation Program at the University of Maine, Orono: The Clinical Segment

Teacher Education Commission
Regional Hearing
New York, New York
October 19, 1984

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Dramatic language has been used to title and describe the major studies in education during the past couple of years - crisis, risk, excellence. The logical follow-up is that dramatic actions must take place to move our educational programs into the 21st century. It is an tremendous responsibility to accept that teacher preparation in the next 10 years will provide the base for professional education services to be delivered in the period 1990-2020.

It is not my intent to chronicle the major movements and recommendations made recently but to say that our College of Education at the University of Maine in Orono tackled the preparation dilemma just prior to the national movement and has been steadily shaping a different undergraduate experience. It is my intent to share our experiences with you on just one portion of this program - the clinical segment, a segment we have been implementing for a couple of years.

As background, it is important to know that this segment is part of an overall program blueprint by faculty, classroom teachers, and administrators which also addresses components such as the liberal arts, basic instructional skills, evaluation etc. The clinical portion that I would like to describe will be explained in three sections: a) preparation phase, b) clinical plan and c) current status.

Preparation Phase

A genuine partnership formed between professional schools and public school personnel is crucial. Obviously this is not a unique idea but it is one major hurdle that has to be constantly overcome long before students are placed in the field. We have been sensitive to resistance from the public sector for any collaboration with universities. This group has been smarting from charges of ineptitude and we at the university level have been guilty of lackadaisical attention to the manner in which we send students into the field and the casualness by which we monitor them. So there were a number of wounds to heal.

Under our Dean's leadership, the college has spent many hours cultivating the respect of local administrators. He helped create a regional organization of superintendents which meets regularly to oversee actions of the state legislature etc. This was one of the first groups that helped us get input on the redesign from over 700 teachers. This action aroused some interest among the teachers and allowed them to accept that we wanted and needed their help. They understood we were not just interested in their schools for research sites.

Simultaneously, we had to cultivate the interest of our own faculty to dare them to change their ways and allow them to take some risks. We gave faculty load time to a small group, a mixture of the old and new who would be "safe" in the field, and charged them with implementing the blueprint.

This small group selected additional faculty to serve on the clinical part or to form the group we call the Professional Preparation Team.

Clinical Plan - Professional Preparation Team

Our clinical portion is a total team effort. The Professional Preparation Team (PPT) is an organizational structure composed of one university-teacher educator, a graduate student, teacher representatives from each school in a district and twenty students. All but the students are involved in the decisions as to what the students should observe and do in the public schools. On campus course content is decided in the same manner. Although some activities, requirements and evaluation procedures may vary among groups, all groups share the same goals.

During the first summer, the teams spent approximately fifty hours in preparing experiences for students in the fall. A small remuneration for all was provided by the college in the summer and superintendents provided some release time during the school year. The college now provides money for staff development

to benefit not only PPT members but also other teachers in school districts. Decisions as to how monies are to be spent are made collaboratively by the PPT's.

Students spend time honing observation, communication, instructional skills etc. At the same time some teams have worked on their writing skills. They may spend several days in public schools where they are met by the participating teachers, given their assignments, collect data and then they have periodic seminars on campus.

All activities are part of a contract system for evaluation, and the grades are arrived at jointly by the classroom teachers and the university faculty. In addition, narrative statements are provided on the status of each. This material becomes part of a portfolio which will follow the student during his/her four years.

Through this evaluation process some students have self-selected themselves out of an education program. Others have been selected out by us.

Current Status

Our second year PPT students, on their own and on a volunteer basis, have formed a mentoring group for the freshmen. In their letter to the freshmen they indicated that no teachers were involved; they provided a list with all their names and addresses and explained they would sit in on their seminars and answers all questions. They have expressed a genuine interest and appreciation for the program.

There are still some persistent problems:

a) issue of pay from some teachers
b) less enthusiasm from secondary teachers for being involved
c) expense of the program - (e.g. transportation, faculty load, staff dev. money)
d) tremendous time commitment of personnel

The advantages have certainly outweighed the obstacles. It is a valid program for providing earlier and more intensive field work. It is a tremendous staff development strategy for the college and public school faculty. All parties have been forced to deviate from their own specialities, math, reading - and to analyze contemporary thought on the act/art of teaching. Those who found themselves teaching the students about teaching have readily admitted their own instruction has improved. This appears to be a very valid alternative to previous inservice programs. Although it is a time consuming venture, team members are buoyant over their successes and the partnership of sharing the teaching responsibilities between the university and public school personnel has exceeded our expectations.

Postscript - (Caveats)

Apart from our brief testimony regarding a current example of a successful practice we would like to identify several issues the Commission should consider.

1) As long as states allow alternative routes to certification, such as transcript analysis, attention only to teacher preparation programs begs a moot issue. Example, last year in Maine nearly half of the individuals certified did not graduate from a teacher prep program.

2) In the past year, with the extraordinary windfall of reports and studies on education, we have found that recommendations based on studies have been he most helpful. We would suggest that your recommendations find support in current research efforts or at least indicate the need for concrete information.

3) Finally, reports have a tendency to generalize. They can paint every school/college with the same brush. Clearly there are differences. We suspect you will find great variations in the capabilities of different institutions and personnel. Certainly all teacher preparation can be improved but we ask that in your earnestness to improve you do not damage the work of good institutions.

APPENDIX

II. MAJOR ELEMENTS OF REDESIGN

The Planning Leadership Team proposes a model which suggests the following innovations:

LIBERAL ARTS

- A major portion of a student's program would be in the Liberal Arts. A major interdisciplinary Liberal Arts seminar would occur in the last year of the program. In addition, each graduate would be required to complete a Senior Paper/Project designed to be a creative expression of the student's background in the liberal arts.

PROFESSIONAL PREPARATION TEAM

- Professional Preparation Teams would be formed to include at least one University teacher educator, 2-3 cooperating teachers from a school district, about 25 students divided among Freshmen, Sophomores, Juniors and Seniors, and one or more graduate students. The team would work in partnership with a school district.

HUMAN DEVELOPMENT

- Exposure to human development concepts would be thorough and would occur primarily in seminar and field-based settings, interwoven with the work of the Professional Preparation Team.

INSTRUCTIONAL SKILLS AND PROFESSIONAL SEMINAR

- The teaching of instructional skills would occur within the framework of the Preparation Team and be integrated into the student's content area as the student moves through various stages to the completion of student teaching. A major seminar would occur in the final year dealing with the "nuts and bolts" of working in a school: professional organizations, contracts, record-keeping, school/community politics, relationships to school board, etc.

FIELD EXPERIENCES AND EDUCATION SEMESTER

- Field experiences would occur within the framework of the Professional Preparation Team, beginning early in the student's program and escalating to a 10-12 week program of student teaching in the fourth year. An Education Semester would be scheduled prior to Student Teaching during which the student would attend local schools for approximately

six weeks to be a participatory observer and instructional aide. The remainder of the semester would be spent on campus in an intensive program of study and practice in teaching methods, curriculum and specialized content skills development.

EVALUATIVE PROCESSES

- The students will undergo three significant evaluative processes in the form of panel interviews: 1) for admission to the teacher preparation program at the conclusion of the second year; 2) for admission to student teaching at the conclusion of the third year; and 3) at the conclusion of their formal program. In preparation for these interviews, the student would develop a portfolio, beginning in the Freshman year, which would chronicle their experiences, work and evaluations.

The new model will bring with it numerous implications for this campus to consider:

- an increase in the minimum semester hour requirements to graduate from the program. Consideration should be given to raising the minimum from the present 120 semester hours to a minimum between 130 and 138 semester hours.
- completion of the program can occur within four years, but may require additional time from the student during May term, an added semester, or summer sessions.
- greater collaboration between UMO faculty and local school districts.
- closer working relationships between faculty members in the College of Arts and Sciences and the College of Education.
- greater use of field-based courses for pre-service students.
- improved recruitment of students for teacher education at an earlier point in their college career.
- increased costs of transporting students to their field sites.
- incentives for public school personnel to assist UMO in preparing teachers.
- assessment of the impact of a new student advisement system upon College of Education faculty and students.
- staff development for the University faculty and school district educators who are to implement the program.

Example of a Typical Student Program

YEAR 1

Professional Preparation Team Activities

- Self-awareness
- Career Awareness
- Counseling
- Advisement
- Observation Skills
- Group Communication Skills
- Initial Field Experiences

	HOURS
Prof. Prep. Team	6
Human Development	6
Lib. Arts & Major	21
TOTAL	33

YEAR 2

Professional Preparation Team Activities

a) Generic Instruction Skills
- Planning
- Diagnosing
- Instructing
- Managing
- Communications & Interacting
- Documenting & Evaluating

b) Reading and writing process

c) Special child

	HOURS
Prof. Prep. Team	10
Lib. Arts & Major	24
TOTAL	34

ADMISSION TO TEACHER EDUCATION

YEAR 3

Professional Preparation Team

- Education Semester
- Special Methods Courses
- On Site Activities
- Use of Technology

- Great Ideas/Issues Seminar

	HOURS
Prof. Prep. Team	18
Lib. Arts & Major	18
TOTAL	36

SCREENING FOR STUDENT TEACHING

YEAR 4

Professional Preparation Team

- Student Teaching, full semester
- Professional Seminar
- Senior Paper/Project

	HOURS
Prof. Prep. Team	15
Lib. Arts & Major	18
TOTAL	33

ENTRANCE TO PROFESSION INTERVIEW

TOTAL HOURS FOR GRADUATION 136

SUGGESTED ROLE OF THE PARTICIPATING TEACHER

... helps orient students to school setting and individual students

... models effective teaching

... provides supervision/evaluation/feedback

... facilitates and contributes opportunities for the student to acquire necessary skills and experiences

... discusses school experience with students, verbally and in writing

... plays active role in communicating with UMO students and PPT school representatives

... participate in PPT program evaluation

SUGGESTED ROLE OF UMO TEACHER EDUCATOR

... to provide on-site supervision in collaboration with cooperating teachers throughout all of field experiences

... to act as a continuous resource person

... to conduct and/or arrange seminars

... to discuss on-going progress of students

... to give advice on individual program decisions

... to conduct needs assessment with the PPT School Representative and the participating teachers

... to establish consultations and make referrals for students

... to insure a collaborative decision is made as to a prospective teacher's readiness to proceed to the next level of field experience

... assume coordination responsibilities of the RIT Summer Coordinator

... serve in a reflective function

... monitor certification

... resource for staff development

... train new PPT members

SUGGESTED ROLE OF THE GRADUATE STUDENT

... to provide on-site supervision evaluating on-going progress

... participate and assist in conducting seminars and inservice, and be a resource person

... advise in program decisions within the field component

... to discuss on-going progress of students

... to conduct needs assessment with the PPT School Representative and participating teachers

... to assist in insuring a student's readiness to proceed to the next level of field experience

... assume co-ordination responsibility

... serve in a reflective function

SUGGESTED ROLE OF SCHOOL ADMINISTRATION

... identify roles and responsibilities for student participation in building

... coordinate experiences with UMO Teacher Educator and cooperating teachers

... provide consultation for problem-solving during all phases of the field experience

... help articulate the PPT experience to the school district in general

... advise regarding organizational and administrative structure

... assist in managing the logistics of the program

... be a source of information about the school system and its functions

... participate in decisions regarding human resources utilization

... select and advise PPT School Representatives or their substitutes

... works jointly with PPT School Representatives in selecting participating teachers

SUGGESTED ROLE OF RIT COORDINATOR

... represent Redesign Implementation Team and the College of Education

... attend planning meetings of PPTs during the summer months

... coordinate those meetings by arranging day, time, place and refreshments

... insure that secretarial assistance is provided: i.e., managing typing, duplication, and dissemination requests

... communicate conceptual guidelines from the RIT to PPTs regarding the formulation and responsibilities of the PPTs

... make available any materials/equipment needed by PPTs

... be a resource person for questions, concerns, needs

... make decisions regarding the framework of the PPT development

... convene the RIT as needed

... coordination of both PPT efforts as a mediator

... meet as needed with UMO Teacher Educators

... inform PPTs about each others' progress

... arrange rewards and incentives

... train new PPT members

Orono/Veazie Objectives

1. Students will become more self-aware through testing and teacher/peer interaction.

2. Each student will produce a written analysis of the degree of fit between what he knows about himself and what he has learned about teaching and two alternative careers.

3. Student will observe a classroom teacher for a given time and complete a list of activities in which the teacher is involved.

4. Student will write a report on a profession of education other than that of a classroom teacher.

5. Student will work with an individual or group of individuals to help them complete a task.

6. Student will discuss with a teacher his rationale and objectives for a particular lesson and observe that lesson.

7. Student will write a rationale why he decided to enter the College of Education as a major.

8. Student will complete a self evaluation of his/her learning style.

9. Identify environmental elements of a classroom as a learning place.

10. Describe classroom operation and interactions.

11. Identify teaching and management techniques.

12. Describe student reactions to instruction activities.

13. Express personal reactions to classroom experiences.

14. Identify ways in which they assisted classroom teachers.

15. Relate student behavior to teacher expectations and methods.

16. Identify aspects of teaching they need to study further.

17. Discuss ways to establish productive relations among students, teachers, administrators.

18. Discuss ways in which classroom discipline is maintained.

19. Explore and refine attitudes toward:
    A. Self as teacher
        1. helping people in need
            a. Directing Activities
            b. Facilitating personal growth of others
            c. Important information/knowledge

2. Being an authority
   a. Setting limits and enforcing them
   b. Knowledge
3. Engaging in evaluation and redefinition of tasks and activities
   a. Knowing the process of learning/teaching
   b. Work within task analysis
   c. Learning by doing/analyzing

FIELD SITE – CLINICAL EXPERIENCE PDT

Orono/Veazie Objectives

1. Students will become more self-aware through testing and teacher/peer interaction.

2. Each student will produce a written analysis of the degree of fit between what he knows about himself and what he has learned about teaching and two alternative careers.

3. Student will observe a classroom teacher for a given time and complete a list of activities in which the teacher is involved.

4. Student will write a report on a profession of education other than that of a classroom teacher.

5. Student will work with an individual or group of individuals to help them complete a task.

6. Student will discuss with a teacher his rationale and objectives for a particular lesson and observe that lesson.

7. Student will write a rationale why he decided to enter the College of Education as a major.

8. Student will complete a self evaluation of his/her learning style.

9. Identify environmental elements of a classroom as a learning place.

10. Describe classroom operation and interactions.

11. Identify teaching and management techniques.

12. Describe student reactions to instruction activities.

13. Express personal reactions to classroom experiences.

14. Identify ways in which they assisted classroom teachers.

15. Relate student behavior to teacher expectations and methods.

16. Identify aspects of teaching they need to study further.

17. Discuss ways to establish productive relations among students, teachers, administrators.

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2. Being an authority
    a. Setting limits and enforcing them
    b. Knowledge
3. Engaging in evaluation and redefinition of tasks and activities
    a. Knowing the process of learning/teaching
    b. Work within task analysis
    c. Learning by doing/analyzing

TESTIMONY BEFORE THE

NATIONAL COMMISSION ON EXCELLENCE IN TEACHER EDUCATION

THE QUEST FOR EXCELLENCE IN EDUCATION:

THE RESPONSIBILITIES OF INSTITUTIONS OF HIGHER EDUCATION

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October 19, 1984

THE QUEST FOR EXCELLENCE IN EDUCATION:

THE RESPONSIBILITIES OF INSTITUTIONS OF HIGHER EDUCATION

At the outset, let me note that the scope of the theme selected by the Commission to organize testimony suggests that the Commission is cognizant of the complexity of the task it has set for itself; let me compliment the agenda-setters for setting such a course. Analysis of the condition of teacher education, if the analysis is ultimately to affect the quality of teacher preparation and quality of education in this nation's public schools, cannot be limited to questions of more or less of the same. Discussion and analysis must consider the full range of variables that ultimately contribute to the current condition of education, if the ends that we all seek are to be realized.

Having commended you on your recognition of the complexity of the task, let me also signal a warning: Failure by the Commission to distill and translate the data derived from soliciting testimony to a set of fairly concise and easily communicated observations and recommendations will significantly detract from institution of higher education (IHE) and local educational agency (LEA) ability to garner public and institutional support prerequisite for effective response. If there is a single lesson to be learned from the publication of A Nation At Risk, it is that the power of the word written for public consumption to affect the behavior of institutions responsible for schools and schooling is great. With the preceding caveat, let me now proceed to the topic at hand, "the responsibilities of institutions of higher education, including the faculty in education, for teacher education."

I begin by sharing with you some generalizations that represent a synthesis of findings and assessments derived from reviews of research, my experience as Dean of a School of Education for four years, and service as a School Committee (School Board) member for six years. Generalizations pertaining to the features of the "crisis" will serve as the base for subsequent recommendations transmitted for your consideration.

FEATURES OF THE CRISIS

- The impetus for the declaration of the current crisis in education was as much a function of a change in the supply/ demand ratio pertaining to teacher employment as to the discovery that students in public schools were not performing at an appropriate level.
- The previous comment notwithstanding, the quality of individuals attracted to the profession, and admitted to teacher education programs, has historically been below that of students entering most other pre-professional or professional programs. This problem was aggravated, at least temporarily, in the 1970s and early 1980s, by the failure of the profession to continue to attract significant numbers of bright women and minorities, as well as the lowering of admission standards by some teacher education institutions and programs seeking to offset declining numbers of eligible applicants by enlarging the size of the applicant pool.
- Teacher education programs, by and large, have functioned in relative isolation from two critical status-according referent groups: Liberal Arts units and LEAs. The inevitable stereotyping, some of it justified, produced by such isolation, has left teacher education units without any significant support base in a period of

declining enrollment. It must be noted that teacher education units are as responsible for this phenomenon as are Liberal Arts units and LEAs.

- The simultaneous isolation of teacher education units from Liberal Arts faculties and the field has significantly hampered efforts to establish a mutually recognized knowledge base to inform teacher preparation programs and to judge teacher performance upon graduation.
- If one accepts the proposition that there is a correlation between time-on-task and student achievement, the current organization of most undergraduate teacher preparation programs virtually assures that graduates of such programs who wish to teach in secondary schools will not have sufficient knowledge in the academic content area; graduates who wish to teach in primary and elementary schools will be deficient either in academic content areas or in knowledge of child development and related implications for design and delivery of instruction; and graduates who wish to teach children who have special learning needs will lack the knowledge, in either the discipline base that informs their area of expertise, or the skills prerequisite to meeting the diverse needs of this population.
- Most teacher education program organizational and staffing patterns neither affect practice in LEAs, nor permit Education faculty to directly affect the behavior of their students in the classroom of the school.
- Finally, there is evidence to suggest that the factors that deter students from entering teacher education programs are not limited to future income potential; the perceived lack of intrinsic rewards to

be derived from enrollment in teacher education programs and the conditions of the educational workplace also serve as significant deterrents.

The School Setting

Any effective response to the current crisis in education must, in addition to those factors previously cited, also take into consideration the characteristics of the settings in which graduates of teacher education programs will practice their profession. Failure to acknowledge projected differences in the classroom of 1990 from those of 1950, and to select students and develop programs cognizant of such differences, will ill serve the profession. Strategies that do not take such differences into account will, at best, lead to a situation in which the current difficulty in retaining able teachers will pale in comparison. The following characteristics of the school will prevail for the foreseeable future and must inform the response of teacher education programs:

- Some segment of the population in any given classroom will be comprised of students designated as "learning disabled."
- Some segment of the classroom population will be comprised of students with different cultural and ethnic backgrounds from the majority.
- Some segment of the classroom population will be comprised of students for whom English is a second language.
- Computer and related technology will affect, in varying degrees, the nature of the curriculum.
- Significant percentages of students will neither write nor read at a level consistent with their potential.

- Significant percentages of students, for a variety of educational and social reasons, will not be motivated to learn.

The preceding brushstrokes seek to sketch the outline of the current profile of teacher education programs. From these lines I will now seek to generate specific features for response, or guidelines for addressing the challenges confronting teacher education institutions. I take this step cognizant of the fact that the features identified do not encompass the full range of variables that contribute to the definition of the problem; the profile developed, therefore, is in some respects an impressionistic one. I also recognize that there is a body of research and literature that would justify the attempt, to continue the painting metaphor, to develop a masterpiece on each subject. What follows, therefore, should only be considered a working sketch to be, or not to be, developed in subsequent sessions or in the privacy of one's study.

FEATURES OF THE RESPONSE

The Supply/Demand Equation

Guidelines for IHE response to the current crisis must accommodate two phenomena: 1) the national priority ranking accorded the quest for teacher and school quality has, historically, slipped in periods of strong enrollment and teacher shortage; and 2) virtually all manpower projections point to significant shortages of teachers in many areas of specialization within five years.* Thus, the failure of IHE teacher education programs to respond to the current quality challenge in a rapid, significant, and publicly-visible manner will markedly and adversely affect the ability of both IHEs and LEAs to positively affect the quality of education for the next several decades. There is little

* Current science and mathematics shortages, and across-the-board shortages in selected urban settings are already well documented.

reason to believe that LEAs and IHEs will be able simultaneously to address quality and quantity needs. Strategies for reform must be designed, therefore, to counter the tendency of educational institutions to celebrate "the leisure of the theory class."

The Quality Dimension

The social climate that once made education one of the few professions with open doors to bright women and minority group members has, fortunately, changed. Teacher education institutions will, therefore, be required to compete for sufficient numbers of talented students to support programs on an even footing with the full spectrum of institutions sponsoring higher education programs, if they are to remain viable. The ability to compete effectively for such students is partly beyond the control of IHEs (e.g., teacher salary levels, provisions for recognition of outstanding performance, and working conditions in the field). There are, however, factors that affect the status of the profession--and ultimately its attractiveness--that are within the scope of IHE authority and responsibility; specifically, the quality of students admitted to education programs and the requirements for graduation from such programs. As regards the "program" entry challenge, I would propose that teacher education programs be required to adopt policies that call for the phasing in, perhaps over a three to five year time period, of standards of admission comparable to other academic units in the university setting in which the program is located; and to professional-association-agreed-upon standards equitable with liberal arts standards for education units not housed in universities. It is recognized that the immediate impact of the adoption of such policies will be to reduce significantly the number of

institutions capable of sustaining a student population prerequisite to fiscal survival, and to aggravate school staffing problems significantly. Such dissonance may be a prerequisite to addressing school-situated constraints to entry and retention.

The graduation requirement, and content, issues will be addressed later in this testimony.

The Isolation Phenomenon

Liberal Arts faculties, by and large, have significantly underestimated the complexity of teaching youngsters in "a place called school"; Education faculty, historically, have resisted attempts to infuse into education programs the scholarly rigor prerequisite to stimulating the intellect of the student. LEA staff--and prospective teachers--have historically underestimated the conceptual and research base that gives definition to the field; Education faculty have consistently underestimated and/or forgotten the impact of the organizational climate of the school on day-to-day problem-solving in the classroom. The price paid for the pervasiveness of the preceding phenomenon has been heavy: the status of the education unit, the quality of education programs, and the ability of education units to affect the quality of education in the public schools have all suffered. Inter- and intramural changes in the policies and organizational structures of the units carrying out teacher education functions will be necessary if the spin-off effects of the isolation phenomenon are to be addressed. The range of possibilities is great; more obvious alternatives include: the establishment of independent "Education Institutes," comprised of Education and Liberal Arts faculty and teachers, that are authorized to grant credit as well as carry out

applied research projects; the establishment of policies and structures designed to support dual degree programs; formal organizational relationships with selected LEAs, including provisions for faculty appointments for practitioners and school-based assignments for institution of higher education faculty; the establishment of educational consortia to provide cooperation between educational institutions and with institutions not traditionally formally linked with the teacher preparation mission.

The Knowledge Base Issue

There is general consensus that the research of the last decade has generated a knowledge base that has the potential to inform teacher preparation, teacher performance, and student achievement in the classroom. There is less evidence that the knowledge base generated by such research has been systematically applied to the design of programs and classroom teaching practice. Such research must inform both the reformulation of academic programs (pre-service) and the practice of those in the field (professional development), if the current challenge confronted by LEAs and IHEs is to be satisfactorily addressed. To achieve this end, significant organizational and programmatic changes must be initiated. For purposes of illustration, only, the following possibilities are identified:

- The establishment of professional-association-sponsored faculty development consortia and institutes, with the specific mission of assisting IHE faculty in applying research to program design and reformulation tasks;
- The establishment of applied research units in IHEs, with such units assuming the charge of systematically analyzing current research and

assessing the implication of such findings for program and practice;

- o The development of self-administered IHE program evaluation protocols and instruments designed to permit institutions to systematically assess their own programs;
- o The articulation of IHE applied research unit agendas with affiliated LEA program development agendas--a variation on the Teacher Center and Laboratory or Satellite School concept.

Time-on-Task and Curriculum

There is increasing evidence that the current four year academic calendar and corresponding curricular constraints simply do not provide the time necessary for the transmittal of knowledge and skills essential to producing a graduate with the knowledge of the content that informs his or her area of specialization and the mastery of teaching skills prerequisite to the transmittal of skills, content and understandings to school-aged youth. Although, to date, the five year program has generated the most attention as a response to this dilemma--and represents one possible route--there are other options for response that may serve as viable alternatives. Additional options worthy of consideration include: the reconceptualization of the "academic" year to accommodate required formal instruction and field experiences during current academic "down-time"; the reassessment of the current patterns for the delivery of instruction that generally equate attendance in classes scheduled to meet university- or college-wide logistical needs with credits in a Procrustean manner; the incorporation of the "internship" concept in addition to "student teaching" as a requirement for graduation, with the internship to serve as a probationary year, and with certification and graduation from the

teacher education program to be contingent upon successful completion.*

As a caveat, it must be noted that the re-ordering of structures to accommodate time-on-task needs does not address the question of "What knowledge is of most worth?" The failure to address this question prior to "packaging" programs would render the re-ordering of time and tasks irrelevant.

The IHE and the School Setting

The failure of education units to develop programs that, directly or indirectly, have the potential to affect demonstrably the performance of pupils in LEA settings will significantly detract from the credibility of projected teacher education reform recommendations. Such credibility is essential for the recruitment and retention of qualified teachers, if changes beyond the scope of IHE control are to occur. Accordingly, teacher education units must develop programs and accompanying organizational relationships designed to affect the performance of pupils in LEAs. Some of the potential structures are alluded to in previous commentary. In addition to structures and policies previously cited, teacher education units should consider the feasibility of: 1) formal professional development programs and delivery strategies specifically designed to address school needs; and 2) the development and coordination of applied research and service delivery activities that address LEA needs in LEA settings.

The Reward Issue

Many of the factors most frequently cited as deterrents to entering the profession are beyond the immediate control of education

* Significant issues relevant to supervisory responsiblity, financing, and student degree options available if performance is not satisfactory, will need be addressed, if such a strategy is to represent a viable response.

units (e.g., salary, recognition of merit, and a host of factors that largely derive from the organizational climate of the school). I would contend, however, that the elevation of admissions standards, the reformulation of programs responsive to the stereotypes accorded education programs by LEA and non-Education IHE units, and the corresponding increased rigor of the academic program (both in the traditional academic disciplines and in the field of pedagogy) has the potential to affect significantly and positively the quality and number of individuals who would seriously consider entering the profession. Assuming the ability to respond effectively to the program content issue, I would also mend consideration by IHEs of dual degree options, as appropriate, the establishment of provisions to permit the formal linking of Master's programs to undergraduate programs, as well as the allocation of scholarship funds specifically ear-marked for "Teacher-Scholars" and/or differential tuition rates or tuition-offsetting income-generating assignments linked to academic degree requirements for education students.

Characteristics of the School Setting

The content domain represented by the academic disciplines, the knowledge base represented by the "foundation areas" and the body of research that informs the practice of teaching must remain primary reference points in the reformulation of programs. The current crisis confronting the schools and teacher education units, however, calls for the application of a program development overlay to a matrix generated from the previous areas that represents what we know, with reasonable certainty, to be characteristics of the schools and the classroom population with which graduates of teacher education programs will

interact upon assuming the position of teacher. The characteristics listed under the "school setting" entry represent a sampling of conditions for which teacher education faculty and program graduates must possess a repertory of knowledge and problem-solving skills essential for effective response. IHE program requirements must include entries designed to equip students to respond to the specific characteristics and needs of children and parents who will be served by the public schools for the coming decades.

In conclusion, I wish to reiterate that the individual entries shared with you are designed to serve as agenda items for Commission consideration. The specific characteristics of the "crisis" cited, and suggested strategies for response, represent a first cut on my part at identifying the issues that must be addressed and the alternative strategies that hold promise for designing a response to the current condition of teacher education.