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**ABSTRACT**

This paper attempts to: (1) construct two intellectual categories within which emerging teacher education knowledge can be embedded; (2) develop a possible collegiate sequence, or a programmatic scheme, that incorporates this knowledge base in teacher preparation; and (3) generate from this knowledge base and programmatic scheme an initial agenda for policymakers in establishing the framework within which teacher preparation in New York might be systematically improved. The development of two categories, Educology and Pedagogy, is based on four assumptions involving: (1) knowledge not being pursued in teacher education programs; (2) differences between the discipline of education and other disciplines; (3) the need to revise the programmatic scheme of teacher education; and (4) the role of teacher educators and policymakers in pursuing knowledge to be incorporated into teacher education programs. These assumptions are discussed, and the development of the scheme is described. (CB)

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AN AGENDA FOR IMPROVING TEACHER PREPARATION IN NEW YORK STATE  
KNOWLEDGE BASE AND PROGRAMMATIC STRUCTURE

by

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An Agenda for Improving Teacher Preparation in  
New York State: Knowledge Base and Programmatic Structure

Norman J. Bauer, Ed.D.

"Now I observe that whenever we are met together in the assembly, and the matter in hand relates to building, the builders are summoned as advisors; when the question is one of shipbuilding, then the shipbuilders; and the like of the other arts which they think capable of being taught and learned... When, however, the question is an affair of state, then everybody is free to have a say - carpenter, tinker, cobbler, sailor, passenger; rich and poor, high and low... and no one reproaches him, as in the former case, with not having learned, and having no teacher and yet giving advice..."

Socrates  
In Plato's "Protagoras"

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"Many teachers, principals... have... supported the view that there's nothing to know about teaching. When a parent complains that a given text book is a poor one or that a teacher has taken an approach that resulted in students being confused, a defense is rarely given. The usual answer is that it's all a matter of opinion. Everyone has his or her own style and there's not evidence that doing things one way is better than doing them another way.

"If there's nothing special one needs to know about teaching, why should teachers be licensed and permitted to teach while those not licensed can't? And, of course, if there's nothing more to teaching than knowing one's subject, teaching is not a profession."

Albert Shanker  
On Campus  
November, 1986, p. 5

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## Introduction

One can discern five major periods related to teacher preparation in the history of American schooling. The first extended throughout the colonial period, 1600-1789, and was characterized largely by little or no training for the schoolmaster except for the meeting of a religious test, and the ability to handle obstreperous waifs. Common schooling emerged during the second period, 1789-1860, and, along with such schooling, the need to provide teachers with a modicum of methodological knowledge and skills. SCDE's began to emerge on university and college campuses during the

period, 1860-1910, and enrollments in teacher education programs steadily rose during the period, 1910-1963. It was not until 1963, however, with the publication of the first Handbook of Research on Teaching (1) that the foundation for a recognized field of research on teaching emerged.

Berlinger points out that at this time "only a small number of scientists could be identified as having a primary interest in teaching." (2) During the 1960's, however, a massive amount of federal funding of research in education became available to researchers. As a result of this federally sponsored research, and independent efforts as well, we have acquired "an enormous increase in our knowledge about sensible, effective, and efficient teaching practices." (3)

Recent reports pertaining to the improvement of teacher education clearly recognize the ramifications for teacher education of the growth in this knowledge base. The California Commission on the Teaching Profession, for example, stresses the fact that "Education professors speak compellingly about the need to provide teachers with more specialized knowledge about teaching, based on the research of the past decade." (4) Holmes outlines three steps related to the knowledge required of teachers, "...revise the undergraduate curriculum so that future teachers can study the subjects they will teach...; organize academic course requirements... so that undergraduate students can gain a sense of intellectual structure and boundaries of their disciplines...; devise coherent programs that will support the advanced studies in pedagogy required for solid professional education." (5) Carnegie stresses the fact that "though much has been learned in recent years that can inform the education of teachers, an even greater effort must now be made to provide a solid foundation of research under an intellectual framework that teacher educators can use to develop the kinds of teachers the nation needs." (6) The Governor's ask that we "define the body of professional knowledge and practice that teachers must have. This is the starting point for everything. Teacher certification and licensing... must stem from a clear statement of what teachers need to know and be able to do."

(7) Our own SED has urged that all teachers ought "to complete an approved program of study that includes a comprehensive sequence of professional education. A comprehensive program should address the current knowledge base for teaching..." (8) And, in a paper presented at a Regents Certification Hearing in Rochester this writer argued for the need to recognize "the vast array of substantive academic material which has been conceptualized during the past generation relative to the study of educational phenomena..." (9)

It is clear from the foregoing that if we are to take any steps toward the improvement of teacher education in New York State, to transform it into a true profession, we are going to have to pay close attention to the rapidly emerging knowledge base. At the same time, however, we ought to be continuously aware of, and sensitive to, Apple's frame of reference about the complexity of schools and teaching, about the intricate structural contexts within which such activity takes place and to "... by wary of assuming that the answers to many of its (education) very real dilemmas lie in preparing a more intellectually rigorous 'profession.'"

(10) It is quite possible, indeed highly probably, that significant improvement in educational practice requires changes in societal structures outside the immediate environments of schools and classrooms.

### Purposes

Three primary purposes of this paper are (1) to identify and initiate the construction of two significant intellectual categories within which the knowledge which has emerged in teacher education during the past twenty-five years can be embedded; (2) to develop a possible collegiate sequence, a programmatic scheme, which incorporates this knowledge base in the preparation of teachers; and (3) to generate from this knowledge base and programmatic scheme an initial agenda which might be pursued by policy makers who are responsible for establishing the framework within which the improvement of teacher preparation in New York State might be systematically, continuously and successfully pursued in the years ahead.

### Assumptions

This paper is based on four assumptions: (1) that there is a large amount of knowledge available for prospective teachers which is not currently finding its way into their programs of preparation; (2) that education as a discipline is not the same sort of discipline as mathematics or physics or geology. Instead it is a field which draws largely on a number of parent disciplines for the knowledge relevant to the problems of practice which are peculiar to itself and which distinguish it from other sorts of professional knowledge. This fact does not, of course, exclude the study of education from the family of intellectual pursuits any more than it excluded engineering, medicine, or law; (3) that the programmatic scheme of teacher education as it exists in many institutions preparing teachers will need to be substantially revised to incorporate the emerging corpus of education knowledge into its framework; and (4) that teacher educators and policy makers possess the desire to pursue the development of teacher education by identifying knowledge which can be justified for inclusion within a professional program of teacher preparation.

### Knowledge Base

Two broad categories of professional knowledge necessary to become a well prepared teacher or administrator have emerged within Teacher Education during the past twenty-five years. One category I shall call EDUCOLOGY; the other PEDAGOGY. Let me begin by offering what Sheffler would call a "programmatic" definition (11) of each of these categories.

#### Educology

Educology is the broad, curricular arena which includes such sub-disciplines as the history, philosophy, psychology, economics, politics, anthropology, sociology, and jurisprudence of education. In addition, the scope of this arena includes analytical and normative philosophy of education, critical, curricular, instructional, learning, and evaluative theory, as well as the theoretical study of the technologies

and institutional configurations which are emerging relative to educational possibilities. We might think of this dimension of teacher preparation as its foundational component.

### Pedagogy

Pedagogy is the broad curricular arena which includes the intellectual analysis and study of method for developing classroom instruction and applying knowledge in concrete cases in each of the major subject matter fields within the scope of our elementary and secondary schools. It includes a number of sub-disciplines, including laboratory exercises, clinical experiences, field-based experiences which consist of short-term, intensive, concrete classroom teaching activities, full-time student teaching, and a carefully monitored, paid internship year. Knowledge emerging from research with the making of effective schools and effective teachers would be encountered within the scope of this curricular arena. We might think of this dimension of teacher preparation as its specialized component.

### Educology - Examples

Examples of educological knowledge abound. In light of our conference theme, let me draw a bit on the knowledge to be derived from two different ways of doing philosophy of education, analytical philosophy and normative philosophy, and on the nature of the concept of 'knowledge' itself to demonstrate the significance of such foundational knowledge for education practice. First, analysis.

### Analysis

Let us examine the concept of 'teaching' as an artistic activity. We could begin by asking ourselves what sort of activities we can identify as being artistic. We might, for instance, identify a class of arts which we could call 'fine arts'; activities which are pursued for their own sake, for example, sculpture, music, dance, drama. We might also identify a class of arts which we could call 'practical arts'; activities which are pursued to achieve some end, for instance, carpentry, sewing, baking and repairing. We might, further, identify still a third class of arts, one which we could call 'cooperative arts'; activities which can only

be pursued with the full cooperation of another, for instance, agriculture, with its need for cooperation from the natural elements; law, with its need for cooperation from judge and jury; medicine, with its need for cooperation from the patient; classroom teaching with its need for cooperation from the student. Teaching, we might conclude, is more nearly a 'cooperative art' than it is a fine or a practical art. As such, it does not lend itself to any sort of 'guarantee' by the teacher, administrator or school system. Guarantees are not a part of the language of any of the cooperative arts. Now of what value can such an analysis be for our work as classroom teachers and school administrators? Plenty!

Consider for a moment the following three statements taken from the revised, February, 1984, version of the Regents Action Plan: "(1) Each student will master communication and computation skills as a foundation to think logically and creatively; (2) Each student will learn methods of inquiry and knowledge gained through the following disciplines and use the methods and knowledge in interdisciplinary applications: English language and literature;... (3) Each student will acquire knowledge, understanding, and appreciation of the artistic, cultural, and intellectual accomplishments of civilization and develop the skills to express personal artistic talents."

(12) Note that in each case students "will" do this and "will" do that. Always the emphasis is placed on the notion of "will." Such language, however, is the language of control, of domination, of reproduction. It is language which we would rightfully expect to be employed in a business or commercial transaction, in a contract, in a guarantee statement which accompanies some purchase which we have made. We want the manufacturer to stipulate in writing what our purchases "will be able to do," and we look for the performance of such "will's" when we use our merchandise. But, clearly, students are not merchandise; they have energy systems, will power, conceptual complexity, interests and goals. Unless it can be clearly demonstrated that persons working with humans in classroom and school circumstances



can control such critically important human capacities, we should scrupulously avoid the use of such language, else we find ourselves wrongly guaranteeing what our students are going to learn. I have referred elsewhere to persons who provide such guarantees in educational endeavors as charlatans; (13) surely we do not want such a designation applied to any of us. Nonetheless, we have the language of the guarantee throughout the Regents Action Plan. Why, you ask? Because it is not likely that many of those involved in constructing that document have had much background preparation in analytical philosophy.

### Normative Thinking

Normative philosophy is also something of no small importance, yet it is not likely that many of use have studied this important dimension of intellectual development either. What would be the major elements of a normative study of education. Clearly one would look at the ends, the goals, the purposes to be pursued by education. That is, as Frankena so clearly stressed in his classic article on this topic, what dispositions would education foster. (14) But one does not stop at this point. One continues on to the task of justification, the task, in fact, to which we are directing our attention during this two-day conference, the task of justifying the inclusion or exclusion of certain ends in the preparation of our teachers. Such justification would require that we be aware of three sorts of knowledge claims, analytical claims, synthetic claims and valuational claims, along with the methods for assessing the validity of such claims about each of the education ends we consider important and determine whether our claims possess enough validity to justify the ends we are considering. We would learn, in other words, how to engage in systematic argument relative to our instructional and organizational purposes.

### Knowledge

Analysis of the concept 'Knowledge' would be equally fruitful. How does one see his world and make defensible claims about this world. Does one employ deduction, induction, revelation, abduction or reflexion as one's logical tools to acquire

knowledge. Knowledge produced by such established tools would be of quite different sorts. Further, as Broudy has pointed out, knowledge, once it has been acquired, can be examined in terms of at least four uses: replication, association, interpretation, and application. (15) And Ryle has made the distinction between "knowledge that" and "knowledge how." (16) I would like to add, as well, that we could also construct a knowledge assessment continuum which might appear as follows:

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Episteme

Doxa

Mere

Opinion

Where 'mere opinion' is just that, one's personal opinion about a matter, considered to be just as good as another's; (17) where 'doxa' refers to the probability that one's belief system is warranted; where 'episteme' designates that knowledge which is immutable. Knowledge, from this perspective, then, can be seen as being assessable along a continuum from the extreme view that just about anything is acceptable to that which satisfies the test of immutability. It seems clear, however, that whoever wished to work with 'knowledge' must be aware that superficial notions of what it means must be avoided. This is especially important in discourse about education because knowledge is our 'stock-in-trade.'

One could go on and consider each of the sub-divisions of educological knowledge, stressing, for instance, the need to be aware of the historical roots of educational practice and the major theoretical interpretations of these roots; one could enter the sub-disciplines of instructional theory and point out the hazards associated with reductionistic theories of instruction and the deskilling effects on both teachers and students of such reductionistic thinking. We shall leave further considerations for another time, however.

The claim I wish to make about educology at this point is that there is a substantial amount of significant material in each of the sub-divisions of this curricular arena which constitutes a potentially powerful body of knowledge for

prospective professional teachers and administrators. Material, I believe, which is not at present being acquired by many prospective professionals. Failure to acquire this knowledge represents a sort of evil, one comparable to a number of evils Dewey pointed out years ago. Among others, he argued, "are a lack of intellectual independence among teachers, their tendency to intellectual subserviency... the tendency of educational development to proceed by reaction from one thing to another, to adopt for one year, or for a term of seven years, this or that new study or methods of teaching, and then as abruptly to swing over to some new educational gospel, is a result which would be impossible if teachers were adequately moved by their own independent intelligence." (18)

### Pedagogy - Examples

Pedagogical knowledge is no less intellectually significant, no less abundant, no less difficult to master from the point of view of analysis and application in actual concrete situations than is educological knowledge. Let me draw examples from research on 'effective schools' and examples from research on 'effective teachers.'

### Effective Teachers

#### Pacing

Our knowledge about choice of content and time allocation keeps mounting. The more a teacher covers the more students seem to learn... variability across classes is most impressive. One adjusts pace and covers half the text; another finishes it all... teachers who form ability groups tend to pace the groups differently. (19)

#### Goal Awareness

We know, for instance, that students tend to pay attention more when teachers spend time discussing the goals or structures of a lesson; structuring does affect attention and the success rate. Hence we want prospective teachers to acquire an understanding of this activity and the habit of practicing it in their preparatory situations. (20)

### Questions

We know, too, that teachers ask many questions each day, one researcher indicating a figure as high as 150 questions per hour when teaching science or social studies. (21) We also know that many of these questions are of the lower order type and that teachers need to have much practice in the development of questioning skills. Indeed, one researcher analyzed over 61,000 questions in workbooks, texts, and teachers manuals of nine world history textbooks and found over 95% to be of lower order. (22) Additional data which is emerging is indicating that when teachers ask more higher order questions their students learn considerably more.

### Responses to Questions

When teachers do concentrate on asking higher order questions, though, we are also finding that a different sort of problem arises. "They may," according to Berliner, "receive and accept answers that do not match the level of cognitive thought required by the question." (23)

Clearly, our pedagogical knowledge about the tasks associated with excellent teaching supports the contention of this year's New York State Teacher of the Year, David Wixted, that knowing your subject matter well is only the beginning of what being a true teacher is all about. "We all know," he said, "it's so much more than that." (24) The 'bright-person' myth - one which suggests that anyone who knows a subject is automatically able to teach that subject is just that, a myth.

Let us consider a few examples from the research on effective schools.

### Effective Schools

#### General

David Smith has pointed out that much firm doxa-type knowledge has emerged regarding the conditions necessary for improving and sustaining educational quality. He stresses "... the need for school-district support: sound, school-based, staff-development programs; a strong principal's leadership a safe and orderly climate; and high expectations for student achievement on the part of the school community... (and) the need for collegiality among staff members." (25)

### Family and Societal Environments

We know, according to Urie Bronfenbrenner, that "the schools are far more powerful than we have thought in shaping human behavior and achievement, but the strongest continuing influence on the child is the home and family environment... (and that) the biggest, most destructive change since 1981, (has been) the proportion of infants to five year olds in America living in poverty, up from 20 to 25%." (26)

### Administration

We are coming to be aware of the doxa-type knowledge about schools that have increased the discretion of individual teachers. They have become more effective schools. In such schools staff members have a common, coherent set of goals and objectives that they themselves have helped to formulate, "reflecting high expectations of themselves and their students." (27) We are also learning that principals can exercise strong leadership by promoting a "norm of collegiality," minimizing status differences between themselves and their members, by employing good, open, clear lines of communication, and by eliminating as much as possible the need to use formal, bureaucratic controls to achieve ends.

### Order and Climate

The manner in which a school is run seems to reveal a seriousness and a purpose with which the school approaches its tasks. A positive ambience is often communicated by the order and discipline maintained in a building. At the same time, however, we "need to remember that literal interpretation can lead to over control, to such a strict academic focus that it... produces debilitating levels of anxiety among students." (28)

We have taken a brief look at two broad categories of professional knowledge, Educology and Pedagogy. It is necessary now to move on to a consideration of a programmatic structure which might be considered in light of these categories. Here it is necessary that we address three factors related to the preparation of

a teacher, the education of humans as humans, the development of sound cognitive and valuational maps which can inform the decision-making of teachers and administrators when they make their classroom and school environments, and the development of an integrated set of skills and dispositions necessary to function well in school situations with a wide range of personalities.

### Liberal Arts and Subject Matter Specialization

The education of humans as humans, of course, pertains to the liberal arts. Indeed, education for this purpose is one of the primary justifications for the pursuit of the liberal arts. We are humans first, and only after are we Americans, Germans, Japanese, etc.; only after are we professionals, tradespeople, business people. The aim of such education, according to Hutchins, "... is human excellence, both private and public (for man is a political animal). Its object is the excellence of man as man and man as citizen. It regards man as an end, not as a means, and it regards the ends of life and not the means to it... it is the education of free men... The liberally educated man has a mind that can operate well in all fields..." (29)

Clearly we want people in the teaching profession who know what it means to be a full human being, who have the intellectual capability of transcending their own narrow boundaries of experience and who can empathize with humans wherever they are found, including, of course, students in classroom and school environments. Further, we want prospective teachers and administrators with the desire to relate, to perceive their students as ends only, not as means to their own personal aggrandizement. And, finally, a task of real significance in all teaching is to help students perceive connections among the events in their worlds. Connection-building is a vitally important task in all teaching. Facilitating the building and re-building of larger, more complex and more comprehensive world images is what teaching is all about. The liberal arts clearly are the means to achieving such dispositions in our teachers.

There are really three questions related to the liberal arts as far as the preparation of teachers is concerned. (1) How much time should be allocated to the scope and sequence of such a curriculum?; (2) how much freedom to elect courses should be granted to the students in this component of their undergraduate study? and (3) Where does one's subject matter major or minor emerge in relation to the liberal arts? Just a word or two about each of these questions.

Two years of time, the equivalent of sixty semester hours of study, could provide a student with a solid introduction to the liberal arts, study which would be for no other purpose than that of developing the student as a human being. During these two years the student should have but little discretion in terms of the courses he must take. The purpose here is not to satisfy his penchant to develop a particular skill, or to pursue a particular, preferred curriculum. This purpose should be clearly understood and continuously emphasized by students and faculty alike.

Toward the end of the second year of the liberal arts curriculum prospective secondary teachers would elect an academic field in which to pursue a major, or two academic fields in which to pursue academic minors if elementary teaching were the goal. The major and minors selected should be from those likely to be taught in the elementary or secondary school. If courses taken during the liberal arts phase of the students program have a bearing on the major or minor, they could be integrated into the sequence of courses required by the respective major or minor. In any event, three years would be ample time for the development of the liberal arts and the subject matter components of the preparation of teachers and administrators. Four years, on the other hand, represent too large an amount of time to be spent on the liberal arts curriculum; this amount of time seems to be anchored in our thinking largely because of tradition. It is usually necessitated by the excessive freedom granted by colleges to provide students with the opportunity to take courses of particular interest to them. Electives are largely the cause

of this problem; and electives clearly are an admission by the faculty and administration alike that they themselves lack clarity of insight relative to what it means to pursue humanhood. At the completion of the third year of study the student would receive a B.A. degree.

### Professional Studies

Toward the end of the third year of study prospective teachers would need to do two things. (1) They would have to take an examination in their major field (if secondary), in their two minor fields (if elementary), a test administered by an outside agency, for the purposes of determining the adequacy of the knowledge acquired to that point; and (2) they would have to apply for candidacy in the SCD of professional studies. Once admitted to the program the student would commence a second three-year cycle of academic preparation. This would consist of three major components, Educology, Pedagogy, and a paid, carefully monitored internship year.

### Educology

Just as the liberal arts are pursued for the purpose of making humans more fully human, so too the content of the subdisciplines within educology are pursued for a primary purpose. In their case, however, it is not to develop humans as humans but rather to develop humans as prospective teachers. To state it differently, the disciplines within educology would expose students to distinctive problems of practice and resources of knowledge which would enable them to acquire the cognitive and evaluational maps necessary to provide them with the capability of making sound, defensible, justifiable decisions in the realm of instructional and administrative praxis. This would enable the student (a) to formulate educational principles, ends, policies; (b) to justify such formulations; (c) to formulate desirable organizational structures and instructional procedures in light of the principles being pursued; and (d) to justify these procedures. These are distinctive normative skills clearly related to professional practice, whether it be instructional or



administrative, and they define to a large extent the scope of the educological curriculum.

Without such intellectual development the student is at the mercy of whim and will be likely to cave in to the slightest pressure when superficial innovations emerge. Reductionistic thinking comparable to the competency advocates of the 70's and the "Hunterism" of the 80's will then be the result. Reductionistic thinking constitutes one of those 'evils' to which Dewey referred early in this century.

(30)

Consider a few examples of such reductionist tendencies which lie about us at the present time. (1) the professional knowledge component of the NTE is a satisfactory examination of such knowledge for prospective teachers and administrators; (2) passage of the NTE means that one will be able to handle the responsibilities of teaching or administering in a satisfactory fashion; (3) a science of education is possible in the same way as a science of geology or of physics; (4) teaching can be reduced to one particular way to teach; (5) everyone's opinion about teaching and educational practice is equally good, (6) the social context of the school, e.g., the way income is distributed, the way budgets allocate and distribute monies, does not affect schooling; (7) differentiated staffing will improve schooling; (8) any school is appropriate for student teaching; and (9) student teaching is the most significant component of the preparatory program.

### Pedagogy

Just as the liberal arts and educology have their particular justifications, so too does Pedagogy have its. This is the component of the curriculum in which we want our prospective professionals to acquire skills and dispositions which will enable them to make instructional and administrative decisions which will exert lasting influence on those with whom they are working. Here is where we need to develop a sequence of integrated situations which will carefully and systematically expose the prospective professional to the acts of classroom instruction or school

administration. For the prospective teacher there would be five significant components extending over the three-year period: laboratory exercises, clinical practice, field-based practice, student teaching, and an induction year in which the student would be paid a salary while handling a reduced teaching load and being carefully coached by a master teacher.

Laboratory exercises would consist of exposing the student to paper and pencil tasks, to a variety of simulated tasks, all designed to demonstrate the range of responsibilities confronted by classroom teachers.

Clinical practices would enable the prospective teacher to gain his initial experience with live human beings. This experience would be of the sort in which the student confronts only a single student and engages in intensive practice working with this student over a period of time. It would be desirable for institutions preparing teachers to create a number of small rooms for such clinical practice, each with its own VCR equipment, with monitoring screens for each of the clinical spaces located in an adjoining room, and with a small seminar room adjacent to the clinical spaces as well.

Field-based practice would constitute a short, intensive two-three week program of instructional practice.

Student teaching would be done under the supervision of a certified public school teacher who has achieved recognized mastery as a teacher. The college would engage in supervising this component of the curriculum.

The induction year, the third year in the professional studies curriculum would be spent in teaching a reduced schedule in a public school, for a salary, while receiving advice and support from a proven master teacher.

At the completion of the sixth year the prospective teacher would be awarded a Professional Teaching (PT) degree.

### Agenda

Let us now consider a number of tasks which need to be addressed if we are to move in the direction of establishing the sort of preparatory curriculum for

professional teachers and administrators outlined in this paper. There are, of course, many details to which we would have to direct our attention. Let us identify only those larger tasks which we would have to pursue in order to implement the framework of these ideas.

### Colleges and Universities

Faculty in our SCDEs throughout the state would have to commence discussions with administrators and liberal arts faculty about the values to be derived from moving to a three year time frame for the liberal arts and subject matter specialization (LASM). While I am not sanguine enough to believe that such discussions would be easy, especially at the start (tradition being as powerful as it is), I am also deeply convinced that such a move makes sound sense. At present many of us have programs of this sort anyway, what with the professional sequence commanding between 30 and 50 semester hours of time. Indeed, a good case could be made for the fact that, by moving to a three year block for the LASM, that curriculum would be gaining hours for itself. At the same time faculty in the professional studies would acquire a significant increase in the measure of control they could exert over their own programs once a student commences work with them. I am not convinced, in other words, that we would find it impossible to persuade our colleagues of the wisdom of such a move.

### Public Schools

Every effort needs to be made to identify teachers and administrators who possess a large measure of knowledge and skill in understanding theories of instruction as well as theories of school administration. It is important that these people be students of the activities in which they are engaged, instruction on the one hand, administration on the other. Clearly, high achievement scores by their students, or seniority in terms of years of employment, are not satisfactory criteria upon which to gauge the expertise of teachers. Securing an adequate budget would not constitute adequate grounds for selecting an administrator either. Indeed, we

do not currently possess adequate instruments of determining who possesses the requisite knowledge and skills in either teacher or administration to be clearly recognized as a 'master.' Here is a need to which we must address ourselves.

SED

The State Education Department needs to take the lead in establishing criteria to be used in assessing schools as possible sites for student teaching and for internships, as well as for other facets of the pedagogical base of knowledge. It is vitally important that only outstanding schools and outstanding teachers be invited to participate in the preparatory process. Indeed, once criteria are established, those schools qualifying as laboratories for teacher education should command some public recognition for the achievement.

In addition, criteria need to be established for determining when a teacher or administrator qualifies as a 'master' and hence for the position of monitoring either a teacher or administrator.

A statewide effort needs to be made to identify and disseminate the knowledge base in Educology and in Pedagogy. We cannot assume that faculty in the professional studies are aware of the nature and extent of this two-dimensional knowledge base, nor can we assume that it can be located in any one spot. Indeed, therein lies a major problem for all of us. While the phrase 'knowledge base' is being widely and frequently bandied about, one is hard-pressed to pinpoint particular sources of the base. They lie in many sub-disciplines within both Educology and Pedagogy. There is much, in other words, of doxa-type knowledge about us, but locating it represents more than a little difficulty. Summer institutes, and year-round study groups, sponsored by the State Education Department, in which specialists in the various sub-disciplines would be invited to participate, would be one way in which the extent of this knowledge could be ascertained and drawn together. Booklets could be developed and the knowledge derived from each of the sub-disciplines in these two categories could be disseminated to those involved in the preparatory

process. It should be very clear that the knowledge contained in each of the two categories we have considered in this paper is knowledge other than that which we expect of one who has a major or minor in a discipline such as music, art, math, etc. It is the professional knowledge in these disciplines, and hence constitutes the basis for their membership in the profession of teaching or administration.

Every effort needs to be made, at the same time, to eliminate from the regulations for certification the need for our current graduates to pass the Professional Knowledge components of the NTE. That component does not constitute an adequate sample of the knowledge in Educology or Pedagogy which a student can and must acquire to be an adequately prepared professional. In its place the SED needs to commence action over perhaps a 3-5 year period to construct a professional knowledge test of its own, one which encompasses knowledge to be acquired from each of the sub-disciplines within Educology and Pedagogy. Once completed, this test could then be used as the tool for assessing the quality of learning derived during the three-year cycle of professional studies, just as a subject matter test would have been employed earlier to assess the quality of intellectual preparation of a candidate in a major or minor academic field. Continuing the use of an instrument as poorly conceived, as inadequate, as the present Professional Knowledge component of the NTE can only in the long run have disastrous consequences for our profession. The larger public, once it becomes aware of the inadequacy of this instrument, will have its respect for our profession diminished by a large measure. And, without question, we in the field will not do our own self-image, our own self-respect any justice by continuing to employ an instrument which has practically no value as a measure of professional knowledge.

#### Summary

In this paper I have attempted to lay the groundwork for the recognition of two broad categories of professional knowledge, Educology and Pedagogy. I have attempted to demonstrate selected examples of the knowledge found in each of these

broad categories and I have argued that there is a large amount of material to be identified for inclusion in each of them. I have also argued that there is a very real need for a liberal arts background for all of our prospective teachers and administrators, as well as a solid subject matter specialization for each of our teachers. But, at the same time, I have questioned whether four years need to be consumed for the achievement of such a curriculum and have, instead, suggested that three years would be ample. Following such a three-year cycle, students desiring to teach or administer would enroll in SOBs of professional studies and pursue an additional three-year program which would culminate in a Professional Teaching (PT) degree. Clearly, if we are to move in the direction outlined in this paper, a number of significant steps would have to be taken. The paper concludes with the identification of a number of the more significant steps which would have to be taken to initiate action to bring this program of preparation to fruition.

# References

1. Gage, Ned L., editor (1963) Handbook of Research on Teaching, Chicago, ILL.: Rand McNally.
2. Berliner, David C. (1984) "The Half-Full Glass: A Review of Research on Teaching," in Hosford, Philip L., Chairperson and Editor, Using What We Know About Teaching, 1984 Year book, Alexandria, VA: Association for Supervision and Curriculum Development, 51.
3. Ibid.
4. Commons, Dorman L., Chair (Nov. 1985) "Who Will Teach Our Children? A Strategy for Improving California's Schools," The Report of the California Commission on the Teaching Profession, 20.
5. Lanier, Judith E., Chair (April 1986) Tomorrow's Teachers: A Report to the Holmes Group, East Lansing, MI: The Holmes Group, Inc., 16-17.
6. Banscomb, Lewis M., (May 1986) A Nation Prepared: Teachers for the 21st Century, New York: Carnegie Forum on Education and the Economy, 73.
7. Alexander, Lamar, Chairman (August 1986) Time for Results-The Governors' 1991 Report on Education, Washington, DC: The National Governor's Association, 38.
8. State Education Department (August 18, 1986) "Background Paper on Proposed Changes in Teacher Certification Requirements," 6.
9. Bauer, Norman J. (Oct. 10, 1986) "Reactions to Proposed Changes in Teacher Certification Requirements," Unpublished, mimeographed, Geneseo, NY: State University of New York.
10. Apple, Michael (Spring 1987) "Will the Social Context Allow a Tomorrow for 'Tomorrow's Teachers?', "Teachers College Record, Vol. 88, No. 3, 332.
11. Scheffler identified three sorts of definitions that have to be given major attention in discourse about education, stipulative, descriptive, and programmatic. See: Scheffler, Israel (1960) The Language of Education, Springfield, IL: Charles C. Thomas, Co., Chapters 1-3.
12. State Education Department (February 1984) "New York State Board of Regents Action Plan to Improve Elementary and Secondary Education Results in New York," Albany, New York: The University of the State of New York, The State Educational Department, 7-8. (Underlined words by writer.)
13. Bauer, Norman J. (March 30, 1987) "Education Not Conducive to 'Guanantees'", New York Teacher, Vol. 28, No. 15, 12-13.
14. Frankena, William K. (1966) "A Model for Analyzing a Philosophy of Education," High School Journal, v. 50, 8.
15. Broudy, Harry S., (February 10, 1966) "The Uses of Schooling," Lecture, State University College, Geneseo, New York, Mimeographed, 15 pp.
16. Ryle, Gilbert (1949) The Concept of Mind, New York: Barnes and Noble, Chapter 2.

17. Note the Shanker quotation at the beginning of this paper.
18. Dewey, John (1904) "The Relation of Theory to Practice in Education," in The Third Yearbook of the National Society for the Scientific Study of Education, Chicago, IL: University of Chicago Press, 16.
19. Berliner, op. cit., 55.
20. Ibid., 63.
21. Ibid.
22. Ibid., 64.
23. Ibid.,
24. New York State United Teachers (April 2-4, 1987) "Summary of Proceedings Saturday," Albany, New York: 15th Representative Assembly, Newsletter, 8.
25. Smith, David (1983) Essential Knowledge for Beginning Educators, Washington, DC: American Association of Colleges for Teacher Education; see: Virginia Koeher, "A Research Base for the Content of Teacher Education," 2.
26. Bronfenbrenner, Urie (December 1986) Innovator, Ann Arbor, MI: School of Education, 6.
27. Conley, Sahron C. and Bacharach, Samuel B., (Spring, 1987) "The Holmes Group Report: Standards, Hierarchies, and Management," Teachers College Record, Vo. 88, No. 3, 340-347.
28. Berliner, op. cit., 67.
29. Hutchins, Robert Maynard, Editor-in-Chief (1952) "The Tradition of the West," in The Great Conversation, Chicago, IL: Encyclopedia Britannica, Inc., 3.
30. Dewey, op. cit., 16-18.