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ABSTRACT

This paper presents an overview of the current state of teacher education in the United States and identifies a series of issues for action. Topics addressed include: (1) the function and form of higher education institutions offering education programs; (2) characteristics of education faculties; (3) student enrollment; (4) job placement of education graduates; (5) teacher supply and demand; (6) components of teacher education programs; (7) extended programs; (8) educational resources; (9) responsiveness of schools and departments of education to preservice education needs; (10) inservice professional development; (11) accreditation, certification, and program evaluation; (12) issues confronting professional education during the coming decade; and (13) questions which warrant the attention of both public policy makers and education professionals. Issues cited in this area are concern with upgrading the quality of education students and teachers, inservice training, improvement of certification and evaluation, the social mission of teachers, public support of teacher education, and the development of a supportive professional climate. A bibliography is appended. (JD)

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An Examination of the Teacher Education Scope:

An Overview of the Structure and Form of Teacher Education

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Prepared for the Airlie House Conference on Teacher Education and Special Education

Sponsored by the

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I. An Introduction

For more than six decades the Federal government has invested significant resources in teacher education. Those investments began in the years before World War I and continue in this era of declining Federal resources for education. They have helped to build capacity within the nation's schools, colleges and departments of education in a variety of curricular areas ranging from vocational education to handicapped education and from reading to mathematics education. Federal programs have taken a multiplicity of forms - from fellowships to grants for curricula development - and included support for faculty development, research and dissemination, leadership development, equipment purchases, program design and evaluation. Generally the Federal investments have been part of categorical programs and been initiated only after efforts have been made to affect changes elsewhere in the educational system. When such investments were focused on teacher education subsystem they have invariably taken the form of a series of alternative teacher education delivery systems. This was evident for the first time in 1965, with passage of the Elementary and Secondary Education Act (ESEA), which significantly shifted Federal policy toward teacher education. At that time, local education agencies (LEAs) were permitted to use Federal monies to initiate teacher: development programs. In addition, in what some consider to have been the most important federal policy decision affecting schools of education, the Cooperative Research Act was amended to establish educational laboratories to develop and demonstrate educational innovations and to train teachers in their use. Finally, Teacher Corps legislation, initiated in 1965, prompted a teacher-intern model in a school setting. Whereas earlier federal investments in teacher education had concentrated on building the capacity of SCDEs, these three Federal acts clearly moved teacher training, research, and development out of the historically exclusive domain of higher education.

These pieces of legislation, as well as the controversial Educational Professions Development Act of 1967 (EPDA), continued the pattern of role erosion for SCDEs as the primary educational training agency. EPDA was expected to consolidate some 15 discretionary programs for the purposes of program administration and local coordination. Teacher renewal sites were to become a local delivery system for the inservice training of teachers. While this effort was curtailed and the Education Amendments of 1976 (P.L. 94-482) repealed EPDA, federal policy further encouraged site-specific training through establishment of the Teacher Centers Program. By the end of 1967, the Federal investment in professional preparation was substantial--over \$500 million in grants, contracts, and other awards through some 40 separate Office of Education-administered programs--with still more millions of dollars invested through a host of programs outside the Education Division. However, this money was shared among three role groups: institutions of higher education (IHEs), local education agencies (LEAs), and state education agencies (SEAs). Federal legislation, either by intent or benign neglect, had cast the current set of actors into the future of teacher education.

The Education Consolidation and Improvement Act of 1981' included in the Omnibus Budget Reconciliation Act (P.L. 97-208) largely moved this debate to a new level. It also presented schools of education with unique problems, because they had been the primary recipients of funds from the 33 categorical programs consolidated. SCDEs have developed a significant number of programs responsive to Federal funding opportunities, and now see their termination as a significant disruption. The "phasing-in" of the block grants will help to alleviate some of the abruptness of this move, but will not prevent the "laying off" of significant numbers of faculty and termination of graduate student fellowships.

Given this shift in emphasis and reduction in suport the nation's schools, colleges and departments of education are serious in their efforts to masximize the benefits of the remaining Federal monies for teacher education. They are also eager to help promote new programs and investments that will enable them to enhance the quality of teacher education. It is in that spirit that the Airlie House Conference on Teacher Education is being conducted.

The Office of Special Education and Rehabilitative Services has made a number of important and innovative investments in teacher education. The Deans' Grant program was a unique strategy for affecting changes in the entire campus-based teacher education program; modest investments in campus improvements have had wide-spread impact on faculty, curriculum, students and administration. More so than any other Federal intervention stragegy they achieved great change in the nation's schools, colleges and departments of education. We are gathering at Airlie House to consider new strategies and to analyze further interventions in teacher education and to determine ways to maximize quality in existing programs.

In order to consider effective ways of enhancing the system of teacher education we begin describing that system. Included are predictions of likely "futures" for SCDEs and the identification of a series of issues for action.

II.A

An Examination of the Teacher Education Scope

II.A.1. Teacher Education Profile-Preservice Education

The task of preparing teachers for today's schools while maintaining and upgrading the knowledge and skills of practicing teachers is an enormous undertaking. As the training arm of the teaching profession, teacher education is charged with-developing the knowledge and skills bases for practice, with preparing personnel for entry to the profession, and with contributing to the on-going development of practicing professionals. The first two of these functions are integral parts of higher education. The third is shared with local staff development programs. The tasks of redefining the function and form of teacher education—both preservice and inservice—and of building a more integrated system for delivery represent one of the greatest challenges for the future.

II.A.l.a. Function and form Today, the initial or basic preparation of teachers, counselors, principals, and school administrators takes place in some 1,340 institutions of higher education (IHES) which range from Stanford University in California to Ball State University in Indiana, and from Lesley College in Massachusetts to Bethune-Cookman College in Florida. More than 70 percent of all IHES provide teacher education programs, although the largest share of prospective teachers (45%) are trained in public, masters-level state colleges and universities that were at one time normal schools. Data drawn from the work of Clark and Guba (1977) detail the spread and diversity of such programs, as is shown in Figure II.1.

A representative sample of the 1,340 higher education institutions offering education programs indicated that all offer at least one bachelor's level program; 166 percent operate master's level programs; 36 percent offer sixth-year programs; and 21 percent offer doctoral programs (Heald, 1982).

Despite severe economic pressures confronting institution of higher education, a pervasive resiliency characterizes the enterprise. Only a few institutions, among them Duke and Notre Dame Universities, Trinity College, and the University of Bridgeport, have closed their education programs. The teacher education programs at Oberlin, Mount Holyoke, and Connecticut Wesleyan have also been recently discontinued (Stroup, 1982). In contrast, the Lutheran Church has added teacher education to two of its institutions in the past two years, and the University of California at Berkeley recently made an important statement regarding the retention of its program (Heyman, 1981).

Estimated Numbers of Education Degrees Granted by SCDEs and Estimated Numbers of SCDE Faculty by RITE Institutional Categories

/ Category	Population	Percent, of Population	E	ducatio	on Degrees	. u	SCDE Faculty	
as and			N ₁	imber	Percent of Total	,	Number	Percent of Total
1 2 3	113 51 247 38	8.2 3.7 18.0 2.3	13	1,450 3,475 4,437 6,962	28.8 5.8 42.3	•	11,380 1,568 15,051 ^a N.A.	33.6 4 ₆ 6 44.5 N.A.
5 6 7 8	280 66 26 556	20.4 4.8 1.9 40.6	2	1,062 9,312 1,800 4,112	9.8 .2.9 .6 7.6	•	2,503 807 ^b N.A. 2,532	7!4 = 2.4 N.A. 7.5

a Combined with Category 4

Source: Cyr, Ralph. "Demographics of Teacher Education: Implications for Policymaking."

Policy for the Education of Educators: Issues and Implications. Washington: AACTE,,1981, p. 33.

Figure II.1

bCombined with Category 7

II.A.1.b. Faculty overview. Although a major study of education faculty is underway at the University of Vermont, (Ducharme and Agne, 1982) the most recent data available were produced by Joyce, Yarger, and Howey (Joyce, 1977). They reported that 41,000 persons teach in these programs, collectively known as schools, colleges, and departments of education (SCDEs). Their data showed that 85 percent of faculty held doctorates; 60 percent were tenured; and more than 90 percent had significant work experience in elementary and secondary schools (with a mean of eight years of such service). Fuller and Bown add that teacher educators share, by and large, humble social-class origins and low status in comparison with their academic colleagues. They more often hold paying jobs while working for a degree, enter the faculty later, perhaps with the Ed.D., and so are less likely to have acquired the scholarly credentials valued by academicians (Fuller, 1975).

In a later study, size of faculties varied greatly, ranging from 1 to 480 full-time equivalent members at the undergraduate level and 1 to 400 full-time equivalent members at the graduate level (Heald, 1982). The study also found a largely white, male, and campus-bound faculty (not engaging in off-campus consultancies), who placed primary emphasis on their teaching assignments. Ladd and Lipset (1975) found the same kind of faculty to be supportive of campus activism, black concerns, and students participation, although its self-perception was one of considerable conservatism. They also revealed that education faculty sometimes criticized for lack of scholarship publishes at a rate comparable to other IHE faculty. The latest AAUP study reported that full professors in education, on the average, earn \$5,000 less than the mean salary of colleagues and that they rank below all other disciplines (excluding library science and fine arts) in salary levels (AAPU, 1982).

enrollments: from 1 to 7,000 full-time equivalent students at the lower division level; from 1 to 7,100 full-time equivalent students at the upper division level; and from 2 to 3,200 full-time equivalent students at the upper division level; and from 2 to 3,200 full-time equivalent students at the graduate level (Heald, 1982).

Perhaps the most pervasive and serious problems confronting SCDEs have been the decline in enrollment, the attendant curtailment of programs, and the retrenchment of faculty. The National Center for Education Statistics (NCES, 1980) documented that enrollments in education fell from 1.118 million in 1966 to 781,000 in 1978, and the National Education Association (Graybeal, 1981) reported that productivity decreased from an all-time high level of 317,254 in 1972 to 159,485 in 1980—a decrease of 49.7 percent. NCES projected additional declines of another 40 percent during the decade of the 1980s. Parallel to the decline in the number of bachelor's recipients in education is the decline in the number for all bachelor's recipients. Bachelor's recipients in education represented 21 percent of all recipients in 1970—71, but declined to slightly less than 13 percent by 1979—80 (NCES, 1982).

II.A.l.d. Job placement overview. During much of the 1970s, graduates of SCDEs experienced difficulty in finding jobs. A survey of 1974-75 bachelor's degree recipients in Spring 1976 showed that 105,000 of 229,500 newly qualified teaching candidates were not teaching. Two years later, a survey of 1976-77 bachelor's degree recipients indicated, that, by Spring 1978, these numbers had declined--71,000 out of 177,200 were not teaching. However, more recent NCES data indicate that 1976-77 bachelor's recipients newly qualified to teach fared much better in the labor market than liberal arts graduates (NCES, 1980).

In the Spring of 1982, while school districts in certain parts of the country were laying off teachers, others were reporting unfilled vacancies. This apparent anomaly is due to different growth patterns being experienced in different states, regions, and localities. While the southwest is experiencing net gain (as well as significant teacher shortages), many areas in the northeast continue to experience net losses (and teacher layoffs) (NCES, 1982).

Selected states are reporting "great difficulty in filling positions" in certain assignment areas, while these and other states are indicating "general employment of persons with substandard qualifications." In the Spring of 1980, 30 states were reporting "great difficulty" in finding mathematics teachers, 32 in finding special education teachers for the secondary level and 27 for the elementary level, 18 for the physical sciences and agriculture, and 27 for industrial arts (Graybeal, 1981). Thus, a shortage is evident in many parts of the country and is likely to grow significantly in the coming (For a graphic representation of these phenomena, see Figure decade. II.2.)

The magnitude of the shortages remains uncertain because of numerous unanswered questions. These include the following:

- Will projected teacher "lay-offs" ameliorate the shortage situation?
- Will more favorable economic conditions in the mid-1980s stimulate or retard the numbers of teachers leaving the profession?
- Will pupil/teacher ratios stay essentially constant?
- Will new Federal categorical programs stimulate additional demands as did earlier efforts for handicapped and bilingual teachers?
- Will the pattern of late retirements for teachers shift to correspond more closely with the general population? Given the fact that 22 percent of the teaching force was 50 or older in 1981, how will this affect staffing?
- Will increases in student enrollment in SCDEs respond in the usual delayed fashion to the general conditions of the marketplace?
- How will the so-called "reserve pool" respond to job opportunities?

Estimated demand for additional teachers in elementary and secondary schools and estimated supply of new teacher graduates

Number, in thousands

Supply of new teacher graduates

Demand for additional teachers

800

SOURCE: Projections of Education Statistics to 1988-89; Department of Education, National Center for Education Statistics.

1974-78

1969-73

1984-88

Figure II.2

Although there is great uncertainty about the potential impact of the "reserve pool" of trained but unplaced teachers and former teachers on any potential shortage, NCES projected that by 1985 the supply of new teachers will fall short of demand by 14.9 percent—with even greater shortages of new teachers likely in the late 1980s (NCES, 1982). Another overlooked but related fact is that the number of members in the 18-21 year old cohort traditionally are drawn will lose over 2.6 million persons, a deline of 15 percent, during this decade. This will force SCDEs to compete with other programs in the university, with the military, and with the job market for potential applicants. This comes at a time when student preferences for teacher education have fallen significantly, and continue to fall; less than 5 percent of last Autumn's freshman class indicated a preference for teacher education, which is down almost 30 percent from a decade earlier (Corrigan, 1982). Indications are that this trend is likely to continue.

while supply is affecting this situation shifting enrollment trends at the elementary and secondary levels are exacerbating these conditions. In public elementary schools, enrollment peaked in 1971 at 27.7 million. An enrollment of 24.2 million was reported for the fall of 1979, and a further drop to 23.6 million in 1983. From then on, enrollment may begin to rise slightly again.... The Census Bureau has projected that the total population of 5-13 year olds will rise from a low of 29.1 million in 1985 to 32.6 million in 1990. Should the birth rate rise, enrollment could be substantially higher.

If the future pattern of elementary enrollment presents a mixed picture, that for secondary education is much clearer. The Census Bureau projects that the number of 14-17 year olds will fall from 15.8 million in 1980 to 14.4 million in 1985 to 12.8 million by 1990. Only in 1991 will a slight increase begin. Thus, high school enrollment can be expected to fall throughout the 1908s. Not all of these 14-17 year olds, of course, are in school. The National Center for Education Statistics reports that enrollment in grades 9-12 in public schools peaked in 1976 at 14.3 million. It is projected to fall to 12.7 million by 1981, continuing down to 11.8 million in 1986. As a result, the job possibilities for new high school teachers seem to be quite bleak, and high school administrators can expect to face the multiple personnel, curricular and budgetary problems of declining enrollment throughout the decade.

Compounding the shortage problem is the growing use of admission and exit examinations that have resulted, inter alia, in a significant decline in the number of minority applicants for teaching positions. For example, Florida, one of the first states to develop its own teacher certification examination, is experiencing an 80 percent passage rate for all college graduates taking its state-developed tests. However, black students are failing at a rate of nearly 70 percent, while white students are failing at less than a 15 percent rate. Florida certified about 5,500 new teachers in 1981; about 200 were black. As another example, Louisiana is one of several southern states using the National Teacher Examinations (NTE) for certification. Although the overall passage rate is about 70 percent, the percentage of black graduates certified has been in the 10 to 20 percent range. Louisiana certified 2,800 teachers in 1981; the two largest predominantly black institutions produced less than 40 of these (Galambos, 1982).

A number of black teacher educators have noted the potential impact of this phenomenon on staffing patterns for urban schools, and are suggesting that the very existence of the black public school teacher is threatened (Witty, 1982). The increasing minority population, as a percentage of the total population, and the growth of ethnic diversity require that schools be able to respond to a wider range of interests, needs, and backgrounds. Significant recruitment efforts need to be mounted among non-Anglo racial and ethnic groups during the coming decade if the teaching force is to remain representative of the larger society.

II.A.l.e. Program profile. Typically, a teacher preparation program is made up of four components: a solid foundation in general education or liberal studies including basic skills; advanced study in one or more academic subjects; professional studies in generic teaching domains, foundational studies, and specialized pedagogical study; and a practicum or student teaching experience.

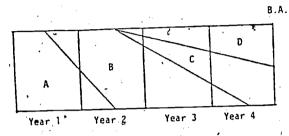
In fulfilling the requirements of the first two components, an education student may devote from 67 to 75 percent of total coursework hours outside the SCDE, depending on whether he or she is preparing to teach in an elementary or secondary school. (See Figure II.3.) Students preparing to teach in an elementary school devote 41 percent of their program to professional study; only 30 percent of a secondary program goes to professional study. In professional courses, students learn a broad repertoire of teaching skills (including knowledge of learners, teaching methods, teaching resources, and assessment procedures), and ways to work successfully with parents, peers, and supervisors.

At present, a number of efforts are underway to alter the structure and form of preservice teacher education. In response to recurrent allegations of needless content duplication and watered-down courses are efforts to use systems planning and technology to alleviate duplication and to use a richer assortment of research findings and clinical experiences to enhance course quality. Attempting to arrive at a slimmer but richer curriculum is the objective. Working contrary to this approach, however, is

the ever-lengthening list of curricular accretions in schools, brought on by various societal ills: sexism, racism, economic inequality, illiteracy, domestic instability, unemployment, injustice, urban unrest, social disorder and lawlessness, drug abuse, crime, juvenile delinquency, sexual permissiveness, litigiousness, corruption, and so on ad infinitum—all of which likewise impact upon, teacher education (Lucas, 1981).

Meeting these demands by adding content to an already overburdened curriculum has been a continuing problem for SCDEs. Sacrificing general education to accommodate these demands is unacceptable. Restructuring and realigning existing programs are appropriate responses, but these threaten the traditional prerequisites of the professoriate.

Typical Four-Year Toacher Preparation Program*



• A = General Education

C = Professional Studies.

B = Teaching Fields(s) Content

D = Clinical Component

*The proportions of time reflected in the components are to be interpreted as approximate proportions.

Source: Scannell, Dale. <u>Extended Programs for Teacher Education</u>. (A position paper developed by the AACTE Task Force on Extended Programs.) Washington: AACTE, February, 1982.

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Figure 11.3

12

II.A.1.f. Extended programs overview. A promising response to the time constraints is to extend initial preparatory programs to five or more years. Such a move should accommodate the greater array of research findings and new knowledge, as well as respond to the clamor by external agencies for the addition of new responsibilities (Scannell, 1981). The inadequate amount of time to teach pedagogy during the course of a four-year bachelor's program is one of the major problems confronting teacher education. While there has been an explosion of knowledge in the last 30 years in areas of teaching and learning, there has been a corresponding decline in the amount of time to prepare teachers to use that knowledge. Smith et al. have compared the growth and decline of quarter hours of stydent preparation for careers in teaching, law, pharmacy, and civil engineering at the University of Florida over the past 50 years. They found that while the other programs increased the time for professional study during the past 30 years, there had been a decline in the number of quarter hours available for teacher education (Smith and Street, 1980). Extended programs for initial preparation seem to offer the best hope for program improvement. Five year plans have already been put into place at schools such as Austin College in Texas, the University of New Hampshire and the University of Kansas. Despite the fact that such programs are more demanding, enrollments have grown in these programs (Benderson, 1982).

II.A.l.g. Resource overview. Funding for teacher education is another major concern. Peseau and Orr (1980) completed one phase of an ongoing study and concluded that more is spent educating a typical third-grader (\$1,400) than training a teacher (\$927). At the same time, according to these researchers, the average expenditure by each full-time equivalent college or university student is \$2,363. The fact is that teacher education is a revenue-producing program, which explains in part why it is offered by so many institutions of higher education. As recently as 1977, teacher education generated 11 percent of all university student-credit-hour production but, in return, received less than three percent of the institution's programmatic resources.

The use of a weighted student-credit-hour measure as the quantitative determinant for the distribution of resources within universities is a major source of concern, particularly when SCDEs are expected to conduct an extensive array of outreach or service programs for school districts. Such off-campus activities typically do not generate credit hours and, therefore, do not qualify for university allocations. Some states have recognized this constraint and freed certain percentages of funds for SCDEs to conduct workshops, seminars, or assessment activities for local education agencies.

II.A.l.h. SCDE responsiveness to preservice conditions. Given these overviews, the anticipated teacher shortage and the apparent diminished quality of the applicant pool, several likely futures for SCDEs can be projected (Howey, 1981; Denemark, 1981; and Wisniewski, 1981):

- The current preoccupation with issues of quality will lead to programs that are more realistic, rational, and rigorous in both general and professional education.
- The significant demographic and ethnic shifts our society is experiencing will place new emphasis upon foundational studies in education, i.e., on the premises and assumptions of schooling in a democratic society.
- Issues of transitional bilingualism and multicultural or cultural pluralism will receive renewed attention along with elements of global awareness. Legal and ethical questions and the implications of various policies with application to teaching and learning situations will serve as the focus of renewed efforts in preparation programs.
- Rigorous and explicit provisions for the recruitment of talented ethnic minorities into teaching will be effected.
- The emphasis upon integration of experiences and coursework in initial preparation programs—culminating in competency examinations—will lead to the setting of goals and objectives that extend beyond individual faculty judgments and, instead, represent broad institutional agreements on teacher preparation, ending (it is to be hoped) the proliferation of missions and fragmentation of roles that characterize too many SCDEs.
- The integration of theory and practice will also lead to renewed emphasis upon "clinical pedagogy," "early entry experiences," and "internships," paralleling the recommendations of <u>A Design for a</u> School of <u>Pedagogy</u> (Smith et al., 1981).
- The magnitude of attention by "significant publics" will cause the majority of preparation programs to become more standardized in terms of their focus, program, and structure with renewed interest in competency-based teacher education, reduction of courses, and individualization of program preparation, thus ending the enormous diversity of programs.
- Enlargement of the "life space" provided for initial teacher preparation will occur, with more and more extended programs and master's degree programs appearing, as the constraints and responsibilities of teacher education programs are recognized.
- Teacher education will assume greater responsibility for initial entry or beginning teacher programs, including supervision, assessment, and assistance.
- There will be greater reliance upon the knowledge base as

 preservice students become more familiar with the following domains: (a) diagnosis and evaluation of learning (i.e., collection of information about each student to ascertain needs and problems and the ability to undertake formative and summative evaluation); (b) planning and decision making (i.e., knowledge of

all those things that constitute proactive teaching—e.g., manipulation of data and information, such as interpreting standardized test scores, responding to recommendations of a school psychologist, and developing courses to sequence actions); (c) management of student conduct (i.e., classroom management and organization); (d) contextual or ecological variables (i.e., an understanding of variables that affect student learning and development); (e) management of instruction (i.e., interactive teacher behavior, including a thorough knowledge of different instructional approaches and the use of existing and emerging media); and (f) teacher evaluation and professional reponsibilities (i.e., self-assessment and improvement, understanding of responsibilities regarding the profession and the community, interpersonal skills).

• New emphasis upon technological literacy will generate a demand for teachers who possess minimal competence in the use of computers and other technology, and will lead to critical concerns about equity among SCDEs, with the "have and have not" issue becoming very important. Teacher educators can and must build upon an expanding knowledge base, apply new technology, and develop a futuristic orientation. Quality programs must be based on defensible and sturdy academic standards.

II.A.2. Teacher Education Profile--Inservice Professional Development

Inservice, staff, professional development, and/or continuing education as it presently exists in the United States is an enormously complex system affecting the nation's 2.2 million teachers, employing as many as a quarter of a million staff development personnel at a cost of millions of dollars. It is a system that is rooted in advanced collegiate preparation through both residential and extension programs of colleges and universities, but also that has witnessed the creation of a whole set of new institutions to provide inservice education and/or staff development opportunities. These latter organizations range from intermediate service centers and local district teacher centers to state department leadership academies and staff development programs (Joyce, 1976).

Local education agencies now provide for "inservice days,"
"workshops" before the beginning and/or after the conclusion of the
school year, and "special conferences" to introduce modified or new
curricula. Colleges offer master's degree programs to attract teachers
to graduate study. Teacher centers offer district-sponsored credits for
participation, independent study, and travel. Important distinctions
have emerged between these programs, with local district programs
emphasizing how faculty members relate to and learn from each other and
how mutual stimulation for growth can develop when professionals work
together. Collegiate programs have responded by offering more varied
academic courses; however, many institutions have allowed their master's
degree programs to decline in quality. According to a recent British

observation, "courses are often fragmented and under-staffed...in some places, little proof of work is needed; no attempt is made to impose a coherent pattern upon it" (Judge, 1982). This is at least one of the reasons that projections for earned master's degrees suggest reductions of 30 percent during the coming decade (NCES, 1980). There are significant efforts to concentrate on upgrading these courses.

The knowledge explosion suggests that we will need to find ways to provide new and better forms of inservice education. The economic conditions of the country suggest that there will be severe limitations on the availability of resources to accomplish this goal. Incentives need to be found to stimulate collegiate programs to better respond to teacher needs, while other incentives are necessary to serve as motivators for teachers to participate in these programs. Ways of aiding the staff trainers, of improving the process used to deliver knowledge, and of enhancing the substance and content of the presentation need serious examination.

II.A.3. Teacher Education Profile—Accreditation, Certification, and Evaluation

II.A.3.a. National accreditation overview. Accreditation is a process self-imposed by educational institutions to ensure quality control. Two basic kinds of accreditation are practiced, one that considers the institution as a whole, and the other that examines specific programs. Current accreditation procedures for teacher education are program-specific.

Less than half (537) of the 1,340 higher education institutions currently have programs accredited by the National Council for Accreditation of Teacher Education (NCATE). NCATE represents colleges and universities, classroom teachers, and others through 13 stakeholder organizations and associations. While accreditation by NCATE is not mandatory, an increasing number of colleges and universities are seeking the stamp of approval by this national accrediting body. Efforts are currently underway to refocus NCATE, to strengthen its ability to identify both inadequate and high-quality programs, to streamline its procedures, and to reduce costs.

II.A.3.b. Certification and evaluation overview. All 50 states have in place procedures for the issuance of teaching certificates to individuals who complete a set of prescribed minimum requirements. These procedures date back to 1825 when the Ohio legislature designated county school superintendents to examine candidates and issue certificates for teaching. Today, all states have centralized teacher certification in their state education agencies, and the completion of an "approved" college or university program in teacher education serves as the basis for certification, with few exceptions. Approval of teacher education programs takes place through the accreditation procedures of NCATE or of the National Association of State Directors of Teacher Education and Certification. Certification is currently undergoing a number of profound changes:

Proliferation of Certificates. There has been a tremendous proliferation of certificates classified by "type" (teacher, administrator; counselor, etc.), "field" (specialization or teaching field), and "level" (nursery school, kindergarten, middle school, etc.). Georgia currently issues certificates in eight fields, Louisiana has certificates for 8 types of school personnel, and a number of states recognize five distinct school levels.

There is significant debate at present regarding the desire by some to move toward more comprehensive certificates while others, exhibiting considerable distrust of local superintendents and principals with regard to improper assignments, want to retain if not enlarge upon the types, levels, and fields certified. Those seeking reforms in certification will probably have to wait until there are basic curriculum and structural reforms in elementary and secondary schools.

- Testing for Initial Certification. Another concern is the use of standardized tests as integral parts of the certification process. Certification by examination was common as recently as the 1930s when it was gradually replaced by graduation from normal school or college. Today, we see a significant reintroduction of competency-based teacher examinations as a requirement for certification. By 1981, 17 states had adopted provisions for competency-based teacher certification. In 1981, 10 states had provisions in effect, and by 1982, three more were expected to begin. More than half of these had their own state-developed examination, all but one of the rest used the National Teacher Examination (NTE), and one state, South Carolina, used both NTE and a state-developed examination (NCES, 1982).
- Emergency Certification. The pressures of staff availability, scheduling, and funding are causing local education systems to assign teachers to specialized courses for which they are not prepared. All states have provisions for the issuance of interim, provisional, temporary, and emergency certificates. NIE and NCES, in cooperation with AACTE, are attempting at present to ascertain the numbers of teachers awarded "nonstandard" certificates allowing them to teach out of their field. Reports of "improper assignments" number in the thousands from many parts of the country, with the potential teacher shortage likely to accelerate this problem. Information systems in many states do not have data on the practice of issuing special certificates for persons who do not meet the regular requirements (Roth, 1981).

Parallel to this phenomenon is the waiving of existing certification regulations to enable local systems to employ arts and science graduates to teach subjects for which qualified teachers are unavailable. The Southern Regional Education Board (SREB) has advocated the modification of certification regulations to permit both the use of graduates in mathematics and science "who lack professional education preparation" and of "out-of-field" asignments for teachers in "surplus fields"

(SREB, 1981). The state of Virginia has recently implemented the SREB recommendation and moved to permit liberal-arts graduates to be given provisional certification (Ingalls, 1982):

eperformance Assessment Prior to Regular Certification. Other aspects of the current debate on certification center on: (a) delaying initial certification for one (Florida, Oklahoma, and Maryland), two (Virginia), or three years (California and New York) during which the candidate satisfies peers, mentors, principals, and/or college supervisors of their teaching competence while teaching a reduced load; and (b) modifying or eliminating permanent or "lifelong certification" by requiring more frequent renewal, additional semester hours of graduate work or professional development units within specified periods of time, and the use of teacher performance evaluations. Experimentation with both of these aspects of certification is likely to increase in the coming three years.

II.A.4. Issues for Action

Among the host of issues confronting professional education during the forthcoming decade will be those emerging from efforts to:

- reduce the number of schools, colleges, and departments of education offering teacher education and find ways to link institutions with various emerging roles and missions. To effect this, professional school models must be examined, information gathered and analyzed, and the results disseminated.
- recruit and retain a diversified and high-quality faculty in pedagogy at both basic and academic levels within the university and in staff development training positions. To effect this, faculty and staff must be provided with development opportunities including the option of returning to the elementary and secondary classroom; reward and tenure systems must be developed that accommodate the needs of the profession as a whole instead of just the academy's needs. Inexpensive and reliable information systems must be counted upon to provide significant staff development opportunities.
- enhance the quality and quantity of the applicant pool, giving serious attention to the recruitment of talented women and minorities. To effect this, the public image must be changed regarding the role and importance of the teacher and teacher education, and appropriate ways of assessing and evaluating beginning teachers must be found. Tremendous information needs are inherent in these efforts.
- develop professionally sound ways of addressing teacher shortages in numerous fields. To effect this, new staffing patterns for "schools, new incentives for teachers, and new technologies for delivery must be explored.

Given the use of formula funding (often based on a weighted complexity factor) for SCDE programs, what incentives can be provided that will stimulate efforts to raise the admission levels without "driving down" enrollments and, thereby, reducing resources? What responsibilities should the K-12 community assume relative to overcoming the under-funding of teacher education? What creative ways can be found to enable SCDEs to undertake non-credit generating off-campus technical assistance/inservice work? Should SCDE faculty be part of existing promotion tenure and reward systems or should alternative systems be established. How do we attract and infuse quality faculty in heavily tenured facilities experiencing significant curtailments?

Does Government, state and federal, have a special financial role to play in the preparation of personnel for the education professions as contrasted to other professional fields? What are the minimum levels of support needed to assure quality of professional education? What should be the role of the states in providing financial support for teacher education apart from their support of higher education. Do local school districts recipients, as they are the results of teacher education programs, have a responsibility to share in the costs as well as the benefits of teacher education?

- f. What responsibilities should the K-12 community assume relative to fostering a better climate for teacher education at the campus? What types of new collaborative mechanisms must be established to promote "ownership" by the K-12 community in teacher education? Does a redesigned NCATE offer a mechanism to achieve part of this ownership?
- what changes are needed in the content, sequence and length of the teacher education program to accommodate the expanding research base? The demands of computerization and other technological "breakthroughs"? The need for field oriented, clinical or laboratory components in teacher education? What priority should be given to these possibilities? What attention should be given to extended programs?
- what alterations need to take place in the general education of prospective teachers? In academic specialization studies? Should both elementary and secondary pre-certification programs require an academic specialization? Should changes in emphasis be given to educational psychology vis a vis other social and behavioral sciences as part of preprofessional study in education?

How do you overcome the fragmentation that characterizes much of teacher education? How do you gain coherence in ideologies, technologies and processes? Should we go back and reassess CBTE as a systematic way of addressing this problem?

Does CAI offer a refinement of this approach or another alternative?

- build more rigorous and realistic preparation programs that draw upon the expanding knowledge base and give renewed attention to bilingual and multicultural issues and global awareness.
- experiment with various structural reforms that provide for extended programs in teacher education, facilitate the entry of beginning teachers into school environments, integrate theory and practice, and rely upon more and earlier clinical experiences.
- examine the appropriateness of a national curriculum for teacher education based on student competence and strengthened assessment procedures. To effect this, programs, goals, and objectives must be constructed that extend beyond individual faculty judgments to represent broad institution-wide agreements on teacher preparation.
- place greater emphasis on technological literacy for the beginning teacher.
- analyze and structure inservice needs of teachers, continue to enhance delivery systems, and effect additional inservice incentives for practicing teachers.
- II.A.5. Questions for Consideration. The above information is intended to describe the function and form of the teacher education subsystem. In an attempt to facilitate discussion of the above information, the following questions have been derived which warrant the attention of both public policy makers and education professionals.
 - 1. Function and Form of Teacher Education: The specificity of purpose, the focus on the clientele, the appropriateness of the design of teacher education as it is currently formed and performed by educational institutions.
 - a. How can we upgrade the quality of the teacher education candidates? What changes are needed in the recruitment, selection, admission and retention procedures for teacher education? What types of incentives could be used to attract better quality candidates? Should testing for admission into teacher education programs be used? Which tests should be used? By whom should they be administered?
 - b. How do we attract a richer mix of academically able women and minorities into teacher education programs?
 - c. What criteria should be used to judge candidates for admission? What combination of tests, grade point averages, prior experiences, interviews and recommendations should be used? What do the various beginning teacher studies tell us about the ideal candidate?
 - d. How should supply-demand data be used to affect recruitment and counseling of preservice candidates? How do we deal with the present science-mathematics teacher shortages?

- Should teachers, administrators and others be partners in the on-campus decision making regarding structure and form of teacher education programs? Should all university teacher education councils include public school persons?
- Can the university prepare teachers given all the status, resource and time limitations or should we create new structures between the university and the public school ala D. Clark and B.O. Smith?
- What impact will current SCDE efforts to focus on the human services or diversified settings have on programs of teacher education? Should SCDEs broaden their training functions to prepare persons for non-school settings? What are the ramifications of such changes?
- What responsibilities do SCDEs have to public schools in 1. generating interst in the career of teaching, introducing new ideas/technology to schools, keeping teachers up-to-date on skills and research findings, and helping improve and evaluate the quality of school programs?
- How do you build an integrated coordinated symmen of teacher education - combining IHES/ISAs/teacher centers and other LEA efforts? How do you avoid competition between these entities? How do you stimulate SCDEs to provide their expertise; and experience to the other units?
- Given all the groups interested in teacher education, is it possible we are moving to a single monolithic model for teacher preparation? How much diversity can the system tolerate?
- Given the many roles of today's schools, how should SCDEs identify the goals of education they will emphasize? Should there, for example, be a division of responsibility between preservice professional development and staff development with respect to SCDE roles? At the latter end of this continuum, should the primary client group of SCDEs be the staffs of the staff development programs?
- 2. Experience of Staff Development by Teacher Educators, Teachers, Kids and Others: Inservice, staff development and training as it is experienced (or not experienced) by teachers, ultimately by kids and hopefully by other educators in their own professional and personal contexts.
 - If staff development and inservice training are to be both credible and useful, what type of evaluation system wold retain the non-threatening atmosphere needed for professional growth experiences while still maintaining legitmiate accountability for such programs? How can SCDE faculty development programs be integrated into general staff development efforts?

- b. How should staff development and training needs be assessed and by whom? How do you balance the needs of individual. teachers to have inservice needs? Which takes priority in an era of scarcity? How do you balance job needs and community needs in designing programs?
- c. What collaborative mechanisms (Lieberman's "networks") are necessary to establish on-going, school-based staff development and training programs? What should be the scope of such programs? Who bears the financial responsibility? What roles should principals and teachers and policy makers play in defining needs?
- d. What mechanisms are necessary to enable teachers and teacher educators to share ideas and to become more involved both in and with educational research? How do we define and assure rigor in preservice and inservice teacher education programs?
- e. Will optimal staff development programs require changes in staffing patterns or other school structures/practices?
- Certification and Evaluation: Program approval, accreditation, certification and the evaluation (and recertification) of teachers, of teacher performance and of staff development programs.
 - a. If educators are to control their profession to make teaching worthy of this title, what mechanisms and legal authority would enable them to guarantee quality? What roles and responsibilities should professional standards boards plan? What types of assessment and evaluation procedures should be used? When should they be applied?
 - b. When should licensing and certification occur? Should they be separated?
 - c. How can meaningful accountability be built into the accreditation process? How can the costs of the present system be reduced? How can the present standards be refined? How can the costly overlap between accreditation and program approval be reduced?
 - d. Would not rigorous beginning teacher, internship or initial year programs, coupled with effective evaluation procedures, preclude the need for an expensive recertification program? Should tenure laws be revamped?
 - e. Should not efforts be made to significantly reduce (or eliminate) emergency, temporary or provisional certification of teachers particularly in an era of shortage?

- societal Inequities as a Mission of Teacher Education: The social missions of teacher education and staff development, particularly to reduce inequities, to respond to minority cultures and to improve the educational opportunities of kids from low-income communities.
 - a. How can adequate minority representation be assured in the teaching force? How can adequate numbers of handicapped persons be included in the teaching profession?
 - b. What can SCDEs do to improve educators' skills in remediation and motivation?
 - c. Should all teacher education programs include substantive coursework on handling student diversity in the classroom, e.g., gifted, disabled, cultural, etc.?
 - d. Since educational research documents the importance of teacher expectations to achievement, informs us that various instructional strategies produce different outcomes with different types of students, outlines effective classroom management practices, are we not denying equal opportunity by failing to assure this information is translated for and accessible to teacher educators and teachers? How do we insure their incorporation in preservice and inservice courses?
- 5. Public Support and the Improvement of the Community: The support of teacher education and staff development by state, profession and public, and the involvement of the community in the staff development and teacher education programs.
 - a. How can the public be made aware of the importance of teacher education and staff development for quality education?
 - a. If schools at all levels are to adequately serve the public interest, how can the community gain input to discussions of goals and be kept informed of progress made in meeting them? How can parents and the public become informed regarding the complexity of the teaching act?
 - c. What are appropriate roles of the community in educational decision-making? What is the appropriate intersection between the public's right to participate and the professional's obligation to practice in school matters?
 - d. Should the teacher education curriculum include training in how to work with parents, including how to help them help their children learn, and how to involve the community in the schools? If so, to what extent?

- 6. Developing a Suportive Professional Climate: Using staff development and reforming teacher education in such a way that the satisfaction, status and recognition of teachers is improved and the elitism of the rest of the educational profession to teaching is reduced.
 - -a. What changes in staffing patterns and reward systems are needed to prevent teaching from being a "dead-end" career? Where does differentiated staffing fit? Is this an old solution never tried or one tried and found wanting?
 - b. If barriers are to be broken down among teachers, administrators and teacher educators, allowing them to work in a more collegial atmosphere, what mechanisms will foster and support this process?

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