Corrigan, Dean C.: And Others:
Statement of the American Association of Colleges for Teacher Education Concerning Teacher Education: Problems and Prospects.

American Association of Colleges for Teacher Education, Washington, D.C.

Sep 81


Declining Enrollment: Educational Legislation; *Educational Trends; *Futures (of Society); Higher Education; *Schools of Education; Teacher Certification; *Teacher Education; *Teacher Qualifications; *Teacher Recruitment; Teacher Supply and Demand

The role of teacher educators is particularly significant for the welfare of a democratic society and for the education of its children and youth. Recently, however, the decline in enrollment in teacher education programs and in school-age children poses pervasive and serious problems, leading to the curtailment of programs and the retrenchment of faculty. A lack of understanding of the issues facing the teacher education field may explain some current disillusions. Contrary to popular belief, all education students do not intend to become public school teachers, and, in fact, schools of education have a long tradition of providing the kind of training valuable in other, noneducation jobs. Although national, state, and individual certification procedures have been implemented to monitor quality in teacher education, other problems remain: (1) Both enrollment and teacher demographics are in a period of change, making planning difficult; (2) Federal programs have become such a substantial part of teacher education that termination of these funds jeopardizes many activities and services; and (3) The talent pool of perspective teachers has decreased in both size and quality. It is recommended that Congress stimulate and support teacher education programs through fellowships, loan programs, and federal incentives for research and dissemination of new teaching practices. (PG)
STATEMENT OF THE
AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION

CONCERNING
TEACHER EDUCATION: PROBLEMS AND PROSPECTS

PRESENTED BEFORE THE
SUBCOMMITTEE ON POSTSECONDARY EDUCATION OF THE
COMMITTEE ON EDUCATION AND LABOR,
U.S. HOUSE OF REPRESENTATIVES

September 9, 1981

BY
DEAN C. CORRIGAN
GWENDOLYN BAKER
JUDITH LANIER
NANCY QUISENBERRY
MARY CHRISTIAN
Mr. Chairman,

The American Association of Colleges for Teacher Education (AACTE) is pleased to have this opportunity to appear before the House Subcommittee on Postsecondary Education of the Education and Labor Committee. We appreciate Chairman Simon's willingness to hold these public hearings, particularly during this time of uncertainty about the future of federal support for education personnel development.

For the past 125 years the Association and its predecessor organizations, including the American Normal School Association (1858), the North Central Council of State Normal School Presidents and Principals (1902), and the American Association of Teachers Colleges (1917), have represented the interests and concerns of higher education institutions engaged in educational personnel development and educational research in this country. The Association consists of more than 770 collegiate institutions in all states as well as Guam, the Virgin Islands, Puerto Rico and the District of Columbia. Its member institutions produce approximately 90 percent of the newly licensed school personnel each year.

I currently serve as the President of the Association while holding the position of Dean, College of Education, Texas A&M University, College Station, Texas. Other members of our panel include Gwendolyn Baker, Vice President of Graduate & Childrens Program Division, Bank Street College of Education, New York; Mary Christian, Director, School of Education, Hampton Institute, Hampton, Virginia; and Judith Lanier, Dean, College of Education, Michigan State University, East Lansing, Michigan; and Nancy Quisenberry, Associate Dean, Undergraduate Studies, Southern Illinois University at Carbondale.

Our comments today will focus on the theme identified by you, Mr. Chairman, as the problems and prospects of teacher education. We recognize that this committee has no pending legislation pertaining to teacher education and perhaps sees this hearing as precedent setting in its scope. We would only note that the Association was a petitioner before the 71st Congress some 50 years ago, and that similar concerns by members of that era led to the commissioning of a six volume national survey of the education of teachers under the auspices of the Department of the Interior. That survey serves today as a useful source of baseline information for assessing our achievements in the field of teacher education. Other Congresses have given careful scrutiny to the matter of teacher education—perhaps because of the critical relationship between the education of children and youth and the maintenance and enhancement of our democratic society. During the 96th Congress, Representative Weiss continued this tradition with his development of the Schools of Education Assistance Act, an amendment to the Higher Education Act.
Direct Congressional involvement in teacher education began with the Nelson Amendment to the Morrill Act of 1907, which authorized land grant institutions to use federal funding for vocational and agricultural teacher education. Amendments to the Smith-Hughes Act a decade later extended this mandate. Subsequent legislation passed during the Eisenhower years established the National Science Foundation, authorized the National Defense Education Act and created the Cooperative Research Act. Included were significant resources for teacher training at schools of education, curriculum development, and research and development activities.

From both historical and philosophical perspectives, the education of children and youth is the fundamental bulwark maintaining and improving a democratic society. Qualified and highly competent teachers are critical to the educational process which ensures that the citizenry of a democracy reaches its highest potential intellectually, socially, morally, economically, and physically. The role of teacher educators, therefore, is particularly significant both to the welfare of a democratic society and to the education of its children and youth. Their preparation, their performance, and their example should exemplify the goals and ideals which will be taught to the children and youth who determine the quality of societal life in future years. To ignore or neglect the role of teacher educators in this dynamic cycle of events is to ignore or neglect the welfare of society itself.

The following set of principles are included in this testimony to assist you in understanding the recommendations and concerns of teacher educators.

1. Teacher education is the preparation and research arm of the teaching profession.

2. Like other professional programs, the teacher preparation program is most effective when it is located on the campus of a significant college or university. Here it can have the advantage of the scholarly environment which fosters research and creative activities; as well as access to the rich opportunities for liberal learning, teaching specializations in the disciplines, the social and behavioral sciences and humanities which undergird the profession of teaching, the privilege of academic freedom in the pursuit of truth and effectiveness, and the rich, cultural environment that prevails.

3. The process of educating persons to be teachers transforms them from lay citizens to professional educators. The role performance of the teacher will be importantly altered during the preparation process.
4. While recognizing the importance of a liberal education and of specialization in one or more teaching fields, nothing should obscure the fact that the difference between an educated person and a professional teacher is pedagogy -- the science of teaching.

5. Teacher educators exemplify what they teach. The professional college or school can be no less than a model of the best educational practice known to the profession and society; i.e., philosophy, instructional strategies and performance, organization, facilities, equipment and resources, experimentation, and innovation.

Jonathan Messerli’s (1974) biography of Horace Mann describes problems which have troubled teacher education since the founding of the normal schools in New England a century and a half ago. According to Mann, an atmosphere of public "ignorance”, bigotry and economy" surrounded the Framingham Normal School and other early Massachusetts normal schools from their inception. As our testimony will point out, those same conditions have prevailed throughout much of the history of teacher education in America. During much of the 19th century, formal training of elementary school teachers in the U.S. was conducted in two-year normal schools. The liberal arts colleges then incorporated pedagogics into their programs in response to the need for secondary school teachers. Pedagogy was first incorporated into a university in 1873, and graduate work in education was first offered in 1890. With the change of the Michigan State Normal School to the Michigan State Teachers College in 1897, the beginning of the demise of the old normal school pattern for training teachers began.

Subsequently, the network of teachers colleges in the U.S. began expanding their curricula and adding new programs leading to the emergence of state colleges and universities. During the same period established universities were adding colleges of schools of education.

These developments in teacher education during the past 150 years are critical to an understanding of the condition of teacher education today. We must still cope with inadequate resources, misinformation, and a prevailing condescension on the part of others -- particularly within the academy.

A second component contributing to the present condition of teacher education is the precarious attempt to fuse together three separate traditions and philosophies concerning teacher education: that of the normal school, liberal arts college, and university graduate school. The normal school placed emphasis on teaching methodology; the liberal arts college, on the content of the disciplines; and the universities, on research about teaching and learning.
Teacher education is now an integral part of higher education, but the perception remains that it is still conducted in the old normal school pattern. We should note that both settings -- normal schools and higher education institutions -- have distinct advantages and disadvantages. While training programs in normal schools were shorter (usually two years) and focused primarily on pedagogy, they had the advantage of incorporating a variety of needed field work in their programs and maintaining close ties to the schools in their environs. In higher education institutions, teacher-education programs are subject to restrictions limiting the amount of pedagogy and field work in the curriculum, yet they have the advantage of drawing on the university's full resources -- a range of academic disciplines, research and development, library resources -- and of being part of four-year degree programs.

In the final analysis the improvement of teacher education programs results by eliminating the disadvantages of both the normal school and higher education settings and incorporating the advantages of both.

Characteristics and Concerns

Today the preparation of teachers, counselors, principals, and school administrators takes place in some 1,400 institutions of higher education (IHÉs) from Harvard to Los Angeles State University and from Pacific Lutheran College to Florida Agriculture and Mechanical University. More than seventy percent of all IHÉs provide teacher education programs, although the largest share of new personnel (45%) are trained in public masters-level state colleges and universities that have as a part of their legacy a tradition of pedagogical emphasis. The accompanying data, drawn from the work of Clark and Guba at Indiana University, details the spread and diversity of such programs and the difficulty of dealing with charges of alleged proliferation of programs and institutions.
<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
<th>Percent of Population</th>
<th>Education Degrees</th>
<th>SCDE Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number</td>
<td>Percent of Total</td>
</tr>
<tr>
<td>1</td>
<td>113</td>
<td>8.2</td>
<td>91,450</td>
<td>28.8</td>
</tr>
<tr>
<td>2</td>
<td>51</td>
<td>3.7</td>
<td>18,475</td>
<td>5.8</td>
</tr>
<tr>
<td>3</td>
<td>247</td>
<td>18.0</td>
<td>134,437</td>
<td>42.3</td>
</tr>
<tr>
<td>4</td>
<td>38</td>
<td>2.3</td>
<td>6,962</td>
<td>2.2</td>
</tr>
<tr>
<td>5</td>
<td>280</td>
<td>20.4</td>
<td>31,062</td>
<td>9.8</td>
</tr>
<tr>
<td>6</td>
<td>66</td>
<td>4.8</td>
<td>9,312</td>
<td>2.9</td>
</tr>
<tr>
<td>7</td>
<td>26</td>
<td>1.9</td>
<td>1,800</td>
<td>0.6</td>
</tr>
<tr>
<td>8</td>
<td>556</td>
<td>0.6</td>
<td>24,112</td>
<td>7.6</td>
</tr>
</tbody>
</table>

*Combined with Category 4

*Combined with Category 7
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public Doctoral Level Institutions</td>
</tr>
<tr>
<td>2</td>
<td>Private Doctoral Level Institutions</td>
</tr>
<tr>
<td>3</td>
<td>Public Masters Level Institutions, Main Campus</td>
</tr>
<tr>
<td>4</td>
<td>Public Regional Masters Institutions</td>
</tr>
<tr>
<td>5</td>
<td>Private Masters Level Institutions</td>
</tr>
<tr>
<td>6</td>
<td>Public Bachelors Level Institutions, Main Campus</td>
</tr>
<tr>
<td>7</td>
<td>Public Regional Bachelors Level Institutions</td>
</tr>
<tr>
<td>8</td>
<td>Private Bachelors Level Institutions</td>
</tr>
</tbody>
</table>
Joyce, Yaeger and Howey (1977) documented that 41,000 persons teach in these programs, collectively known as schools, colleges and departments of education (SCDEs). Their data showed 85 percent of these persons held doctorates; 60 percent were tenured; more than 90 percent had significant work experience in elementary and secondary schools (with a mean of 8 years of such service).

They also found a largely white male, largely campus-bound faculty (not engaging in off-campus consultancies) who placed primary emphasis on their teaching assignments. Ladd and Lipset (1975) found this same faculty more supportive of campus activism, black concerns, and student participation than the average faculty member, although its self-perception was one of considerable conservatism.

Perhaps the most pervasive and serious problem confronting SCDEs has been the decline in enrollment and the attendant curtailment of programs and retrenchment of faculty. The National Center for Education Statistics (NCES) (1980) documents that enrollments in education have fallen from 1.118 million in 1966 to 781 thousand in 1978, while the National Education Association (NEA) (1981) reports that education productivity decreased from an all-time high level of 317,254 in 1972 to 159,485 in 1980 - a decrease of 49.7 percent.

The student enrollment in education exhibits characteristics long associated with the public school teacher. More than two-thirds are female; almost 90 percent are white; the majority come from middle class homes (one-third of their mothers are homemakers); fifty percent attended universities and colleges approximately fifty miles from home; and a quarter transferred into their present program from a community or junior college. The composite of the preservice teacher candidate described by Joyce et al. is consistent with historic patterns.

One of the persistent myths regarding teacher education programs is that students spend all of their time in professional education courses. In reality students preparing to teach spend more time studying liberal arts areas outside the school of education - language, literature, humanities, mathematics, natural and social sciences, etc. - than in teacher education. Professional study comprises only 41 percent of an elementary school teacher's program and 30 percent of a secondary program.

One of the major problems confronting teacher education is the lack of adequate time to teach pedagogy during the course of a four-year bachelor's program. 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 utilizing that knowledge. The following tables (Smith and Street, 1980) compare the growth and decline of quarter hours of student preparation for careers in teaching, law, pharmacy and civil engineering.
Table 1. Preparation Required in Secondary Education, English, University of Florida (Quarter Hours)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
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<tr>
<td>Coursework taken outside</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>professional school*</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coursework taken within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>professional school**</td>
<td>148</td>
<td>155</td>
<td>146</td>
<td>141</td>
<td>143</td>
<td>145</td>
</tr>
<tr>
<td>Percent of total coursework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>work taken within the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>professional school</td>
<td>50</td>
<td>30</td>
<td>41</td>
<td>45</td>
<td>45</td>
<td>43</td>
</tr>
<tr>
<td>Years required for degree</td>
<td>7.5</td>
<td>4.6</td>
<td>7.5</td>
<td>4.6</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Total graduation credits</td>
<td>198</td>
<td>185</td>
<td>187</td>
<td>186</td>
<td>188</td>
<td>188</td>
</tr>
</tbody>
</table>

All figures represent minimum amounts of credit hours needed to meet requirements.
*Includes general education courses and upper-division electives and requirements taken outside the professional school.
**Includes coursework offered within the professional school and lower-division requirements labeled with the lettered prefix of the professional school.

Table 2. Preparation Required in Elementary Education, University of Florida (Quarter Hours)

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Coursework taken outside</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>professional school*</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Coursework taken within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>professional school**</td>
<td>96</td>
<td>127</td>
<td>141</td>
<td>122</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>Percent of total coursework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>work taken in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>professional preparation</td>
<td>90</td>
<td>59</td>
<td>54</td>
<td>66</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Years required for degree</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total graduation credits</td>
<td>186</td>
<td>186</td>
<td>195</td>
<td>188</td>
<td>192</td>
<td></td>
</tr>
</tbody>
</table>

All figures represent minimum amounts of credit hours needed to meet requirements.
*Includes general education courses and upper-division electives and requirements taken outside the professional school.
**Includes coursework offered within the professional school and lower-division requirements labeled with the lettered prefix of the professional school.
### Table 4. Preparation Required in College of Law, University of Florida (Quarter Hours)

<table>
<thead>
<tr>
<th>Year</th>
<th>1929</th>
<th>1939</th>
<th>1949</th>
<th>1959</th>
<th>1969</th>
<th>1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>102</td>
<td>141</td>
<td>135</td>
<td>192</td>
<td>192</td>
<td>186</td>
</tr>
<tr>
<td>Professional coursework</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>Percent of total coursework taken in professional preparation</td>
<td>57</td>
<td>48</td>
<td>49</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Years required for degree</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Total graduation credits</td>
<td>230</td>
<td>269</td>
<td>263</td>
<td>320</td>
<td>318</td>
<td>312</td>
</tr>
</tbody>
</table>

All figures represent minimum amounts of credit hours needed to meet requirements.

*Based on minimum requirements for an Arts and Sciences degree at the University of Florida.

### Table 5. Preparation Required in the College of Pharmacy, University of Florida (Quarter Hours)

<table>
<thead>
<tr>
<th>Year</th>
<th>1929</th>
<th>1939</th>
<th>1949</th>
<th>1959</th>
<th>1969</th>
<th>1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coursework taken outside professional school*</td>
<td>111</td>
<td>105</td>
<td>104</td>
<td>122</td>
<td>134</td>
<td>123</td>
</tr>
<tr>
<td>Coursework taken within professional school**</td>
<td>93</td>
<td>104</td>
<td>102</td>
<td>101</td>
<td>104</td>
<td>114</td>
</tr>
<tr>
<td>Percent of total coursework in professional courses</td>
<td>46</td>
<td>50</td>
<td>50</td>
<td>45</td>
<td>44</td>
<td>48</td>
</tr>
<tr>
<td>Years required for degree</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total graduation credits</td>
<td>204</td>
<td>209</td>
<td>206</td>
<td>223</td>
<td>238</td>
<td>237</td>
</tr>
</tbody>
</table>

All figures represent minimum amounts of credit hours needed to meet requirements.

*Includes general education courses and upper-division electives and requirements taken outside the professional school.

** Includes coursework offered within the professional school and lower-division requirements labeled with the lettered prefix of the professional school.
Table 6. Preparation Requirements in the College of Engineering, Department of Civil Engineering, University of Florida (Quarter Hours)

<table>
<thead>
<tr>
<th>Year</th>
<th>Courses taken outside professional school</th>
<th>Courses taken within professional school</th>
<th>Percent of coursework taken in professional subjects</th>
<th>Years required for degree</th>
<th>Total graduation credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929</td>
<td>120</td>
<td>98</td>
<td>45</td>
<td>4</td>
<td>218</td>
</tr>
<tr>
<td>1939</td>
<td>119</td>
<td>107</td>
<td>47</td>
<td>4(5)</td>
<td>226</td>
</tr>
<tr>
<td>1949</td>
<td>104</td>
<td>120</td>
<td>54</td>
<td>4(5)</td>
<td>234</td>
</tr>
<tr>
<td>1959</td>
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<td>117</td>
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<td>4(5)</td>
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<tr>
<td>1969</td>
<td>107</td>
<td>106</td>
<td>50</td>
<td>4(5)</td>
<td>213</td>
</tr>
<tr>
<td>1979</td>
<td>90</td>
<td>112</td>
<td>55</td>
<td>4(5)</td>
<td>202</td>
</tr>
</tbody>
</table>

All figures are expressed in terms of minimum number of hours required for graduation.

"Experience has shown that the average student requires five years for graduation," states the 1939 catalogue. Thus, while the curriculum is a four-year program, most students required five years to complete it.

The 1959-60 catalogue states that "the curricula for all departments in the College of Engineering have been established on a five-year basis." However, it states that "accelerated" students may graduate in less time.

The 1969 catalogue states that the curriculum could be completed in 12 quarters, but that "the majority of students will require at least 13 quarters."

In 1979 the catalogue says, "The aggressive, strongly motivated student" can complete the curriculum in 13 quarters, but "the majority of students will require more than 13 quarters."
Many outstanding schools of education are currently experimenting with extended programs of preparation. The separation between subject matter and pedagogy has long been a major concern of both critics and supporters of teacher education. Efforts to build continuity and coordination between these two, often disparate program elements cause many to argue that teacher education is an all-university responsibility. The Council for Basic Education (Basic Education, June 1981 issue) builds the case as follows:

"pedagogy is the proper business of Doctors of Education, and it is proper for them to cede to the Doctor of Philosophy responsibility for the subjects of content of school teaching. Propriety, however, is no guarantee of quality programs of teacher preparation. It does nothing to ensure either the right kind or the right amount of pedagogy and subject preparation, to say nothing of their effective coordination."

Perhaps the most notable change in teacher education during the last decade has been the growth in the clinical experiences segment of teacher training - as measured in both academic credit hours and clock hours. The National Survey on Preservice Preparation of Teachers (1977) showed an increase of four credit hours and 50 clock hours (from 275 to 325) since 1963 - and concluded that this change increases the opportunities for academic concepts to be applied to real school situations.

SCDEs use a variety of admission and retention policies and procedures to influence directly the quality of personnel being prepared to teach. However, admission to a college or university is the first step in the selection process of who shall be prepared to teach. Teacher educators have little, if any, control over this step.

Decisions regarding who shall be admitted to a teacher education program are the responsibility of teacher educators. Such decisions are based on standard measures like grade point averages, personal interviews, standardized test scores, letters of reference, etc. Admission to a teacher education program, however, is only one phase of the selection process. Candidates for teacher preparation generally must demonstrate, at a number of specific points during the preparation program, that they possess the necessary knowledge, skills, and values for successful professional practice. Decisions regarding whether or not a candidate is retained in a preparation program should be made periodically; unfortunately this does not occur in every program.
In addition, teacher education may need to make special efforts to ensure not only the quality of teacher preparation candidates, but also to ensure that the cadre of candidates reflects the diversity of the population base of American society.

While we acknowledge that the quality of teacher education programs varies widely among the colleges and universities in the United States, efforts are being made through accreditation and program approval processes to ensure greater uniformity of quality for all teacher education programs.

The program for the initial preparation of teachers generally includes several components:

1. A strong foundation of general education courses and experiences providing exposure to the various academic disciplines making up the school curriculum - the humanities, languages, sciences, mathematics, social sciences, and the arts. The contents of this component are usually stated as college/university graduation requirements; teacher educators generally do not have control over what the contents will be.

2. Studies in the social and behavioral sciences (psychology, human growth and development, anthropology, sociology) and their application to the practice of education.

3. A specialization component which provides a strong indepth study of a teaching field or fields. Specific knowledge and skills to be acquired usually are defined by college/university major requirements. The requirements, however, should allow time in the teaching major to accommodate the preparation needed for teaching particularly at the secondary school level.

4. A component providing generic pedagogical knowledge and skills in assessing, diagnosing, and interpreting students' learning needs; planning and prescribing instruction; conducting/implementing instruction; evaluating instructional outcomes; classroom management; human relations skills; conferential/referral skills; knowledge and skills related to population-specific characteristics; institutional citizenship; and professional citizenship.

5. Specific pedagogical knowledge and skills for teaching specific subjects and for specific age or grade levels.
6. Clinical and practicum experiences which bridge theory and practice. This component includes observation and analysis of classroom teaching; laboratory and clinical experiences; practicum/student teaching; and an internship. It is not assumed that clinical and practicum experiences will be concentrated into only one culminating experience near the end of the preparation program. Rather, it is assumed that such experiences will be provided throughout the preparation program at appropriate times, beginning with observation and analysis and leading to full responsibility for classroom teaching, under the supervision of qualified personnel.

Funding for teacher education is a major concern. Peseau and Orr (1980) recently completed a study which concluded that more is spent educating a typical third-grader ($1,400) than training a teacher ($927). At the same time, according to these same researchers within the university, the average expenditure per equivalent full-time 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 and in return, received less than three percent of the institution's programmatic resources.

The use of weighted student credit hour measures 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 activities typically do not generate credit hours and, therefore, do not qualify for university allocations. Certain states have recognized this constraint and "topped-up" or freed certain percentages of funds for schools of education to conduct workshops, seminars, or assessment activities for local education agencies.

At the same time, complexity formulas have determined that the preparation of teachers is a less complex task than, for example, the preparation of a nurse or veterinarian. This continues to leave teacher education in an untenable position. While we do not believe there should be one-to-one allotment of dollars to academic programs for dollars generated by those programs, we do believe that a better balance must be achieved between various productivity measures and budgets for teacher education.

A problematical myth is that all persons enrolled in teacher education programs intend to become public school teachers. Decade-long supply-demand studies have assumed that all students preparing to teach should be counted in the potential supply column, although in actuality as many as 20 percent of those enrolled never intend to seek certification or enter the teaching
force. It has only recently become recognized that schools of education have a long tradition of preparing persons for other jobs - so-called noneducation jobs - and doing so with considerable success.

In part, because of this phenomenon, graduates newly qualified to teach fare better in the total labor market than those arts and science graduates not qualified to teach.

Quality Controls for Teacher Education

Unlike the case in many other countries, the quality of the initial preparation of teachers in the U.S. is not controlled by a national ministry of education. While a centralized approach to quality control might result in greater uniformity among the approximately 1,400 teacher education programs in the country, the approved level of quality would likely be lower than what most educators and citizens would consider adequate for the preparation of teachers. The advantages of other approaches to quality control outweigh any advantage there might be in a national centralized plan conducted by the federal government.

Quality control of teacher education in the U.S. is multifaceted in nature; it does not depend on the activity of any one agency or organization. The activities of a single agency or organization are complemented by those of other groups. However, quality control of teacher education is hampered by the fact that not all facets of the overall process are as effective as they should be, as is noted below. Four facets of the quality control process deserve mentioning here.

1. National Accreditation of Teacher Education

Unique to the U.S., accreditation is a process self-imposed by educational institutions to ensure quality control. Two basic types of accreditation are practiced: institutional, and program-specific, with the former being a prerequisite to the latter. Accreditation of teacher education is the program-specific type. Less than half (537) of the 1,400 higher education institutions are currently accredited by the National Council for the Accreditation of Teacher Education (NCATE). The Council represents colleges and universities through AACTE, classroom teachers through NEA, and others through 11 organizations and associations which also have a stake in the preparation of teachers. The evaluation of a teacher education program is made every seven years on the basis of a detailed institutional report and an on-site visit by an evaluation team. 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. If accreditation were mandatory, as some argue that it should be, one would expect that the quality of teacher education programs generally would be improved.
2. **State Approval of Teacher Education Programs**

Included in the responsibilities of state education agencies is the task of ensuring that institutions of higher education which prepare teachers in their states meet certain quality standards. Colleges and universities must obtain the approval of the state department of education (or the professional standards commission, as is true in a few states) before offering teacher education programs. On the surface this appears to be a sound approach to quality control. While the several states have made progress in making their separate standards more uniform, there remains the serious problem of implementing their application. Few, if any, colleges or universities fail to obtain some form of approval for operating teacher education programs. Rather than deny approval, state departments of education often issue to the programs renewable, temporary one-year approvals in response to pressures from state legislators. State approval of teacher education programs, therefore, is often made on the basis of politics rather than of program quality.

3. **Certification of Teacher Education Graduates for Entry into the Profession**

Unlike the first three facets of quality control, which are concerned with program quality, certification is the process where an individual is judged to meet the minimum standards of competence in the profession of teaching. Licensing is the legal process of permitting persons to practice the profession. This responsibility, too, is carried on by state departments of education. The express purpose of certification is to ensure that only qualified persons are permitted to teach. In practice, the certification process often involves little more than reading a candidate's transcript to verify that certain prescribed requirements (usually courses) have been met. The assumption is that meeting the requirements means competence. As is too well known, this does not always follow.

A serious quality control problem in the certification process is the flexibility which state departments of education exercise in times of teacher shortages. States can and do certify unqualified candidates when the demand for teachers exceeds the supply of qualified candidates. This practice seriously undermines efforts to maintain quality control over who is certified to teach.

Another facet of this process, which touches on other interests of this subcommittee, is the use of standardized tests as an integral part of the certification process. Ten states now have various systems of testing prospective teachers and 33 more have pending legislation to put in place minimal competency measures. These measures do not guarantee quality teachers.
Issues Confronting Teacher Education

Societal expectations

During the past 30 years, schools have increasingly been used as instruments for social change through a combination of shifts in general societal expectations, legislative mandates, and court decisions. As a result, schools still are held responsible for developing the basic skills and knowledge that has been their traditional domain, but they have also been given responsibility for implementing solutions to problems ranging from nutrition and health to desegregation. While it appears that there may be less consensus about the propriety of such roles than there has been in the past, the multiple expectations of the schools has added to the difficulty of training teachers.

Changing clientele

From 1930 to 1980, schools and teacher training institutions have been called upon to serve a student clientele that has undergone rapid changes in numbers, composition, and characteristics. The well-known "baby boom" that the United States experienced during the 1940s and 1950s resulted in a rapid and pronounced need for schools and school personnel during the 1950s and 1960s.

Except for a short interruption during World War II, births in the United States increased dramatically, until about 1959; then, equally dramatically they began to decrease. In 1935, 2.38 million babies were born; by 1950, that number had risen to 3.63 million, reaching a peak of 4.268 million births in 1961. By 1965, however, the number of births had already dropped to 3.76 million and to a low of 3.15 million births in 1975.

Schools were forced to quickly accommodate these rapidly changing numbers. From 1950 to 1965, school districts built schools, hired teachers and expanded programs to accommodate ever-larger classes. By the time they had fully adjusted to the larger numbers, the pattern of the birth rate and the number of births had reversed— each entering class was steadily smaller. Since the late 1960s, education has been trying to adjust to those smaller numbers, and to make decisions about how to use—or eliminate—a surplus of buildings, programs and personnel.

Ironically, since 1975 the birth rates and number of births have once more reversed and have risen annually. School districts and teacher training programs are faced with a new quandry: is the increase a short-term one, to be followed by a return to low numbers of births and birth rates, or is it the beginning of a longer term cycle of increased births?
According to the most recent Bureau of the Census data (current Pop. Rep., P-20, No. 362, May, 1981); the following data and trends currently prevail in school enrollment:

1. As of October, 1980, about 57.3 million persons three to 34 years old were enrolled in school. There was a significant increase in preprimary enrollments but no significant change in college enrollments from 1979 to 1980.

2. Elementary school enrollment in 1980 (27.4 million) was about one-fifth below the 1970 figure, resulting from the decline in the elementary school age population. Since 1977, however, the number of births has been climbing slowly, bringing a projected end to the declining elementary enrollment in the next few years.

3. Private elementary school enrollment declined in the decade, mostly in the early years of the decade. In 1980, about 11 percent of elementary school students attended private schools, not significantly different from the proportion in 1970 but significantly less than the 15 percent in 1975.

4. Total high school enrollment of 14.6 million in 1980 exhibited a one-year decline of about 560,000 students. There has been a decline of at least one million students in high school since the 1975-77 period when enrollment remained around 15.7 million. This decline is the result of the population decline in the eligible high school age group.

Not only have numbers of students changed, but their composition and characteristics have changed as well:

1. In 1932, 302 of every 1,000 students who had been in fifth grade in 1924-25 graduated from high school; by 1977, 744 of the students who had been fifth-graders in the fall of 1969 graduated. Thus, schools increased their holding power by about 268 percent, and while doing so, broadened the range of the type of student being served. (Digest of Education Statistics, 1979, Table 10)

2. Between 1960 and 1977, the percentage of children living with a separated parent doubled from nine to 18 percent (7.1 million to 11.3 million), and the percentage living with a divorced parent tripled. The number living with a never-married parent was seven times as high; there was a 10 percent decline in the number of children living with two parents (from 56.3 million to 50.8 million). (From Paul Glick, The Future of the American Family: Bureau of the Census, 1978.)
3. Increasing racial and ethnic diversity requires that schools be able to respond to a wider range of interests, needs and backgrounds. Immigration, which accounts for one-fourth of net population growth in the United States (Coates, 1979), places increasing language-related demands upon schools, especially in metropolitan areas.

4. During the 1950s and 1960s, family size increased and a higher percentage of later-borns than first-borns were produced. According to some theorists (Zajong7-1976), birth order effects the amount of adult attention the child receives, which in turn has an influence on student intelligence and academic performance; thus birth order could be accountable for some of the drop in scores that occurred during the 1960s and 1970s.

Teacher demographics

1. The supply of teachers in the United States has closely corresponded to a combination of two factors—the well-publicized demand for teachers during the 1950s as the baby boom moved through the schools, and the coming of college age to the baby boom, which resulted in increased numbers and percentages of college age youth entering and completing college.

2. Teacher supply and demand seems to respond well, although in a delayed fashion, to the general marketplace. Between 1975 and 1977 the number of new graduates qualified to teach decreased from about 243,000 to 190,200 in 1977, a decrease of 22 percent. (NCES, New Teachers in the Job Market, p. 3)

3. In 1976, 84 percent of the 243,000 1974-75 graduates qualified to teach applied for teaching jobs; 54 percent of all graduates or 132,200 received positions, either full-time or part-time. By 1978, the percentage of eligible new teachers seeking teaching positions decreased to 77 percent; 60 percent of all graduates, or 113,300 received full-time or part-time teaching positions. In 1978, 65 percent of those who sought teaching positions found them; in 1978, 77 percent of those who applied for a teaching position obtained one. (NCES, New Teachers, pp. 9-100). This compares favorably with other bachelor's degree recipients as a group in the labor market of 1978. NCES reports that newly qualified teachers are currently at least as successful in obtaining jobs as are persons in most other fields.

4. Equilibrium between demand for supply of newly qualified elementary school teachers is expected by the middle of the 1980s; a shortage is expected by the end of the decade. The supply of newly qualified secondary school
teachers is expected to continue to exceed demand throughout the 1980s. (Occupational Outlook Quarterly, Fall, 1980)

5. Opportunities within the teaching profession vary widely by field and by region of the country. According to the 1980 ASCUS Teacher Supply/Demand Report, there continues to be a great demand for teachers in the fields of mathematics, industrial arts, vocational, agriculture, and bilingual education, and to a somewhat lesser extent in special education and the physical sciences. Physical education, social sciences and health education were shown to be in the least demand. However, these vary by region, and a teacher's ability to be hired depends to a certain extent on his/her willingness to relocate to areas with teacher scarcity.

Problems that Confront Teacher Education:

One problem that has had an impact on schools of education during the past several Congresses has been the apparent interest of the Federal government in building 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. For the first 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 promoted 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. 84-482) repealed EPDA, federal policy further encouraged site-specific training through establishment of the Teacher Centers Program. By the end of 1976, 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) now moves this debate to a new level. It also presents schools of education with unique problems, because they have 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. "Overloaded curriculum."

A far more serious problem confronting schools of education is both the shortage and the quality of the talent pool of applicants. Imig (1981), in a recent speech, highlighted this problem:

"In teacher education we have been asked to do the impossible. With meager resources, a lack of institutional commitment and limited time, schools of education are asked to produce ever more capable young men and women to deal with an increasing array of school problems. Today the challenge is to improve the quality of a profession confronted by a host of problems. In all other professions there were efforts to improve salary levels before there were serious reform efforts designed to improve the quality of their practitioners; in education, schools of education are being asked to improve the quality of its graduates before we substantially increase remuneration for practicing teachers - and yet our expectations continue to grow.

Yet the evidence abounds that we have fallen short in attracting the best and most capable students into teacher education. Weaver (1981) has written much regarding the persistent and prolonged decline in the applicant pool of teacher education. SAT scores of 1980 high school seniors who planned to major in education were 48 points below the national average in math and 35 points below in the verbal component. He reported that college seniors in 1976 majoring in education ranked 14th of 16 college specialties on verbal measures and next to last on math scores. Recently students enrolled in education scored lowest of all college students on an examination of international literacy. What causes this decline is probably both a legacy of the collapse of the job market for teachers and the success of affirmative action programs. It also is attributable, as Cronin
(1981) has recently written, to the fact that the nation gets approximately what it pays for, which is the bottom one-third of the college-going population, seeking positions paying salaries in the bottom one-third of the economy. Other reasons include:

(1) Stress and burnout - stress has increased dramatically as schools have assumed greater responsibility for ameliorating social ills, while having less authority to carry them out; and,

(2) Adverse publicity - a three-week Newsweek series and the April issue of New Republic stressed burnout, oversupply, problems of discipline and violence and inadequately trained teachers as reasons for the failure of the American public school, thereby raising even more doubts regarding the efficacy of the public school.

Today we are on the threshold of a major teacher shortage brought on by: (a) declining enrollments in SCDEs; (b) an upturn in the birthrate which will increase from 14.7 percent (1976) to 17.1 percent (1985) as large numbers of young women enter their childbearing years; (c) the simultaneous retirement of scores of teachers who were hired in the late 1950s to accommodate the Post-World War II baby boom; and (d) changes in employment opportunities for women in other fields, compounded by the increasing number of female teachers who are heads of families (and, necessarily, must move out of teaching to secure sufficient salaries).

While there is some uncertainty about the potential impact of the reserve pool of trained but unplaced teachers on this shortage, the most recent Condition of Education projects that by 1985 the supply of new teachers will fall short of demand - with significant shortages of new graduates in the late 1980s. Whether the reserve pool will significantly alleviate this shortage is uncertain.

Another overlooked but related fact is that the age group from which teachers traditionally are drawn will decrease by 25 percent during the next decade. This will force SCDEs to compete with other programs within the university, the military and the job market for potential applicants, at a time when student preferences for teacher education have fallen significantly and are likely to continue to fall. (Less than 5 percent of last Fall's freshman class indicated a preference for teacher education, down almost 20 percent from a decade earlier.)

A number of black teacher educators have already noted the potential impact of this phenomenon on staffing patterns for urban schools, suggesting that the very existence of the black public school teacher is threatened - not for malicious reasons, but because capable young blacks are opting out of teacher
Compounding the shortage of the applicant pool is the likelihood that in an era of a total job surplus, attrition among practicing teachers is likely to grow from the current level of 6 to 8 percent to a much higher percentage.

Given the decline of fiscal and other public support for schools, and the rapidly accelerating need for teachers and other educational personnel, we need to give serious reconsideration to ways of attracting more and more capable persons into the profession. Mr. Chairman, we believe this merits the deep interest of this Congress and particularly of this Committee.

Recommendations

We recognize that this Committee does not have a specific legislative agenda on this issue. In a time of fiscal austerity, professional development and educational research never do well, and the re-emergence of Federalism and enactment of consolidation measures will compound the difficulties that confront schools of education. Budget reductions will further exacerbate this problem. The effort of this Congress to initiate new programs will necessarily be minimal. Nevertheless, because of the critical nature of the problems outlined above -- particularly, relative to the "talent pool" of prospective teachers -- we believe that this committee should exert leadership on the concerns discussed here. Consequently, we urge the members of this committee to:

A. Stimulate the expansion and enhancement of the "talent pool" of prospective teachers through a significant new merit-based fellowship/scholarship program to attract the most capable of students into teacher education;

B. Expand rather than eliminate the "forgiveness provisions" contained in the federal student loan programs for students in teacher education;

C. Assure that your colleagues on the Appropriations Committee assign priority to and commit resources to building capacity within schools, colleges and departments of education to meet the crises of shortage and quality (funding of the Weiss provisions (sec. 533) of the Education Amendments of 1980 (P.L. 96-374), would facilitate this recommendation);

D. Provide federal incentives and support for research, development, and dissemination in the area of teaching and learning, and for capacity building in fields identified as high national priorities through increased support for the National Institute of Education;
E. Stimulate both LEAs and SEAs to give serious attention to the need to build continuous professional development programs for teaching personnel (using successful Teacher Corps/Teacher Centers modules as they implement the block grant authorization);

F. Maintain policies consistent with those enunciated in the Department of Education Organization Act, having to do with Federal nonintervention in national accreditation matters and the strengthening of the National Advisory Committee on Accreditation and Institutional Eligibility to avoid proliferation of accreditation bodies or their intrusion into the affairs of institutions of higher education;

G. Encourage strengthened provisions in the National Center for Education Statistics authorization that call for NCES to undertake appropriate supply-demand surveys of educational personnel and other relevant studies; and finally, Mr. Chairman,

H. Develop new legislative incentives for foreign language development, educational technology, women's equity, etc., that will ultimately impact on schools, and that the concept of "front end" monies for schools of education become an integral part of such legislation. We firmly believe that if SCDEs are given the opportunity to "gear up" by retraining their faculty, redoing their curriculum, undertaking necessary research and devising new delivery systems, then the interests of the Congress can be better served in the implementation of these new thrusts.

We thank you for this opportunity.