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TEACHER TRAINING
1926-1928

By
BENJAMIN W. FRAZIER
SPECIALIST IN TEACHER TRAINING
BUREAU OF EDUCATION

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TEACHER TRAINING

By Benjamin W. Frazier

Specialist in Teacher Training, Bureau of Education

Contents.—Definition and scope of teacher training—Increased professionalization of teaching and of teacher training—Growth in number of teachers colleges, schools of education, and other training agencies—State control of teacher training—Financial support—The teacher-training staff—Increased supply of trained teachers in relation to the demand—The raising of State certification requirements—Selective measures applied to applicants for training—Revision and construction of the curriculum—The training school—Improvement of faculty instruction—Teacher placement—Training of teachers in service—Conclusion

Among the outstanding trends in teacher training during the biennium 1926-1928 may be noted some tendencies which have been growing cumulatively in force for about two decades. Some of these tendencies, as reported by responsible officials of the institutions which train teachers and by State departments of education, or which are disclosed by examination of research studies, reports, and other publications in the field, are the following:

1. Development of a clearer conception of the definition, scope, and objectives of teacher training.

2. Increased professionalization of teaching and of teacher training.

3. Growth in number of teachers colleges, and schools and colleges of education.

4. Increase in direct State control of teacher-training agencies and the consequent development of more unified and effective State teacher-training programs.

5. Increase in financial support of institutions and agencies which train teachers.

6. Raising of standards of qualifications for the staffs of the training institutions.

7. Increase in the number of trained teachers in relation to the number of teaching positions available.

8. Raising of State certification requirements.

10. Improvement of teacher-training curricula.
11. Development of training school facilities and offerings.
12. Improvement of instruction in the training institutions.
13. Development of more effective institutional facilities for the placement of teachers.
14. Enlargement and increased diversification of training-in-service programs.

**DEFINITION AND SCOPE OF TEACHER TRAINING**

What constitutes a trained teacher? The answer changes with each decade. In round numbers, 1,000,000 teachers at the present time are required to instruct something like 32,000,000 children and adults in the classrooms of this country. In a great variety of ways and to varying degrees of completeness these teachers have all been "trained" for their work. Among the States having 75 per cent or more of their public-school teachers with preparation equivalent to two years beyond secondary education are: Connecticut, Arizona, Massachusetts, California, New Jersey, Rhode Island, New York, Utah, Oregon, and perhaps a few others. About eight States have less than 25 per cent of their teachers with two years of college-grade training. These percentages are approximate only, as data are extremely difficult to secure. The typical State the country over probably has slightly less than 50 per cent of its teachers with two years of training above secondary education.

"Standards" of training also vary among different groups of teachers. Typically, a graduate of a 2-year normal school, or a teacher with equivalent training, with one or more years experience in teaching, will meet the standards for the elementary schools of the average American city at the present time. In the elementary schools of a few of the wealthier or more progressive cities and States, and in the accredited high schools, a bachelor's degree, including work in professional education courses, is considered the standard for an adequately trained teacher. This is a tentative minimum standard for all teachers often suggested by educators. In the colleges and universities, a trained teacher may possess varying amounts of academic or technical training ranging from one to three years of graduate work, but typically, neither experience in teaching nor training in professional education is required. In typical rural elementary schools a high-school graduate with about a year's additional work in education and academic subject matter is accepted as a trained teacher. In most colored elementary schools the requirements are still lower.

The nature of the cultural, technical, and professional subject matter, which constitute part of the equipment of teachers, like-
wise varies greatly among the many types of instructors. Teacher training includes cultural elements but its aim is not primarily cultural. Objection is sometimes made to the term "teacher training." The term "teacher education," however, is also inadequate. A teacher must possess not only scholarship; he must be able also to exercise the skills of a practitioner. Actual practice work with children for the development of teaching skills is a distinguishing element in the preparation of teachers. The training of teachers is conducted on varying levels; but the professional training ordinarily given a public-school teacher is not the equivalent of that commonly demanded for medicine or law. The term "professional education" should be the ideal one, but it does not apply to much of the work of the teacher-training high schools and of the county normal schools.

The general public often thinks of teacher training as referring to the work in professional education only. Skill in the use of an ample and well-selected body of subject matter is, perhaps, an even more important element in the training of a teacher. Ideally, a teacher should be at home in all the common fields of human knowledge. Preeminently, he should be in the finest sense a person of culture. The teacher trainer is interested, too, in the development of scores of marginal abilities and traits, such as those included under the loose terms "personality" or "character."

A marked tendency during recent years is to define teacher training in terms of its immediate objective, which is specific preparation for a very definite type of teaching, supervisory, or administrative service. Teacher training can not be well understood nor confidently undertaken apart from a thorough knowledge of the requirements of the specific positions to be filled. This is a scientific basis upon which to build a training program.

Teacher training, then, consists in the provision of opportunities for a prospective teacher to acquire the requisite body of knowledge, the professional attitudes, the teaching skills, and the capabilities for future growth, which are demanded by the specific requirements of the position to be filled.

INCREASED PROFESSIONALIZATION OF TEACHING AND OF TEACHER TRAINING

The increased professionalization of teaching and of teacher training is a noteworthy tendency of the past few years; it has been relatively a short time since almost anyone who wished to realize a little money out of a high-school education could secure a job in the schools. Since progress in teacher training is intimately associated with progress in public education as a whole, some tendencies
toward the professionalization of public-school teaching are of interest. Such teaching more and more partakes of the nature of the learned professions of medicine, law, and theology. The members of such recognized professions are licensed, or are otherwise differentiated from the lay by recognized authority. Teaching has been characterized during recent years by decidedly improved standards of certification. Again, professional workers enjoy certain advantages in tenure, and usually are able to accumulate enough to retire in some comfort, or are the beneficiaries of retirement or pension laws. The increase in tenure and retirement laws for teachers has been marked during the biennium.

Further, a professional organization usually insists that its members give reasonable observance to an established code of ethics. Codes of ethics for teachers are constantly formulated, and the general underlying principles in the best of these codes are well understood and reasonably well observed by most teachers.

Public recognition characterizes professional work; one indication of public recognition of workers is the amount the public is willing to pay for their services. The average teacher's salary has more than doubled during the past decade; the increase ranges from slightly over $600 to $1,300. Even when the decreased purchasing power of the dollar is considered, cultural and professional improvement are now more nearly within the means of the teacher. Again, well-established professional organizations among professional workers are almost universal. The enrollment in the National Education Association has increased from 10,104 in 1918 to 181,350 in 1928, and in State education associations from 200,000 in 1917 to more than 600,000 in 1927. Finally, adequate and distinctive professional training, specific in nature to meet the needs of specific positions, must be given workers in order that they may render the expert service which perhaps is the chief characteristic of a profession. Such professional training, the better teacher-training institutions now afford.

Probably no one factor in the upbuilding of truly professional work in the training institutions is more important than scientific study and research in teacher training and in related aspects of education. Many research agencies are contributing to the increasing body of knowledge available. One measure of the increase in research in teacher training during the past decade may be found in the number of master's and doctor's theses produced in this field. In 1917, W. S. Monroe reports one doctor's thesis in the field of teacher training; in 1927, 20 were listed for the single year. In 1917, 13 master's theses were produced; in 1927, 76. During the decade, a total of 76 doctor's theses and 386 master's theses were reported in the field of teacher training, or in closely related fields. Nearly half of
the total number of both kinds of theses reported during the decade were produced during the past two years—a remarkable contribution for such a limited period.

Comparatively little research in education is undertaken in the normal schools and teachers colleges in comparison with the amount of research carried on in the large colleges and schools of education in the universities. The reasons are fairly obvious. The offerings of the 2-year normal schools are of the lower collegiate level only. Instruction on graduate levels is offered in perhaps not over a half-dozen of the State teachers colleges. State funds for research in the newly established teachers colleges have been strictly limited, and neither adequate personnel nor material facilities for thoroughgoing research programs have been provided. Furthermore, the conception is still commonly held that teacher-training institutions have a specific training function which precludes the undertaking by these institutions of work that traditionally has been held to be the somewhat exclusive prerogative of the universities.

While several teachers colleges, which are financially or otherwise in a position to do so, are making appreciable progress in the field of research, a still larger number of institutions are neglecting abundant opportunities to carry through most profitable scientific or semiscientific studies of their own institutional problems. As a first step, institutional officials should establish adequate channels through which information concerning the functioning of their own institutions could be promptly secured. The teaching load of a few qualified staff members could be reduced, and such individuals put to work on institutional problems.

As the number and complexity of research productions increase, the gulf widens between the research worker in education and the practitioner in the public schools. Experienced teacher trainers who are also skilled interpreters of scientific findings are increasingly in demand. The average classroom teacher reads publications devoted to practical teaching devices rather than technical and scientific articles and books. Prospective teachers are now given more instruction in up-to-date institutions in the more easily applied principles and techniques of research applied to classroom activities.

The American Association of Teachers Colleges, after considerable preliminary work in the formulation of standards and in the inspection of teachers colleges, adopted in February, 1928, a list of accredited institutions, including 65 class A teachers colleges, 7 class A junior teachers colleges, and 3 class B junior colleges. Changes in standards are adopted from time to time, and the lists of institutions will be enlarged or otherwise changed from year to year in
keeping with the observance by the institutions of the standards adopted. The steady pressure exerted by the association on the teachers colleges and normal schools during recent years is undoubtedly one of the outstanding factors contributing to the development of teacher training as a professional activity.

Among other organizations which contribute directly to the general professional advancement of teacher training may be mentioned the National Society of College Teachers of Education, the Association of Departments of Education in State Universities and Land-Grant Colleges, the City Teacher-Training School Section of the National Education Association, and the National Association of Supervisors of Student Teaching. So closely related is teacher training to the whole field of professional education that almost every active professional organization of educators contributes in some way to the general upbuilding of professional teacher training.

GROWTH IN NUMBER OF TEACHERS COLLEGES, SCHOOLS OF EDUCATION, AND OTHER TRAINING AGENCIES

The outstanding trends in the growth of teacher-training institutions are the continued increase in the number of teachers colleges, the decrease in the number of State and county normal schools, and the general expansion of offerings by almost every type of training agency. Some of these tendencies may be noted below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Teachers colleges</th>
<th>State normal schools (including 3-year institutions)</th>
<th>Private normal schools</th>
<th>City normal schools</th>
<th>County normal schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918-20</td>
<td>46</td>
<td>137</td>
<td>60</td>
<td>33</td>
<td>58</td>
</tr>
<tr>
<td>1921-22</td>
<td>80</td>
<td>110</td>
<td>42</td>
<td>34</td>
<td>52</td>
</tr>
<tr>
<td>1923-24</td>
<td>88</td>
<td>106</td>
<td>67</td>
<td>29</td>
<td>90</td>
</tr>
<tr>
<td>1925-26</td>
<td>101</td>
<td>102</td>
<td>64</td>
<td>27</td>
<td>108</td>
</tr>
<tr>
<td>1927-28</td>
<td>137</td>
<td>69</td>
<td>50</td>
<td>28</td>
<td>46</td>
</tr>
</tbody>
</table>

The 36 institutions added to the list of teachers colleges in 1927-28 are distributed over 15 States. Most of the 4-year institutions were developed from 2 and 3 year normal schools by the addition of a year or two of work. While the 2-year curriculum is usually retained in the 4-year organization of courses, the number of 2-year normal schools is constantly decreasing. There is a prevailing belief that four years' work, including professional training, should constitute the minimum preparation for elementary teachers. In 1920 two-fifths of all students enrolled in teacher-training institutions were enrolled in teachers colleges. In 1928 three-fourths of all students in teacher-
training institutions, as a result of the increase in number of teachers colleges, were enrolled in the 4-year teachers colleges.

The number of institutions which train teachers as a secondary or incidental function can not be definitely stated; by far the larger number of approximately 975 colleges, junior colleges, and universities contribute to the training of teachers, supervisors, and administrators for American schools. Many of the small liberal arts colleges and junior colleges, having discovered that as many as half or more of their graduates enter teaching, are setting up training programs to meet State certification requirements. Most of the State universities, land-grant colleges, and women's colleges, and many of the large private higher institutions of learning have well-developed departments, schools, or colleges of education; and it is in the graduate schools of such institutions that most educational leaders receive their advanced training. Many of the State teachers colleges are developing regular training programs for secondary-school teachers, as in New Jersey. Graduate work is also undertaken by the teachers colleges as increased State support is provided. These lines of development have in some States reawakened the old question of the limits to be set to expansion among State-supported higher institutions of learning offering similar work.

A continual decrease in the amount of subcollegiate work offered by the training institutions is reported. Such work is tolerated in progressive schools chiefly to serve a diminishing group of ill-trained but mature teachers. The organization of the college work is now kept distinct from that of the work of secondary grade. Considerable demand for the continuance of this type of training still comes from backward sections not yet able or ready to pay the salaries demanded by normal-school graduates.

A lively discussion has been carried on during the biennium concerning the function and probable future of the teacher-training high school and of the county normal school. A few States, such as Michigan and Wisconsin, have county normal schools. About half the States of the Union have established, or recognized in State law, teacher-training courses or departments in high schools. Several States with excellent standard normal schools or teachers colleges maintain such training units. Courses in education are offered in more than 3,000 high schools located in almost every State. The teacher-training objective, however, is not commonly foremost in such schools.

The demand for the type of training which is offered by the county or local high-school teacher-training unit arises largely through the demand for teachers at very low salaries in rural and semirural sections. A large proportion of the teachers in the colored schools also
receive training of secondary grade only. There are, undoubtedly, needs for teachers in some localities which are not met by training institutions which offer work only on higher professional levels. Teacher-college graduates will not accept the salaries and living conditions in many rural sections.

About half the State superintendents or State officials concerned are more or less actively opposed to the county or high-school training unit. It is indorsed without qualification by very few State departments. The remainder accept the unit on its merits as an expedient that they would like to think is temporary. The number of States which will accept high-school graduation as sufficient scholastic preparation for teaching has decreased approximately 15 per cent during the past five years. A marked decrease, as in Ohio, in the number of county teacher-training units is reported over the biennium. The tendency is against a general increase in numbers of teacher-training high schools and county normals.

Suitable types of regular normal school or teachers college training may be adapted to meet the needs of the rural or other communities that actually suffer from a scarcity of teachers, but temporary concessions to necessity should not obscure the ultimate goal of full professional training of collegiate grade for every teacher.

Enrollment of teachers in summer schools during the biennium reached the highest point in the history of the summer school movement. An estimate has been made that at least one teacher in four each year attends sessions of this convenient training agency. The summer terms range from 5 to 12 weeks in length. A steady increase is reported in the number of institutions with the longer terms, and of institutions which make the summer term an integral part of the regular session. Practically all the teachers colleges and the majority of the normal schools offer work during summer sessions. An increasing number of technical schools, universities, and liberal arts colleges make special provisions during the summer months for teachers by offering courses in education and general subject matter. Well-known educators are in constant demand for such work. A dozen or more of the universities and other institutions in the leading countries of Europe and South America now definitely bid for the attendance of American teachers; examples are Oxford University, The Sorbonne, University of Buenos Aires, University of Brazil, and the University of Mexico. The number of such institutions is steadily increasing.

Growth in the number of schools, colleges, and equivalent major divisions of education has been an outstanding tendency during the past decade. More than three-fourths of the State universities now have schools or colleges of education; approximately half of these schools or colleges have been organized within the past decade. Some
of the advantages claimed for this type of organization are: The teacher-training policies and programs are determined by the teacher trainers themselves, and not primarily by specialists in subject-matter fields; the professional school has exclusive control of the necessary professional advisement of students; the teacher-training curricula are determined by those who should be in a position to decide what knowledge, skills, and attitudes a teacher should have; and there is a greater possibility of proper teacher placement and follow-up work. After the organization of a school or college of education, however, a problem still remains. Typically five-sixths to seven-eighths of a teacher's preparation in college or university is in strictly academic or technical subject-matter fields other than education, and therefore most of the training of the prospective teacher is usually done by instructors outside the school or college of education. Hence the administrative problem arises as to the best ways and means of organizing a genuine professional program of training extending over four years of work.

A rather difficult problem is presented in many universities and colleges in which teacher training is offered in a number of separated departments. Many of the staff members who teach academic or technical subject matter quite naturally have little interest in the field of professional education or of teacher training and often have had the additional academic distrust of a new subject-matter field. On the other hand, the claims of some of the earlier followers of the new science of education were characterized more by the exuberance of adolescence than by the humility of experience. All this would have led to more or less salutary exchanges of opinion and consequent benefit to all concerned, had not the matter been confused by the bane of college administration—overdepartmentalization. The free ventilation of the minds of faculty members by the cross currents of thought and attitude prevailing in an institution of higher learning has been shut off too often by high administrative walls. The relative amount of financial support to be accorded the several departments of the institution, the development of curricula, the determination of lines of administrative authority, and agreement on the major division in which trainees shall register, become unduly troublesome problems.

Institutional authorities who have been most successful in establishing harmonious and fruitful relationships among separated departments engaged in teacher training have first of all assumed definite responsibility for such relationships. It is true that superior personalities among staff members go far toward compensating for deficiencies of institutional organization. With some fine souls, almost any type of organization seems workable. But wise administrators, with modern personnel methods in mind, are learning to
protect their staff members from undue hindrances in the progress of their work and from strain in their personal and professional relationships.

STATE CONTROL OF TEACHER TRAINING

A growing tendency is noted for the State departments of education to assume a greater measure of direct control over the State-supported teacher-training institutions, and this tendency is indirectly affecting the teacher-training programs of private institutions. The State is, of course, the ultimate authority over all State-supported public education, although so much authority has been delegated in the past to local units that not a few teacher-training and other higher institutions have operated in "splendid isolation and majesty."

The reasons are apparent for the assumption by many of the State departments of measures of authority commensurate with their responsibility. The task of supplying the increasing number of new teachers required yearly in the public schools has become extremely heavy; standards for teachers' qualifications have become higher; the character of training agencies has become more diverse; conflicts instead of unity of effort have often arisen among training institutions; the administration of certification regulations has become more difficult; and the amount of State funds allotted the several institutions has become much greater, necessitating more supervision over expenditures of such funds.

In 1900 only one State exercised direct supervision by professional staff officers of teacher training. In 1926, Alabama, Connecticut, Indiana, Massachusetts, New York, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia had regular divisions or bureaus of teacher training. Teacher-training work in high schools is commonly supervised in some degree by the State department. Direct State control of the certification of teachers had just begun in 1900; now three-fourths of the States exercise such function, and all the remainder of the States offer some kind of oversight or semiprofessional supervision over the certification of teachers.

Some of the most common functions now undertaken by the State departments which affect teacher training are: (1) The certification of teachers; (2) the promotion or direction of conferences and group meetings of teacher trainers; (3) direction or supervision of extension, reading circle, and other forms of in-service training; (4) accreditation of teachers from other States; (5) inspection of teacher-training institutions; (6) placement of teachers; (7) advice in the selection of the teacher-training staff, including the president or principal of the institution; and (8) the conduct of a
large variety of miscellaneous activities, such as informal advisory services to the institution.

Supervision of instruction by the State, and by counties, cities, and other local units, is really a form of teacher training; the growth of such work is one of the major tendencies of the century in education.

In 1926, 10 States had established the position of State director of teacher training. This important office serves to coordinate the teacher-training activities of the department of education and usually to afford some degree of professional guidance and service to the training institutions. A continued growth in the number of such offices is to be expected; only with the development of highly trained professional staffs is much genuine assistance in the professional activities of the teacher-training institutions to be expected of the State departments. Without such staffs only general clerical, inspectorial, or statistical work is possible.

Constant opportunity is afforded the State departments of education to contribute materially to the professional teacher-training programs of the country. There is a constant demand for the scientific upbuilding of certification requirements. There must be some degree of uniformity within the several States in the entrance and graduation requirements for curricula leading to specific teaching certificates. Minimum requirements must be established for such subjects as music, art, physical education, and so on.

The definite limits to State department activity have not so far been established. Such limits are at present largely conditioned by the financial support accorded the department by the State, and the consequent size and professional qualifications of the staff. The qualifications of the typical State director of teacher training include graduate training equivalent to that required for the M.A. degree, and six or eight years practical experience in teaching or other public school work.

The development by the State department of professional leadership, as well as of administrative authority, is a marked tendency of recent years. The development of such leadership has become most desirable, for the job of raising standards in teacher training and of coordinating such activities in a State is tedious and complex. Professional knowledge and some courage are demanded to unify the diverse teacher-training programs of strong and well-entrenched institutions of higher learning, while small and weak teacher-training institutions may often profit by professional assistance.

The relationships of teacher-training agencies to the Federal Government steadily become more significant and fruitful. The Bureau of Education, the Federal Board for Vocational Education,
and other agencies of the Federal Government have rapidly enlarged their programs of service to the educational public. In the Bureau of Education, a variety of professional services is offered in addition to the usual service of collecting and disseminating statistics and other data on education. A specialist in teacher training was appointed during the biennium. A survey of the land-grant colleges was begun. A part of this survey includes a detailed investigation of vocational and other forms of teacher training in 69 institutions located in every State in the Union.

FINANCIAL SUPPORT

The property valuation of normal schools and teachers colleges has increased more than one-third during the past decade. Ten years ago there were about half a dozen teachers colleges with valuations of a million dollars or more; now there are more than a score of such institutions. Eight or nine teachers colleges have valuations of from two to three million dollars each. In 10 years, approximately 50 schools show incomes increased by 200 per cent or more; at least two show an increase of from 1,000 to 1,400 per cent. The receipts from the States for maintenance and capital outlay have likewise greatly increased. Examples of the most liberally supported institutions are the State Normal College at Ypsilanti, Mich., which reports for 1928-29 a total of $887,855 from the State for maintenance, $250,000 for permanent improvements, and some additional income from other than State funds; Western State Teachers College at Kalamazoo, Mich., reports $867,000 receipts for maintenance; and State Teachers College, Cedar Falls, Iowa, reports $633,500 receipts from the State for maintenance, a moderate sum for permanent improvements, and $200,000 from sources other than State funds.

Teachers colleges and normal schools in 1928 reported $22,171,374 in endowments. Gifts and bequests in 1926 amounted to $8,728,950—nearly five times the amount in 1924. Later data are not available.

Recent efforts have been made to calculate expenditures on a unit basis with some interesting results. The cost of giving a teachers college student nine months training, in terms of current expense, is reported to be over six times as great in one institution as in another in a different State. The size of the student body determines much of this difference. Current expenditures per student in teachers colleges are typically nearly twice as great in institutions with less than 400 enrollment as in schools of more than 1,700 enrollment. The approximate median annual cost per pupil to the State in terms of current expense is about $300 in normal schools, and $270 in the teachers colleges.
The expenses of students in teachers colleges and normal schools are lower than in any other type of higher educational institution. According to a study made in the Bureau of Education, minimum expenses in the teachers colleges average $335 per year, covering tuition, fees, board, room, and incidentals. More than one-fourth of the men and one-sixth of the women work at outside occupations during term time and earn half a million dollars annually. Eleven per cent of the men and 4 per cent of the women are entirely self-supporting. The percentage of students who work at outside occupations is much less in teachers colleges than in other types of higher institutions; many, however, earn additional money by teaching at intervals before graduation.

THE TEACHER-TRAINING STAFF

In the teachers colleges and normal schools a distinct effort is made to raise standards of training for staff members. In California, for instance, three-fourths of the teachers college faculty must possess master's degrees or higher by 1930. The departments, schools, and colleges of education of the universities and other higher institutions are now qualitatively as well staffed, except for training supervisors, as the academic departments. The practice a few years ago, when trained men in education were hard to secure, was to pick instructors from almost any related subject-matter field, such as philosophy and psychology, for work in the new field of "education." Abundant trained personnel is now available.

Much room for improvement still exists in the training of the staff of the normal schools and teachers colleges. The typical teacher-training institution has less than 10 per cent of its faculty with the doctor's degree, and less than half of the typical staff have the master's or doctor's degree. In teaching experience the showing is more favorable; training supervisors, for instance, average nearly 13 years' experience in public-school work. The low scholastic standard, however, for training supervisors and demonstration teachers, one-fourth of whom do not hold the bachelor's degree, has been a cause for constant dissatisfaction. If the training school is to be the heart of the institution, the staff should at least equal the other members of the faculty in training, salary, and faculty rank.

The American Association of Teachers Colleges sets as a minimum standard of training for members of the faculty who give instruction in the college departments at least a year of graduate study in their respective fields, with recommendations for even higher standards; while the immediate requirement for teachers in the training school is the bachelor's degree, with eventual training equal to that of teachers in the regular college departments.
The standards of the American Association of Teachers Colleges are not fixed, but are constantly rising. As a result, the steady pressure exerted upon the training institutions to raise the amount of training of their faculties has evoked much discussion. Most objections offered to the increasing quantitative requirements for training are based on the fact that it is difficult to secure really superior teachers who possess the doctor’s degree for the salaries most training institutions can afford to pay. No one can intelligently question the value to a college instructor of ample scholarship of the right sort.

The objections raised to the nature of the training which the teachers college faculty member secures in the universities should receive a sympathetic hearing by the large graduate schools and colleges. The average staff member in the teachers college is given little or no opportunity to use the elaborate research techniques which he so laboriously acquired in his graduate training. He is called upon in the teachers college to instruct young people in superior classroom teaching, but he is given no training in such work in the university, nor is he given any particular encouragement to acquire the art for himself. He should know a great deal about elementary education, but the supply of doctors of philosophy adequately equipped with a knowledge of this field is entirely insufficient for the needs of the training institutions.

Fortunately, at least two or three of the larger universities which train teachers have made definite provisions for many of these specific needs of future instructors in teachers colleges. There is good reason to believe that the type of instructors that is in greatest demand in training institutions will be supplied in more ample measure in the near future.

The teaching load of instructors has always been excessive in training institutions, but it has been steadily reduced until now the average in accredited institutions is around 16 clock hours per week of classroom work. This average is slowly diminishing.

Salaries for professors in the teachers colleges and normal schools which have a system of academic ranking have increased during the biennium about 11 per cent; the salaries of faculty members with less than the rank of professor, 10 per cent. The increase in the salaries of all teachers in the smaller institutions in which a system of academic ranking is not usually established was 7 per cent. The increase in the salaries of training supervisors in both types of institutions was only 4 per cent in the two years. According to statistics collected by the Bureau of Education at the close of the decade the median salary of professors on the basis of nine months’ service is $3,000, to which should be added $450 for summer session work. The median salary of instructors with less than the rank of pro-
The professor is $2,200, or $2,600 including summer session work. In institutions with no system of academic ranking the median for all teachers is $2,400, or $2,780 including summer school work. The median salary of training supervisors is $1,875 for nine months, and $2,380 including summer school work. The median salary of the president or principal is $6,000. As these data include colored schools, normal schools, and teachers colleges, a wide range in amounts of salaries exists among the institutions considered. For example, the salaries, including perquisites, of the presidents of teacher-training institutions, range from $2,700 to $10,000 or more.

INCREASED SUPPLY OF TRAINED TEACHERS IN RELATION TO THE DEMAND

The existing supply of professionally trained teachers, conceived in terms of genuine social needs, is totally inadequate. When considered in relation to existing certification requirements, and in relation to the minimum requirements in training demanded for employment, there is an apparent quantitative oversupply of some types of teachers at the close of the decade in many sections of the country. An oversupply of elementary teachers is reported, among other sections, in portions of New England, as in Massachusetts, and in the Middle Atlantic States, as in New York.

The number of students enrolled in all types of institutions which train teachers is more than half a million. This is more than 400 per cent greater than the number undergoing training two decades ago. During the same period, the number of teaching positions has increased by approximately 35 per cent. During the biennium, there was an increase of enrollments in perhaps two out of three teachers colleges and normal schools. The decreases reported in the enrollments of a number of teacher-training institutions during the biennium are significant. Some institutions have forestalled such decreases by making careful studies of local and State needs for beginning teachers, and of redirecting institutional training programs accordingly. Such local studies often disclose actual shortages of trained teachers for certain subjects.

The system of distribution throughout the country is rather faulty. Despite the reputation of teachers as birds of passage, there is now demand in some quarters for means of increasing the mobility of the teaching population. At present four-fifths of the graduates of a typical teachers' college or normal school obtain their first positions within 150 miles of the institution.

Unless other factors operate, the usual result of an oversupply of workers in most occupations is a lowering of wages or salaries.
Educational leaders are hopeful that the prevailing salary schedules for teachers may be at least maintained at the present levels, and perhaps increased, as a result of public appreciation of the services of teachers with superior qualifications. Hence educational leaders in many States are advancing the standards of qualifications of teachers by such means as raising State certification requirements, lengthening the training period, and better selection of trainees. These movements necessitate scientific adjustment of salaries and construction of salary schedules which adequately compensate teachers who have met the requirements of improved standards. Many progressive city school systems are now making such adjustments. In the rural schools, which usually suffer from an undersupply of well-trained teachers, such adjustments have been hastened by the application in several States of improved equalization programs in the distribution of State school funds.

The complex problems involved in a consideration of teacher supply and demand are of major importance to teacher-training institutions, to State departments, to employers of teachers, and to the teachers themselves. Among the States which report progress in the investigation of the difficult problems involved are Arkansas, California, Illinois, New York, Ohio, and Pennsylvania. The need is urgent for the establishment of more adequate basic records of the number of trained teachers of different types and qualifications, and for the initiation of intensive research based upon such records.

RAISING OF STATE REQUIREMENTS FOR CERTIFICATION

Raising of certification requirements among the States is one of the outstanding tendencies of the biennium. A movement toward the centralization of the power of certification directly into the hands of the State, instead of allowing such power to remain in the hands of local districts, counties, and cities, has been proceeding many years. Thirty years ago only three States issued and controlled all teachers' certificates. In 1926, 36 State departments exercised such powers. Certification on the basis of examination continues to decrease, while certification on the basis of institutional training continues to increase. At present, all States grant one or more certificates primarily on the basis of professional training.

Little uniformity exists among the States as to certification requirements. Such requirements are determined often by local necessities and traditions. Many of the States give little or no recognition to certificates granted outside their boundaries.

Nearly all the States, in one way or another, are raising standards by enforcing higher minimum scholarship requirements, usually
extending the application of such requirements over a period of years. Low-grade certificates, such as those granted on examination or as temporary credentials, are dispensed with as the supply of trained teachers is increased. Course requirements for life certificates have been raised from two to three or four years in several States. There is a tendency in a few localities to abandon altogether the life certificate. Among many other States raising standards for the higher-level certificates may be mentioned Michigan, New York, New Jersey, California, and Colorado.

The raising of certification requirements results in a much larger job for the several types of training agencies; in Pennsylvania, for example, of more than 8,000 teachers taking summer courses in the 24 colleges and universities offering accredited work, 80 per cent during the past year were completing requirements for converting their existing teaching certificates into more advanced credentials.

The good effects of the raising of certification requirements may be illustrated in almost every State. In Virginia, for instance, the number of teachers who are normal-school and college graduates has doubled in the past five years. The advancement of certification requirements was one important factor in this raising of the level of teacher preparation.

In the formulation of salary schedules teaching experience is often given more weight than training. Certification requirements, however, more often raise standards of training than of experience. The salaries paid teachers eventually determine the amount of training which it is economically feasible for teachers to acquire. Many State departments, however, have not taken full advantage of present possibilities for raising standards by means of increased certification requirements. The States that are the last to raise standards may be among the first to witness a lowering of teachers' salaries.

The requirements for professional work in education subjects continue to rise; 16 to 20 semester hours in professional education is the typical requirement for graduates of colleges who plan to teach in high schools. There is, however, a very wide range of requirements in this respect among the several States.

Not the least important among tendencies in certification is the increasing practice of granting certificates for special types of teaching positions. Among these are the several academic subjects, vocational subjects such as agriculture and home economics, nonacademic subjects such as music and art, and special differentiated grade positions such as primary, intermediate, and junior high school work. In almost half the States some kinds of special certificates for principals, supervisors, or superintendents are provided.
SELECTIVE MEASURES APPLIED TO APPLICANTS FOR TRAINING

By far the greater number of officials and instructors of the teacher-training institutions desire more effective selective measures applied to the increasing number of applicants for training. Teacher training is definitely vocationalized; its aim is not that of the cultural college; and teaching requires and deserves better personnel than many other vocations. The quantity of human material now available affords a propitious opportunity to insist upon better quality. Consequently, a variety of selective measures has been employed with varying degrees of effectiveness. A general strengthening of formal admission requirements by the institutions has been a desirable first step. The most common measures thereafter adopted are:

1. The use of intelligence and other psychological tests. More than one-third of the teachers colleges and normal schools now use, before or after admission, intelligence tests such as those devised by Otis, Terman, Thurstone, and Thorndike. It is recognized that the correlation between abstract intelligence and success in teaching is not very high, but extremely low intelligence should, as a rule, mean elimination of the deficient applicant.

2. The recommendation of the applicant's former high-school principal is required in a substantial number of institutions. This method is limited in usefulness, if such recommendation does not contain definite information concerning specific traits of the applicant.

3. Certificates of health are required in about half the institutions. Once largely a formality, the health examination has become a valuable means, not only of keeping out students of low vitality, poor health habits, or those handicapped by disease, but it also affords an important guide for remedial measures to be undertaken later by the institution.

4. More than a dozen teacher-training institutions require a superior scholarship record in high school before admission to the freshman class. A certain percentage only of the high-school graduating class, such as the upper 50 per cent, are eligible for admission to these institutions.

After admission to the institution the selective process is continuous. Nearly half of the teachers colleges at the end of the first term or semester directly or indirectly eliminate varying proportions of the unfit, largely on account of poor scholarship. A minimum number of "quality points," indicating satisfactory scholastic marks, are occasionally required for graduation. Students in about a dozen institutions are not admitted to practice teaching who have not attained a minimum scholastic average. Lack of conformity to com-
mon social or ethical standards and voluntary withdrawals account for some eliminations.

No selective measures have been discovered that alone are satisfactory. Scientific study of the whole problem is urgently needed. No scientific method has been discovered by which to measure accurately most of the human traits which have a direct bearing on success in teaching. With the very inadequate means at hand, an extremely coarse sieve is provided, but a rapidly growing use of the means we have, or of better means to be devised, may be confidently expected in the future.

The consensus of opinion is that the best predictive measures of future teaching success are intelligence tests, high-school scholarship marks, and marks made in the training institution. But the groups of traits so measured are composites of only a limited number of abstract intellectual traits. A very superior personality or well-balanced emotional characteristics may often compensate for moderate deficiencies in scholarship. Very few applicants for training, if any, should be accepted whose mental, physical, or emotional deficiencies are decidedly greater than those typical of the general population of the country.

The increasing urbanization of the general population is leading to certain shifts in the composition of the student body in the training institutions. Typically, the teacher is country reared, but it is noticeable at the close of the biennium that the proportion of trainees of urban origin is greater than of rural origin in several States, such as Michigan, Pennsylvania, and Massachusetts. The trainees in municipal normal schools and teachers colleges are, of course, usually local city students. In the large cities, a considerable number of teachers are of foreign-born parentage; in New York City, for example, over half the students preparing to teach in the elementary schools have one or both parents foreign born.

The number of men who are preparing to teach is slowly increasing. About one teacher in five is a man. About one in seven was the proportion in 1920. The number of men had been decreasing steadily for a half century prior to 1920; 50 years ago approximately three-sevenths of the teachers were men. Most men are in public-school administrative work, in college teaching, and in high-school work, especially in certain vocational subjects. Very few men are in elementary school teaching; the proportion is largest in the rural schools of the South.

There has been much discussion during the biennium of the possibilities and methods of both educational and professional guidance. Effective programs in these fields, however, must be based upon more thoroughgoing research than has yet been made, if these move-
ments are to eventuate in more than expressions of pious hopes. A detailed knowledge of the fluctuating demands for teachers trained for specific positions and of the needs of teachers in the field, a thorough and detailed analysis of the abilities of the student, more adequate support of institutional placement agencies, and an intensive and continuous education of employers of teachers in the selection of teachers trained for specific jobs, are all highly desirable as elements of thoroughgoing guidance programs for prospective teachers. The responsibility in the majority of institutions for the selection of teaching as a vocation, or of the field of specialization in education, is placed upon the student; chance influences too often determine his choice. There is a sufficiently large number of failures and near failures among young teachers to justify much more careful guidance programs. The prevailing method, that of post-graduation tryout, is antiquated and extremely wasteful of human effort and possibilities.

REVISION AND CONSTRUCTION OF THE CURRICULUM

Curricula construction and revision are bringing about one of the most noteworthy advances of recent years in teacher training. Established textbooks, traditional offerings, and the pronouncements of subject-matter specialists are running the fire of critical inspection and evaluation. Older methods of curriculum construction are being displaced in part by a newer and more scientific method of procedure, and many constructive achievements are noted in the formulation of training curricula.

A disposition prevails in the most fruitful curriculum revision programs to pool the activities and findings of many contributing agencies. In the first place, an expert curriculum builder plans the program of revision. The entire teaching force is usually organized into a working body. Numerous committees select, evaluate, and organize curriculum materials. Often officials of several institutions cooperate in state-wide curriculum revision programs, as in Oklahoma, Pennsylvania, and West Virginia. The educational scientist is called upon to select and apply many of the techniques of the study. For instance, he may point out the necessity for determining the personal traits, the development of which is essential to a teacher, and he may analyze the specific teaching and managerial activities undertaken in the classroom. An illustration of the work of the educational scientist is found in the recently completed Commonwealth Study. The philosopher and the educational sociologist outline the broader considerations governing the job of teacher training as a whole. The subject-matter specialists assist in the selection and organization of curriculum materials. The educational psy-
chologist determines the most effective ways of modifying the mental and emotional behavior of the prospective teacher and of the children whom the teacher will later instruct. The school administrator decides upon the relative amount of financial support to be given the teaching of each curriculum element. Finally, the expert curriculum builder brings together and coordinates the activities of all the contributing agencies engaged in the work of curriculum revision.

Remarkable growth continues in quantity, and corresponding improvement is maintained in quality, of professional education subject matter. Between one-fifth and one-third of the courses offered in teachers colleges are in the field of education. In the 4-year teacher-training curricula of the colleges and universities one-eighth to one-sixth of each curriculum, on an average, is in the field of professional education. This proportion varies greatly among the higher institutions which are governed largely by the certification requirements of the several State departments of education. In the early part of the century, the teachers of "education" had little to teach that was not to be found in older subjects or in the experience of practitioners. Now the difficulty is to choose from an embarrassment of riches. It is very difficult to organize and professionalize properly what is chosen. Many topics taught in education courses may be quite academic in nature, and worthless as professional material. Excessive duplication among courses is still common. Terminology is confused. And the failure of many courses in education, as taught, to change very materially the skills, emotionalized attitudes, or possibilities of growth of the prospective teacher is a constant challenge to the conscientious teacher of professional education.

Increasing specialization by workers in the broadening field of education has led to the differentiation of curricula in nearly all types of teacher-training institutions. A common recommendation of educationists is differentiation of offerings into primary, intermediate, junior high school, and rural school work. At present, the teachers college curricula leading to special-type diplomas or degrees are, in order of frequency: Home economics, 2-year normal work, elementary teaching, intermediate teaching, music, mechanical arts, and commercial education. Many other curricula are offered, such as those for junior high school, kindergarten-primary, rural school, and other types of work. In the State universities and in the larger private institutions, there are almost as many teacher-training curricula as there are majors in subject-matter fields; approximately 40, for instance, were offered near the close of the biennium at the University of Minnesota.

Rural school leaders have often asserted that the many special needs of rural teachers are not adequately provided for in general teacher-training curricula. Many teacher-training institutions are
now making provision for special courses, differentiated curricula, or special departments designed to care for the training of prospective rural teachers. In Connecticut, some training in the rural school aspects of education is required of every student in the normal schools. Not more than one teacher in eight, however, the country over, is definitely preparing for rural school teaching.

The best results are secured in the preparation of rural school teachers in fully organized rural school departments, which are found in their most complete development in 12 or 15 institutions. Adequate differentiation of offerings and activities in such departments is characterized by rural school laboratory or practice work, distinct groups of trainees, differentiated curricula, extension and follow-up work for graduates and ex-students, a staff trained for rural school teacher preparation, and specific and adequate financial support. Some objection has arisen to the development of special rural school departments. The arguments are that fundamentally most of the elements in the rural school curriculum are common to other curricula; that rural school curricula are too meager; and that there is little point in this age of rapid interchange of population to further set off the rural group from the urban one. Probably the matter of increased costs for separate rural education departments inspires some of these objections. It must be admitted that in a locality where existing curricula are inadequate to provide for the teacher needs of the rural population, there is certainly a direct responsibility not met by the training institution. This is a responsibility to be shared, however, by States or localities which do not offer sufficient inducements in salaries or living conditions to make it worth while for teachers to prepare for rural school work.

The names of the degrees conferred by the institutions give little indication of the nature of the curricula offered. In the teachers colleges the B. A. degree is still most common. It is granted in two-fifths or more of such institutions. Other degrees conferred include the B. S., B. S. in Education, A. B. in Education, Bachelor in Education, and others. Comparatively few State teachers colleges confer graduate degrees.

A majority of the teachers colleges still use the plan of offering majors or minors. There is a growing tendency in many of the colleges and universities which train teachers to dispense with these terms in connection with the offerings in teacher training; neither the term "major" nor "minor" denotes very well the program of professional studies and activities undertaken.

 Entirely too little agreement exists among State teachers colleges as to what courses should be required, or as to how many should be required. In education, for instance, slightly more than half the
courses offered in the several curricula, on the average, are prescribed. Slightly less than one-third are directed electives and about one-fifth are free electives. The required subjects in education in half or more of the teachers colleges are: Observation or practice teaching, principles of teaching (or of education), educational psychology, special methods, history of education, introduction to teaching (or to education), and educational measurements. Two courses only, practice teaching and educational psychology, are uniformly required in the teachers colleges. In the 2-year normal schools, the number of prescribed subjects, both in education and in academic subject matter, is much greater than in the 4-year institutions. In the colleges and universities the required undergraduate subjects in education correspond roughly to those in the teachers colleges; emphasis, in the colleges and universities, is put more on courses in education bearing on high-school teaching, and not so many courses in education are required for graduation.

The content and organization of the subject matter in the several professional courses, as taught in the better schools, are subject to constant change as research advances and as a better understanding is attained of the needs of teachers. In psychology, for instance, there is a decided tendency to cut down on the strictly technical phases of the subject. The value of many topics in general psychology to a busy teacher is often questioned. More actual observation and study are now made of the mental and emotional reactions of children. The laws of learning applied to particular subjects are stressed. Emphasis is put on such topics as behavior, tests of personality, and mental hygiene. Thorndike has emphasized additional possibilities in adult learning, and Charters and Horne, among others, have suggested improved techniques in character education.

Introduction to teaching or to education is comparatively a new study but it is a popular one. A number of the best teachers offer some regular observation work with children in connection with the course. The aim of the course is not yet sufficiently clear in the minds of many instructors, but, nevertheless, educators usually agree as to the value of the work.

In the special methods courses, instructors are getting away from the earlier textbook presentations of simple teaching devices. Without practice in the use of such devices the point of diminishing returns in their presentation is soon reached. The best teachers of special methods are now endeavoring to take hold of subject matter in a fundamental way and to instruct and drill the prospective teacher in its proper selection and presentation to children. This method is a safe rock to anchor to; less fundamental methods of teaching shift with the tides.
Educational measurements, under various titles, are usually offered as a two or three semester hour course. In some institutions the subject matter in this field is taught as a part of educational psychology. Educational measurements is a rapidly growing field; more than 550 educational and mental tests were available in commercial quantities at the close of the biennium. The emphasis is now on diagnostic testing. Some attention is given to informal test construction. Very simple statistical procedures only are presented. The chief emphasis is on tests of nonintellectual traits, such as attitudes, character, and emotions. Analytical measures, rather than general blanket measures, are now applied to intellectual traits.

Principles of education continue to draw, with constantly shifting emphasis, from philosophy, sociology, psychology, methods, practical experience, and common sense. The realization is growing that "principles" in education, as in other fields, are relative. They are largely dependent for their validity, in a rapidly changing age, upon the stage of advancement of educational science and philosophy.

History of education, while still required in many teachers colleges, occupies a less and less important place in the training program. The tendency now among progressive curriculum builders is to leave the subject out entirely in the 2-year curriculum and to require it for one term or semester in the third or fourth year of the 4-year curriculum.

The professionalization of subject matter continues to afford a fruitful topic of discussion among many leaders in teacher training. The normal schools and teachers colleges, as a whole, are inclined to emphasize the teaching of professional education. The liberal arts institutions and the technical schools which train teachers are more inclined to trust in the efficacy of academic or technical subject-matter offerings. The proponents of the idea of professionalized subject matter busy themselves with the idea of preventing a lopsided development of teacher training in either professional education or in traditional subject-matter offerings.

While the concept of professionalized subject matter has not yet been reduced to a very workable form, it represents undoubtedly the most valuable attempt made so far to reconcile some very troublesome differences of opinion in curriculum construction. In some fashion or other, the concept affects the organization and practice of teacher training in most of our progressive institutions. The most promising growth in the development of the idea is to be found in progressive institutions with professionally trained staff members who are given abundant opportunity to participate in the teaching of children in the laboratory school, and to experiment in subject-matter
presentation. While many excellent instructors admit their inability to define professionalized subject matter, nevertheless, as a result of thoughtful experimentation and fruitful experience in the teaching of children, such instructors give special treatment to academic or technical subject matter that differentiates these materials rather markedly from the traditional courses in such fields. The best instructors afford prospective teachers new views of familiar material. Larger possibilities are revealed for the use of such material in the public schools, and the methodology which the trainee often unconsciously acquires is in the highest sense professional. These outcomes, which are inherent in the definition of professionalized subject matter, are now quite commonly attained in the best work of expert teachers.

The arts and science subjects are, of course, standard content in most teacher-training institutions. The humanistic studies are uniformly a required element in some degree in nearly all curricula. Such subjects are largely cultural in function, but since they are a part of the necessary equipment of a teacher they are also of professional value. The sciences are offered not only as elements in the prospective teacher's general education but also as preparatory training for some of the vocations. The liberal arts and related offerings of many of the larger teachers colleges have become sufficiently adequate to result in the accreditment as standard 4-year colleges of a number of such institutions by the North Central Association of Colleges and Secondary Schools.

The so-called special subjects, such as public-school music, art, and physical education and health, have become almost as "regular" as English or student teaching. These special or nonacademic subjects are usually required in most normal schools and teachers colleges and in varying degrees in the colleges and universities. The present demand for teachers of such nonacademic work is illustrated in the field of health and physical education. An estimated number of 20,000 full-time teachers of the subject are employed in the schools of this country.

The demand is growing rapidly for the establishment of new courses and curricula for the training of teachers of subnormal children. An estimated number of 1,000,000 subnormal children of grammar-school age, most of whom are educable, are becoming the increasing concern of public-school officials. More than one-third of the States have recognized in some way in school legislation the needs of these important groups of future citizens. School employment officials, however, have been forced by the inadequate supply of trained teachers for exceptional children to draw almost entirely upon superior teachers whose chief qualifications are experience and
personality. A dozen or more institutions, such as Teachers College, Columbia University, and the Training School at Vineland, N. J., now offer special work for teachers of subnormal or of superior children.

The demands for teachers of vocational agriculture, home economics, trades and industries, commercial work, and similar subjects have led to vigorous and sustained programs of teacher training in these fields during the past 10 years. The amount of financial support available is an important factor in curriculum development. Under the provisions of the Smith-Hughes Act Federal funds for the training of vocational teachers, supervisors, and directors of agricultural subjects and teachers of trade and industrial and home economics subjects, has made available for the current year a total of approximately $1,100,000, which is matched by State or local money. Many of the wealthy States, especially those in which agriculture is an important industry, have added very greatly to the Federal funds available for each State.

Many of the existing trends in teacher training as a whole are reflected, of course, in the training of teachers of vocational subjects. The field is a virile and growing one, and constant and fruitful efforts are being made by leaders in vocational education to evaluate and redirect their programs. Among many items engaging current attention may be mentioned the expansion of teacher-training offerings in home economics; the formulation of clearer objectives for each type of training activity and training agency, following continuous studies of the requirements of vocational teaching positions and the individual needs of trainees; the formulation of definite standards for each training agency; and increased provisions in the construction of curricula for the training of local leaders, such as supervisors and directors.

Standards of admissions have been greatly strengthened in practically all the State teacher-training institutions, and the laxity in some schools, which was a source of concern a few years ago, has been largely eliminated. The American Association of Teachers Colleges has set a minimum quantitative requirement for college entrance at 15 units of secondary-school work or the equivalent. Such work must be in secondary schools approved by the State department of public instruction, and of similarly approved quality and quantity, or must be evidenced by the results of examinations. The regulations governing the admission of special students correspond fairly closely to the regulations adopted by the liberal arts colleges. Instances of present practice in respect to the matter of admissions are shown in the Pennsylvania State normal schools for which students qualify for entrance only if graduates of 4-year high
TEACHER TRAINING

schools approved by the State department of public instruction. Beginning in the fall of 1928, Michigan State normal schools will accept only graduates of high schools accredited by the University of Michigan.

Criticisms of the scholarship of young teachers by employers and complaint concerning subject-matter deficiencies of newly admitted high-school graduates have led to the adoption of several expedients to remedy these conditions. A few teachers colleges require the student to pass examinations in certain elementary school subjects before admission or before actual teaching is begun. The old type review courses for college credit have nearly all been discontinued. Various kinds of noncredit "hospitalization" or "make-up" courses are now offered. More attention has been directed to the needs of the high school in respect to its function as a preparatory agency for teacher-training institutions. About a dozen training institutions now cooperate with high schools in arranging secondary-school courses of study for students who plan eventually to enter the teachers colleges.

In graduate work in education a new emphasis is seen in the recent modification of regulations in the University of Southern California and in Stanford University. The usual research work necessary for the completion of the dissertation is largely dispensed with, and the time thus saved is devoted to the mastery of academic, technical, or professional content. Perhaps 75 per cent of all graduate students who secure a doctor's degree, other than in medicine, law, or theology, enter teaching, and research or the job is only a minor activity for most of them. More teachers are needed who are especially trained for work in the junior colleges, normal schools, and colleges. The new graduate programs of study which lead to a practitioner's degree are designed to prepare such teachers.

Of all the tendencies in curriculum revision and construction during the biennium perhaps the outstanding one is the replacement of the old method of constructing curricula on the basis of frequency of practice in the larger institutions and the adoption instead of more scientific methods of curriculum construction. Such scientific methods include the study of personal traits of the prospective teacher which are important as professional assets and the study of the specific activities which teachers undertake on the job. As a result of such studies, efforts are now made to improve the quality of instructional materials rather than merely to increase the quantity. Teacher trainers have been convinced that the two, three, and even four year curricula are not long enough. Now they are becoming convinced that such curricula are neither wide enough nor deep enough. They have come to an increasing recognition of the present limitations of the
training institutions in respect to the professional development of the trainee not only in sound scholarship of the right sort but also in appropriate emotionalized attitudes, professional ideals, and capacity for future growth.

Sensing in somewhat uncertain fashion the needs which have long been pointed out by the public and by employers of teachers, institutional officers have made many changes in methodology, in curriculum offerings, and in institutional activities, to the end that personality, managerial ability, character, attitudes, and a host of related traits might receive recognition in the training programs. The teaching of health and physical education and of art and music has been given attention. The offices of dean of men and of women have been established. Character education has been attempted. Extracurricular activities and offerings of many kinds have been fostered, but the objectives of all such activities and offerings have never been unified, nor, indeed, quite clear.

The time now seems near when all these so-called extracurricular training activities and agencies may be definitely incorporated as integral and essential parts of a newer and broader curriculum. Sound scholarship of the right sort will always be the keystone utilized by curriculum builders. But in the whole arch many stones are needed. It is not impossible that many of these may yet be discovered to be the odd pieces which have been long relegated to the rubbish heap.

THE TRAINING SCHOOL

The training school is theoretically considered the center around which the whole training program should revolve. It is the laboratory school work that chiefly characterizes teacher training. The minimum amount of student teaching accepted in the standards of the American Association of Teachers Colleges is at present 90 clock hours. The average teachers college actually requires a larger number of hours. As a rule, four semester hours or six quarter hours of college credit are granted for 90 clock hours of work. The minimum required in the colleges and universities varies but is usually considerably less than in the teachers colleges. The amount is often determined by the minimum accepted for certification by the State departments.

Some of the aims most commonly accepted at present for student teaching are: To enable the inexperienced teacher to feel at home in the classroom; to give individual assistance to each teacher in personal problems of classroom management and instruction; to develop favorable emotional and intellectual attitudes toward teaching and education as a whole; to secure a degree of control over the
simple techniques of instruction and pupil management; and to
develop the capability for further growth.

The training school building is an integral part of most of the
normal school and teachers college plants. Considerable attention is
devoted to the improvement of the plans for such buildings. The
special needs of a training school building are legion in respect to
practice rooms, model administrative offices, conference rooms, offices
for training supervisors, and abundant facilities for special training
programs. Slightly more than half of the State universities have
their own training school buildings. Near-by high schools are often
utilized instead and the public-school teachers are frequently
empowered to act as training supervisors or demonstration teachers.

Nearly all the teachers colleges have their own fully controlled training
facilities, slightly less than three-fourths have separate buildings, and
about two-fifths have additional training facilities in the public
schools.

The consensus of opinion now is that an ideal situation provides
for a campus school for the development, under constant supervision,
of teaching skill. Public schools should also be utilized when possible, for in them the trainees may best obtain exposure to typical school conditions. The training program, either in campus or in off-campus schools, usually functions much better when under the complete control of the training institution. Local conditions, of course, sometimes render this impossible.

"Apprentice" teaching, that is, student teaching during which
the trainee leaves the institution for a limited period and teaches
or assists in teaching a regular class, apparently gains ground very
slowly if at all, owing among other reasons, to the expense and difficulty of supervision. In some institutions, such as Ohio State University, the work has been very highly developed and excellent results are secured.

In general, training-school curricula, for obvious reasons, follow
in some degree the State courses of study. The improvement of such courses of study is within the province of the training school
and is undertaken in some way in a growing number of up-to-date institutions. Between one-fifth and one-fourth of the teachers
colleges make their own training-school courses of study.

There is an increasing tendency to base instruction of trainees on actual analyses of their needs; one study, for instance, shows, the
difficulties reported by student teachers to be, in order of frequency:
Devising and managing educational seat work, managing two or more
sections of children simultaneously, teaching beginners, teaching
children how to study, teaching phonics, teaching subject matter in
the common branches, and pupil management.
In methodology, the training supervisors, while usually up to date, are moderately conservative. Only a few traces remain of the Herbartianism of a generation or so ago. More self-direction is permitted the trainee as well as the pupil. The desirability of controlled conditions in typical training exercises, however, remains unquestioned.

The office of director or dean of training is now becoming common. A high type of professional worker is developing in this position, which, under the presidency, is one of the most important in the whole institution. A superior type of training supervisor is growing up who occupies a sort of intermediate level between the director of training and the regular demonstration teacher. An important function of the director of training may well be to develop and maintain coordination of the instructional activities of the training supervisors and demonstration teachers with the instruction of the main institution. Such coordination is at present an outstanding need both in the academic program of instruction and in the laboratory-school training program.

A number of small liberal-arts colleges and junior colleges are endeavoring to realize their primary aim of offering liberal education and at the same time to train teachers. The necessity of establishing an expensive laboratory-training program is leading to difficulties in a number of these institutions as progressive State departments continue to set standards higher and higher.

In general, most institutions are not wholly satisfied with their existing student teaching facilities. The training school typically does not afford anything like all the exercises desirable for the extraordinarily varied practical experiences necessary for the preparation of a well-trained teacher. The expense of maintaining special housing facilities and a typical training staff of 10 or 12 members is quite large. Often the number of training-school pupils is inadequate. The training staff is usually undertrained. Probably the chief directions of future progress will center about the raising of qualifications of the training-school staff, the provision of additional plant and facilities, and improvement of the materials and techniques of training discovered as a result of the rapidly increasing amount of research in the field.

IMPROVEMENT OF FACULTY INSTRUCTION

Great interest has been expressed during the biennium in the improvement of the instruction offered by the teacher-training staff. The influence of example in teaching is particularly strong in institutions which train teachers, and it is inconsistent to maintain expensive demonstration schools and at the same time permit slipshod
work among the regular instructors of the institutions. The chief means undertaken for the improvement of college and normal school instruction are:

1. The requirement of greater scholastic training for instructors. The mere possession of the Ph. D. degree, however, offers no assurance that a specialist is a good classroom teacher.

2. The requirement of more work in professional education, more especially in courses dealing with elementary teaching. The value of such work apparently depends somewhat upon the courses taken, upon their practical application, and upon the attitude of the individual instructor toward improvement.

3. Increased requirements in teaching experience for staff members. The colleges and universities do not usually stress such requirements. Teachers of education in the normal schools and teachers colleges, especially the training supervisors, are usually expected to have public-school experience.

4. Supervision of instruction. This has been undertaken in a few institutions, as, for example, in Colorado State Teachers College, at Greeley. It is difficult in most institutions to secure men with suitable personality traits and sufficient professional and general training to influence very much the general faculty body. Tradition is all against “supervision” which involves routine inspections and autocratic demands from above. However, advances have been made in helping the younger or more inexperienced instructors, in some cases by direct supervisory assistance. Improvements in methods of constructing tests and examinations and of the proper selection and presentation of subject matter are examples of the activities undertaken.

5. Cooperative research projects undertaken by staff members on institutional problems. Very satisfactory results have been secured in a few institutions, such as the University of Minnesota.

6. Curriculum revision. Duplications among courses and topics are reduced, better selections of materials are made, courses are better defined, and lines of curriculum expansion are determined.

7. Specific recognition of superior teaching ability by increase of salary or by promotions. Little progress is noted in this apparently logical method of stimulating faculty advancement.

TEACHER PLACEMENT

There is a growing realization among teacher-training institutions that the complete cycle of institutional service to the individual and to the State is not rounded out when the student leaves the institution. Curricula are frequently differentiated with great minuteness; the
student is trained for primary or intermediate work or for work in one or two academic subjects. Upon graduation, however, chance or fancy too often determines the kind of position secured. Some boards of education do not yet realize the desirability of specialized training for their teachers. A blanket normal school diploma or a degree in any field suffices. The tendency is for the teacher to take the first attractive position, as determined by salary, good location, or perhaps necessity, which is offered. When conditions are such that teachers secure positions unlike the ones for which they were prepared, the differentiated training program may be even less effective than an undifferentiated one.

Definite organization of placement activities is highly desirable in any institution. Even a part-time placement officer must be given adequate facilities and time to do thorough work. At present, of the normal schools and State-supported universities and colleges which train teachers, approximately one-fifth make no definite provisions for placement service. Individual professors, the president, and various training officials assist the best students to any attractive positions that happen to be reported vacant. In about one-fifth of these publicly supported institutions, some official, such as the director of training or dean of education, assists part-time in the placement of teachers. In these institutions there are no placement bureaus. In about three-fifths of all teacher-training institutions definitely organized placement bureaus function for the benefit of employers and prospective teachers.

In all, the cost of placing a teacher ranges from $8 to $12 per registrant in the typical institutions. Most of the institutions charge the students no fees for placement service. Usually the superior teachers are given first chances at the best positions. Perhaps a third of the registrants, usually the less promising ones, are left to shift for themselves and quite often secure places for which they have had little specific preparation.

There is at present no adequate recognition of the possibilities of making the placement function a decidedly professional one; the work is still too largely clerical. A scientific study of the actual needs of new teachers on the job should go hand in hand with the development of a thoroughgoing placement service. The specific weaknesses and needs of teachers in the field are too often inadequately reported to the institution. The placement bureau could study its function as a connecting link between the instructors of the institution and the teachers of the State. As a result of such studies considerable improvement could be made in the nature of existing objectives of the placement bureau and of the institution as a whole. Other studies could be made concerning such matters as the quali-
tative demands of the teacher market and concerning ways and means for improving the present irregular distribution of teachers over the district served by the institution.

TRAINING OF TEACHERS IN SERVICE

The training possessed by the average teacher is two years or more below the tentative standard set by most educators as a desirable minimum. Teachers with one or two years training must keep abreast of rising requirements from year to year. Improvement in educational methods and teaching techniques are constant. Even the teacher originally well trained, after three or four years experience, tends, as his work becomes routinized, to reach a standstill in professional improvement. Teachers have subscribed to the belief that the best time to learn anything is the time when one needs or wishes to know it. Institutionalized training conducted intensively over a comparatively brief period is not enough. Hence a variety of agencies has arisen to care for the needs of an increasing number of teachers who realize that professional education, as well as education in general, is a lifelong process. Class extension courses, correspondence courses, conferences of teachers, both graduate and undergraduate summer school work, short courses, and other professional education programs of training in service, have been soundly established as integral parts of fully developed institutional and State teacher-training programs.

The State, county, or city usually sets up a program of supervision which is really a form of teacher training, and which, of course, frequently includes service to the normal school graduate. Occasionally, the normal school or teachers college establishes a follow-up semisupervisory program for recent graduates. Examples of this service are found in the Central Missouri State Teachers College, in the Eastern State Teachers College of South Dakota, and elsewhere. Another plan of training in service which is found occasionally is that of local or regional conferences of young teachers as in the normal school at Westfield, Mass. Itinerant teacher training is undertaken chiefly by colleges of agriculture. This service is designed primarily to help the recent graduate of the institution to put into practice what he has learned and otherwise to hasten his professional development.

The extension of training into the period of employment is illustrated at the State Teachers College at Buffalo, N. Y. The college has an agreement with near-by institutions which enables graduates of the institution to receive advanced college credit for probationary work in teaching centers in Buffalo. Strong advisory teachers are a necessary part of the plan. This program extends
over a period of three years, during which as many as 12 college credits may be secured. At the University of Cincinnati certain graduate students may secure credit for work toward the M. A. degree for successful teaching done under controlled conditions in the city schools. This work is carried on in connection with the students' university work in education.

An example of the possibilities of evening school work for teachers is shown at Seattle. More than 800 teachers and principals registered during a recent session for credit in professional courses. City authorities suggest that such a number invites comparison with the enrollment of many fair-sized colleges.

Almost without exception all the agencies and activities for training in service have increased in both number and scope during the biennium. Above all, they have become largely professional in objective and method.

The training institution which confines its activities to the campus alone is losing sight of one of the most significant tendencies of the decade in the whole matter of the professional education of teachers. It is passing by an excellent opening for future expansion of institutional service to the State.

**CONCLUSION**

Of the dozen or more tendencies in teacher training during the biennium which have been briefly outlined, which are most significant? All the trends mentioned are too closely related in cause and effect to evaluate as separate movements. Slight advancement in one phase of educational activity may be more significant than great advancement in another. In each tendency discussed, however, there are in varying degrees evidences of genuine progress.

Teacher training and public-school education naturally share the same tendencies. Coincident with the growth of wealth the financial support of public education has more than doubled in a decade and the number of students in the schools has increased far more rapidly in proportion than the population of the country. This is evidence that the confidence of the general public in education has been maintained and extended. The public, which pays the present annual bill of $2,000,000,000 for education, does so only because it is getting in the main the services it wishes; that is, not only the maintenance of the existing level of social intelligence, but also a satisfactory increment of the elements of civilization it prizes most.

As never before, social leaders perceive that the continuation and advancement of an increasingly complex civilization are absolutely dependent upon the work of the teachers. They transmit the major portion of the social heritage from generation to generation replacing
the losses due to human disability and death. Society is not content to have novices and incompetents despoil the materials and break up the machinery of progress.

In the last analysis, however, it is the margin of increase from generation to generation in the desirable elements of our social heritage that alone justifies an increase in our immense program of public education. The enormously increased support, then, of society for public education and for teacher training is an outstanding tendency which has a twofold meaning; it is the recognition by society of value received, and it affords abundant proof of the fundamental faith of humanity in its own progressive evolution. Increased support of education demands greater service in return by teachers and by teacher trainers. The increased standards of selection and of training for teachers, the increase in number of teacher-training agencies, and the improvement of their offerings are but the ways and means of justifying the support by society of the most outstanding agency of human progress—the public school.

As to the immediate needs of the future, the necessity is clear for maintaining the necessary flexibility of organization and viewpoint among the training staffs which will assure the easy dissemination among them of the increasing flow of professional knowledge available. The teacher trainer must depend in large part for his professional advancement upon the discoveries of a great number of constructive educational and social agencies. But he himself has abundant opportunity for creative work of the highest order. This type of work is, in fact, his daily occupation. More scientific study of teacher training and the development of a larger supply and more vigorous type of educational leadership than at present exists in the field are, perhaps, the outstanding needs of the future. The further professional education and training of the teacher trainers themselves, therefore, will afford an excellent index to future progress.