

# Development of State Programs for the Certification of Teachers

By

**BENJAMIN W. FRAZIER**  
*Senior Specialist in Teacher Training*  
*Division of Higher Education*  
*Office of Education*



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## FOREWORD

The standards set in teacher-certification requirements, and the effectiveness of the administration of certification, have been intimately related to the advancement of public education throughout its history. The Office of Education has, therefore, from time to time issued bulletins and other publications concerning the State laws and regulations governing the certification of teachers. During the present century, the most extensive among these publications were bulletins by Updegraff in 1911 (137),<sup>1</sup> and by Cook in 1921 (31) and in 1927 (32). Other studies were made by Blodgett in 1898 (19), by Jackson in 1903 (70), and by Hood in 1915 (68). The major portions of these reports were devoted to the presentation of the detailed requirements for obtaining the different kinds of certificates issued in the several States; of the regulations governing their scope of validity, duration, and similar items; and of certain tendencies prevailing at the time the publications were issued.

During the past decade certification requirements and practices have been changing with great rapidity, and numerous differences that have prevailed for many years in the certification standards of the several States have been intensified. Studies of problems in certification have become numerous and extensive in scope. Many of the study reports, however, are not easily available. A need has arisen for bringing together in organized form for ready reference the more significant findings and recommendations of the many reports that have been made in recent years. The present study was therefore undertaken with a purpose somewhat different from that of preceding studies. The primary purpose of the present study is to bring together from the literature on teacher certification such principles, authoritative proposals, and suggestions for improved practice as appear to be of value to certification officers, research workers, public-school and college officers and teachers, and laymen interested in improving certification practices and requirements. To assist in the realization of this purpose, the present status of certification practices and requirements is given in respect to selected items in which important differences exist among States, and in which desirable changes may be brought about. Trends are shown which appear to indicate the directions in which future changes may be expected to occur. It is believed that such materials may be of service to those who construct or influence the construction of State programs of teacher certification.

BESS GOODYKOONTZ,  
*Assistant Commissioner of Education.*

<sup>1</sup> Figures in parentheses refer to the numbered bibliographic references given at the end of this report.

# DEVELOPMENT OF STATE PROGRAMS FOR THE CERTIFICATION OF TEACHERS

## CHAPTER I: INTRODUCTION

*Purpose and scope of the study.*—The problem of this study is (1) to ascertain the nature and extent of the most significant differences in certification of teachers in the various States; (2) to analyze the causes of such differences; and (3) to suggest means whereby the most effective practices and requirements may be introduced or extended in States where they do not now exist, or where they exist only in part.

In keeping with the general nature of the problem, the chief purpose of this study is to assist in the improvement of State programs of teacher certification by bringing together and evaluating materials selected from State certification laws and regulations and from the extensive literature of the field. The realization of this purpose involves the summarization of present certification practices and requirements in the several States, insofar as they present distinguishable and important differences; the disclosure of trends and tendencies in certification; and the assembly and organization of consensuses of expert opinion relating to means for the improvement of State certification requirements and practices. Involved in the study are evaluations of requirements and practices in the light of the principles and jury judgments that are presented. Involved, also, are explanations of the bearings of the trends disclosed upon the future development of the certification of teachers.

Certain limitations in the scope of the report are made in keeping with the primary purpose of the study. Tabulations of certification regulations and requirements, and statements of trends in certification, are presented only insofar as they contribute to the realization of this purpose. A general view of the present status of certification requirements and practices, however, may be secured in the several chapters, which bring up-to-date certain summary material given in studies made in previous years. Since requirements are constantly changing, and copies of the latest State certification regulations and requirements may easily be secured from the State departments of education by those interested, highly detailed requirements and provisions of individual States are not presented. Similarly, only the trends that appear to throw most light upon the future development of certification in the several States are presented in any considerable detail. In general, the material presented has been

selected with a view to enable those interested in the improvement of certification laws, rules, and regulations, to arrive at more intelligent solutions of the numerous and complex problems that confront them.

*Significance of the problem.*—Every State in the Union makes provisions for the certification of its teachers. The importance of certification is also recognized in foreign countries, most of which certificate their teachers, or provide equivalent means for the legal qualification of applicants for positions in their schools.

Teacher certification is related to most aspects of public education. The largest single item in State expenditures for education is for teachers' salaries, and teacher certification constitutes one of the most effective means available to the State for avoiding waste of public funds caused by the employment of incompetent instructors. Constant reminders are given in the literature of education that qualifications of teachers constitute the key to educational efficiency, and that the provision of competent teachers overtops in decisive importance all other State educational enterprises. In the wide range of personnel administrative activities involving teacher recruitment, preservice education, employment, assignment to work, and in-service education, certification has an essential place. The requirements for certification are an index to the amount of education of the teachers of a State; and are indications of the conscious concern of a State school administration for the advancement of the qualifications of its teaching staff.

Certification requirements governing scholarship are directly affected by the supply of teachers with given amounts of education. The average amount of education possessed by teachers is increasing approximately 1 year during each 15 years. The annual number of students who received baccalaureate degrees from teacher-education curricula of teachers colleges increased from 1,296 in 1920 to 16,303 in 1934. In keeping with advances in the scholarship of teachers, certification requirements have risen rapidly. From 1925 to 1928, 85 percent of the States revised their bulletins on certification. More than half of the revisions were made in 1927 alone (128:38).<sup>1</sup> Partially because of an oversupply of teachers during the depression, minimum scholarship requirements for certification were changed in 20 States between September 1, 1935, and September 1, 1937 (126). The proper direction of these and other changes in certification is of major concern to leaders in education.

Certification requirements are of direct concern to more than 800 institutions of higher education engaged in the education of teachers.

<sup>1</sup> Figures in parentheses refer to bibliographic references given in full at the end of this publication. In the present citation (128:38), the first figure, 128, refers to the number of the reference; the second figure, 38, to the page of the reference cited.

Curricula and courses in many of these institutions are constantly modified more or less in keeping with changes in certification requirements.

Certification requirements and practices are of personal concern to individual teachers. All but a few of the 893,347 public elementary and high-school teachers, principals, and supervisors in the United States are certificated. This large group, as well as more than 100,000 prospective teachers turned annually into the teacher market, are affected directly by requirements for the initial issuance, or for the renewal or exchange of certificates.

In determining the qualifications of teachers, certification requirements ultimately affect the educational welfare and advancement of pupils around whom all public-school educational activities revolve. The certification of teachers is therefore so directly related to important aspects of education that even slight improvements in certification requirements may have widespread and lasting effects in the educational advancement of a State.

*Sources of data and method of treatment.*—Primary sources of data used in this study include: First, the State certification rules and regulations, published by practically all of the State departments of education or other offices that administer certification; second, the State school laws; and, third, oral and written communications from State certification officials, who checked data from State laws and regulations compiled and sent to them by the Office of Education for correction and additional information. The secondary materials used include 150 references on certification and closely related topics selected from a total of more than 600. Of the 150 selected references, all but 19 were published or written after January 1, 1927. Of the entire list of some 600 references, 62 masters' theses and 11 doctors' theses, most of which were written during the past decade, give predominant or exclusive attention to the many different problems in certification. In addition, 9 doctors' theses and 15 masters' theses were found that treated certification in connection with other subjects, such as teacher employment or education. Most of the theses are unpublished, and may be secured only through interlibrary loans. The entire list of references is available in the card files of the author. The 150 references selected for the present study are listed in the bibliography at the end of the report. Many other valuable references may be located by searching the text of the 150 references listed. Among the references in this report, numbers 18, 33, 45, 48, 66, 67, 79, 98, 99, 100, and 134 will be found particularly helpful by investigators who desire further bibliographic materials on specific problems in certification.

The general organization of each of the chapters II to VI of this report is approximately the same. First, the present status of the

certification practices or requirements under review is presented. Second, important historical trends are outlined to indicate the degree to which the practical realization of established principles or authoritative proposals may be expected in the near future, and factors that have influenced and will probably continue to influence programs of certification are discussed. Third, evaluations of present practices, requirements, and tendencies by qualified investigators of the problems under review are presented. Included in this section of each chapter are certain proposed principles or suggestions, examples of the adaptations of the proposals made to existing conditions, and statements of opposing viewpoints in the case of controversial issues. Fourth, a brief summary of the findings and of the principles or accepted proposals is given. The principles and proposals given in the chapter summaries for the most part represent a consensus of expert opinion; most statements have either received jury validation or represent reasonable unanimity of agreement by a number of authorities.

The proposals which received jury evaluation were first, those presented by Cushing (41:21-79), who used a jury numbering 202 and consisting of heads of State departments of education, city and county superintendents, and college, university, and State normal school and teachers college executives located in every State. The second set of proposals, consisting of two parts, was that formulated by Dearborn, and evaluated by 48 members of a jury selected by Brodie (21:28-53). This jury included specialists in teacher education, State certification officers, and public-school administrators. A third set of proposals was used, consisting of criteria formulated by the Research Division of the National Education Association. These and related criteria were compiled from references selected from more than 100 State school surveys and a similar number of theses, monographs, and books, and submitted to the criticism of scores of school administrators and writers on State school administration (100, pt. II:113-120). A fourth set of judgments secured in 1929 by George E. Myers (97) was also used. This report presents the judgments of 312 authorities on the desirability of certain tendencies in the certification of teachers. The jury included deans of schools of education, presidents of State teachers colleges and normal schools, State superintendents of education, and superintendents of city schools. The desirability of these tendencies was also passed upon by 31 State superintendents of education in 1932, at the joint request of the Michigan Conference of City Superintendents, the Michigan Education Association, and the Michigan State Department of Public Instruction (145:53-54).

*Definition, purposes, and general nature of certification.*—A teacher's certificate is an instrument that gives a person legal authority to teach. It is usually granted by some governmental agency upon the basis of college credentials, teaching experience, or examination, and is valid in one or more types of public-school teaching positions (23:1-2; see also 41:6).

The primary purpose of teacher certification, as traditionally administered, is to protect the State against incompetent teachers. It protects the State against waste in the expenditure of public-school funds; protects pupils against ill-prepared teachers; and protects qualified teachers against the unfair competition of those not qualified. Properly administered, certification may be made a positive force for educational advancement, as well as a protective device. Within limits it may be made to advance teacher competency, as well to prevent manifest incompetency. It may be used not only to advance the qualifications of beginning teachers, but also to improve the qualifications of teachers in service. Furthermore, it may be used to yield information on which a continuous inventory of teachers and their qualifications may be based, and thus to assist in maintaining a proper balance between teacher supply and demand. (See 23:1-2; 29:16; 106:422-431). The several functions of certification are yet to be exercised in full in many States. Properly administered, certification is one of the most effective means to raise the qualifications of teachers.

There are several limitations to the use of certification for the improvement of the qualifications of teachers. Minimum certification requirements constitute only the legal basis or starting point in the attainment of satisfactory standards governing such qualifications. Teacher certification is only one of a number of State teacher personnel activities involved in securing and maintaining an effective teaching staff. The teacher-education institutions determine to a considerable extent the quantity and quality of the supply of teachers to be certificated. The selection, placement, and retention in service of certificated teachers is the function of school employment officers. These officers may or may not select teachers whose qualifications exceed the low minimum requirements for certification prevailing in many States.

Great diversity exists in certification among the several States, in respect to terminology, number of certificates issued, administrative control, amount of preparation and experience demanded of teachers, degree of specialization in certificates issued, and other important items (126). Even within certain States, certification practices and requirements may vary among counties, cities, local school

districts, or teacher-education institutions empowered to issue certificates. As a consequence, the protective and other functions of certification vary greatly in effectiveness among States.

Because of the great diversities in certification among States, the different kinds of certificates are numbered by the hundreds. The names of most of them mean little outside the States in which the certificates are issued. Because of differences in terminology, requirements, and practices, 41 States will not issue certificates upon the basis of out-of-State certificates.

A program of teacher certification cannot well be developed in a given State without careful study of many social, economic, political, and educational factors peculiar to that State. The cultural status, traditions, wealth, and general nature of the population must be considered. Certification standards are affected also by factors that are educational in nature, such as the organization of the State educational system as a whole, quality of educational leadership, effectiveness of the teacher-education institutions, levels of education attained by teachers already in service, extent of teacher supply, teacher salary levels, and teacher tenure provisions. State as well as national trends in certification must be considered, for education in the 48 States has evolved for many years in somewhat different directions, and at varying rates of speed. While there are many improvements in certification requirements and practices that should be made immediately, there is an even greater number that can be made only as successive steps in a long-time program, or as fundamental economic or social conditions are changed.

*Summary of proposals.*—Of many authoritative statements concerning the purposes and nature of certification, the following are given in this place:

State certification should not only protect the State against incompetent teachers, but should also be utilized as a positive force toward educational advancement.

The removal of inequalities in certification requirements and standards that result in marked differences in the quality of service rendered by teachers in the several States and by the schools within these States, should be an integral part of a continuing certification program. In no State, however, should standards thereby be lowered.

Certification terminology should be simplified and be made more uniform among States.

In typical States, the number of different kinds of certificates, other than those differentiated by different kinds of educational service, should be reduced.

\*State certification must take into account the varying conditions under which schools are organized and maintained (21:30).

\*Certification regulations should provide for professional improvement of teachers (21:35).

\*Certification should be utilized as a means for improving classroom instruction (21:35).

The development of an improved State program of teacher certification should be accompanied by the development of related and coordinated programs for the improvement of other teacher-personnel practices.

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\* Have received jury validation.

## CHAPTER II: ADMINISTRATION OF CERTIFICATION

### STATUS OF ADMINISTRATIVE CONTROL

#### OVERHEAD CONTROL

*Legal responsibility of the State.*—While not specifically mentioned, the responsibility of the several States for public education is implied in the Constitution of the United States (art. X, Amendments). Such responsibility is attested to by statutes and court decisions, and is recognized in long-continued custom. Accordingly, the States may prescribe such qualifications for teachers as public policy may demand.

In practice, the selection and the employment of teachers in America are functions of local school authorities; but these functions are subject to the limitations placed upon them by the State, which places its final sanction upon the teacher who has met its requirements for certification (150:22). In general, a teacher without a certificate has no legal standing as such (2:14).

*Certification of private school teachers.*—In most States, statutory control is not exercised directly and specifically over the qualifications of teachers in private, denominational, or proprietary schools. Most of the State certification rules and regulations are silent on the specific question of certification of private school teachers. Lischka in 1926, and Cronin in 1936, reported that the school laws of four States—Alabama, Michigan, Nebraska, and South Dakota—stipulated that private school teachers of pupils within the compulsory school age hold State teaching certificates. Six other States required by statute that private schools be taught by competent teachers, but this requirement was expressed in very general terms. One additional State (Minnesota) stipulated that private school teachers shall be qualified to teach in the English language (36:8; 83:107). In 1936, a total of 14 States had legislated in varying terms that the quality of instruction in private schools shall be equivalent to that in public schools (36:8).

*Relationship of the legislature to certification.*—While the ultimate authority of the State legislature over certification in all of its aspects is unquestioned, the extent to which the legislatures actually undertake to exercise directive control over requirements and practices varies greatly among States. William A. Cook in 1927 said:

The school law of Arizona disposes of certification in a brief six lines. That of Wyoming takes two pages to assign the control of this function

to the State department of education. New York's law contains three pages on qualification and certification of teachers. Illinois lengthens it to five and others go further still. But even in the most extreme case the details left for regulation by administrative authorities are very numerous (quoted in 100, pt. II: 115).

About seven-eighths of the legislatures meet in regular session only at 2-year intervals. Even when they meet, prompt and timely changes in certification requirements are likely to be neglected in the haste of legislative sessions. In States which attempt to make the complex details of certification matters of statute, the lay members of the legislatures may or may not follow the recommendations of the professional staffs of the State departments of education.

According to an interpretation of school laws by Bachman, the legislatures of only 11 States in 1933 had delegated to a central State authority full and complete power over elementary school certificates. The States mentioned by Bachman were: Alabama, Arizona, Delaware, Louisiana, New Hampshire, New Jersey, New Mexico, Rhode Island, South Carolina, Utah, and Vermont. In 18 other States where certification authority was centralized, more or less definite laws limited the amount of preparation which might be required for a given certificate (10: 15-16).

*Administrative organization of certification.*—The laws of the several States specify a number of different administrative agencies and officers as responsible for the administration of certification. Foremost among those specified are the State board of education and its executive officer, the State superintendent of education. These are specified as the sole authorities in charge in more than half the States. In the remainder of the States, the State department of education or some division of the department, a State examining board, county board of education, county board of examiners, county superintendent, institutional authorities, and local school district authorities are also empowered in varying degrees to participate in the administration of certification (28: 11-27). While most of these agencies or officers in reality are integral parts of, or are responsible to, the State board of education or to the State department of education, authority is often delegated to decentralized administrative offices to such an extent that important consequences result in determining certification requirements and practices.

The official titles of the principal State school officers responsible under the State superintendent for the administration of certification differ greatly among States. Sixteen different titles in which the word "certification" or an equivalent term occurs are employed in 33

States. By generalizing titles somewhat, the following composite designations of certification offices are possible for 33 States:

Director (or assistant commissioner, or supervisor, or chief of division) of teacher training and certification (or teacher bureau, or higher education), 14 States.

Director (or supervisor, or assistant superintendent, or head of department) of teacher certification, 11 States.

Certification (or credential) clerk (or secretary), 5 States.

Secretary, State board of examiners, 3 States. (135, pt. 1 : 4-20).

In the 15 remaining States, teacher certification and teacher education is administered by a variety of officers, whose connection with the work in these fields is not indicated by their titles. Usually such officers devote only part of their time to the administration of certification.

*Teacher-personnel activities related to certification.*—The certification of teachers is but one of a number of processes involved in placing and retaining properly qualified teachers in the schools. The whole round of personnel procedures involves, among other items, the recruitment and selection for preparation of prospective teachers, and their preservice education, certification, employment, and placement in specific positions. Further involved, are their improvement in service, retention, promotion, transfer, retirement, and pensioning. Certification authorities must consider the relationships of certification to most of these activities. The most important relationships are with the teacher-education institutions, discussed in chapter VI.

Second only to relationships with teacher education are the relationships of certification to teacher employment and placement. Certification legally authorizes teacher employment, but sets minimum requirements only. State teacher-placement services are limited. Only 17 State departments of education have teacher-placement bureaus or placement services. The States include: Alabama, Connecticut, Idaho, Iowa, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, New Hampshire, New Mexico, Oklahoma, Pennsylvania, Texas, Vermont, and Wyoming (126). The scope and effectiveness of State teacher-placement services vary greatly; in the typical State, beginnings only have been made in solving the difficult and perplexing problems involved in securing and placing the best available certificated teachers in the classroom. Usually the prospective teacher must find his own position, with such help as he can secure from college-placement bureaus, private teachers agencies, employing officers, and acquaintances.

## CONJOINED STATE AND LOCAL CONTROL

The issuance of certificates, and in some instances the setting of requirements, is done not only by the State board of education, the State department of education, the State superintendent, a State board of examiners, or a State board of higher education institutions, but also by local county, town or district, city, or institutional officers (40:624-628; 32:5-6, 16-20; *see also* pages 12, 13, and 14). Often two or more of these agencies or authorities may function in the same State.

In 1930, Nebraska illustrated an extreme condition to which the decentralization of the power to issue teachers' certificates may extend. Eight distinct agencies were authorized by law to issue certificates, and seven were actually issuing them. These agencies included the office of the State superintendent of public instruction, the board of regents of the University of Nebraska, the board of education of the State normal schools, the private and denominational colleges of the State, the board of education of the school district of the city of Omaha, the board of education of the school district of the city of Lincoln, the State board of vocational education, and the boards of regents of county normal schools (41:10). Recent legislation effective September 1, 1938, provides that certification be centralized in the hands of the State superintendent of public instruction (126:Nebraska).

*State-county control.*—Six States delegate more or less responsibility to the counties for the issuance of teachers' certificates, and one State delegates authority to town committees for qualifying teachers. Responsibility is shared chiefly in respect to certificates issued upon examination.

States which exercise a high degree of centralized control over certification in most cases have a teaching body with higher levels of preparation than States with decentralized control. Every State in the Union which in 1937 had the minimum requirement for certification of 3 years or 4 years of college preparation belongs, with the exception of California, in the group of States which issues or exercises complete control over the issuance of all certificates (page 12 and table 4). The effect of county certification on California standards is very small. Bachman in 1933 found that in 7 of a total of 11 States that had accorded full power over certification requirements for elementary teachers to central State certification officers the minimum level of certification was 2 years or more above high school. A total of only 17 of all States then had a minimum requirement of 2 years or more of preparation. Two of the three States that required a minimum of practically 4 years' work for elementary teachers had centralized control (10:15-20). Concerning at least 19

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of the 37 States in which full centralized control had not been established Bachman said:

... It seems almost impossible to raise the minimum elementary school teaching much, if any, beyond high school graduation with or without technical preparation (10:179).

*Systems of control over the issuance of teachers' certificates in the several States, September 1937<sup>1</sup> (126)*

1. *State system exclusively.*—State issues or exercises complete control over the issuance of certificates.

Alabama, Arizona, Colorado, Connecticut, Delaware, District of Columbia,<sup>2</sup> Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wyoming.

2. *State-controlled system.*—State governs the issue of certificates (including giving questions and examining papers), but county authorities issue some certificates under State control or regulations. Practically, the State is the responsible agent.

Arkansas, Illinois, and Missouri.

3. *Semi-State system.*—State exercises some but not full control. County authorities mark applicants' examination papers and issue certificates, and to this extent influence standards; but questions are prepared by State authorities, who also make regulations governing examinations.

Mississippi.

4. *State-county system.*—Both State and county authorities govern all of important certification regulations, formulate questions, mark papers, and issue certificates.

California and Wisconsin.

5. *State-local system.*—Full power of certification is accorded local town committees; State issues certificates only to State-aided high-school teachers and superintendents of schools in superintendency unions.

Massachusetts.

The division of certifying authority between the State and the county or local school districts has been one important cause for the marked differences prevailing in standards and in the scope and length of validity of certificates. County certificates usually express the minimum requirements for certification in the States having such certificates (10:16-17).

*Certification of teachers in cities.*—Many progressive city school systems require applicants for positions to have the higher grade State certificates, to pass city examinations, or otherwise to meet higher requirements for employment than the minimum requirements made by the State for certification. One or more cities in at least

<sup>1</sup> Issuance of certificates by cities or higher educational institutions not considered.

<sup>2</sup> Considered for present purposes in list of States.

11 States are authorized to issue certificates. In some of the cities listed, however, the legal right to issue certificates is infrequently exercised.

*States in which one or more cities are authorized to issue certificates directly to applicants, 1937 (126)*

State	Representative cities <sup>1</sup>	Practices
Colorado <sup>2</sup>	Denver	School boards of first-class school districts may issue in special subjects only.
Delaware	Wilmington	City board issues on recommendation of city superintendent.
Illinois	Chicago	City board of education licenses teachers upon the recommendation of the board of examiners.
Kansas	Topeka	Examining committees in cities of the first and second class legally authorized to issue elementary city certificates, but city examinations for such certificates cannot be given unless applicant holds a certificate issued by State board of education.
[Maryland]	[Baltimore]	Baltimore City is independent of the State certificate rules, and sets its own standards for eligibility for appointment.
Massachusetts	Boston, others	Towns and cities customarily set their own requirements, usually based upon institutional credentials. Boston certificates through the city superintendent of schools.
Missouri	Kansas City St. Louis	Teachers are usually employed upon the basis of college credentials.
Nebraska	Omaha Lincoln	City boards of education may issue, but do so infrequently.
New Jersey	Jersey City Newark	Certificates may be issued by boards of examiners in city school districts as local certificates to holders of State certificates of the corresponding grade.
New York	Paterson New York City	In New York City, the superintendent of schools issues licenses upon the recommendation of the board of examiners. City board has authority but does not exercise it.
Oregon	Portland	Very few certificates are now issued by the city superintendents, who are empowered to issue special 1-year certificates.
Washington	Seattle and 12 other cities employing 100 or more teachers.	

<sup>1</sup> Not a complete list. Only representative cities or cities employing large numbers of teachers are included. In some States, the cities do not invoke the authority legally accorded them.

<sup>2</sup> Data for 1936. Final ruling on new law approved May 19, 1937, not available in September 1937.

*Teachers' certificates issued by State boards and institutions of higher education.*—In at least 10 States, the State normal school or college boards, or individual college or normal school boards or executive officers, may themselves issue certificates, under the delegated authority of the State. In some of these States, such as Utah, the degree or other diploma when validated by the State, in itself gives the holder authority to teach. In the States where institutional certification is permitted, the State university, State teachers colleges or normal schools, occasionally the agricultural and mechanical college, and in one, State-approved private institutions, may issue certificates.

*States in which higher education institutions may issue certificates directly, or in which a degree or other diploma in itself may constitute a certificate, 1937<sup>3</sup> (126)*

State	Institutions or institutional agencies
Colorado	Governing board of three State teachers colleges.
Idaho	Two State normal schools (if certificate is signed by members of State board of education).

<sup>3</sup> State issuance of certificates upon the basis of college credentials not here considered. Note, however, the special situation in New York State.

## 14 STATE PROGRAMS FOR THE CERTIFICATION OF TEACHERS

<i>State</i>	<i>Institutions or institutional agencies</i>
Kansas.....	Two State teachers colleges, and one State college (formerly classified as a teachers college). Diploma conferred by the degree of bachelor of science in education constitutes life elementary and high-school certificate. Life certificate valid in elementary and junior high schools is issued on completion of 2-year course. Three-year non-renewable certificate valid in elementary schools is issued on completion of 1-year course.
Missouri.....	State University (School of Education), and five State teachers colleges.
Montana.....	Montana State Normal College and Eastern Montana Normal School diplomas upon issuance are in themselves elementary State certificates. State University of Montana and Montana State College diplomas when accompanied by university certificates of qualification to teach, constitute upon issuance secondary State certificates.
Nebraska.....	University of Nebraska and four State teachers colleges and authorized public and private colleges and teachers colleges meeting the requirements of the State university or of the State teachers colleges.
New York.....	The State education department issues diplomas to graduates of the two State colleges for teachers and the nine State normal schools which entitle said graduates to teaching certificates issued in accordance with the certification regulations of the Commissioner of Education.
North Dakota.....	University of North Dakota (Teachers College), North Dakota Agricultural College (School of Education), and five State teachers colleges issue diplomas accredited as professional certificates.
Utah.....	University of Utah (School of Education) diploma is a legal license to teach, when endorsed by chairman of the State board of education.
Washington.....	University of Washington and Washington State College grant normal diplomas valid to teach in high schools and junior high schools. Three Washington State teachers colleges grant diplomas valid to teach in elementary and sometimes junior high schools.
Wisconsin.....	University of Wisconsin and 10 State teachers colleges issue certificates to graduates that legally entitle them to State licenses to teach.

### TRENDS IN ADMINISTRATIVE CONTROL

#### TRENDS IN THE COUNTRY AS A WHOLE

Certification of teachers in its rudimentary forms is almost as old as the school itself (39:124-26, 259-60; 40:621; 106:153-422). Among early examples of qualification requirements may be found

an edict made by rulers of the Roman Empire more than 1,500 years ago, making penal the opening of schools by persons unauthorized by the Government. Licenses to teach and oaths of fealty were required in song and grammar schools long before the 15th century (89:124-126). In Europe, church authorities then performed this function, since they controlled most of the schools, and allegiance to the church was a definite requirement. In earlier Colonial days in America, certification or its equivalent was likewise administered by the church, usually through the ministers of the towns who assured themselves that candidates were of sound faith and knew at least a little about the elementary subjects they taught. During the last decade of the 17th century, record exists of the compulsory requirement that grammar school masters secure the approval of the "minister of the town and of the two next adjacent towns, or two of them" (88:78). Conjoined ecclesiastical and lay authorities, and eventually lay authorities alone, passed upon the qualifications of teachers as local political governments grew more and more independent of church dominance. As the early towns were broken up educationally into small school districts, the district school committee or trustees and township authorities eventually took over the function in conjunction with their control over general educational matters. Such State departments of education as existed were weak and their clerical assistance was inadequate. Communication was difficult between the State capitol and local school districts and local district control was predominant. The certification of teachers, therefore, remained for many years in the hands of local school authorities.

Public education advanced rapidly during the early decades of the nineteenth century and larger school administrative units—county, township, and city—were developed as intermediate units of control between the small local districts and the central State education office or department. With the continued centralization of educational control in the hands of these larger intermediate units went the power to certificate teachers; and accompanying this movement until the present time has been increasing assumption by the State of control over certification. Logical first steps in the evolution of the strict county system into a State system were the extension of inter-county recognition of one or more grades of county certificates, the strengthening of State departments of education, and more and more State participation in the administration of examinations and in the issuance of certificate (40:626-27). The movement was especially marked during the last half of the nineteenth century. It increased at an accelerated rate during recent decades and it continues today (35:411-12; 139:1-8; 150:30-46; 126).

The hastening of the trend toward centralization of certifying authority since 1898 is quite marked (table 1). The present tendency

is unmistakably for certification to be increasingly centralized in the hands of the State board of education, or the department or superintendent of public instruction (89:124; 131:119, 121; 150:130, 148).

While centralization of State certification has been proceeding since Colonial days in line with the historical development of the several State school systems (40:622-28), it has not reached in all States its conclusion, i. e., a complete State system in which the State issues or controls the issuance of all certificates. Illustrations of semi-State control amounting almost to dual systems of administration may still be found.

TABLE 1.—TENDENCY TOWARD CENTRALIZATION OF CERTIFICATING AUTHORITY IN STATE DEPARTMENTS OF EDUCATION, 1898-1937

Kind of system	Number of States <sup>1</sup>					
	1898	1911	1921	1926	1930	1937
	2	3	4	5	6	7
State systems (State issues all certificates) <sup>2</sup>	3	15	28	36	39	41
State-controlled systems (State prescribes rules, gives questions, and examines papers; county authorities issue some certificates)	1	2	7	4	3	3
Semi-State systems (State makes regulations and gives questions; county authorities issue certificates and correct papers)	17	18	10	5	4	1
State-county systems (both issue certificates; county retains full control over examination for one or more types of certificates)	18	7	3	2	2	2
State-local systems			3	1	1	1

<sup>1</sup> Temporary and emergency certificates and permits not included.

<sup>2</sup> Reference: 32:19. For references prior to 1926, see for 1898, 19:1693-1691; 1903, 70:653-519; 1911, 127:16-20; 1921, 31:9.

<sup>3</sup> Reference: 122:30-33.

<sup>4</sup> Reference: 126.

<sup>5</sup> Issuance of certificates by higher education institutions and by cities not here considered.

There has been a gradual decline of certification by city school systems, as well as by counties. Early in the present century, when State standards for certification were much lower than they are today, local certification by municipalities was quite common. In 1911, cities or towns in 20 States issued certificates (137:138); in 1937, approximately half of these States have discontinued the practice (126). Cities have led in public-school progress in this country for a century or more, and their leadership was often exercised in raising standards of certification. As State standards are raised and the administration of certification becomes more and more centralized, certification by cities tends to disappear. Texas illustrates the course of the trend since 1891. In that year, Texas cities and towns with populations as small as 600 were authorized to have city boards of examiners. These were empowered to issue certificates valid only in the city where they were issued. Fewer and fewer of these municipi-

palities exercised their power to certificate teachers, and by 1911, only 3.5 percent of the 19,000 certified teachers employed in the State held city certificates (21:7-8, 15). City certification in Texas has now practically passed out of existence.

#### TRENDS IN SPECIFIC STATES

In typical States, centralization of certification has proceeded slowly, and has been subject to many set-backs when undertaken prematurely. It has developed along lines determined by numerous local conditioning factors, among which the effectiveness of State educational leadership ranked high. Illustrations of these conditions of development are numerous.

Massachusetts is said to have had the first State-certification law in America (1781). In 1827, the town school committees began to license teachers. Local determination of teacher-qualification standards still prevails. In 1910, Massachusetts had 333 examining boards that granted certificates, none of which was valid outside of the town or city in which it was issued. Since 1910, the State has certificated annually a relatively small number of teachers for State-aided high schools. Superintendents in union superintendencies must also hold State certificates (126: Massachusetts). Beginning in 1891, the town school committees were required by law to accept the diplomas from State normal schools in lieu of examinations (150:37-38); and elementary teachers are now usually employed by local town committees upon the basis of State teachers' college credentials.

In Rhode Island, every public- and private-school teacher as early as 1800 was required to hold a certificate of approval from the town council. In 1842, the school committee was required to ascertain by personal examination the qualifications of teachers. In 1845, the law authorized the issuance of teachers' certificates by the town school committee, the county school inspector, and the State commissioner of public schools. In 1857, the school committee became the exclusive agency for examining and certificating teachers, continuing so (with recognition of the Rhode Island Normal School diploma after 1871) until 1898. Since 1898, Rhode Island has had an exclusive State system for awarding certificates. This State at present affords an excellent example of a highly centralized State system of control over certification (126: Rhode Island, regulations of 1925 and 1935).

In New York, town commissioners determined qualifications of teachers between 1795 and 1812. More or less in succession thereafter, special inspectors, and town, county, and State superintendents assumed this function. A system of joint control by State and local superintendents was gradually replaced by the system of full

State control now in effect (126 : New York). The final change was realized near the close of the nineteenth century (40 : 623).

In Missouri, district certification by school visitors beginning in 1825 was followed in 1838-39 by township certification, and in 1852-53 by county certification. Different county officers and agencies issued certificates from time to time thereafter. County certification under State control still exists. The office of State superintendent of common schools was established in 1838-39. The superintendent prescribed the form of certificates issued by township inspectors, but he himself had no authority to issue certificates until 1865 and thereafter. In 1886 normal certificates of graduation were made certificates to teach. The State university school of education and five State teachers colleges now issue certificates. Three separate types of agencies therefore certificate teachers: The State department of education, six State educational institutions, and the county superintendents of schools. There has been a steady increase in the number of teachers certificated by the State department of education since 1924, a still greater increase in those certificated by the State institutions of higher education, and a marked decrease in those certificated by the counties (105 : 28-66; 126 : Missouri).

Trends similar to the foregoing in the evolution of State systems of control in other States are shown in numerous studies in addition to those previously cited (13; 19; 21; 22; 23; 31; 57; 61; 73; 80; 105; 107; 147; 149; and others.)

#### TRENDS IN THE ORGANIZATION OF CERTIFICATION ACTIVITIES IN STATE DEPARTMENTS OF EDUCATION

State laws during the past century quite generally specified in detail such requirements as were made for certificates, and to a considerable extent the practice is still followed. Certification, however, has become an increasingly complex process, the details of which have become difficult to manage through legislation. The tendency for the legislatures to delegate to the State board and its executive officers the responsibility for making detailed requirements beyond minima set by legislation has been growing for a number of years, as State department staffs have been enlarged and strengthened. Graves says:

Progressive certification systems no longer have their detailed standards written into the laws of the State. Legislation, on the contrary, places the responsibility for establishing certification standards upon the State administrative unit for education—the superintendent, commissioner, or board of education (65 : 180).

While the State boards and departments of education have been concerned since their establishment with the education of teachers,

the growth of a full-time office of State director of teacher education is comparatively a new development, arising as State departments of education increase markedly in size of staff and complexity of functions. Yeuell said in 1927:

. . . The increasing power of the State in granting certificates has made a teacher training program possible, using the State as a unit . . . this trend toward State-wide control in certification has compelled State departments at least to create Divisions of Certification. At present [1927] 19 States have a specialist in charge of that work, not counting the 11 States of the study [which have State directors of teacher training]. The next step, logically, is to make him a Director of Teacher Training (148 : 13-14).

In 1932, Stine mentioned the continuance of a trend to place teacher education and certification in one division or bureau (127 : 12-13).

Pennsylvania, among other States, affords an illustration of the growth in coordination of State department of education activities concerned with the many relationships of the State department and the teachers of the State. Reorganization of the State department in order to care for the proper administration of the part of the Edmonds Act having to do with certification was undertaken after the passage of the act in 1921. A unit first known as the Bureau of Teacher Training and Certification, and later as the Teacher Bureau, was organized in three divisions: Training, certification, and placement. Each of these units was developed and organized internally in keeping with the needs of the State. The development of a consolidated office made continuous and well-planned programs in the advancement of teacher preparation and certification much easier (147 : 43-44).

There is a growing need for further consolidation of activities of State departments of education relating to teacher personnel. Extension of State accreditation and approval of institutions of higher education which prepare teachers, increase in State supervision of instruction, increase in teacher-tenure legislation, extension of State teacher-pensioning systems, better adjustment of teacher supply and demand, improvement in teacher certification requirements and practices, and similar movements are related in nature, and demand increased coordination in planning and administration. Constant growth of teacher-personnel activities suggests the future possibility of creating teacher personnel offices in State departments which will coordinate and administer such activities as a unit. The administration of many of the personnel functions by an assistant commissioner of education or officer of similar rank is a possibility already realized in a few States, of which New York is a good example.

## EVALUATION OF ADMINISTRATIVE PRACTICES

## CONTROL BY STATUTORY REQUIREMENTS

To what extent should certification requirements be prescribed in the statutes? While the present practice in more than half of the States is to prescribe such requirements in considerable detail in the laws, the tendency appears to be away from this practice. The tendency toward the assignment by statute to the State board of education of authority to formulate rules and regulations for certification, rather than to make specific provision for details of certification in the law itself, was judged desirable by 288 members of a jury of 312 whose opinions were secured by George E. Myers in 1929 (97:1).

The unsatisfactory features involved when statutory requirements regulate detailed certification requirements and practices have been pointed out by numerous investigators (10:16; 21:73; 81:347; 86:68; 114:9). Details of certification regulations have become too numerous and too specialized to be included advantageously in statutes. Conditions of teacher supply and demand are constantly changing and considerable flexibility in certification requirements is necessary to meet such conditions. Existing laws are not readily changed. A patchwork of hastily conceived and unrelated bills rather than a definite, coordinated program is likely to result from detailed certification legislation.

Authorities seem to agree that requirements set up and administered by the State departments of education are more easily changed and more flexible than requirements crystallized in statutes; and that professional aspects of certification should be handled by a professional agency. The legislature should authorize the State board of education and the State superintendent and his staff to set up and change the detailed rules and regulations governing certification as often as needs demand (21:29-30; 76:30-31; 86:122). As executive officer, the State superintendent must have authority to give full force and effect to the provisions of State laws; he must meet emergency situations; and he must determine the procedure in dealing with many certification problems not specifically covered by law. In addition, his office must interpret the law and act as a clearing house of information to prospective teachers and employers.

Few investigators question the practice of fixing minimum standards of qualifications for certification by law. The State board may add to such basic minimum legal requirements, but cannot go below them. It is maintained that minimum statutory provisions fortify and strengthen the State board in its endeavors to carry on a constructive and forward-looking program (107:214). Cook said in 1927:

The practice of enacting laws increasing the minimum scholarship requirement exacted annually over a period of years is of increasing importance in teacher certification (32:11).

#### CENTRALIZED CONTROL BY THE STATE BOARD OF EDUCATION AND ITS EXECUTIVE OFFICERS

It has been shown that the State board or department of education controls certification in the majority of States, but not in all of them. There is still a score of States in which the issuance of certificates by counties, cities, higher education institutions, or towns is legally authorized, with varying degrees of control by the chief State education office. The trend for more than a century toward the centralization of the certifying authority in the central administrative unit, has long been considered desirable. Updegraff said a quarter of a century ago:

As to the effect of centralizing the authority to certificate teachers in State agencies, there seems to be a general agreement that much good has come from it. Higher standards in the examination of teachers have generally prevailed, and the profession has been advanced through the wider validity of certificates (137:141-142).

Learned and Bagley said in 1920:

Assuming . . . a well-organized State department with a permanent, trained executive, the best interests of the teachers of the State would require that all certificates of whatever character be issued from the State office. This admits of no doubt insofar as county certificates are concerned. . . . Certificates for work done at institutions should be issued from the same source. . . . Teachers should be considered as officers of the State, and their credentials should logically proceed from the State's responsible educational representative in charge of the public schools (81:347).

In 1929, the trend toward centralizing the power of certification in the State department of education under the State board of education was judged desirable by 95 percent of Myer's jury of 312 members (97:1). In 1932, 30 of the 31 State superintendents of education responding to an inquiry made by a committee of Michigan educators believed the trend desirable (145:53).

Brodie's jury in 1932 agreed that State certification or direct State supervision of local certification should be mandatory for every school district (21:33, 43). Cubberley states that "all local systems of certification should give way to a general State plan, centrally administered" (40:638). Zaugg and Bachman agree that the power to grant certificates should be located in the State board or department of education (10:36, 186; 150:160).

Numerous reasons are advanced by investigators for the centralization of certifying authority and of related State teacher-personnel activities such as teacher education. Stoutemyer believes that since

public schools are State institutions, it is logical that the State should issue teachers certificates (128:42). Switzer believes that centralization assists in securing well-prepared teachers who will grow in service (131:136). Since the service rendered by teachers is universal, the mechanism for the selection of teachers should be centralized in order to secure equality of service among different communities of a State (92:137; 131:11). The raising of levels of competency of teachers is hastened if authority to issue certificates is removed as far as possible from adverse local, social, or political pressure, including personal or charitable influences. The State department of education is in a better position than any other agency to ascertain the educational needs of the State. It is the most effective single State agency for certificating teachers. It ordinarily represents the collective wisdom of a larger number of educational leaders throughout the State, than is represented by a county or local school district. The services of educational experts in large school systems are economically practicable to a degree not possible in small school administrative units. There are much better opportunities in the State unit to establish uniform standards of teacher qualifications, to avoid confusion in certification, and to keep a continuing inventory of the supply and qualifications of certificated teachers.

More effective administration of State programs of improvement of teacher personnel are possible if certification is centralized. Where certification is administered locally, laxity of administration, differences in standards, lack of broad State leadership in establishing requirements, and the difficulty of ascertaining adequate levels of teacher competency through local examinations, all tend to prevent the raising of scholastic and professional standards (106:430-38).

Although Brodie's jury believed that "State certification or direct State supervision of local certification should be mandatory for every school district," the phrase "or direct supervision of local certification" is to be noted. A supplementary qualification accompanying the statement of the principle was that large administrative school units, e. g., cities with populations of 500,000 or more, might be permitted to issue local certificates if the State exercised direct supervision over such issuance (21:33-34, 43).

Cubberley in 1927 stated that there might be good reason why perhaps a dozen of our largest cities in which the work can be carried on by special examining boards, should retain special city certificates. In smaller places he considered the practice of doubtful value. He advocated the abolition of this special form of local privilege as soon as State standards could be raised satisfactorily. The cities should depend on regular State (or county) certification,

remaining free, however, to go beyond the minimum demands set by State certification standards (40:624). Advocacy of city certification of teachers is probably inspired in part by the fact that large and progressive cities have often raised standards more rapidly than the States. Progressive city school requirements for employment include high scholastic and professional preparation and specialized preparation for each subject or grade level taught. Good city school practices, including personal interviews with applicants, selection by qualified executive or examining officers, maintenance of eligibility lists from which the best-qualified teachers are chosen, and other practices have often been called to attention (130:1-43; 44:1-115; 6:253-352; 7:237-354). The tendency toward discontinuance of local certification in cities and other local school units may be expected to continue in the future as it has in the past.

Authoritative statements are lacking concerning the desirability of the issuance of teachers' certificates by teacher-education institutions. The acceptance of general principles governing the centralization of certification implies that direct State supervision and control of teacher education in the institutions is necessary if the authority to certificate teachers is accorded such institutions. At the same time, it is conceded that centralized control of teacher education is most effective only when there is a strong State department of education, with a highly professionalized staff.

The ideal to which most authorities adhere is to have an educational superstructure in the several States which is integrated and perfected in its entirety. To realize this ideal, there should be a department of education with adequate powers, organized and directed in accordance with accepted principles of educational administration, and free from political dominance. There should be a definitely organized unit in the department which administers certification and teacher preparation; an adequate staff; and a professionally qualified superintendent (21:29, 31, 41, 71-73; 35:413-415; 86:108-117; 90:928; 96:192-193).

As in the case of State departments of education, it is axiomatic that State boards of education should be organized in accordance with sound administrative principles. State school surveyors and other authorities usually recommend that the board members be appointive; that terms of office be fairly long; that members be laymen; that the functions of the board should be chiefly legislative and policy making; and that the State superintendent should be the executive officer (35:411-412; *see also* 21:29).

INTERNAL ORGANIZATION AND FUNCTIONS OF TEACHER CERTIFICATION IN THE STATE DEPARTMENT OF EDUCATION

The close relationship of teacher certification and teacher preparation is recognized in proposals for having a single coordinated unit of the State department in charge of these two functions (21:34, 43). Clark says:

Every State should have a constructive teacher-training program closely correlated and in harmony with the certification requirements. No program of this kind can be effected without active centralized control and positive direction . . . . (29:16).

Yeuell said in 1927:

. . . It is recommended that the Director of [teacher training] be given the Department's administration and supervision of certification. In current practice, he either administers and supervises the work directly or has a Bureau in his division for which he is responsible. Both practices seem to be commendable, depending on the size and organization of the Department of Education (148:18-19).

Maintenance of a single State division of teacher education and certification does not mean that it shall be given dictatorial powers over teacher education in the State. The director of the teacher-education and certification division of Pennsylvania said in 1937:

Nor does this mean that the State shall assume the responsibility for creating programs but rather that it shall be responsible for the coordination of all the agencies engaged in teacher education. These officials must develop a spirit of cooperation that will make effective the tremendous resources in every State (77:161).

There are numerous advantages in organizing State department activities in teacher education and certification in a single administrative unit in the department. The serious lack of correspondence that has long existed between certification requirements and the curriculum and course requirements of teacher-education institutions (see chapter VI) can be remedied more easily when a single State office directs and coordinates the formulation of the two types of requirements. Institutional credits offered as a basis for certification are more easily and accurately evaluated if the standing of the institutions is passed upon by the State office issuing the certificates. Furthermore, changes in certification requirements are more intelligently made when the State certification office has established direct functional relationships with the teacher-education institutions. With the help of the State teacher-education division, the institutions can immediately change or modify curriculum patterns and redirect student guidance to meet new or pending certification requirements. Better coordination of in-service teacher-education programs and of certification requirements can also be attained under such conditions (147:327).

In addition to teacher education, there is a variety of other functions relating to teacher personnel that should be integrated or at least coordinated with the teacher-education and certification functions. One function authoritatively proposed is the regulation of the balance of teacher supply and demand over and beyond that provided by minimum certification requirements. Strayer and Engelhardt said in a school survey of Missouri in 1929:

The Director of this Division [of teacher certification] should be given the responsibility of studying continuously the supply and demand of teachers in the State, and should provide such information as is necessary to guide the teacher-training institutions in their respective programs (92:143).

Yeager and Alonzo Myers stress the desirability of accurate State records of teacher supply and demand, and the maintenance of a proper balance between them (96:197; 147:327).

A necessary initial step in the regulation of teacher supply and demand is to ascertain the extent of the supply of teachers with given levels and types of preparation. Evenden says in the National Survey of the Education of Teachers:

Unless a State has an accurate, detailed, complete, and up-to-date inventory of the professional preparation of its teaching personnel—employed and unemployed—in terms of the standards in force in the State at the time, no effective plans can be made for teachers . . . the majority [of States] would need to increase their present records and include all the unemployed certificated teachers for which they may be considered in any way responsible before the inventory could be used as the basis for any planned attempts to regulate supply and demand (54:236).

According to Cubberley:

A yearly registration and validation of all types of teaching certificates, closely connected with the supervisory function, and for the records of the certification and pensioning divisions, should be required of every teacher anywhere in the teaching service, regardless of the type of certificate held (40:638).

McMullen proposes that the rating given a teacher in terms of his success become a part of his record in the bureau of credentials of the State department of education (86:125). Parker recommends that a complete and detailed system of records of teachers' qualifications and certificates be kept for all teachers in Missouri, by the State department of education (105:155).

Employers of teachers, guidance and placement officers of teacher-education institutions, State department placement officers, State certification officers, and others constantly need information that could be provided by careful and continuing teacher-personnel records kept for the State as a whole. The ideal of placing the right teacher in the right place could be forwarded by provision of accurate informa-

tion concerning the number of, and future needs for, teachers prepared for each type of educational service (54:236-240; 77:161; 106:446-447).

The exercise of effective leadership in mobilizing the educational and other forces of a State which may advance certification practices and requirements is an obvious responsibility of the State unit concerned with certification and related functions. The cooperation not only of all State officers concerned, but also of the teacher-education institutions, local boards of education, school administrators, supervisors, teachers, and lay agencies interested in education as well, is highly desirable and is usually a necessary accompaniment of long-time programs of improvement in certification requirements. Local authorities empowered to issue certificates or to set standards of teacher employment frequently do not wish to surrender the authority delegated to them. Some teachers fear that they may be eliminated from the profession, or that their tenure will be made less secure through the necessity of meeting State requirements higher than those set up by local authorities (147:310-311). In a democratic system of educational administration, and probably in other systems as well, a State teacher-certification program that does not secure the cooperation of the local school officers and teachers is doomed to failure.

Means to be considered for securing the cooperation of local educational agencies are suggested by successful programs undertaken in numerous States. For example, in Minnesota the bill authorizing the 1929 certification plan, which embodies a number of approved principles of certification, was sponsored by the State department of education, with the cooperation of teacher-education institutions, school boards of the State, and other educational agencies (85 : 197). In West Virginia, teacher-preparation curriculum committees with membership drawn from all over the State made a noteworthy report in 1928 (29). The findings of the report were helpful in setting certification requirements. The Pennsylvania program designed to put into effect the Edmonds Act of 1921 was noteworthy in respect to its mobilization of major local forces and influences (147 : 310, 326). Securing the cooperation and counsel of the approved teacher-education institutions in the teacher-education and certification program of Pennsylvania continues to be a definite policy of the State department of education (77 : 154-162). The new certification program of New York was built upon a sound foundation by virtue of the action of the Commissioner of Education in creating a committee which included representation from college and university schools of education, by submission of the committee report to village and city superintendents for consideration and recommendation, by fur-

ther submission of a brief statement of the proposed regulations to college committees, and by affording opportunity to district superintendents and classroom teachers to submit their opinions of the proposed regulations (34 : 281-282). In Michigan, committees and subcommittees representative of the city superintendents, the Michigan education association, certain higher education institutions, and the State department of public instruction made studies over a period of years that greatly advanced practices in certification and teacher education in that State (145). Similar cooperative activities in other States could be mentioned as well.

The cooperation of local educational agencies may extend beyond the making of suggestions and recommendations concerning certification requirements. For instance, through local cooperation by school employment officers, unsuccessful probationary teachers may be eliminated and the quality of classroom instruction safeguarded (106 : 438). Morrison points out that "State certification must always deal primarily with minimum standards, whereas real leadership comes from those who move far beyond the minimum" (95 : 7). In the employment of teachers, local requirements for appointment that exceed minimum State certification requirements will assist in raising standards.

Whether or not a given State should maintain a teacher-placement bureau is a moot question. Probably less than 1 percent of the teachers in the country as a whole are placed by the State placement bureaus and services. Direct applications made by the candidates themselves, services of college-placement bureaus and private teachers agencies, invitations of employing officers, and other means are much more commonly employed in typical States in the selection of teachers than are the services of State teacher-placement bureaus (44 : 36). That the conditions of teacher employment and placement in the country as a whole, however, are inefficient and wasteful of much human effort is commonly recognized. If the State can remedy such conditions through a placement bureau it appears logical that it should do so.

Clark gives additional reasons why such bureaus should be maintained:

A large amount of work in this field is indispensable . . . The State owes this free service to its teachers and the public. No other division has so much of the machinery, data, and resources for directing this work as the division of teacher training and certification. Moreover, no other division is so much in need of the information relative to the supply and demand of teachers and teachers of a specific type of training (29 : 18).

There are other functions involved in State teacher-personnel administration that a growing number of investigators believe should be performed as parts of a unified program. These functions include

administration of teacher-welfare provisions, including tenure, pension, and retirement provisions; administration of State salary schedules; conduct of research and study pertaining to teacher personnel; and related functions (86:110-111, 122).

The problem of advancing public-school education through an effective certification program is only a part of the larger problem of developing an effective teacher-education, employment, and placement program. Such development in the future will be conditioned in large part by the development of the State department of education as a whole. That there is much promise in the latter direction is indicated by several noteworthy trends; among them is an increase in the median number of State department staff members from 5 in 1910 to 28 in 1930 (35:415). Professional qualifications of department staff members have also improved greatly, which is in some ways a more important consideration than quantitative growth, in the establishment of genuine State leadership in teacher education. If the teacher-education institutions, which include the greatest universities and colleges in the United States, are to be guided in many worth-while directions by the State departments of education, the teacher-education and certification divisions must have staffs of no less caliber than that indicated by Bachman:

... If the States are to take the part suggested ... in the development of certification requirements ... the division of education and certification of teachers will need to be made the most powerful single division of the State department of education. The clerical aspect of such a division—that is, the formal issuance of certificates—can be done almost entirely by high-grade clerical assistants, but the director of such a division will need to be an expert in curriculum construction, and in the education of teachers and the peer of any man or woman of the State engaged in similar work (10:184).

#### SUMMARY

The certification of teachers is the responsibility of the several States. The agencies that actually administer certification and prescribe requirements are varied. Although State legislatures possess final authority in certification, the extent to which they determine detailed certification requirements varies greatly among the States. On the one hand, the statutes prescribe certification requirements and regulations in detail, as in Illinois and Kansas; on the other hand, they specify little more than the State educational officers who are to make and administer them, as in Arizona and Wyoming.

In 41 States, the issuance of all certificates, except those issued by the teacher-education institutions or by cities, is under the complete control of State education officers. County authorities in 6 States, and local town committees in 1 State, still issue some certificates. In at least 11 States, certain cities are authorized to issue

certificates; and in at least 10 States, certificates may be issued by teacher-education institutions.

The State education authorities that are most frequently in charge of the administration of certification are the State board of education and the State superintendent of education. Control over certification is divided or decentralized within a few States to such an extent, however, that there is a marked lack of uniformity in requirements and much difficulty in raising standards.

In most States, difficulties arise because the administration of teacher certification is not sufficiently coordinated with other State teacher-personnel activities, including especially the education of teachers.

A trend for many years in the administrative control of certification has been the centralization of certifying authority in the hands of the State board of education or of the State superintendent or department of education. This movement has continued for a century or more, and has been greatly accentuated during the past 40 years. The number of States in which all certificates are issued by the State education officers increased from 8 in 1898 to 41 in 1937, institutional and city issuance not considered. Accompanying this movement, the issuance of certificates by local school districts, counties, and cities declined greatly in extent. Also accompanying this movement has been an increased delegation of the details of certification by the State legislatures to the State board or superintendent of education. This trend was hastened by a steady upbuilding of the professional aspects of the work of the State departments of education, including that of the director of teacher education and certification.

Some of the more important principles and proposals relative to the administration of certification follow:

\*Certification requirements, other than minimum or general standards, should be set by the State board of education rather than by statute (100, Part II: 115; 21: 29; 97: 1). The certification law ought to do these two things: Fix minimum standards and empower the Board of education to interpret these standards into rules and regulations and to set higher standards when deemed advisable (100, Part II: 115).

\*Teachers in nonpublic schools should be required to meet standards essentially equivalent to those required of public-school teachers (100, Part II: 120).

A highly competent professional staff which is accorded reasonable security of tenure should be provided for the State administration of teacher education and certification.

\*Have received jury validation.

\*State certification or direct State supervision of local certification should be mandatory for every school district (21:33). The State should have the exclusive authority to issue certificates (100, Part II: 114-115).

\*There should be some central office or agency through which all certificates should pass for validation, in which central office there should be filed transcripts of all credentials upon which certificates are based (41:21). This office may be assumed to be that of the State superintendent of public instruction, or of the State board of education of which the State superintendent is the ex-officio secretary (41:96; see also 41:38).

Programs of certification should look forward to the eventual abolition of certification by cities.

Certification by institutions of higher education, where permitted, should be under direct State supervision.

The division of teacher education and certification or equivalent unit should maintain accurate, detailed, and up-to-date information concerning the extent of teacher supply and demand in the State.

In the development of a program of teacher certification, consideration should be given to the gradual integration and organization in one administrative unit of the State department of education, of the major functions of the department relating to teacher personnel.

The cooperation of local school officials, teachers, teacher-education institutions, and other agencies and individuals concerned should be secured in the development of a program of teacher certification.

\*Local school districts should be encouraged and authorized to exceed minimum State standards whenever possible (21:34). Higher local standards should be defined in terms of higher-grade State certificates.

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\*Have received jury validation.

## CHAPTER III: INTERSTATE EXCHANGE OF CERTIFICATES AND INTERSTATE RECOGNITION OF INSTITUTIONAL CREDITS

### STATUS OF PRACTICES

*Extent of teacher migration.*—The interstate migration of teachers is appreciable; and the mobility of teachers will probably continue to increase (86:2-5). The extent of migration was indicated in the National Survey of the Education of Teachers, which ascertained the percentages of new teachers who in 1930-31 began teaching in States other than those in which they were teachers or students the preceding year. The percentages ranged in the case of elementary teachers from 3.1 in Pennsylvania to 42.1 in Delaware. In the case of junior high school teachers, the range in percentages was from 6.1 in Nebraska to 66.6 in Wyoming. In the case of senior high school teachers, the range was from 7.1 percent in Texas to 61.6 percent in Connecticut (55:80-81, 86-87, 90-91). Hubbard, in a study based upon reports that included numerous estimates from 33 State departments of education in 1929-30, found that 10,673 new teachers were employed from without the several individual States reporting; the average percentage of new teachers from outside the several individual States was 23.2 (22:341).

Causes for the growing interstate migration of teachers include increased ease of travel, increasing diversification of teachers' economic and professional interests, recruiting of out-of-State teachers by employers, and increasing specialization in teacher education and certification which sometimes compels the individual teacher to extend the geographical area in which he seeks employment (86:2-5). Fluctuations of teacher supply and demand in different States, differences in certification standards, differences in salaries, efforts of teachers' agencies and other employment offices, and similar causes also tend to increase the mobility of the teaching population. Factors in given States such as proximity of teacher-education institutions to State lines, area of State, and number and types of teacher-education institutions also influence the extent of interstate teacher migration.

*Recognition of out-of-State institutional credits.*—The recognition of out-of-State institutional credits as a basis for certification, as distinguished from the recognition of out-of-State teaching certificates, is an accepted practice in all States. The acceptance of institutional credits necessitates evaluation by the several States of

credits earned in most of the institutions of higher education. Either regular institutional transcripts or blue prints of credits, or special State department credit forms completed by the institutions, are required of applicants for certificates issued upon the basis of college credentials. Such credentials may be submitted from practically any type of school, including institutions of subcollegiate grade, defunct institutions, and "diploma mills." Hence the State-certification agencies must exercise great care in accepting credits if acceptable standards are to be maintained. For the purpose of judging the standing of institutions, certification authorities usually resort to the accredited, approved, or membership lists of the Association of American Universities, American Association of Teachers Colleges, the regional accrediting associations, State boards or departments of education, and State universities including the graduate schools of these institutions. The annual directory of the Office of Education and similar publications are also used. Practices vary widely among States in respect to utilization of such lists (86: 79-89).

Dilley in 1934-35 ascertained some of the practices of the several States in evaluating and recording credits (46: 138-147). A summary of his findings on certain selected items is given in table 2.

*Interstate reciprocity in exchange of certificates.*—Concerning legal provisions governing the recognition of out-of-State certificates as a basis for the issuance of certificates in a given State, McMullen said in 1932:

In 35 States specific statutory provision is made authorizing reciprocal relations with sister States in reference to the certification of teachers. In the remaining 13 States no special statutory enactments in reference to the recognition of out-of-State certificates or credentials is found, but authority for the same is obtained by implication from the general powers and duties vested in central certifying agencies, such as the State board of education or the State superintendent of public instruction . . . (86: 64).

TABLE 2.—SUMMARY OF STATE PRACTICES IN EVALUATING AND RECORDING INSTITUTIONAL CREDITS AND CERTIFICATES, 1934-35 (46: 128-147)

Practice	Number of States replying—		
	Yes	No	Uncertain or not ascertained
1	2	3	4
Requiring official transcripts.....	42	4	2
Retaining transcripts for their files.....	39	7	2
Accepting credits from only those institutions accredited by recognized accrediting associations.....	26	19	3
Having a record of all certificates.....	43	2	3
Having a record of all the training on which certificates are based.....	39	5	4

A list of States issuing in 1937 one or more types of certificates on the basis of teachers' certificates from other States follows (126):

Delaware (conditional).

Iowa.

Kentucky, provided Kentucky requirements are met in detail.

Maine, provided requirements of other States meet Maine's minimum requirements.

Mississippi.

Vermont, provided standards of other States are as high as those of Vermont.

Virginia.

Practically all of the foregoing States require that prior out-of-State certificates meet the requirements for the new certificates issued, and all demand evidence concerning the preparation received by applicants submitting out-of-State certificates for recognition. Out-of-State certificates are endorsed only under numerous conditions, and often it is as easy to qualify for a new certificate as it is to obtain endorsement of an out-of-State certificate (126). Most States recognizing out-of-State certificates will not do so unless the applicant can show that he has received conditional appointment to a teaching position in the State in which application for certification has been made (86:64-67). Certificates granted by counties rarely if ever have interstate recognition. Usually only high-grade or life certificates issued by the State are recognized. Several other factors are considered by States entering into reciprocal agreements, including the standards of the issuing States, the grade and type of prior certificates held and the amount and nature of preparation required for them, the standing of preparatory institutions, and others (31:30-31; 32:10-11). Careful evaluation is necessary to ensure real equivalence in what the certificates stand for, and to make reasonably certain that the college credits upon which new certificates are based meet the standards of the States issuing them.

A serious obstacle in the way of securing a greater measure of reciprocity among States in the validation of out-of-State certificates is lack of uniform certification terminology (86:95). Even if two States happen to give the same name to certain types of certificates, the amounts and kind of education required, duration, and subjects or fields covered by these certificates are likely to be different (126; 131:111-117). For instance, a secondary certificate in one State may be valid for secondary school work only, and a certificate under the same name in another State may be good for both secondary and elementary school work.

Certificates based upon examinations in a given State are extremely difficult to evaluate in other States, and the attempt is rarely made. Since titles of college courses, especially those in profes-

sional education, are not standardized to any great extent, there are many difficulties even in determining the equivalence of out-of-State certificates based upon college credits. Everything considered, an ideal plan of reciprocity in the exchange of certificates among States is impossible under existing conditions (86:116-117).

### TRENDS IN INTERSTATE RECOGNITION OF CERTIFICATES AND CREDITS

The problem of reciprocity in the exchange of certificates issued by different certifying officers is as old as certification itself. In earlier days, certificates issued or authorization to teach accorded by church or State school officials were often good in no more than one school. During the past century when certificates were granted by local school, district, and county authorities more generally than today, the difficulties in reciprocity existed among smaller school units within the same State, as well as among States. As certification evolved into a State function, the problem became one of interstate reciprocity in the exchange of certificates.

Historically, the difficulties in securing reciprocity in certification among schools, school districts, counties, and States arose largely through differences in standards and requirements existing among the many certifying officers and agencies. Other causes included certification by examination, and perhaps a certain amount of suspicion in earlier days concerning out-of-State teachers, some of whom may not have been impelled by professional motives to leave their home States (86:16-17). A feeling of local self-sufficiency in school administration and the spirit of provincialism also probably played a part.

New York in 1888 was among the first States to make headway in advancing the idea of interstate reciprocity in certification. The idea was related to that of recognizing out-of-State institutional credits. The Legislature enacted a law conferring upon the State superintendent power to endorse certificates and diplomas issued by State superintendents and normal schools in other States. Normal diplomas or State certificates from seven different States were endorsed within a year by New York, and the number of States soon increased. Other States had been accepting to some extent the life certificates of New York, which were deemed representative of good standards. Since many State educational authorities did not have the power or inclination to endorse out-of-State certificates, New York soon established the policy of endorsing only the certificates of States extending a similar courtesy to New York in respect to her certificates and normal school diplomas (86:18-21). In 1935, New York discontinued the issuance of certificates upon the basis of out-of-State certification.

Interest and occasionally favorable action during the 1880's and thereafter in reciprocity in certification was also manifested in North Dakota, which announced the recognition of out-of-State certificates in 1887, and in Michigan and Kansas. Other States introduced plans of reciprocity at later dates. The State superintendents, assembled during the meeting of the National Education Association in 1896, appeared with some exceptions to favor the interstate recognition of State certificates (86:26-29), and their discussions continued in 1910 and 1911 (137:5-6). In 1897, the normal school section of the association reported that about half of the States granted recognition to diplomas from normal schools located in other States. Interstate comity was favored by the group, provided that approximately equivalent standards in the different States could be attained. Interest in the problem continued in various places, but the difficulties in solving it were great. Nevertheless, the principle of reciprocity had won wide acceptance by the opening of the twentieth century (86:21-29; 137:5-6).

During the present century, the number of States recognizing out-of-State certificates in the different years when reported, are as follows: 1903, 14; 1911, 29; 1921, 38; 1927, 28; and 1937, 7. The great decline in the number of States since 1921 is explained in large part by the increased State recognition of credits of out-of-State teacher-education institutions for certification purposes during the same period. The increase in the number of States issuing certificates upon this basis was as follows: 1903, 25; 1911, 37; 1921, 42, and possibly more; 1937, all States (31:30-31; 32:10-11, 27-28; 70:468; 126; 137:244-245. *See also* 15:299; 86:29-44; and 89:124). The greatly increased reliance of certification officers upon out-of-State institutional credentials as a basis for certification, parallels the increasing reliance upon credentials of institutions within a given State, as a basis for certification in that State.

### EVALUATION OF PRACTICES

What should be the policy in setting certification requirements for out-of-State teachers? Despite the tendency of employing officers in many school systems to give preference to local teachers, especially under adverse economic conditions, all authoritative statements reviewed agree that the free interstate migration of competent teachers should not be hindered; and many authorities believe that it should be encouraged. For example, Pittenger, chairman of a committee of the American Association of Teachers Colleges in 1931, said:

Nothing should be done to interfere with the employment of teachers from other States, provided their standards of academic and professional training are equal to those required by the laws of the State (112:910).

Cubberley, in 1927, said:

Interstate recognition of equivalent training should be extended, with a view to making it easy for the successful and properly trained teacher to cross State lines and engage elsewhere in what is in reality a national service (40: 638).

Several reasons are advanced for encouraging the interstate migration of competent teachers. It should be encouraged in order to equalize the supply of teachers among States, avoid provincialism and inbreeding of ideas and practices in local school systems, promote the raising of local standards for the selection of teachers, advance the quality of local instruction, and assist in the dissemination on a national basis of new educational ideas. Capable teachers as well as the schools may benefit thereby (86: 6). Unfortunate economic conditions on a national scale which result in the discouragement of interstate migration of teachers are temporary. No State has so many excellent teachers that it can ignore entirely the supply of such teachers available in other States (131: 117).

Various proposals are found in the literature relating to the place of national agencies in the coordination of certification, but there is no general agreement in these proposals. Switzer says:

As the problem is Nation-wide in importance, national cooperation with the States in making their rules for certification is highly desirable (131: 136).

Martin says:

Possibly what we need to accomplish such a program is a department of education in the President's Cabinet with power to establish uniform certification standards (89: 122).

McMullen suggests that—

It would seem entirely feasible for a national committee, sponsored either by the National Education Association or the United States Office of Education, to work out a uniform certification law which would make possible an easy evaluation of a certificate gained in one State and presented in another (86: 96).

McMullen believes that a joint committee of the two agencies he mentioned could work out uniform certification laws that would establish uniform terminology and standards (86: 115, 122-123). Sueltz suggests that since the problems of secondary education in the various States are believed to be more similar than they are dissimilar, some National coordinating agency might give constructive suggestions for the issuance of secondary school certificates, so that the basic certificates issued in the several States might have greater agreement (129: 117).

Among other proposals are the possible initiation of a program leading to greater uniformity in practices, certification, and ter-

minology, if not in requirements, by the National Association of State Directors of Teacher Education and Certification; and cooperative action by States on a regional basis.

Since the administration of public education is a function of the several States, and not of national agencies, it is not to be expected that national agencies can do much more than to invite voluntary cooperation of the States in arranging for reciprocal exchange of certificates, and to assist in the study of means for such exchange. Accrediting associations rarely concern themselves with such matters. If cooperative arrangements among States are to be successful, there must be more uniformity of requirements, greater uniformity of nomenclature in certification, and further development of reciprocal relationships (131:117, 136-137).

Cubberley states that general interstate reciprocity ought not to be expected between States that have similar standards. Lowering of standards in any State is not necessary or desirable. However, a low-standard State could well accept certificates from one with high standards. Higher-grade certificates of different States often are equivalent even though minimum standards in some States are lower than those in others. Reciprocity in the interchange of such certificates would appear possible without the danger of lowering standards (40:634-635). If certification requirements were standardized in respect to form, terminology, and similar elements, it would be possible for the several States to honor each other's certificates without endangering their own standards (89:124).

McMullen's proposals, advanced in connection with a proposed certification plan, represent the more advanced ideas concerning possibilities in the validation of out-of-State certificates:

A valid certificate issued by any State on the basis of the national standards of certification shall be endorsed at its face value, provided the holder of the certificate is assured of a teaching position in this State and, provided further, that his record in his home State as shown by his credentials, including his success schedule, merits approval. In those States which prescribe special local certification requirements, such as knowledge of State history and constitution, school law, State manual, etc., out-of-State teachers shall be allowed 1 full year after entering upon their teaching duties in which to meet these special requirements.

For the most part, the validation of a certificate from another State will involve merely the sending of a transcript of the certification record of the teacher in question from one State department to another (86:127-128).

Despite the numerous proposals made for the free interchange of certificates among States, the trend is distinctly away from this practice, and toward certification upon the basis of out-of-State institutional credentials. While theoretically attractive, and quite acceptable as a practice, general interstate exchange of certificates faces formidable difficulties. The adoption of a common pattern of certifi-

cation by all States may be attained in greater degree in the future, but the past history of certification indicates that a uniform country-wide certification pattern cannot be looked forward to for a long time to come, unless conditions change considerably.

Of the two means of securing a greater measure of State reciprocity in certification, that is, endorsement of out-of-State certificates and acceptance of out-of-State college credits as a basis of certification, the latter under present conditions, appears preferable. Certification upon a basis of out-of-State institutional credits is approved in common practice in all States. Under present conditions, it is a much more accurate, direct, and effective method of ascertaining the qualifications of applicants than certification upon the basis of out-of-State certificates alone. While the difficulties in ascertaining the value and equivalency of out-of-State institutional credits are considerable, there are usually means of meeting such difficulties. For instance, in accepting credits on an interstate basis, a suggestion by Cubberley more than 20 years ago appears to apply with minor adaptations today. He believed that the standards set by the State teacher-education institutions of a given State, i. e., by the State universities and State colleges, including State teachers colleges, should be the standards for measurement considered in the approval of out-of-State institutions (38:150). Problems involving the relationships of certificating agencies to teacher-education institutions are discussed in chapter VI. It is sufficient for present purposes to say that the possibilities in the use of institutional credits by certificating officers could be much more widely realized if all States applied commonly accepted standards in their accrediting or approval of institutions of higher education for teacher education. If institutions were more carefully selected and approved by the State for work in specific fields of service for which teachers are certificated, and the individual State lists were made available to all other States, much clerical work, uncertainty, expense, and delay in issuing certificates would thereby be avoided.

### SUMMARY

Out-of-State applicants are granted one or more types of certificates in all States upon the basis of institutional credentials. Certain types of certificates, however, are issued upon an exchange basis in seven States.

Difficulties in certification upon the basis of institutional credentials include the necessity of evaluating credits from institutions of doubtful standing, and lack of equivalence of courses offered by a large variety of institutions that prepare teachers. Difficulties in certification upon an exchange basis are even greater, because of

differences in certification standards, requirements, and terminology among States.

Important trends in interstate recognition of certificates include the centralization of certification into the hands of State certification officers, and the increasing acceptance of institutional credits as a basis of certification. In 1903, 25 States recognized out-of-State institutional credits as a basis for certifying teachers; in 1927, all States issued one or more kinds of certificates upon the basis of institutional credits. The number of States recognizing out-of-State certificates as a basis for certification increased from 14 in 1903 to 38 in 1921; since 1921, the number has decreased to 7. Approved procedures and practices relating to the interstate exchange of certificates and the interstate recognition of institutional credentials are summarized in the statements that follow:

National or regional education associations and other appropriate agencies should be invited by the State departments of education to assist in the conduct of studies with a view to suggesting means of securing a greater measure of reciprocity, in certifying teachers. Cooperative action by State officers on a regional or national basis is desirable.

\* The several States should use one general pattern in certification for public-school service. This principle should in no way affect the formulation of different minimum standards among the several States (21:31).

Standards in no State should be lowered as a result of interstate exchange of certificates.

In the certification of out-of-State teachers, emphasis should be put under present conditions upon the use of credentials of approved teacher-education institutions, rather than evaluation of out-of-State certificates alone.

Equivalent training and experience secured in other States should be recognized as a basis for certification (100:Part II:117).

The interstate migration of teachers should not be hindered by certification regulations or requirements based upon any considerations other than the professional competency of such teachers.

\* Have received jury validation.

## CHAPTER IV: STATE ISSUANCE OF CERTIFICATES UPON CREDENTIALS AND BY EXAMINATION

### STATUS OF PRACTICES

Initial certificates are issued upon two bases: (1) Upon evidence of educational preparation as shown in statements of college credits; and (2) by examination. One or more kinds of certificates are issued in all States upon the basis of college credentials. In addition, certificates are issued upon examination in 20 States (126). In the District of Columbia, authorization to teach in elementary and in high schools is accorded upon the basis, respectively, of 4 or 5 years of college or university work, and upon the basis of examinations in addition. More than three-quarters of the 20 States that issue one or more types of certificates by examination, do so on a limited scale only. In several of them, certificates are rarely issued by examinations, although the practice is legally authorized.

*States in which teaching certificates are issued upon the basis of (1) institutional credentials only, and (2) institutional credentials, and State or local examinations, September 1937 (126)*

1. States in which certificates are issued upon the basis of institutional credentials or credits only.<sup>1</sup>

Arizona, Colorado, Connecticut, Delaware, Georgia, Idaho (examinations authorized by law but practically certificates are issued on credentials entirely or almost entirely), Indiana, Kentucky, Louisiana, Maine (examinations given for superintendents only), Maryland, Michigan, Minnesota, Nevada, New Hampshire (all candidates must pass examinations in New Hampshire programs of studies and New Hampshire school laws), New Jersey (exclusive of two or more cities), New Mexico, New York (exclusive of two or more cities), North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Utah, Vermont, Virginia, and Washington (examinations authorized by law but practically certificates are issued on credentials entirely or almost entirely).

2. States in which certificates are issued upon institutional credentials and also upon the basis of State or local examinations:<sup>2</sup>

Alabama (very few certificates issued upon basis of State examinations; none on local examinations); Arkansas, California (in the case of a few teachers certificated upon the basis of county examinations), District of Columbia (bachelor's and master's degrees required as prerequisites to examinations for elementary and high school teachers, respectively), Florida, Illinois, Iowa, Kansas, Massachusetts (examinations by local authori-

<sup>1</sup> Minor examinations in State constitution, school law, State manual or history, etc., not considered.

<sup>2</sup> One or more types of certificates are issued upon college credentials, and in addition one or more types are issued upon examinations.

ties authorized but local authorization to teach on the basis of institutional credentials predominates), Mississippi, Missouri, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, Tennessee, Texas, West Virginia, Wisconsin, and Wyoming.

Details concerning the certification of teachers upon college credentials and by examinations are presented by numerous writers (10:17-20; 89:7, 54-55, 155; 131:21; 132:64; 150:183). In 1932, Martin found that 29 States issued elementary certificates upon examination and 9 States issued high-school certificates by this means. Thus certification by examination was much more common for elementary teachers than for high-school teachers. However, most of the 29 States issuing elementary certificates by examination issued only one or two kinds of certificates of this type. These were usually, but not always, of low grade. The nine States issuing high-school certificates in 1932 by examination were: Florida, Iowa, Maine, Michigan, Mississippi, Nebraska, New Hampshire, Tennessee, and Texas. All of the States, however, issued one or more types of high-school certificates based entirely on college credentials. No State issued certificates entirely by examination to elementary or high-school principals (89:6, 54-55, 121).

Examinations for the superintendent's certificate are slowly disappearing. In 1933, State examinations for such certificates were confined to five States, and in some of these the examinations were confined to only a few subjects (115:21-23).

As previously shown in table 1, about five-sixths of the States exercise complete control over certification, city and institutional issuance of certificates not considered. In remaining States, varying control is exercised over examinations and the issuance of certificates. In only two States, however, do county authorities share in all three of the following functions: Formulating questions for use in certifying by examination, marking papers, and issuing certificates. In Massachusetts, local town committees pass upon the qualifications of elementary teachers, and of high-school teachers except those in State-aided high schools. Teachers in State-aided high schools, and superintendents in union superintendencies, must hold certificates issued by the State department of education (126:Massachusetts).

Local school district certification of teachers by examination has about passed out of existence. The town committees of Massachusetts that qualify teachers do so largely on the basis of institutional credentials. There is a decided tendency also in cities that issue certificates, to issue them upon the basis of institutional credentials rather than upon examination (80:25-27, 128).

Less than 5 percent of the city school systems that made returns in the National Survey of Secondary Education in 1932, required examinations as one means of selecting teachers after they were certificated. Such examinations were seldom held except in cities of more than 30,000 population; less than 1 percent of the cities with smaller populations held examinations for prospective teachers. Slightly more than one-third of the cities with populations of more than 100,000 required candidates for teaching positions to take special examinations (44:56-61).

### TRENDS IN METHODS OF ISSUANCE

Certification of teachers by oral or written examinations is probably as old as certification itself. Early beginnings in certification on the basis of institutional training are illustrated by New York which began in 1849; Pennsylvania, 1854; Rhode Island, 1871; and Massachusetts, 1891 (150:45-46). During recent decades, the number of States employing examinations as a basic method of certification has decreased. At the present time, 28 States no longer issue certificates upon this basis (p. 40).

In States still issuing certificates by examination, the number of teachers certificated by this method constantly tends to decrease, while the number certificated upon a basis of credentials tends to increase (32:9; 89:121-122; 131:121; 132:64). In California, for example, the number of certificates granted on examinations decreased from 1,050 in 1899 to 282 in 1921, and the number of certificates granted on college credentials increased from 1,065 to 10,368 during the same period (23:70). Only 30 applicants passed the county examinations in 1936. Switzer reported that 23 States in 1925, and 30 in 1930, issued all high-school certificates on college credentials. The number of certificates issued on examination within most States certificating by this method decreased markedly. In 1925, 14 States issued life secondary teaching certificates on examination and none in 1930 (181:121-122).

Elimination or restriction of certification by examination has accompanied or followed the transfer of control of certification from local school districts to larger school administrative units. When the State undertakes the issuance of certificates, certification upon the basis of institutional credentials very often follows. Tennessee affords an illustration. A system of certification by local school committees within counties first evolved into a State-county certification system, and later into a State system. In 1913, a law was enacted which made the bases for the issuance of certificates uniform throughout the State. Two kinds of certificates—those issued on the basis of examinations, and those on the basis of institutional cre-

dentials—were authorized. Issuance upon the basis of institutional credentials was steadily extended thereafter. Since 1920, the number of certificates issued on examinations has declined greatly (57:188-208).

McMullen says:

The gradual elimination of certification of teachers by method of examination and the progressive substitution of a system of certification on the basis of academic and professional credits earned in a teacher-training college are two opposite but parallel trends discernible to all students of education. . . . It perhaps is not too much to predict that other States (those certifying teachers on the basis of examination) will gradually outgrow the practice of certifying teachers by examination, rendering that system obsolete within the next few years (86:104).

However, it still appears expedient in practice in many States to employ both methods of certification, and the indications are that the two systems will continue to exist together for some time to come (40:622, 631-632). It has been suggested by Martin and by Cook that this method may continue for many years, but that it may eventually be considered practicable only as an occasional substitute for systematically earned scholarship requirements, and be employed less and less frequently (32:9; 89:121-122).

#### EVALUATION OF METHODS OF ISSUANCE

The tendency to discontinue or subordinate in importance examination as a basis for the issuance of certificates, substituting therefor the recommendations of teacher-preparing institutions, was judged desirable by 94 percent of Myer's jury of 312 members (97:1). A number of authorities have stated the reasons why certification should be based upon approved college credentials rather than upon examination (57:215-216; 131:137; 149:160; 150:134). Most of the reasons given are substantiated in part by the following statements which received validation by Brodie's jury: Certification should be utilized as a means for improving classroom instruction; it should provide for professional improvement of teachers; and it should stand primarily on a foundation of professional education (21:35).

There is common agreement that certification upon the basis of college credentials hastens the elevation of levels of teacher preparation much more rapidly than certification by examination. When certificates are based upon credentials from approved institutions, there is generally some assurance of systematized and more or less prolonged study by the applicant; of his mastery of subject matter and of his acquisition of teaching skills, especially when student teaching is required. On the other hand, certification by examina-

tion as administered in this country often permits the infiltration of poorly qualified teachers into the profession, instead of eliminating such teachers from consideration for employment. Minimum requirements are usually lower for certificates issued by examination, than for those issued upon a basis of college credentials (table 4; 10:17; 40:631). Furthermore, the examination offers only minimum incentives to the teacher for self-improvement in service. It advances genuine scholarship little, if any.

Examinations in subject matter cannot be depended upon as a means for predicting teaching success (6:261-266; 7:242-252). The ability to recall factual material hastily reviewed for an examination is not a satisfactory single criterion for certifying a teacher. In the teacher-education institutions, however, the selective forces at work among student bodies can be directed to weed out poor material for the profession (100, Part II:118-19).

In respect to the use of examinations as a means of certifying high-school teachers, Stoutemyer says:

... Recent studies of examinations show that the ordinary type of teachers' examination does not test the ability to teach nor does it indicate the degree of this fitness. While these examinations show ability to cram textbooks they do not measure the "carry-over" into teaching. Psychology has proved that knowledge carries over into action only when it has been connected with action. Training in situations similar to those found in actual classroom work will be needful before any large amount of transfer can be predicted (128:42-43).

Parkinson says:

Experience in the several States seems to indicate that success as a student in a teacher-training institution is a more reliable criterion for predicting teaching success than success in passing a teacher's examination. Examinations are not always honestly stood and reliably scored. Often they require only temporary retention of limited factual material. No examination adequately measures ideals, attitudes, interests, habits, and teaching skills. But the composite judgment of teachers who have observed a student for a period of years, both in the classroom and out of it, is a fairly reliable measure of these traits, all of which enter into teaching success. Breadth of training can be more adequately portrayed by a transcript showing academic and professional credits of a student than by a teacher's examination; moreover, evidence of academic and professional training presupposes a considerable number of examinations (106:464).

Other reasons why the issuance of low-grade certification by examination is not approved are, first, that the need to secure a greater supply of certificated teachers by examination which has prevailed during periods of marked teacher undersupply, does not now exist in most States. Second, certification by examination leads to unfair competition between teachers so certificated, and teachers with more thoroughgoing institutional preparation. Third, as Cook and Martin point out, the administration of certification is becoming increas-

ingly cumbersome, as the number of school subjects and fields of work in the profession of education increases (32:9; 89:121). Certification by examination is a needless additional burden. Fourth, undesirable local pressure for unmerited certification is often exerted when local certification exists, and abuses in certification are invited.

Typical among authoritative recommendations on the subject is that of the Carnegie Foundation, which recommends for California, that all county or local certificates, i. e., those issued by examination, be abolished (26:55). Cubberley in 1927 proposed as a principle, that the number of examinations for certificates be reduced, and the emphasis shifted from examination tests to evidence of training (40:636).

Pittenger says:

The best interests of American childhood demand that certification of teachers be based on something more substantial than mere success in passing an examination (112:907).

Examinations find most support when they are used as a supplementary means of selecting high-grade teachers. While their predictive value in respect to teaching success is low, it has been said that well-constructed and carefully administered tests may be of considerable value in selecting teachers (44:60-61).

Although no attempt is made to evaluate the merits of their practices, it should be mentioned that many European countries still stress examinations as a basis for ascertaining the qualifications of prospective teachers, and for their certification or legal qualifications to teach (71:542-543, 559-560, 589-590, 832, 835-840, 842-847, 850-853).

In Germany, France, and certain other countries the examinations, which may be both oral and written, begin early in the period of the teacher's preparation. They continue until his final work is concluded, extending sometimes (as a basis of promotion) into the period of his in-service work. College, university, or normal school teachers are often subject to the examinations. In France, where a teaching staff with high scholastic qualifications is taken for granted, practically every teacher has passed through a rigorous series of examinations extending throughout his school career (1:1-14).

There is some argument for the use of examinations as a means of ascertaining the qualifications of individual candidates whose general preparation is good, but which may have been of a nature not technically in accord with special State requirements.

Examinations are sometimes used as a supplementary device in the selection of teachers whose prior institutional education has already reached high standards. In such cases, examinations that are scientifically constructed and that test general competency as well as

scholarship, hold claim to a place in the general scheme of teacher selection.

There appears no good reason for retaining the practice of issuing low-grade certificates upon examination. The question is how to eliminate the practice. Trends in most States indicate that certification by county examinations is eliminated much more often by gradual steps than by sudden drastic changes. After studying conditions in Missouri, where county authorities still issue certificates, under State control, Parker recommends:

That county certification be discontinued gradually by first eliminating the special and the third grade, the second grade, and finally the first grade certificates (105: 154).

### SUMMARY

Issuance of initial certificates to inexperienced teachers is made upon two bases: First, upon the submission of evidence of educational preparation as shown in transcripts or other statements of college credits; and, second, upon examination. The first-mentioned practice is followed in all States in the issuance of one or more kinds of certificates; the second practice is followed, in addition, in 20 States.

In most States issuing certificates upon examination, control over issuance is exercised by the State board or department of education, rather than by county or local district authorities.

For the most part, certificates issued upon examinations are of low grade. They are usually offered for the benefit of applicants whose formal schooling is limited, and do little more than test the applicants' knowledge of elementary or of secondary school subject matter. The examinations afford little stimulation to the applicants to undergo intensive or prolonged preparation for their work. Examinations for low grade certificates perpetuate low standards of preparation, and permit the infiltration into teaching of numerous persons who do not meet satisfactory scholastic standards.

The chief defense of examinations as a method of certifying teachers would appear to exist only when they are scientifically constructed and used as a supplementary device to ascertain certain qualifications of teachers who have already had satisfactory preparation in professional and teaching content.

Trends include a steady decrease in the use of examinations, their increased control by the State board or department of education, and increased reliance upon evidences of institutional preparation as a basis of certification. The number of States issuing certificates solely upon institutional credentials has increased, until at the present time 28 States employ this method alone. In the remaining 20 States the number of certificates issued upon examination to in-

dividual teachers tends to decrease, and the method itself to become an incidental one.

• Authoritative proposals in respect to the place of examinations in a State program of certification follow:

\* Certification should be utilized as a means for improving classroom instruction (21:35). It follows that the method of certifying teachers which is adopted should contribute to this end.

\* States should not continue to issue certain types of lower-ranking certificates on the basis of State teachers' examinations (41:73).

Examinations as a basis for initial certification should be discontinued in favor of the recommendations of teacher-training institutions (100, Part II:118-119; see also 97:1).

Examinations in subject matter should not be used as the sole means of certifying teachers. If examinations are used as a supplementary basis of certification, high-school graduation and as much college preparation as the supply of teachers permits, should be required as a prerequisite to examination.

If examinations are used as a supplementary basis for certification, the following practices should be observed:

- (a) Examinations should be constructed scientifically and in accordance with the best educational practices.
- (b) State departments of education or the equivalent State offices should construct or approve all examination questions, should prescribe the conditions under which the examinations are given, and should mark all examination papers.

\*Have received jury valuation.

## CHAPTER V: CERTIFICATION REQUIREMENTS AND PATTERNS

### STATUS OF REQUIREMENTS

#### NUMBER AND TYPES OF CERTIFICATES

*Diversity in requirements and classification.*—An outstanding characteristic of requirements for certificates and of patterns of certification is their great diversity. Of two certificates issued in different States, one may require prerequisite scholarship no higher than elementary school graduation; the other may require a year of graduate work. One may cover only a single subject; the other, practically all the subjects taught in the public schools. A variety of prerequisites other than scholarship may be required for one, but not for the other. One may be valid for 1 year only; the other for life. If by any chance all requirements for both correspond, in all probability the names of the certificates will not be the same. These and other differences have been discussed in detail by numerous investigators (21:31-32, 43; 32:6-7; 89:2; 150:135-136; and others).

*Total number of different kinds of certificates.*—In respect to the number of kinds of certificates issued, Ashbaugh reported in 1927 that there were nearly 600 of all grades and classes (9:154-155). Parkinson in 1932 reported that:

The number of different kinds of certificates issued by the various States ranges from 3 in one State to 55 in another, the average for all of the States being 20 (106:444).

Martin reported in 1932 that two States issued only one kind of certificate for teachers in the elementary grades, while one State issued 17 kinds. The average number of kinds of elementary certificates per State was about seven. Only 1 kind of high-school certificate was issued in each of eight States, while 11 kinds were issued in one State. On the average, about twice as many kinds of elementary certificates were issued by the several States, as of high-school certificates (89:2). Switzer in 1930 reported a total of 172 kinds of certificates valid for teaching academic subjects in high school (131:73-75).

Probably differences in certification terminology account for many of the foregoing "kinds" of certificates that were reported. If the names applied to them were disregarded and only the certificates that are intrinsically different were counted, the numbers reported by different writers might be considerably reduced.

*Differentiation of certificates by types of work.*—Certificates are issued for specific subjects, fields, grade levels, or special types of educational service, primarily for the purpose of ensuring the specialized education of teachers. The States may be divided roughly into two groups in respect to differentiation of certificates on such bases. The first group differentiates very little; typically, States in this group issue elementary certificates, certificates based upon college graduation that are good in most teaching positions in high or elementary schools irrespective of grade or subject, and a few special-subject certificates, e. g., for music. The second group, containing about the same number of States, issue certificates variously specialized for administrators, general and special-subject supervisors, and teachers of different high-school subjects and grade levels. Such specialized requirements assist in the improvement of instruction by assuring some degree of specialized preparation in the fields or subjects covered by the certificates.

Conditions have improved somewhat since 1927, when it was said:

It is an astonishing fact that a sixth of the States permit any college graduate to teach in any grade in any public school in the State (128; 40-41).

It is still possible in most States, however, for a college graduate with professional training to secure a certificate that will permit him to teach in subjects, grades, or fields of work in which he has little if any specific education.

When certification requirements fail to assure preparation for the specific work to be done by the teacher, other agencies to some extent assume the task. State boards of education and accrediting associations attempt to assure specialization by accrediting high schools and by other means. Approved teacher-education institutions set varying but fairly definite requirements for graduation, and for the completion of short curricula. This is helpful but does not assure the placement of the teacher in the position for which he prepared. While progressive cities and other local school systems often demand considerably more specialization of applicants for positions than the minimum required for State certification, many school employers because of difficulties in teacher assignment and other reasons, demand little if any specialization.

Bachman in 1933, distinguished six different types of elementary school certificates exclusive of special certificates. The types of certificates and the number of States issuing each type were: Kindergarten, 20; kindergarten-primary, 12; primary, 10; intermediate, 5; general elementary, 46; and rural school, 2. The most highly specialized and restricted certificate was that for kindergarten teaching. The relatively few specialized intermediate and rural school certifi-

cates were not restricted to the degree characterizing the kindergarten or kindergarten-primary certificate. A general elementary certificate was issued by nearly all the States. With few exceptions, it was valid for all elementary grades; and occasionally it was valid for secondary grades (10:28-30).

Provision of specialized junior high school certificates is relatively a new development. Switzer found in 1930 that 163 of the 426 kinds of certificates reported for secondary teachers were specialized for junior high school teachers. Some elementary certificates were valid in junior high school grades also. Nine States issued certificates valid only in the junior high school (131:46-53). The number has since increased slightly (table 4). Eight States in 1930 issued a total of 26 kinds of certificates valid in the junior high and elementary schools; 14 issued a total of 35 valid only in grades 7 to 12; and 25 issued a total of 87 valid in the secondary and elementary schools, including the junior-high schools grades. (131:46-59).

In 1930 Switzer found that 17 States issued a total of 50 kinds of certificates valid only in high school. The remainder of the States issued certificates valid both in the elementary grades and in high schools (131:69-73). In 26 States in 1930 the highest grade State high-school certificate was valid both in high-school and elementary school teaching (12:172-73). The idea persists that high-grade certificates carry with them the right to teach in most if not all types of teaching positions (10:24).

Committee Q of the American Association of University Professors in 1932 found that the highest grade certificates issued to inexperienced high-school teachers were restricted in 20 States to specified subjects. Practically all of the remaining States did not so restrict the certificate (142:177). Switzer in 1930 found that at least 11 States issued certificates other than special-subject certificates that represented definite specialization in the high-school teaching or subjects. The subject or subjects to be taught were specified on the face of the certificate. In another group of 18 States the majors and minors were specified on the face of the certificate, but certain subjects not covered by the certificate could be taught. Six States that required definite specialization in subjects to be taught outlined in detail the kind and amount of education required for certification in the various fields, and four others stated the required amount of credit but did not specifically outline the kinds of courses to be pursued (131:75-77).

Considerable attention is being given by the States to the qualifications of teachers in publicly controlled junior colleges. State control is exercised not only through the requirement of a teacher's certificate specifically for junior college work, but also through the desig-

nation by the State of certain bodies, usually national or regional accrediting associations, to formulate standards governing the qualifications of staff personnel. Specific State legislation also occasionally governs such qualifications. In 1931, according to Wahlquist, 21 States were making provisions of some kind that were designed to safeguard the qualifications of junior college teachers. Fourteen of these States issued junior college certificates, although only one, California, appeared to do so on wholly satisfactory terms. Usually such certificates were valid both in junior colleges and in high schools. Only 4 States had specific statutes concerning the matter (139 : 187-190). Brief statements concerning requirements for junior college teachers in 1936 may be found in Woellner and Wood (144). While the detailed data in this study cannot be tabulated to advantage, the total number of States reporting specific provisions for safeguarding the qualifications of junior college teachers is about the same as the number in 1931. More than half the States still make no regulatory provisions of any kind for junior college teachers. Requirements for junior college certificates when made are more specific, however, than in 1931. Usually one year of graduate work, or the master's degree, is required as a minimum for such certificates (144).

While comparatively a new development in the long history of certification, the issuance of certificates specifically for teachers of non-academic subjects such as music, and of vocational subjects such as home economics, is now common practice. In addition, specialization in certification has been extended also to include workers in non-teaching educational services, such as school administration.

In a number of States legal authority has been granted State departments of education to issue certain special types of certificates, but the authority granted has not yet been exercised in full. In the regulations of some States, the names of special kinds of certificates issued infrequently are not listed. Distinctions between certificates for teachers of academic subjects and for teachers of nonacademic or special subjects are often slight. A frequent requirement for the certification of high-school teachers of each type is a college degree, 18 semester hours of work in professional education, and a major or minor in the subject to be taught. The chief apparent difference in the types of certificates is in the name of the subject to be taught.

For the foregoing and other reasons, tabulations of the number of States issuing special certificates are likely to be inaccurate. Only an approximation of the relative frequency of the issuance of certificates for special or nonacademic subjects or fields of work may be secured from available statements of State certification laws and regulations.

The special or nonacademic subjects or fields of work for which specialized certificates are distinguished by name in the certification laws and regulations applicable in 1937, number more than 100. Differences in terminology account for many of these. By generalizing titles somewhat, it may be said that specialized certificates are issued for the following major subjects or fields of work in two-thirds or more of the States: Agriculture, vocational and general; art education, public-school art, and drawing; commercial and business education; home economics and homemaking; industrial arts education and manual training (nonvocational); music education, vocal and instrumental; and physical education, health, and hygiene. The following are recognized by one-third, but no more than two-thirds of the States: Administration and general supervision; school librarianship; and trade and industrial education (vocational). A wide variety of additional subjects or fields of work demanding prolonged and special preparation on the part of the teacher, are recognized by less than one-third of the States; the most frequent among such subjects or fields of work are the teaching of exceptional children, evening school work, school nursing, and speech or speech arts (126).

Consideration can be given here to only two types of special or nonacademic certificates. Certificates for administrators and general supervisors and for teachers of exceptional children will serve to illustrate certain features that are common to related types of certificates.

*Administrative and supervisory certificates.*—Thirty-one States and the District of Columbia issue specialized administrative or general supervisory certificates (table 3). With few exceptions, the certificates that are issued are required. In States not issuing administrative and supervisory certificates, the holding of teachers' certificates, usually of a high grade, is sufficient to enable administrators and supervisors to meet State demands for certification. Teachers' certificates are accepted also for certain types of administrative and supervisory positions in some of the 31 States issuing administrative and supervisory certificates.

A study by Reller in 1933, stated that at least 6 States not issuing special administrative or supervisory certificates exercised a certain amount of control more or less different from that applicable to teachers' certificates, over the qualifications of administrators or general supervisors, or both, through high-school accrediting, or regulations of the State board of education.

TABLE 3.—STATES ISSUING SPECIALIZED ADMINISTRATIVE AND GENERAL SUPERVISORY CERTIFICATES AND TYPES OF OFFICERS TO WHOM ISSUED, 1937 (126)

State	Officers for whom specialized certificates are issued				
	Superintendents	Principals			Supervisors other than of special subjects
		General (high and elementary school)	High school	Elementary school	
1	2	3	4	5	6
Alabama.....	X	X	X	X	X
Arizona.....	X	X	X	X	X
Arkansas.....	X	X	X	X	X
California.....	X	X	X	X	X
Connecticut.....	X	X	X	X	X
Delaware.....	X	X	X	X	X
District of Columbia.....	X	X	X	X	X
Georgia.....	X	X	X	X	X
Illinois.....	X	X	X	X	X
Indiana.....	X	X	X	X	X
Iowa.....	X	X	X	X	X
Kentucky.....	X	X	X	X	X
Maine.....	X	X	X	X	X
Maryland.....	X	X	X	X	X
Massachusetts.....	X	X	X	X	X
Minnesota.....	X	X	X	X	X
Missouri.....	X	X	X	X	X
Nebraska <sup>1</sup> .....	X	X	X	X	X
New Hampshire.....	X	X	X	X	X
New Jersey.....	X	X	( <sup>2</sup> )	( <sup>2</sup> )	X
New Mexico.....	X	X	X	X	X
New York.....	X	X	X	X	X
North Carolina.....	X	X	X	X	X
Ohio.....	X	X	X	X	X
Pennsylvania.....	X	X	X	X	X
Rhode Island.....	X	X	X	X	X
Tennessee.....	X	X	X	X	X
Texas.....	X	X	X	X	X
Utah.....	X	X	X	X	X
Vermont.....	X	X	X	X	X
Washington.....	X	X	X	X	X
West Virginia.....	X	X	X	X	X
Wyoming.....	X	X	X	X	X

<sup>1</sup> Required certificate for general elementary school supervisors.  
<sup>2</sup> For superintendents of schools in superintendency unions.  
<sup>3</sup> Administrative and supervisory certificates legally authorized, effective Sept. 1, 1938.  
<sup>4</sup> No principal's certificates issued. The supervisor's certificate covers principalships of any schools and the supervisory principalships or superintendencies of schools employing not more than 100 teachers.  
<sup>5</sup> Supervising principal's certificate.  
<sup>6</sup> For county superintendents.  
<sup>7</sup> Texas State department of education issues an administrator's certificate of approval (not a legal document) to superintendents, high-school principals, and elementary-school principals. The same document is issued to each officer named.  
<sup>8</sup> A junior-high school principal's certificate is also issued.

These States included Montana, North Dakota, South Dakota, Virginia, Washington, and West Virginia (115). In Virginia, division superintendents of county and city school systems are not required to hold teachers' certificates, but the law requires that they be appointed from a list of eligibles prepared by the State board of education (126: Virginia).

A certificate for any one of the 4 groups including superintendents, high-school principals, elementary school principals, and general supervisors often applies also to one or more of the remainder of these types of positions. Not only are certificates differentiated for these major groups, but specific provisions are also made in one or more of the States listed for county superintendents, assistant superintendents, principals with varying administrative or supervisory loads, principals in school systems of varying sizes or classifications, supervising principals or agents, junior high school principals, and elementary school supervisors, as well as for related types of workers, such as attendance officers, and normal and trade school administrators.

*Certificates for teachers of exceptional children.*—Ten States and the District of Columbia in 1937 require one or more types of certificates for teachers of exceptional children (126). In 1931, Schleier found that 11 State boards of education had either authorized special certificates or had otherwise formulated standards for the preparation of teachers of special classes of handicapped children. These States were: Connecticut, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, Ohio, Pennsylvania, Wisconsin, and Wyoming (121:20-40, 110-115).

States requiring special certificates for teachers of exceptional (atypical or special class) children, 1937 (126)

<i>Types of children</i>	<i>States requiring special certificates<sup>1</sup></i>
Mentally handicapped.	Connecticut, Delaware, District of Columbia, Minnesota, New Jersey, New York, Pennsylvania, Wisconsin, Wyoming.
Deaf.....	California, Connecticut, Minnesota, New Jersey, New York, Pennsylvania, Rhode Island, Wisconsin.
Partially sighted.	District of Columbia, Minnesota, New York, Pennsylvania.
Speech defectives.	California, District of Columbia, Minnesota, New York, Pennsylvania, Wisconsin.
Exceptional children (general).	Pennsylvania, Wisconsin.
Blind.....	Connecticut, District of Columbia, Minnesota, New Jersey, New York, Pennsylvania, Wisconsin.
Crippled.....	District of Columbia, Minnesota, New York, Pennsylvania, Wisconsin (for physiotherapists).

<sup>1</sup> Some States, such as Louisiana, specify in teachers' certificates the service authorized by the certificates, and special certificates are not issued. In Louisiana, the transcript determines the service authorized. Michigan requires at least 1 year of training in the special teaching field, although a special certificate is not required.

MINIMUM AMOUNTS OF PREPARATION REQUIRED FOR CERTIFICATION

Minimum scholarship requirements in September 1937 for the lowest grade elementary, junior-high school, or academic high-school certificates issued by the several States are shown in table 4. Certificates issued by State and by county authorities are included. Minimum requirements for elementary school certificates issued upon the basis of college credentials and upon examinations, are shown separately in columns 2 and 3. Certificates for special or nonacademic subjects are not included. In most States the minimum requirements for such certificates are not lower than the requirements shown in the table. Minimum requirements for administrative and supervisory certificates in a given State usually are higher than the minimum requirements for elementary school teachers (126).

TABLE 4.—MINIMUM STATE OR COUNTY EDUCATIONAL REQUIREMENTS IN YEARS ABOVE HIGH-SCHOOL GRADUATION, FOR LOWEST GRADE REGULAR ELEMENTARY, JUNIOR HIGH SCHOOL, OR ACADEMIC HIGH-SCHOOL CERTIFICATES GRANTED TO INEXPERIENCED APPLICANTS, SEPTEMBER 1937 (126)

State	Types of certificates and minimum requirements			
	Elementary school		Junior-high school, for all 3 junior-high school grades: College years required	Senior or 4-year high school: College years required
	College years required for certificate issued upon college credentials	Scholarship prerequisites for certificate issued upon examination		
1	2	3	4	5
Alabama.....	2	High-school graduation or equivalent.....	3	3
Arizona.....	4	.....	4	5
Arkansas.....	1	None specified.....	2	4
California.....	4	High-school graduation or equivalent <sup>2</sup> .....	4	5
Colorado.....	2	.....	2	4
Connecticut.....	4	.....	4	4
Delaware.....	4	.....	4	4
District of Columbia.....	4	4-year college graduation (bachelor's degree).....	4	5
Florida.....	2	None specified.....	2	4
Georgia.....	2	High-school graduation.....	3	3
Idaho.....	2	.....	2	4
Illinois.....	2	High-school graduation and 1 year additional.....	2	4
Indiana.....	2	.....	4	4
Iowa.....	2	High-school graduation and 1/2 year additional.....	2	4
Kansas.....	1	High-school graduation, including high-school normal training courses.....	2	4
Kentucky.....	2	.....	4	4
Louisiana.....	3	.....	3	4
Maine.....	2	.....	3	4
Maryland.....	3	.....	3	10
Massachusetts.....	3	.....	4	4
Michigan.....	(12) 2	(12).....	(12) 4	(12) 4
Minnesota.....	1, 2	.....	4	4
Mississippi.....	4	None specified.....	4	4
Missouri.....	2	High-school graduation or equivalent.....	2	2
Montana.....	2	High-school graduation and 2 years of special preparation.....	4	4

Footnotes at end of table.

TABLE 4.—MINIMUM STATE OR COUNTY EDUCATIONAL REQUIREMENTS IN YEARS ABOVE HIGH-SCHOOL GRADUATION, ETC.—Continued

State	Types of certificates and minimum requirements			
	Elementary school		Junior-high school, for all 3 junior-high school grades: College years required	Senior or 4-year high school: College years required
	College years required for certificate issued upon college credentials	Scholarship prerequisites for certificate issued upon examination		
1	2	3	4	5
Nebraska.....	1	High-school graduation or equivalent.....	2	2
Nevada.....	1	.....	3	4
New Hampshire.....	3	(10).....	3	4
New Jersey.....	3	.....	4	4
New Mexico.....	1	.....	4	4
New York.....	3	.....	4	4
North Carolina.....	11 2	.....	4	4
North Dakota.....	1	None specified.....	2	4
Ohio.....	2	.....	4	4
Oklahoma.....	2 1/2	Completion of 2 to 4 years' high-school work for limited elementary certificate.	3	3
Oregon.....	11 2 1/2	.....	11 2 1/2	11 4
Pennsylvania.....	11 3, 4	.....	4	4
Rhode Island.....	4	.....	11 4	11 4
South Carolina.....	1	.....	4	4
South Dakota.....	11 1	6-weeks' summer session within past 4 years. <sup>11</sup>	2	4
Tennessee.....	1	None specified.....	4	4
Texas.....	1	do.....	11 2	11 2
Utah.....	3	.....	4	4
Vermont.....	2	.....	4	4
Virginia.....	2	.....	4	4
Washington.....	3	.....	3	5
West Virginia.....	1 1/2	High-school 16 units, plus 1 year of college.	4	4
Wisconsin.....	11 3	High-school graduation and 1 year of special preparation.	3	4
Wyoming.....	11 1	do.....	4	4

<sup>1</sup> Does not pertain to grades 7 and 8 of elementary schools alone. Requirements are applicable to teachers of the first year of 4-year high schools in States where junior-high school teachers are not separately certificated. See also footnote 2.

<sup>2</sup> Junior-high school certificates are specifically and separately provided.

<sup>3</sup> Very few teachers are certificated on the basis of county examination.

<sup>4</sup> 3 years required for State nonrenewable elementary temporary certificate.

<sup>5</sup> As in certain other States (cf. footnote 1), an elementary teacher may teach in grades 7 and 8, whereas a 4-year college graduate may teach in the ninth grade.

<sup>6</sup> An additional type of certificate is based on 5 years of work (master's degree).

<sup>7</sup> Also graduation from 4-year normal high schools.

<sup>8</sup> Degree required in 1940.

<sup>9</sup> 2 years' minimum for nonprofessional certificate; 3 years for professional.

<sup>10</sup> Includes, in Maine, 18 semester-hours of professional training. Similar inclusion of professional work is made in figures for other States.

<sup>11</sup> Except for a small number of certificates based upon 2 years' work, issued temporarily to meet a special situation.

<sup>12</sup> Examinations are given in certain cities. Teachers are usually qualified by local school authorities on the basis of college credentials. Teachers in State-aided high schools are certificated by the State department of education. Minimum levels of preparation were estimated in 1935 as 3-years' college for elementary teachers, and 4 years for high-school teachers.

<sup>13</sup> Also graduation from 1-year county normals.

<sup>14</sup> Graduation from teacher-training high schools, including 1 year of work beyond regular 4-year high-school course; also 1 year in ungraded elementary (rural) schools. 2 years required in graded elementary and accredited ungraded elementary schools.

<sup>15</sup> Graduates of teacher-training courses of first-class-high schools are also certificated.

<sup>16</sup> Examinations chiefly in subjects in professional education.

<sup>17</sup> 3 years beginning July 1, 1938.

<sup>18</sup> Effective Jan. 1, 1939, to Jan. 1, 1941, 2 1/2 years; after Jan. 1, 1941, 3 years.

<sup>19</sup> Effective Jan. 1, 1938, 4 term-hours covering Oregon history, school law and system of education will be required. Effective after Jan. 1, 1941, 1/2 year of graduate work will be required.

<sup>20</sup> State Standard Limited Certificate. Must be renewed upon additional preparation every 3 years until 4 years have been completed. This is a temporary certificate during transition from a 3-year to a 4-year level.

<sup>21</sup> Rural schools only.

<sup>22</sup> Approximate minimum.

<sup>23</sup> Elementary permit, valid for 3 years; issued to residents of Wyoming only. Completion of a fourth- or fifth-year of normal training in a Wyoming high school plus 18 or 6 semester-hours, respectively, at the University of Wyoming or in an accredited teacher-education institution will also satisfy the scholastic requirements.

<sup>24</sup> Plus examination.

The percentages of teachers certificated on a given level are known to vary greatly among States. For example, in some States comparatively few teachers with the minimum preparation shown in column 8 of table 4 are actually certificated on the basis of examination. On the other hand, probably the majority of the teachers in States requiring 3 or 4 years as a minimum for elementary teachers, and 4 years for high-school teachers, are certificated on the minimum year-levels shown in the other columns of the table. Comparable figures for 1933 for elementary teachers' certificates are given by Bachman (10:17-19).

Arizona, California with the exception of a few certificates issued by examination, Connecticut, Delaware, the District of Columbia, and Rhode Island, with the requirement of 4 years of preparation, had the highest minimum requirements in 1937 for elementary teachers. Arizona, California, the District of Columbia, and Washington, with the requirement of 5 years, had the highest minimum requirements in 1937 for high-school teachers. Other States plan to reach these levels within a very few years. On the average, the minimum requirement for certification of elementary teachers on the basis of college credentials is 2 years above high school. Minimum requirements for certification on the basis of examination are lower; how much lower is not known in 8 States, since prerequisite scholarship requirements for examination are not specified in their regulations, and the relative difficulty of the examinations given cannot be expressed in terms of number of years of preparation.

Requirements for the highest-grade certificate when more than 1 grade is issued, vary in the case of elementary certificates from 2 years above high-school graduation, a level found in slightly more than half the States, to 4 years. Four years plus an examination are required in the District of Columbia. In several States, elementary certificates with the maximum requirement of 4 years of college work are in reality high-school certificates good in elementary grades (126). In 1933, Bachman reported that the maximum requirement for elementary teachers was 2 years above high-school graduation in 23 States; 3 years, in 10 States; and 4 years including requirements for certain high-school certificates, in 15 States (10:23).

The minimum requirement for junior high school teachers in half the States is 4 years. In the remainder of the States, either 2 or 3 years is required.

The minimum requirement for high-school teachers typically is graduation from an approved college. Occasionally 5 years of college and university work is specified for the highest grade certificates. This requirement is increasingly specified by the States.

Unfortunately, the low minimum requirements shown in table 4 are often in effect accepted as standards for the employment of rural teachers. On the other hand, cities when employing teachers often require preparation and experience considerably in advance of the minimum requirements for certification. In States having a 2- or 3-year requirement as their highest for elementary teachers, cities may often be found that require a minimum of 3 or 4 years of preparation for the employment of such teachers. Sullivan in 1932 in a study of a large sampling of cities found that the minimum requirements for teacher appointment in these cities varied but little from the requirements of the States for the highest grade certificate (130:130, 142-143). Furthermore, the larger and wealthier cities on the average had higher requirements than the smaller ones. Sullivan found that 50 percent of the cities he studied which had more than 500,000 population, required 4 years of preparation above high school for the appointment of elementary teachers. The requirement was made in about 11 percent of the cities smaller in size. A minimum of 3 years' preparation was required by 25 percent of the cities of 500,000 population or more; 21 percent of the cities of from 250,000 to 500,000 population; and about 12 percent of the cities smaller in size (130:127).

The requirement of 4 years or more for teachers of academic subjects in junior high schools was found in more than 74 percent of all cities reporting. Five years was required by 8.3 percent of the cities of 500,000 or more population. For senior high schools, more than 92 percent of all cities required either 4 or 5 years as a minimum. One-third of the cities of more than 500,000 population required 5 years (130:127-128; *see also* 44:15).

A scarcity of teachers of special subjects during periods of under-supply in the past often resulted in certificating such teachers on lower levels than teachers of academic subjects, but in recent years the differences in requirements are becoming less (130:36-46). In the case of vocational subjects such as agriculture, minimum scholarship requirements correspond to those for teachers of academic subjects. The requirements are somewhat more specialized, however, for teachers of vocational subjects.

Minimum requirements for teachers of nonacademic or special subjects are now approximately the same as the minimum requirements for teachers of academic subjects in the same grades, in more than three-fourths of the States. In the remaining States, minimum requirements are somewhat lower. A number of studies, including numerous theses, present the detailed certification requirements for teachers or supervisors of special or nonacademic subjects or fields. These include nonacademic subjects considered as a group

(16); music (124); art (109); industrial arts (8); industrial evening schools (87); physical education (140); school nursing (47); commercial education (118); guidance (108); and a number of others. Specific requirements in all of these fields cannot be given here. While such requirements are similar to those for the usual academic fields in their main essentials, certain variations from the usual patterns will be illustrated by requirements of administrative and supervisory certificates, and of the special-type certificates for teachers of exceptional children.

More than three-fourths of all administrative and supervisory certificates require 4 years of collegiate preparation as basic to special preparation for work in administration or supervision. The ranges in States where requirements are specifically stated are: Superintendents, 2-5 years; high-school principals, 4-5 years; elementary school principals, 2-5 years; and supervisors, 2-5 years. Slightly more than half of the States granting administrative or supervisory certificates require graduate work, usually 1 year, for 1 or more of these certificates. The most common scholastic requirement for all 4 types of certificates is 4 years of college work. The possession either of a prior teacher's certificate, or of college work qualifying for the administrative and supervisory certificate is required in nearly all cases (126).

In addition to, or in some cases included in, the general education required, special undergraduate or graduate preparation in the field of specialization is also prescribed. The range in such requirements is from no special requirements other than those for teachers, to a year of graduate work. All States issuing certificates for superintendents require teaching or administrative experience as a prerequisite to the certificate, and all require a major in education. In the case of county and city superintendents, successful experience rather than specialized preparation in college is given most emphasis. Additional details concerning certification requirements for administrative and supervisory certificates during fairly recent years are given by Martin (89), Reller (115), and Karchin (72).

Karchin in 1936 reported that 13 States had established special certificates for the elementary school principalship between 1928 and 1936. Typically, the bachelor's degree was required for this certificate. There was little uniformity in the courses required, except that courses in administration and supervision were usually specified. From 1 to 6 years of experience was required, with a median requirement of 3 years. Only 3 States specifically required teaching experience in elementary schools (72: 174-175).

In respect to minimum qualifications of teachers of exceptional children, 2 years of education above high school was required in 1931

for certification in 5 States, 3 years in 2 States, and 20 semester-hours of general academic training in 1. Five States required permanent, normal school, or elementary school certificates as prerequisites for entering the field of special-class teaching (121:20-40).

Causes are numerous for the great variations in the minimum requirements for different types of certificates, but fundamentally such causes are economic in nature (65:182). Variations in teachers' salaries among States directly affect teacher supply and demand. Certification requirements are directly influenced by the supply of teachers in relation to the demand. The fact, however, that a number of fairly wealthy States have exceedingly low minimum requirements for certification indicates that there are other causes for low certification requirements, that are not economic in nature.

#### AVERAGE LEVELS OF PREPARATION ATTAINED BY TEACHERS

Approximate average levels of education attained by public elementary, junior-high school, and senior-high school teachers in service in 1930-31 are indicated in table 5, taken from the National Survey of the Education of Teachers (55:216-231).

TABLE 5.—HIGHEST LEVEL OF TRAINING OF ELEMENTARY AND SECONDARY TEACHERS IN PUBLIC SCHOOLS OF THE UNITED STATES, 1930-31 (55:216-231)

Level of training	Percent of		
	Elementary teachers (248,648 cases)	Junior high school teachers (36,186 cases)	Senior high school teachers (84,767 cases)
1	2	3	4
Graduate of elementary school only.....	0.3	0.2	0.1
1 year of high school.....	.2	.1	..
2 years of high school.....	.5	.2	..
3 years of high school.....	.7	.3	..
4 years of high school.....	4.0	1.1	..
6 to 12 weeks of college.....	3.6	.6	.2
Half year of college.....	2.4	.4	.2
1 year of college.....	14.5	3.0	1.1
2 years of college.....	46.2	17.5	4.4
3 years of college.....	15.5	16.0	6.1
4 years of college.....	10.2	43.7	58.1
1 year of graduate work.....	1.3	12.1	20.2
2 years of graduate work.....	.4	3.1	5.9
3 years of graduate work.....	.1	.8	1.7
More than 3 years of graduate work.....	.1	.7	1.4

Average levels of preparation were roughly 2 years for elementary, and 4 years for junior high school and senior high school teachers. Because of a large oversupply of applicants for positions, the average level of the education of elementary teachers rose

very rapidly during the depression. The level for elementary teachers in 1937-38 is conservatively estimated to be at least  $2\frac{1}{2}$  years, somewhat above the average minimum certification level of 2 years for the country as a whole.

The effect of low minimum certification requirements prior to 1930 is reflected in table 5. Some teachers in 1930-31 had no more than an elementary school education; 5.7 percent had no more than a high-school education; and 26.2 percent had 1 year, or less, of college preparation. The complete Survey report shows wide variations in levels of preparation among States, and also shows wide variations in the levels of preparation among cities of different sizes and rural school districts within the same States. Such variations clearly indicate why it is impossible, under present conditions, to set up for all States the same standards for the amount of preparation to be required for teaching certificates.

#### CURRICULA, SUBJECTS, AND COURSES REQUIRED

*Requirements in academic and special courses and curricula.*—Of the 20 States issuing elementary certificates by examination, at least 6 do not specify the scholarship prerequisites for admission to the examinations. Practically all prescribe the elementary or secondary school subjects in which examinations may be taken. The minimum grades to be made in individual subjects and the average grade to be made in all subjects are usually specified also. The nature of the education of teachers certificated by examination varies with the nature and difficulty of examination questions, differences in marking papers, and differences in the types of certificates. In several States, the minimum and average grades earned in the same examination are the bases for the issuance of different grades of certificates.

The curricula and courses required for the general elementary certificate issued upon college credits are often not specified. According to Bachman, 25 States in 1933 endeavored to exert some direction over the preparation of elementary teachers, through either liberal-cultural requirements, or technical (professional education) requirements. Twelve States made liberal-cultural prescriptions; 6 were content with general requirements only, governing the specific academic subjects to be taken. Indiana led the other States, in that it prescribed the total number of hours of liberal-cultural work required for the several kinds of elementary school certificates, and allocated the amounts in full to specific academic subjects (10:30-34).

Typically, teachers in junior and senior high schools teach in more than one field and in more than one subject. Of 34,257 junior high school teachers reporting in 1930-31 in the National Survey

of the Education of Teachers, 37 percent taught in one field (e. g., biological sciences or modern languages); 51 percent in two fields; 8.1 percent in three fields; 2.8 percent in four fields; and 1.1 percent in five fields or more. Corresponding percentages for 82,627 senior high school teachers were 34.3, 52.6, 9.4, 2.8, and 0.9 (55:66). A higher percentage of teachers give instruction in more than one subject than give instruction in more than one field. A teacher in the field of modern language, for instance, may teach any one of several modern languages, each of which demands specific preparation.

When a teacher gives instruction in three or more subjects, the chances are smaller than are commonly realized that he is sufficiently prepared in all of them. Regier in 1933-34 reported that only 29.74 percent of all high-school teachers in Kansas were teaching in their major. In the larger schools a few more than half taught in their major, but in the smaller schools, only 6.35 percent (114:260, 279).

Lack of coordination between certification requirements, teacher employment, and teacher assignment is largely responsible for the presence in the classroom of thousands of teachers not prepared specifically in the subjects that they attempt to teach. The issuance of "blanket" and other unspecialized certificates is the chief cause of this lack of coordination. In 1930, Bachman found that 27 States made no academic requirements whatsoever for the highest grade academic high-school certificate, other than graduation from a recognized college. Sixteen States required college graduation and also required a major or minors with a specified number of hours of work in each. Only 5 States required college graduation, and in addition prescribed or suggested the necessary courses to be counted toward required majors or minors. These States were Alabama, Arkansas, Indiana, North Carolina, and West Virginia (12:16-17, 164-169). The number of States making such requirements has increased slightly since 1930.

*Requirements in professional education.*—All States require directly or indirectly, at least some strictly professional preparation for one or more types of elementary, of junior high school, and of senior high school certificates. In the case of certificates good in elementary or in junior high school grades, the great variations in the total amounts of preparation required and in the different grades and classes of certificates render tabulations of the requirements almost meaningless. Martin in 1932, indicated that the average amount of credit in professional education, when definitely required for elementary certificates, was about 12 semester-hours. The most frequent among a wide variety of professional courses required were: Elementary school methods, educational measurements, history of education, educational psychology, classroom management, organiza-

tion and management of elementary schools, principles of education, and the elementary school curriculum. Student teaching was definitely required for all elementary school certificates in only 14 States. The amount of credit demanded in this subject ranged from 2 to 6 semester-hours (89:7-8). In requiring normal school graduation for certification, it is assumed that work in student teaching and professional education has been taken by inexperienced graduates. This assumption cannot be made, however; for students completing 2 years of work in a liberal arts college. Student teaching cannot be required for most certificates issued upon the basis of examination. Neither can it ordinarily be required for certificates issued upon the basis of 1 year or less of normal school or college work, because student teaching is usually offered in teacher-education institutions in the last year of 2-year curricula, and in the final years of 3- or 4-year curricula.

The amount of professional education required for specifically designated junior high school certificates, considered apart from elementary or secondary school certificates, ranged in 1932 in nine States from a 6 weeks' course to 18 semester-hours. The median requirement was 12 semester-hours. This work was required in college curricula which varied in length as follows: 2 years, 5 States; 3 years, 2 States; and 4 years, 2 States (58:30).

All States have minimum requirements in 1937 in professional education and 33 States have requirements in student teaching, for high-school certificates issued to inexperienced academic high-school teachers certificated on a basis of 4 years of college work (table 6). The range in requirements in professional education, including student teaching, is from 8 to 25 semester-hours, and the median requirement is 18 semester-hours. While student teaching is required in 33 States and the District of Columbia, the amounts are not stated definitely in 4 of them. The range for those expressing requirements in terms of semester-hour credits is from 2 to 6 semester-hours; and the median requirements is 3 semester-hours.

Requirements in professional education for the highest grade and for the lowest grade academic high-school certificates are not greatly different. In 1930 the requirements for the highest-grade secondary school certificates ranged from 5 to 24 semester-hours, with a median of about 17 semester-hours (12:17-20). Baldwin (13), Kinder (75:110-114), Martin (89:55-56), Switzer (131:36-46, 90-91), the American Association of University Professors (142:177-179), and others, have also presented during the past 8 years more or less comparable data on requirements in professional education for high-school certificates.

TABLE 6.—MINIMUM REQUIREMENTS IN PROFESSIONAL EDUCATION AND STUDENT TEACHING FOR HIGH-SCHOOL CERTIFICATES ISSUED TO INEXPERIENCED TEACHERS OF ACADEMIC HIGH-SCHOOL SUBJECTS ON A BASIS OF 4 YEARS OF COLLEGE PREPARATION, SEPTEMBER 1937 (126)

State	Number of semester-hours required <sup>1</sup>		State	Number of semester-hours required <sup>1</sup>	
	Professional education, including student teaching and observation	Student teaching and observation		Professional education, including student teaching and observation	Student teaching and observation
1	2	3	1	2	3
Alabama.....	21	3	Nebraska.....	15	
Arizona.....	24	5	Nevada.....	18	4
Arkansas.....	16	2	New Hampshire.....	12	
California.....	18	4	New Jersey.....	18	10 11 x
Colorado.....	20	4	New Mexico.....	15	
Connecticut.....	8		New York.....	18	12 2
Delaware.....	18	3	North Carolina.....	18	3
District of Columbia.....	24	4	North Dakota.....	16	x
Florida.....	18		Ohio.....	17-19	3-5
Georgia.....	9		Oklahoma.....	10	4
Idaho.....	15		Oregon.....	15	2
Illinois.....	15		Pennsylvania.....	18	6
Indiana.....	15	3	Rhode Island.....	25	10 x
Iowa.....	15	3	South Carolina.....	18	
Kansas.....	15	3	South Dakota.....	15	3
Kentucky.....	18	6	Tennessee.....	18	
Louisiana.....	12	4	Texas.....	24	x
Maine.....	18		Utah.....	18	
Maryland.....	16	3	Vermont.....	12	3
Massachusetts.....	12		Virginia.....	18	6
Michigan.....	20	5	Washington.....	16	3
Minnesota.....	15	3	West Virginia.....	20	3
Mississippi.....	18		Wisconsin.....	18	5
Missouri.....	15	2 1/2-3	Wyoming.....	16	2
Montana.....	15				

<sup>1</sup> Quarter-hour or year-hour requirements are expressed in terms of semester-hours.

<sup>2</sup> Includes 6-hours' graduate work.

<sup>3</sup> 1 year of graduate work required; 18 semester-hours in education required, including 6 in graduate work.

<sup>4</sup> Master's degree required for high-school teaching.

<sup>5</sup> For provisional certificate, 9 semester-hours; for professional certificate, 18.

<sup>6</sup> 18 semester-hours recommended.

<sup>7</sup> 30 to 40 observation and practice periods required; usually practice is offered in conjunction with methods courses.

<sup>8</sup> For State-aided high schools. Options for inexperienced teachers: Four courses of 30 hours each in professional subjects in an approved summer school; or diploma from an approved teachers college or normal school.

<sup>9</sup> May be increased to 3 hours by State department of education if deemed necessary.

<sup>10</sup> x indicates that a general requirement of student teaching is made, which does not specify the number of semester-hours.

<sup>11</sup> 150 clock-hours.

<sup>12</sup> Temporary substitution of 2 semester-hours in methods accepted when applicant is unable to meet requirements.

<sup>13</sup> Exclusive of general psychology.

<sup>14</sup> 1-year renewable certificate. 20 hours required for life certificate.

<sup>15</sup> Standard is 400 class-appointment or clock-hours in the study of education.

<sup>16</sup> Standard is 400 class-appointment or clock-hours of practice teaching.

<sup>17</sup> The general pattern; minimum under certain conditions may be less.

<sup>18</sup> Applicable to collegiate professional but not collegiate certificates.

In 1937, the specific professional subjects required for high-school certificates are not specified in the certification regulations or school laws of about one-eighth of the States. In 1930, in a study of the

highest-grade secondary school academic certificates, Bachman found that 13 States prescribed the total number of hours only; 3 prescribed only the list from which electives could be taken; 17 prescribed 1, 2, or 3 required professional subjects; 11 prescribed at least half of the professional work; and only 4 prescribed all of it, including specific professional subjects and the number of semester-hours' credit allowed in each (12:19). Much of the responsibility therefore rested upon teacher-education institutions and regional accrediting agencies in respect to the determination of the courses taken by prospective teachers.

The titles of the required, optional, and elective courses in professional education specified in 1937 as meeting requirements for certificates issued to high-school teachers of academic subjects, show great diversity. Table 7 presents under generalized titles the courses most frequently mentioned in State regulations. The exact titles used in the regulations often show little uniformity in terminology; for example, student teaching is variously expressed as apprentice, cadet, directed, practice, and supervised teaching. Typically, the professional courses are listed in the regulations as options or electives. Only two courses, student teaching and educational psychology, are specifically required by half or more of the States in terms that deny the possibility of substituting optional courses.

TABLE 7.—REQUIRED AND ELECTIVE COURSES SPECIFIED IN CERTIFICATION REGULATIONS AS MEETING REQUIREMENTS IN PROFESSIONAL EDUCATION FOR TEACHERS OF ACADEMIC SUBJECTS IN HIGH SCHOOLS IN 45 STATES, 1937 (126)

Course	Number of States
Educational psychology, including psychology of adolescence.....	43
Student teaching, including observation.....	40
Principles of education, including principles of teaching.....	29
History of education.....	20
Administration and organization, including school management and supervision.....	19
Methods, special; including methods in major, minor, or specialized teaching fields.....	17
Tests and measurements, including educational measurements.....	16
Philosophy of education.....	14
Methods, general; including technique of teaching.....	10
General psychology.....	10
Educational sociology.....	10
Secondary education, including problems, aims, and practices in secondary education.....	9
Materials and methods, including contents.....	8
Health and physical education, including school and community hygiene.....	6
Introduction to teaching, including introduction to education.....	6
Miscellaneous, including all courses mentioned 4 times or less.....	20

Professional course requirements for teachers of special or non-academic subjects or for nonteaching positions in education tend to follow the same general patterns as the requirements for teachers of academic subjects. The same tendency toward specialization in specific professional course requirements for certificates valid in academic high-school subjects, may be found in requirements for special or nonacademic subjects, administration, supervision, and other major types of educational service. For teachers of academic high-school subjects, courses in principles of secondary education, special methods in the subjects taught, etc., are commonly specialized. Similarly, variously specialized courses in administration are prescribed for administrators, and in supervision for supervisors. However, marked specialization in professional course prescriptions is by no means as frequent in certification requirements, as in the requirements for graduation set by the institutions that prepare teachers.

While legal enactments in 22 States in 1931 provided for classes for physically handicapped, in only 6 States had definite standards been formulated for teachers of such classes. There was little agreement among the States concerning the nature of the special training needed. The subjects or courses required included the psychology of exceptional children, specialized industrial arts courses, methods of teaching subnormal children, and clinical tests and measurements (121:20-40).

#### EXPERIENCE REQUIREMENTS FOR CERTIFICATES

All States issue initial elementary and high-school certificates without experience requirements. Such requirements are made in the renewal or exchange of certificates. Most certificates which are valid for life require experience. When required, the amount of experience specified ranges from 1 to 10 years and sometimes more in the case of life certificates. A few States require that part or all of the experience specified shall be secured within the State. In the case of special or nonacademic subjects, practical trade or other nonteaching experience is sometimes required in the general field taught. This is especially true for vocational subjects including trades and industries, among others. Vocational experience is sometimes accepted in lieu of given amounts of college preparation, but this practice is less common than formerly. Preliminary teaching, supervisory, or administrative experience is required for all but a few administrative and supervisory certificates. The median of the total amounts of experience required for such certificates in the States issuing them is about 3 years; the range is from 1 to 6 years, not including the experience requirements for teaching certificates issued prior to the issuance of administrative or supervisory certificates. According to Schleier, teachers of atypical or special-class

children in 1931 were required in 5 States to have teaching experience of from 1 to 3 years in the regular grades; and the desirability of experience was implied in the regulations of other States issuing such certificates (121:20-40).

For the actual employment of teachers, as distinguished from their certification, experience requirements are fairly common in cities. Inexperienced teachers were not appointed for elementary, junior, and senior or 4-year high school positions in from 21 to 28 percent of a large sampling of city school systems studied in 1932 in the National Survey of Secondary Education. Regulations were made in more than 34 percent of the cities studied concerning the proportions of inexperienced teachers that could be employed annually. The typical requirement was 1 or 2 years of prior experience (44:17-20). Service in country, village, or small-town schools usually provides the teaching experience required in many cities as a prerequisite for employment.

SPECIAL REQUIREMENTS

Minimum prerequisites other than scholarship required in 1937 for the issuance of all certificates vary considerably among States (table 8).

*Age.*—The minimum age requirement of 18 years is made for certification in 30 States. No requirement is specified in 11 States and the District of Columbia. California is included in this number. Four States specify 17 years, 1 State 19 years, and 2 States 20 years. Minimum scholarship requirements demanding an appreciable amount of time in college also indirectly afford some protection against immaturity of applicants.

Maximum age requirements also are set by a few States. Sometimes the maximum requirement is higher for secondary school teachers than for elementary school teachers (89:2; 131:16-17). Maximum age requirements when made, are usually found among the States having State teacher-retirement systems.

TABLE 8.—MINIMUM PREREQUISITES IN RESPECT TO AGE, HEALTH, CITIZENSHIP, AND OATH OF ALLEGIANCE FOR ISSUANCE OF ALL CERTIFICATES, SEPTEMBER 1937 (126)

State	Minimum age	Proof of good health	Citizenship	Oath of allegiance to Constitution of United States or of State
1	2	3	4	5
Alabama.....	17			
Arizona.....	18		X	X
Arkansas.....		X		
California.....	(1)	X	X	X
Colorado.....	18			X

Footnotes at end of table.

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TABLE 8.—MINIMUM PREREQUISITES IN RESPECT TO AGE, HEALTH, CITIZENSHIP, AND OATH OF ALLEGIANCE FOR ISSUANCE OF ALL CERTIFICATES, SEPTEMBER 1937 (126)—Continued

State	Minimum age	Proof of good health	Citizen-ship	Oath of alle-giance to Constitution of United States or of State
1	2	3	4	5
Connecticut	18	X		
Delaware	20	X		
District of Columbia		X		
Florida	17	X	X	X
Georgia	18	X		X
Idaho	18	X	X	
Illinois				
Indiana		X		
Iowa	18			X
Kansas				
Kentucky	18			
Louisiana				
Maine	17			
Maryland	18	X		
Massachusetts				X
Michigan	18		X	X
Minnesota		X		
Mississippi	18			
Missouri		X		
Montana	18	X	X	X
Nebraska	18			
Nevada	18		X	
New Hampshire			X	
New Jersey	18			
New Mexico	18	X	X	X
New York				
North Carolina	18	X	X	X
North Dakota	18			
Ohio	18		X	X
Oklahoma	20	X		X
Oregon	18			X
Pennsylvania	18			
Rhode Island	19	X		
South Carolina	18	X	X	X
South Dakota	18	X	X	X
Tennessee	18			
Texas	18		X	
Utah	18		X	
Vermont	17	X		
Virginia	18			X
Washington	18	X	X	X
West Virginia	18	X		X
Wisconsin				X
Wyoming	18		X	

- <sup>1</sup> Declaration of intention to assume citizenship accepted by State.
- <sup>2</sup> No requirement specified except for county certificates, 18 years.
- <sup>3</sup> For high-school teachers.
- <sup>4</sup> Pledge of loyalty.
- <sup>5</sup> Except for graduates of Wyoming high-school training departments, for whom no age requirement is specified.

*Proof of good health.*—Proof of good health is required for certification in 24 States and the District of Columbia. According to unpublished data compiled in 1935 by the National Education Association, 2 States in addition, Ohio and Tennessee, then required

health certificates or health qualifications of candidates for employment in the public schools. The requirements of less than half of the 24 States specify that a physician shall certify to the teacher's health. The most frequent specific requirements concerning good health are that the applicant be free from contagious, infectious, transmissible, or hereditary diseases, especially pulmonary tuberculosis; and that he be free from any disease or physical defect that would interfere with his success as a teacher. The requirements and the means provided for their enforcement are indicated in such general terms by many States, that it is questionable whether the health and good physical condition of teachers are assured by the provisions made.

*Citizenship and oath of allegiance.*—Citizenship in the United States, or declaration of intention to become a citizen, is required by 17 States and the District of Columbia. An oath of allegiance to the Constitution of the United States, or to the State constitution, is required by 19 States and the District of Columbia.

*Moral character; personal fitness or conduct; local and miscellaneous requirements.*—About two-thirds of the States have a formal requirement that applicants for certificates be of good moral character (126). Personal fitness or ability, variously defined, may also be a prerequisite for certification (21:37, 44; 131:17-18).

Strong political, social, economic, or religious attitudes influence the issuance or status of certificates in a variety of ways (89:2; 150:25-27, 37). For example, during the economic disturbances beginning in 1929, a tendency of employing officers to favor local applicants for teaching positions became quite marked in some sections. In some cases the movement was practically State-wide. At least two States enacted laws requiring State residence for certification. Although such laws do not appear to be operative at present, certain indirect restrictions on out-of-State teachers exist in several States that appear to have little relationship to classroom efficiency. Among these are requirements that certain courses be taken in the higher education institutions of the State making the prescriptions.

#### DURATION OF VALIDITY OF CERTIFICATES AND CONDITIONS FOR RENEWAL: LIFE CERTIFICATES

The periods of validity of certificates issued to teachers of junior high school and senior high school grades range in length from 1 year or less to life. Typically, the length of validity is from 3 to 5 years. For teachers of special classes, the range is the same, and the most common length is 2 years. However, figures denoting length of validity are in part meaningless unless used with reference to a particular grade and class of certificate in a given State, and with

reference to the conditions of renewal of the certificate. As an illustration of requirements, the average number of years required in 1933 by States that issued administrative and supervisory term certificates, was 3 years. The range was from 1 to 10 years, excluding life certificates (115:30).

Usually the certificates of lower grade are more limited in length of validity than certificates of higher grade. Lowest grade certificates often are not renewable. It is common practice to renew higher grade certificates continuously during satisfactory service.

In-service education in summer sessions or in class extension work is usually relied upon for meeting the additional study requirements for renewal of initial certificates. Eight semester-hours is a common requirement for renewal (126).

Requirements other than specified amounts of college education and of teaching experience are sometimes made for renewal, especially in the case of semipermanent certificates. Reading courses, travel, professional writing, teaching in training schools and distinctive educational services are occasionally recognized in renewing certificates (126; 150:138-140).

In 1927, according to Cubberley, about half the States issuing different grades of elementary certificates upon examination, did not require an examination in additional subjects to secure a first-grade instead of a second-grade certificate. Teaching experience and higher average grades on the written examination, rather than added college preparation, were the bases for granting higher-grade certificates (40:630).

Stine found in 1931 that only 39.2 percent of the kinds of renewable certificates issued required in-service education for renewal. In 9 States, however, all renewable certificates were renewed on the basis of in-service education. Of the kinds of exchangeable certificates, that is, those that could be exchanged for an advanced grade of certificate in the same field or class, 47.7 percent required in-service education for exchange. In 7 States all exchangeable certificates could be exchanged on the basis of in-service education. Of the life certificates, 54.6 percent were issued on the basis of in-service education. In 14 States, all life certificates were issued on the basis of additional in-service education (127:187-188). The fact that more than half of the renewable or exchangeable certificates issued did not demand in-service education for renewal or exchange is very significant inasmuch as the function of teacher certification should include the improvement of instruction and the education of teachers after their initial certification.

Stine also found that 61.1 percent of the kinds of exchangeable certificates issued on less than 1 year of preservice preparation required in-service education for their exchange. Only 21.4 percent

of the kinds of exchangeable certificates issued on 3 years of pre-service preparation, and 48.9 percent on 4 years' preparation, required in-service education for exchange. A much smaller percentage of the kinds of secondary and special certificates required in-service education for renewal than was the case for the supervisory and elementary certificates (127:190-191).

Burkman in 1931 distinguished on the basis of permanency four classes of certificates. The first included certificates that remain in force during the life of the holder without any additional experience or scholastic requirements (35 States). The second included certificates requiring evidence periodically of additional professional growth (8 States). The third included certificates issued for limited periods, but indefinitely renewable without raising the grade of the certificate (8 States). The fourth included certificates issued for limited periods and either not renewable or else renewable only for a definite number of periods. In the fourth class, requirements for securing and renewing some of the certificates were so low that the certificates could be renewed for a number of periods aggregating in length more than an average teaching life, and in this particular sense could be considered "permanent." Fifteen States issued certificates of this type that could persist for 12 years or more. Twenty-five States issued certificates that fell into 2 or more of the 4 classes mentioned (23:12-14).

Thirty-five States in September 1937 recognized some form of permanent certification of teachers, i. e., certification for life, unless the certificate is revoked for some specified cause. Thirteen States and the District of Columbia do not issue life certificates to teachers: Alabama, Arizona, Arkansas, Delaware, District of Columbia, Louisiana (resumed issuance April 30, 1938), Maine (except to teachers in service prior to August 1, 1932), Maryland, Massachusetts, North Carolina (issued to school administrators and supervisors only), South Carolina, Utah, Vermont, and Virginia. Washington will discontinue issuance of life certificates after September 1, 1938 (126: Washington).

Martin found in 1932 that 30 States issued life high-school certificates, and 32 issued life elementary certificates (89:56). In 1931, Zaugg found that training institutions in 10 States granted life diplomas. County life certificates were authorized in 6 States. In 18 States, certificates leading to permanency could be secured, wholly or in part by examination (150:134, 148).

Scholastic prerequisites for the issuance of life certificates are most commonly 2 or 3 years of education for elementary certificates, and 4 years for high-school certificates. However, variations in the minimum amounts of preparation required range from elementary school preparation only, to a year of graduate work. Typically,

the amount of experience required prior to issuance of the certificates is 3 to 5 years, but the range is from none to 10 or more years. Requirements in 1931 were presented in considerable detail by Burkman and Zaugg (23: 6, 21-22, 38-39, 46; 150: 136-149).

Zaugg in 1931 summarized requirements in 43 States for permanent certificates. States requiring both probationary experience and professional growth numbered 14; probationary experience only, 25; probationary experience not mandatory, 5; probationary experience not required for certain certificates, 5; continuous use or periodic training obligatory, 11 (150: 130, 147). In 7 of the last-mentioned 11 States no plan was specified for the reinstatement of certificates that had expired. In 31 of the 43 States, practically no control was exercised by the States over the professional improvement of the holders after the permanent certificates were issued (150: 132-133).

### TRENDS IN REQUIREMENTS

*Changes in the number of types of certificates.*—There has been a steady decrease for a number of years in the number of types of certificates issued by county and by local school authorities, including certificates valid only in a limited geographical area within a given State, e. g., in a given school district, city, or county. The number of types of certificates issued by examination has decreased accordingly. Differentiation of certificates upon a basis of length of validity appears to become somewhat less marked among the States. On the other hand, there is marked increase in differentiation of certificates according to grade level, subject, or type of work for which issued. Graves believes that on the whole, similarity in the different types of certificates issued is increasing. (65: 194).

Increase in the number of types of State certificates has been brought about largely through two movements: Increase in the amounts of academic or special work required, which has resulted in a greater variety of high-grade certificates; and increase in the number of specialized subjects or fields taught in the public schools (60: 47-48). These trends, while existing for a century or more, have been most noticeable during comparatively recent years.

*Increase in minimum amounts of preparation required.*—Early certification requirements in this country varied among schools and localities. The information received through examinations by local civil authorities concerning the academic proficiency of applicants was quite meager (31: 6-12; 40: 631). As new States and Territories were organized, requirements became a little more definite. The rise in requirements has proceeded at a slow rate, and only after many struggles, to the levels of today (60: 25). Many early differences in

requirements persist to the present time, and some have been intensified.

A rapid rise in minimum certification requirements between 1921 and 1937 is indicated in table 9. Some States issued the majority of their certificates upon somewhat higher levels than those indicated by the minima shown for each year. There is a decided increase in the number of States requiring 2, 3, or 4 years of college work as a minimum for certification. The decrease is marked in the number of States having no definite scholarship requirements.

The data shown apply predominantly to elementary certificates, since minimum levels are lower for such certificates than for high-school certificates. However, certification requirements rose for practically all certificated groups of workers in education.

TABLE 9.—MINIMUM SCHOLARSHIP PREREQUISITES FOR CERTIFYING INEXPERIENCED TEACHERS (TEMPORARY AND EMERGENCY CERTIFICATES NOT CONSIDERED), 1921, 1926, AND 1937 (ADAPTED FROM 31:16:126)

Scholarship prerequisite	Number of States		
	1921	1926	1937
	1	2	3
4 years' college			15
3 years' college or normal school			8
2 years' college or normal school, including professional preparation		4	11
1 year of college or normal school, including professional preparation			8
High-school graduation and some professional preparation in addition but less than 1 year			2
4 years' high school (may or may not include professional courses)	14	14	6
No definite scholarship requirement stipulated	30	15	18

\* Includes California, which certifies only a few teachers by examination, with high-school graduation as a prerequisite.

† 1921 classification includes also professional training secured without high-school graduation.

‡ Except in Massachusetts, certificates are issued upon the basis of examinations covering elementary or secondary school subject-matter.

§ 1926 classification includes Massachusetts, in which relatively few teachers were employed who had not completed a standard normal school course; and Oklahoma and Kentucky, in which completion of ninth grade was a prerequisite.

¶ 1937 classification includes Massachusetts, in which the minimum scholastic requirement for teacher employment is usually 3 or 4 college years; and Oklahoma, in which completion of 2 to 4 years of high-school work is prescribed for a limited elementary certificate.

California, which has been well in the forefront among progressive States in raising requirements for teachers' certificates, illustrates the course of advancement among such States. According to Burkman, the first State standards regulating the qualifications for high-school teachers' certificates in California were promulgated in the certification law of 1893. Graduation from an accredited university and a minimum of 12 semester-hours in pedagogical courses were required. Examinations by local authorities were retained. Since 1901, high-school certificates have been granted only on the

basis of credentials. In 1905, the State board ruled that one-half year of graduate work should be required as a minimum standard for the issuance of high-school credentials. In 1906, the standard was raised to 1 full year of graduate work, except for certain experienced applicants who had completed only one-half year of graduate study. Since 1928, a full year of graduate study has been required for all secondary school certificates (23:87-88). Elementary teacher-certification standards also rose, in keeping with the extension of normal school curricula to 4 years of teachers-college work. With the exception of a few county certificates, the bachelor's degree is now required as a minimum for elementary certificates.

For a number of years, the majority of States considered as standard requirements 2 years of preparation above high school for elementary teachers, and 4 years for high-school teachers (89:123; 131:126; 126). These levels are now considered as temporary goals in the long process of raising requirements. Curricula for elementary teachers terminate increasingly at the end of 3 or 4 years of college preparation; and courses offered for high-school teachers include more and more graduate work. The number of prospective teachers completing advanced curricula and courses is increasing steadily. Certification requirements are being raised in accordance with the increased supply of teachers with advanced preparation.

*Rise in average levels of preparation of teachers.*—The rise in levels of preparation of teachers bears a close relationship to the rise in levels of certification. On an average, the amount of time spent in preparation by public-school teachers has increased about 1 year in every 16 during the past century. The extension upward of the general level of preparation has increased at a more rapid rate during the past quarter of a century, than before. In 1839, when the first State normal school was opened, the typical public-school teacher did not have more than the modern equivalent of 8 years of schooling, and in all probability had less. In 1890, the average level was approaching, but had not yet reached, the equivalent of high-school graduation. In 1910, the average level had very nearly reached high-school graduation; in 1921-22, the average level was slightly below 2 years of work above high-school graduation; and in 1930-31, the average level was between 2 and 3 years above high-school graduation. If this long-time trend continues in the future as it has for the past century, it is safe to predict that well within the next 25 years the level of 4 years of preparation above high school will have been reached as an average for all teachers, and a standard now advocated by many authorities will have been attained for half of the teachers of America (25:57-58; 55:216-231; 60:4, 11, 25, 49-50).

*Changing conditions of teachers supply and demand.*—Conditions of teacher supply and demand have long determined to a consider-

able extent the amounts of preparation required for certification. Teacher oversupply and undersupply tend to run in cycles, as conditioning factors change. For example, a scarcity of teachers existed toward the close and for a few years after the World War. Salaries were extremely low. Thereafter, salaries improved, and more men and women returned to the profession. Enrollments in teacher-preparation institutions increased rapidly, and an oversupply of certificated teachers resulted. While the oversupply of teachers was intensified considerably by the economic depression, beginning in 1929, the oversupply was already marked in many States and types of positions before the effects of the depression on education had been noticeably felt (50:437-473). Sherrod found in 1930 that 23 out of 34 State superintendents reporting had a large oversupply of certificated teachers. Only 1 State, Vermont, reported a general shortage of teachers. The explanations for the oversupply given in States where location and economic forces were not the determining factors, were invariably the existence of low standards of certification, and inadequate preservice training of teachers (122:848).

In 1937, reports from a number of States and teacher-education institutions indicate that the oversupply of certificated teachers has decreased greatly. In elementary education, the former surplus of teachers has disappeared in many States. Placement of high-school teachers of academic subjects, however, is still a difficult problem for many institutions.

*Increase in specialized requirements in academic and special subjects and fields.*—Historically, the first significant step in specialization was the elimination of the "blanket" certificate, good in all of the school grades and types of educational service, and the issuance of certificates specialized for elementary or for secondary grades. Cubberley said in 1906:

In almost all of our States a teacher's certificate of any grade is good to teach in any part of the school system in which the teacher may be able to secure employment . . . To be employed as a teacher in a high school when one has never had more education than that represented by a four-year high-school course is not uncommon (37:59).

While there has been a marked tendency for a number of years to eliminate certificates covering all or most of the grades, some are still issued. Not only has there been a distinct trend toward the issuance of certificates for elementary and for high-school teaching, respectively, but specialization has extended to specific subjects; grade levels, and fields of work (12:14; 32:21-25; 40:632; 86:105; 100, Part II:113-114; 131:125). Junior and senior high school teachers of specific academic and nonacademic subjects, and administrators, supervisors, and other workers in professional education.

are separately certificated to an increasing extent. Certificates have been increasingly differentiated on the basis of grade levels or types of work, e. g., kindergarten, kindergarten-primary, intermediate, and junior high school grades.

In recent years, there has been a rapid development in requirements governing the amount and nature of the work to be mastered in a particular subject or field, e. g., the requirement of a major or minor, or of a given number of college credits in the field to be taught. There appears to be a decided movement toward certification for specific subjects by writing on the face of the certificate the subject or subjects which the holder is qualified to teach, and by permitting him to teach only those subjects (32:21-25; 86:105; 123:207; 131:125).

Trends toward certificating teachers by subjects are well illustrated by the changing requirements for teachers of nonacademic or special subjects. According to Baum, certificates valid only in special subjects were issued in 17 States in 1921 (16:9-10). According to Switzer, 61 kinds of special certificates for teachers of nonacademic subjects were issued in 1925; and 1 or more of these were issued in all but 5 States. In 1930, 122 kinds of special certificates were issued in 45 States (131:123).

Trends during the present century in certification for administrative and supervisory positions follow in certain respects those for teaching positions. According to Cubberley, in 1906 only 1 State, Wisconsin, recognized in certification requirements anything like adequate provisions for superintendents. This State issued a certificate by State examination for county superintendents. The certificate differed from a first-grade teacher's certificate only in respect to requirements for examination in "school law and the organization, management, and supervision of district schools", and in respect to a teaching experience requirement of 8 months (37:66).

Certain unmistakable trends since 1906 in the issuance of administrative and supervisory certificates are shown in studies made in several different years: 1911, (137:209); 1921, (31:225-226); 1927, (32:261-263); 1933, (115); and 1937, (126). First, the number of States issuing such certificates has increased from 9 at most in 1911, to 31 in 1937, and their possession in the States issuing them is now more generally required for specific positions than during earlier years; second, the amount of preparation required has increased until college graduation is now the most frequent single scholarship requirement; third, the certificates themselves have been increasingly specialized (115:7, 9) from the earlier "supervisory" certificates; fourth, certification of administrators by examination, once the predominant method, is now found infrequently; and, fifth, the propor-

tion of life certificates issued to administrators has declined (89:81-82; 115:6-31; 126; 131:123-124).

*Changes in requirements in professional education.*—There has been until recent years a marked trend toward increasing the amount of strictly professional work required for certification. In the last few years, the increase has been slower, and has been especially noticeable only in States originally having the lowest requirements in this subject.

In 1906, one pedagogical subject was required in about three-fourths of the States, for one or more kinds of certificates. Usually this subject was the theory and art of teaching. Occasionally school law, and much less frequently, psychology, history of education, and a few other professional subjects were required (37:28-29). In 1937, all States require courses in professional education for one or more types of certificates. The requirement is also made for many more kinds of certificates than in 1906; and the courses required are specified in increasing variety and by a greater number of States as time goes on. For instance, 26 States in 1930 required student teaching, an increase of 4 over the number of States making such a requirement in 1925 (131:131). Thirty-three States and the District of Columbia made this requirement in 1937 (table 6).

*Changes in special requirements other than preparation and experience.*—Inspection of three studies published, respectively, in 1911, 1921, and 1928, and of certification regulations and laws in 1937 discloses a very slow elevation of minimum age requirements for certification during the past quarter of a century (table 10; and 31:241-242; 32:278-279). The elevation of age requirements is not as rapid as the elevation of the average amount of preparation of teachers, which rose 2 years or more during the same period. There was no appreciable rise in minimum age requirements in approximately 40 States. Different age requirements formerly made in some States for men and for women have practically disappeared. Different age requirements for different types of certificates within the same State have decreased greatly in number. The age-requirement trend in the recently introduced administrative and supervisory certificates is not yet clear.

Minimum age requirements are often specified in school laws, and the raising of requirements embodied in statutes is slow. Actually, of course, the average age-level of certificated applicants tends to increase, as requirements governing the amount of their preparation are increased. The protection afforded the schools by the minimum age requirements at present in force becomes largely unnecessary as minimum certification requirements in respect to preparation are raised.

TABLE 10.—COMPARISON OF MINIMUM AGE REQUIREMENTS FOR LOWEST GRADE CERTIFICATES, 1911 AND 1937<sup>2</sup>

Age	Number of States	
	1911	1937
16	2	—
17	8	4
18	26	30
19	—	1
20	—	2
21	1	—
No fixed requirements	12	11

<sup>2</sup> References: For 1911, 137 : 226; for 1937, 126.

<sup>3</sup> Includes California, which requires 18 years for county certificates only. These are issued in negligible numbers.

Religious affiliation or belief was a common requirement in earlier days when church authorities controlled the schools and desired to assure themselves that applicants were "sound in faith" (39 : 631). The requirement of good moral character has existed almost from the beginning of teacher certification, and this qualification is still mentioned in the regulations of about two-thirds of the States.

Civic requirements for teachers have received increased emphasis within recent years. The World War appears to have added considerable impetus to the adoption of the requirement of citizenship (150 : 26. See also 131 : 17-18). The movement has continued during the past decade. The prerequisite of citizenship was required in 10 States for the issuance of all certificates in 1927 (32 : 278). Citizenship, or the declaration of intention to assume citizenship, was required in 17 States and the District of Columbia in 1937. Proof of good health was required in 15 States in 1927, and in 25 States in 1937 (32 : 278; 126).

*Changes in duration of period of validity and conditions of renewal and exchange.*—Long-time trends in the length of validity of many types of certificates are difficult to distinguish, since certificates of the same name may change greatly in essential characteristics over a period of years. There does not seem to be any marked tendency recently to depart from the long-established practices noted by Cook in 1927 of renewing certificates of higher grade during good service, and of limiting the period of validity of certificates of lower grade (32 : 28).

Among clearly distinguishable tendencies in recent revisions of certification requirements, has been an increase of emphasis upon provisions for the issuance of initial certificates as probationary or provisional certificates only. The length of validity of such certificates is relatively limited, and they can be renewed or exchanged only after the holder has completed additional college work while in service. Such provisions, while not entirely new in any State, have

been particularly emphasized in recent revisions of certification requirements in Kentucky, Michigan, Nebraska, New York, Ohio, Pennsylvania, and other States.

The requirement of in-service education as a prerequisite for the renewal of certificates is subject to certain limitations, most of which are economic in nature. During the depression, for example, a number of States extended or renewed the validity of teachers' certificates without enforcing previous prescriptions of additional college preparation for renewal. Legislative provisions to this effect were made in 5 States during the biennium (1934-36 (73:20)).

Life certificates were introduced in most States during the last half of the nineteenth century. County superintendents of Pennsylvania under the law of 1854 creating their office and giving them responsibility for certification, designated in convention a permanent form of certificate entitling the holder to the privilege of being called a professional teacher. After revising the provisions for the permanent form of certificate in 1855 to include examinations in the art of teaching, as well as in subject matter, the Act of 1867 authorized the issuance locally of a permanent certificate upon examination by a committee elected by local teachers (147:11-14; 150:46). Permanent certification was extended to the majority of the States thereafter. In 1911, Updegraff found only 8 States that did not issue life certificates: Delaware, Virginia, West Virginia, North Carolina, South Carolina, Massachusetts, Louisiana, and Colorado. However, all but 2 of these—Delaware and North Carolina—made provisions for the renewal of their highest grade certificates. In Colorado, the second renewal was for life (137:162-163). In 1921, 10 States were reported that did not grant life certificates (31:204-205), and in 1930, 7 States (131:132). To 1937, the number of States had increased to 13, including 1 State issuing life certificates to administrative and supervisory officers only (126). Slight differences in the foregoing figures may be caused in some instances by differences in classification of certificates.

The increase in the number of States not issuing life certificates, from 8 in 1911 to 13 in 1937, is not particularly impressive despite a very recent increase in the number of such States. A statement by Cook in 1927, however, still applies. She reported a good deal of agreement that permanent certificates should be issued to relatively few applicants, and then only after evidence of successful experience. Some States were issuing fewer life certificates than formerly. There was a tendency to issue probationary certificates which were later validated for long terms or made life certificates only on evidence of credentials showing continued professional training as well as experience (32:28).

## EVALUATION OF REQUIREMENTS

## NUMBER AND TYPES OF CERTIFICATES

Simplification of terminology applied to certification practices and requirements has been advocated for some time. Updegraff said in 1911:

A uniform nomenclature is needed for all the States, or at least the adoption of principles which shall control the naming of certificates (137:137).

Lewis said in 1925:

The number and names of certificates should be reduced to a minimum (82:98).

Zangg believes that:

The term "certificate" which is used by the majority of the States, would appear to be adequate for all States (150:187).

Dearborn says:

Variability in meaning of the names of certificates is at present quite confusing. . . . Simplification is imperative (43:3).

It must be admitted that exact uniformity may be unnecessary in certain respects. But there is unquestionably too much confusion in terminology for which no brief can be field.

Confused terminology results in large part from variations in certification practices and requirements among States and within States. Certification procedures and requirements are often needlessly complex, however. Certification procedure should be simple enough to be readily understood by school administrators, teachers, prospective teachers, and board members (41:95). If practices and requirements are simplified and made more uniform, simplification of terminology in some degree should follow. Oversimplification, however, should be avoided. On this point, the following statement by Regier reflects the belief of most authorities whose opinions were reviewed:

A sound certification system should name as many kinds of certificates as there are kinds of work calling for specific and prolonged preparation. (114:308).

Lewis said in 1925:

The terminology of the certificate should, so far as possible, describe the attainments and the rights of the holder (82:98).

The wide range (3 to 55 in 1932) in the number of different kinds of certificates issued by the several States suggest questions concerning the extreme numbers indicated. Three kinds of certificates would not at all meet the needs of States differentiating certificates adequately for different types of educational service. It appears obvious that the number of kinds of certificates should be consistent with

effective certification procedure. This principle relates to the maximum as well as the minimum number of certificates. There should be as many kinds of certificates as there are specific and pertinent certification purposes, but no more. Parkinson in 1932 believed it was possible to carry out the spirit of this principle and at the same time issue not more than 20 different kinds of certificates (106:444-445).

In respect to the number of different types of certificates, there is a fair agreement among authorities that in many States there should be fewer of certain types, such as those issued locally or upon examination, and an increase in other types through more specialization in certification. Burkman concludes that "the multiplicity of bases upon which certificates are issued, in the different States, for the same type of educational position is unwarranted." He bases his conclusion upon the commonly accepted statement that teacher certification has the major purpose of ensuring that teachers be properly qualified (23:159).

That a reasonable degree of simplicity in certification requirements is possible in a certification plan that recognizes different grade levels, subjects, and fields of work, and provides for a regular progression of grades of certificates based upon varying amounts of experience and scholarship, is shown in the regulations of a number of States. Among these, the regulations of Maine afford an excellent example.

McMullen proposes that the scholastic and professional training requirements for certificates of a given level and type which carry the same prerogatives, should be made uniform among the States. If this were done, a reasonable similarity of practice in the certification of teachers should result (86:96). If the number of certifying agencies were reduced to one, i. e., the State department of education; if the bases of initial issuance were reduced to one, i. e., upon institutional preparation; and if terminology were standardized, the many different kinds of certificates could easily be reduced to a fraction of the present number. Not many more elements of difference among certificates appear necessary, than the number required to specify the amount and the nature of preparation, the amount and the nature of experience, kinds of educational service authorized, length of validity, and terms of renewal.

A need in some States for temporary certificates, or nonrenewable certificates of 1 year's duration to be used in the process of raising minimum standards or for use in emergencies, is recognized in actual practice, and advocated by some authorities (76:31; 43:9; 92:143). On the other hand, the undesirability of low-grade certificates, including third or fourth grades now issued in some States, and of temporary or emergency certificates and permits, is commonly recognized when such certificates perpetuate extremely low standards

## 82. STATE PROGRAMS FOR THE CERTIFICATION OF TEACHERS

(40: 631, 636-637). Causes operating toward increasing the number of teachers who hold permits unfortunately may include poverty of the administrative unit, undue conservatism of administrators, local political influences, and other causes.

The recommendation has been made that no temporary certificates or permits be issued (57: 209-212). There is evidence that low-grade certificates may be retained when there is no real need for them. For example, Elrod showed that in Tennessee there was a supply of 7,951 high-school teachers in 1933-34 who were college graduates, whereas the demand was for only 3,341. Each high-school vacancy in the State could have been filled with a teacher who had 4 years or more of preparation with a surplus of 4,610 college-trained teachers; yet high-school teachers were being certificated with less than 4 years' preparation (52: 6). However, local economics and administrative forces at the present time appear to make the issuance of substandard certificates necessary or expedient in many places, and their final elimination must wait upon general educational improvements. These include, to a varying extent in the several States, such advancements as better salaries for teachers and centralization of educational administration, including the abolition of local administration of examinations for certificates.

Nearly all authorities agree on the desirability of differentiating certificates to meet the needs of workers on two or three different grade levels, in major fields of instruction, and in important types of educational service noninstructional in nature (12: 158; 57: 219-222; 97: 1; 100, Part II: 115-116; 106: 139-442). To secure specialized preparation, it is advocated that certification be undertaken by subjects or combinations of subjects, grade levels of work, and different types of work such as the principalship. Brodie suggests a modified form of certification for certain types of nonprofessional service also (21: 33-44).

Inasmuch as teachers are frequently called upon to give instruction outside their major fields (7: 284-287), certification should provide for this situation. Certificates should be issued that make provisions for competent service in two or more subjects. Such provisions are illustrated in the certification regulations of Alabama, Arkansas, California, Indiana, Mississippi, North Carolina, Oklahoma, Virginia, and West Virginia, among other States.

It is commonly agreed that certification requirements should protect prospective teachers who prepare for service in specific subjects or grade levels from the competition of prospective teachers who have had no such specific preparation. The need is shown by the fact that in about half the States high-school certificates by law or regulations are valid also in elementary schools. Of five types of specialized

elementary certificates for intermediate grades reported in one study, not one gives its holders protection against holders of other types of elementary certificates (10:29-30, 180).

Cubberley's proposals in 1927 may now be considered conservative in some States, but they afford goals yet to be attained in others:

A differentiation of certificates for different types of teaching is becoming increasingly desirable. Two main grades—elementary-school and high-school—should be provided for at once, and higher standards should be fixed for obtaining the high-school certificate—graduation from a four-year college course and professional study should be the goal—than for the elementary. Further differentiation will in time be desirable, and kindergarten-primary-school, intermediate-school, junior-high-school, and probably junior-college certificates as well will in time be called for . . . An administration and supervision certificate also should be created . . . Either a general form or a variety of vocational permits and certificates should be provided to cover Smith-Hughes and part-time-instruction teachers. Similarly, special certificates for teachers of a number of special types of classes—defectives, sub-normals, speech defects, adults, etc.—may all be needed (40:637).

Differences of opinion may be found concerning the degree to which specialization should be carried, and concerning the types of work to which certification should extend (21:50-51; 81:346). George E. Myers in 1929 secured majority agreement from a jury of 312 members as to the desirability of the trend toward issuing special certificates valid only in a more, or less limited field designated in the certificate; and based upon special preparation for this field. The special certificates approved by two-thirds or more of his jury included those in such special or nonacademic subjects as music, drawing, industrial arts, household arts, and physical education; those for teachers of exceptional children, adults, and illiterates; those for grade levels, including kindergarten and primary classes and elementary grades; those for teaching senior high school academic subjects singly or in combination; and those for supervisors of special subjects. More than half his jury favored the increasing differentiation of certificates for junior high school teachers and for elementary, junior high school, and senior high school principals, and for superintendents of schools (97:1-2).

Bachman says that, with the exception of a certificate based upon a short curriculum preferably 1 year in length designed for teachers in 1-teacher schools, there is need for but a single protective and limited elementary school certificate and of a single curriculum for elementary teachers in the first 6 grades (10:67-68, 81). He does not believe that a rural school certificate, as distinguished from a certificate temporarily demanded for teachers of 1-teacher schools as such, is justified. All certificates, however, should be restricted in validity (10:57-66, 180-181). Other authorities would extend the

specialization of certificates to include specific elementary grade levels.

In practice, of course, there are a number of States and of teacher-preparation institutions that have not made more than fair beginnings toward specialization; others have gone further in specialization in the elementary field than Bachman would appear to approve. It is conceded that education authorities differ as to what constitutes a qualified teacher. The question has not been settled by scientific means, nor to the satisfaction of all those who prepare, certificate, or employ teachers. Such difficulties, however, should not be made hindrances to advancement of certification practices by commonly accepted means.

Brodie secured agreement by a number of educational authorities on the following statement: "The several States should use one general pattern in certification for public school service." (21:41, 43). It is argued with much justification that the realization of this ideal would simplify the administration of certification, encourage the interstate migration of competent teachers, and make the evaluation of out-of-State certificates easier and more accurate. Efforts of well-qualified teachers to better their economic and professional status, and efforts of employing officers who wish to improve their teaching staffs, would be more effectively realized if differences in certification practices and requirements among States could be reduced (86:3-4). The adoption of one general pattern need not mean that minimum standards among the States would have to be the same (21:51-53).

State systems of certification should, of course, be simple enough to be easily administered, and readily understood by teachers and laymen (21:31-32, 43; 150:167).

Fast trends do not indicate that exact uniformity in certification requirements will be attained in the near future under present conditions. McMullen believes that "State uniformity in certification is probably impossible and perhaps undesirable. Minor differences will continue to appear" (86:1). There is something to be said, of course, for even unplanned experimentation in the educational evolution of a State or country, if the social and financial wastes are not too great, and if there are reasonable hopes for fruitful outcomes of such experimentation. However, there appears to be an entirely unnecessary amount of confusion and divergent practices in certification. To secure a greater measure of uniformity in practices and requirements, without lowering standards or sacrificing the educational identity of the several States, or infringing upon their possibilities of educational growth in new directions, appears to be a real need.

Several "model" patterns of certification have been proposed. The earliest noteworthy plan was proposed by Cubberley in 1914, as a part of his revised constitution and school code of the hypothetical State of Osceola (38:148-172). Brodie in 1932 secured the opinions of 48 judges concerning a number of proposed principles and a certification pattern (table 11) formulated by Dearborn (21:28-53; 43). The judges consisted of 15 specialists in teacher training, 16 State officers of certification, and 17 public-school administrators. While the pattern as a whole for a State plan of certification was favored by the judges, there were some diverse opinions on certain details of the plan (21:51-53). Subdivision "F" of the pattern, representing the class of certificate requiring only 1 year of preparation above high school was seriously questioned; 13 judges voted "yes" and 15 "no." Recognition in the requirements of all certificates was recommended in respect to the following items: Scope of validity, length of validity, basis of issuance (amount of approved preparation required), and terms of renewal or exchange (21:32, 42).

TABLE 11.—PATTERN FOR DEVELOPING PLANS OF STATE CERTIFICATION FOR PUBLIC-SCHOOL SERVICE (43:3-4; 21:38-39)\*

Class of certificate	Amount of preparation required	Length of validity	Terms of renewal	Scope of validity
1	2	3	4	5
	Years	Years		
A.....	6	12	(1) 10 years' successful teaching experience, or (2) 12 semester-hours in approved courses.	Determined by nature of preparation.
B.....	5	10	(1) 8 years' successful teaching experience, and 6 semester-hours approved courses, or (2) 18 semester-hours in approved courses.	Do.
C.....	4	8	(1) 6 years' successful teaching experience and 12 semester-hours approved courses, or (2) 24 semester-hours in approved courses.	Do.
D.....	3	6	Not renewable	Do.
E.....	2	4	do.	Do.
F.....	1	2	do.	Do.

\* Or more.

\*Notes related to the foregoing pattern:

1. This pattern can be used for developing certification plans in any State.
2. The pattern can be used in certification for any phase of school service.
3. The Class A certificate should be the ultimate certification goal for every member of the profession.
4. The lowest class of certificate or minimum standards for any given phase of service, should be determined by conditions in each State.
5. A year should be defined in terms of the established length of the school year in the school district or districts where the service was rendered.
6. The definition of "approved preparation" should rest with the best philosophical and scientific thought regarding teacher education in each State.

7. A year of preparation should be interpreted as approximately 30 semester-hours of approved courses.

8. One year of additional preparation would qualify holders of all certificates below Class A to the next higher form of certificate.

9. If the holder of a certificate fails to qualify for renewal or exchange to a higher form of certification, he should be entitled to the next lower form of certificate valid in the field he is qualified to teach, provided the minimum certification standards in that field are not violated.

10. Any class of certificates issued to a new entrant to the profession should be for a probationary period of 2 years.

11. Degree requirements are purposely omitted.

12. Emergency certificates are always necessary to meet extreme conditions and technical difficulties.

McMullen has proposed basic provisions for a uniform State certification law based on the standards of a hypothetical national certification law. Brief extracts from his detailed provisions follow:

All certificates shall be specializing certificates issued for particular subjects or fields of service on different grade levels . . . [14 kinds proposed].

. . . Two classes shall be designated for each type of certificate, as follows: (a) Provisional, and (b) Permanent. . . Permanency shall depend upon successful validation every five years by evidence of added educational training and professional growth. . . The academic training for all elementary and secondary certificates shall be four and five years of training beyond high-school graduation, respectively. . . There shall be a minimum requirement of twenty-four semester hours of professional training for all certificates. . . A schedule of additional training required for subsequent validation of certificates likewise shall be set up.

. . . Any certificate unused for a period of three years or longer shall lapse automatically and shall be reinstated only upon evidence of further training . . .

. . . Provision shall be made for the renewal or extension [under prescribed conditions] of a provisional certificate when the holder has failed to qualify for a permanent certificate. Likewise, provision shall be made for the renewal or validation of permanent certificates every five years, provided the holder has met the additional requirements of training and professional growth . . .

. . . Provision shall be made for the continuance in full force and effect of all old certificates for the full time for which they were issued (86:124-127).

Regier in 1935 proposed a certification plan for Kansas that included provisions for 4 types of certificates: Administrative and supervisory, secondary, elementary, and special. Three grades—advanced, standard, and provisional—were proposed. Requirements for preparation ranged from 2 years of undergraduate collegiate work for the provisional elementary certificate to 2 years of graduate work for the advanced administrative and supervisory certificate. Length of validity of the certificates ranged from 3 to 5 years, with provisions for a conditional life certificate. In most respects the plan was in keeping with the principles set forth in the present study (114:306-320).

Dilley proposed a plan for Ohio that was designed, if adopted, to remedy many weaknesses in the plan in existence in 1935. His proposals were also in keeping with commonly accepted principles (46:157-162).

Recommendations of the Carnegie Foundation for the Advancement of Teaching in respect to California in 1932 provided for distinct differentiation of certificates for different types of educational service as follows:

1. A credential to cover teaching in the kindergarten and primary levels, grades up to 3, inclusive.
2. A credential to cover teaching at the elementary level from grades 1 to 9, inclusive.
3. A credential to cover teaching at the secondary level, with emphasis as justified, upon high-school teaching, from grades 7-14, inclusive. This credential should indicate the major fields of teaching competence (e. g., social science, literature and language, science, physical education, foreign languages preferably by name, art, home economics, mechanical and industrial arts, etc.).
4. A credential to cover teaching at the secondary level with emphasis as justified upon junior college teaching, from grades 9 to 14, inclusive. This credential should indicate the major fields of teaching competence as suggested above.
5. A credential to cover supervisory competence in fields and at levels for which the teacher is already certificated.
6. A credential to cover administration.
7. A credential to cover competence in such special fields of staff work as counseling, research, assisting in administrative capacities, etc., to apply to all levels (26:56).

#### MINIMUM AMOUNTS OF PREPARATION

The minimum standards most often set by educational authorities as minima for the certification of elementary teachers and for high-school teachers are 2 and 4 years above high-school graduation, respectively. Higher levels are often proposed (100, Part II:113-114; 107:222; 131:138). Higher standards are usually proposed for cities (130:130). Evenden says in the National Survey of the Education of Teachers:

The amount of educational preparation required for all new teachers should equal or exceed the present generally accepted minimum standards of 2 years of college work beyond the completion of a standard high school for teachers in the elementary and rural schools and 4 years of college work for teachers in the secondary schools. Every State . . . at the same time should set a date in the near future when the goal of a minimum of 4 or more years above high school for elementary teachers will also be enforced. The nearness of that date to the present should be determined in each State by its general educational and economic conditions and by the present level of the educational preparation of its teachers and the amount of upgrading needed (54:66).

General approval may be found in the literature to the proposal voiced by Fields, that limited training certificates, such as those issued upon graduation from high school with a few high-school units or college credits earned in professional subjects, should be discontinued (57:212). Poor as such preparation is, the requirement of high-school graduation is one step in advance of an indefinite examination requirement with no set minimum of professional or academic preparation. In respect to the latter, Cubberley said in 1927:

Graduation from a four-year high school should be required, at the earliest possible date, as a prerequisite for being admitted to any examination for any type of a teacher's certificate, and dates should be fixed after which some evidence as to professional preparation in addition will also be required (40:637).

Differences in the amounts of scholarship mentioned by different authorities as desirable minima for beginning teachers are due for the most part to differences of opinion concerning the time when relatively high levels of preparation can be attained for teachers in given States or areas. The vast majority of educators agree that a minimum of 4 years of college work, and eventually some graduate work, is desirable for all elementary teachers. Although the minimum of 4 years of college work for beginning teachers has been attained in five States, the principle of equality of educational opportunity for all American children regardless of the residence or economic status of their parents is still violated throughout the country as a whole. Unfortunately, the realization of the ideal of equal educational opportunities is exceedingly remote under present conditions of decentralized school support, because differences in taxable wealth per pupil among the several States and subdivisions of the same State are very great. Only as means are evolved to equalize the amount of income available for education among the various local educational administrative units may equality on a national scale of educational opportunity as expressed in approximate equality of teacher competency and service be attained. States in which adequate salaries are paid may require a minimum of 4 years of college education for certification; but States where very low salaries prevail must continue to certify teachers at levels lower than 4 years. Cubberley says:

Increased professional competency should accompany general salary increases, and general salary increases should be so planned as to make increased certification requirements possible (40:636).

Insofar as certification authorities are concerned, about the best that they can do under present conditions is to continue to raise standards by successive levels, a year or less at a time, as the supply

of qualified applicants permits. Conditions have been such in recent years that considerable progress has been made even under severe financial handicaps. Some of these conditions, including a considerable surplus of unplaced college graduates prepared for high-school teaching, increasing length of teaching life, and a large decline of pupils in the elementary schools, still continue. To heighten the average level of the education possessed by teachers, a year each decade should be considered a conservative program for elementary teachers in States where standards are relatively low.

The observance of certain conditions may hasten the realization of such a program. Authorities advocate and experience confirms the desirability of setting successively advancing steps in minimum scholarship requirements some years ahead. A series of gradually rising requirements that are predetermined assist teacher-education institutions, teachers in service, prospective teachers, and employers to make their plans to meet such requirements. A gradual upbuilding over a period of years is recommended by many State school surveyors (100, Part II: 113-114). Under normal conditions of teacher supply, very high requirements cannot be set up for immediate enforcement in the States with low requirements. Authorities agree that a period of transition, possibly a decade in length, with periodic increases set in advance, is desirable (40: 637; 82: 98; 92: 137-138; 105: 154; 106: 434; 114: 298).

Difficulties in raising minimum requirements where examination is a basis for certification, and where no specific institutional scholarship prerequisites are required, may be partially overcome by first setting a low but definite minimum requirement of institutional preparation as a prerequisite for examination. Thereafter this requirement may be gradually raised to a level approximating that on which certificates are issued on a basis of college credits. Certification by examination thereupon becomes unnecessary.

It is important to remember that while there is a close relationship, there is no exact correspondence, between salaries paid teachers and minimum levels of certification. There are a few States in which salaries are relatively low, but in which the average amount of education possessed by teachers is relatively high; whereas the reverse is true in certain other States. The presence of a large supply of teachers prepared in teacher-training high schools or in 1-year normal school or college curricula appears seriously to retard the elevation of levels of teacher education, even in wealthy States.

Hubbard indicates that reduction in the supply of teachers through heightened certification requirements in effect appears only temporary (21 : 363). Improved standards tend to force or to encourage teachers to meet such standards (21 : 48; 89 : 122-123). Height-

ened certification requirements may result in improved services and greater public demand for such services.

While often retarded by a lack of qualified teachers, the elevation of minimum certification requirements sometimes does not keep pace with the supply of teachers meeting successively higher requirements.

During the depression, standards of teacher preparation could be raised materially without reducing the supply of teachers below the demand. In 1937, it was still possible for certification authorities to capitalize the asset of an abundant supply of prospective high-school teachers with 4 years' preparation by raising requirements to include graduate work.

A large supply of well qualified teachers is a resource of unlimited possibilities. It is also a great economic loss to our nation not to utilize this resource while it is available . . . . The teacher supply has finally reached a point at which it seems feasible to carry into general practice an educational program which, up to the present time, has been limited to the most progressive school systems (112 : 902).

The relationship of the supply of teachers to the demand constantly varies. Minimum standards should therefore not be fixed with the idea that they are to be permanent. The improvement of minimum certification standards should be a continuous administrative responsibility (21 : 32).

To fix minimum standards of certification properly, it is necessary for certifying authorities to be informed in detail concerning the exact condition of teacher supply and demand in the several fields of educational service. Many State departments are not so informed (22 : 346). There is danger, therefore, that standards may be set too low. This possibility is increased where there is resistance within the State to the material heightening of standards or to significant changes in regulations, as is often the case.

Even when certification requirements are elevated to new high levels, and teachers and prospective teachers have accepted and endeavored to reach such levels, the success of the program of improvement depends in large degree upon the attitudes and action of local school officials who employ teachers. During periods of economic depression, and even during normal times, thousands of poorly-prepared teachers are employed when teachers with superior and better preparation are available. The heightening of certification requirements facilitates the elevation of levels of teacher preparation, but the process by no means guarantees the placement of the best available teachers in the classrooms. A tendency to employ low-salaried teachers with minimum legal qualifications only tends to defeat the program for continuous elevation of standards (147 : 262). The hearty cooperation of local school officials in employing the best educated teachers available is essential in raising standards.

The cooperation of the teachers considered as a professional group, is also essential in raising levels of preparation, and in maintaining such levels (147:262-266, 289). Changes in certification regulations should not be retroactive (21:32). Unfavorable attitudes toward mandatory requirements which cause unusual hardships to teachers, or which have an appearance of unfairness to them, should not be awakened. However, when changes are reasonable, certification officers may depend to a considerable extent upon the cooperation of teachers in the introduction of State requirements tending to upbuild teaching as a profession.

In some places States certification requirements afford very little protection from unqualified applicants, to city school systems and other local school districts requiring higher qualifications than those recognized in States certification requirements. A certification plan should take into account the need for providing certificates of a sufficiently high grade to meet the needs of the most progressive school systems of the State.

The minimum standard of education most commonly set for teachers of academic high-school subjects, i. e., college graduation or equivalent, also appears reasonable for teachers of most of the special or nonacademic subjects taught in high schools. Inequalities in standards governing teachers of academic and of nonacademic subjects are looked upon with disfavor by educational authorities. The former lack of teachers reasonably well qualified in nonacademic or special fields has largely disappeared. The 4-year standard is most difficult to attain in trades and industries and related fields and in certain special types of noninstructional school services.

In the case of teachers of physically or mentally handicapped children, Schleier presents recommendations based upon approved practice and upon the opinion of selected teachers concerning desirable immediate standards. These include 2, or preferably 3 or more years of training in a normal school or teachers college, as a foundation for further professional training (121:24-40).

Large differences characterize the standards for administrative and supervisory certificates, and 17 States do not issue them at all. There appears no good reason why all States should not issue these certificates, nor why variations in requirements are as great as those existing.

Cubberley proposed that the standards for administrative certificates should be high, and that the certificates should be required of all superintendents, county as well as city (40:633). Numerous specialized duties are demanded of superintendents that are highly professional in nature. Changes in education are rapid, and assurance should be given the State that its educational officers are fitted

to cope with the heavy and increasing demands made of them (94 : 50). The diversity and breadth of a superintendent's or principal's public contacts and his position as an educational leader demand special recognition in his preparation. Not only should he possess above-average professional preparation and experience of a technical nature, but he should also have an education of a general or liberal nature that will assist him in coping with economic and other problems confronting educational leaders of the present day. Graduate work in many instances alone will enable him to retain genuine professional leadership of his teachers (95:6-11; 141:551-563).

The nature of the demands upon administrators and supervisors would indicate that the level of 4 years of college work should be set as an immediate minimum standard for them in all States. Such requirements eventually should be higher. A tendency at present to require graduate work probably forecasts the day when the master's degree or equivalent will be the usual requirement (131 : 137-138). Sufficient preparation can scarcely be provided in 4 years of college work (92 : 138-140). The 1937 standards of the North Central Association provide that:

... The superintendent or the principal directly in charge of the supervision and administration of the high schools shall hold a master's degree from a college belonging to the North Central Association, or the equivalent, and shall have a minimum of six semester hours of graduate work in education . . . (117:104).

A committee of the Department of Elementary School Principals in 1932 tentatively suggested 3 levels of requirements for the certification of elementary supervising school principals as follows: First class, 1 year or more of graduate preparation, with undergraduate and graduate professional preparation in the field of specialization; second class, less than 1 year of graduate work, with some undergraduate and graduate specialized study; third class, college graduate, some specialized undergraduate professional preparation (119:98).

That relatively low levels of preparation of county superintendents constitute a special certification problem is indicated by Regier in a statement concerning the qualifications of such officers in Kansas in 1933-34:

Only 22 out of 105 county superintendents, or 20.95 percent, hold a degree and 20 percent more have only two years or more of college training. Sixty, or 57.14 percent, of the county superintendents have less than one year of college training (114:277-278).

Comparable levels of preparation of the administrators of county school systems are known to exist in many other States. Election of such officers by popular vote is a complicating factor in improving

their qualifications by certification. It is to be expected that the attainment of 4-year and higher levels by county superintendents will be realized gradually in some States.

A program for certificating administrative and supervisory officers has much greater possibilities for success if the cooperation of these educational leaders and of the other educational agencies of the States is secured. Some steps that were taken to this end in New York are described by Morrison (95:3-6).

#### CURRICULA, SUBJECTS, AND COURSES

Four general types of preparation, in balanced proportions, must be provided for in certification requirements if the schools are to be reasonably well protected from incompetent teachers. There must be provisions first, that the applicant secure a good general, liberal, or cultural education; second, that he secure adequate preparation in the specific subject or field of work which he is to teach or in which he is to serve; third, that he secure instruction in professional subjects in education; and, fourth, that he secure practice in teaching in the field which he wishes to enter.

Some indication of the minimum amount of general education upon which teachers are certificated has been given in preceding sections of this report. The requirement of a given amount of general college education, however, often does not assure specific preparation of a worker in a specific subject or field of service.

*Academic or special-subject requirements.*—The principle that a teacher should teach only the subjects in which he has had the requisite preparation has been accepted in theory for many years. The realization of this principle is not easy, as indicated in a statement by Learned and Bagley, published in 1920:

Three steps are essential: first, the formulation and acceptance of reasonable qualifications for the specific teaching positions in the public school system; second, the provision of adequate facilities for giving teachers these qualifications; and, third, the aforesaid requirement that each teacher shall teach only the subjects wherein he has had the requisite preparation. These are simple principles and can be set forth clearly in law, but their execution is an intricate task with which no law should attempt to deal . . . (81:347).

Some of the difficulties that confront certification officers in making specific subject requirements can be remedied only through the cooperation of the teacher-education institutions. For example, if the institutions turn into the teacher market a large oversupply of applicants for positions in given fields or subjects, and an undersupply in others, inequalities in certification requirements may be expected to follow.

Certification requirements expressed in exact quantitative terms, e. g., in terms of a given number of semester-hours' credit, are often questioned by educators and others on the ground that they do not assure teaching competency. This attitude toward State board control of professional and subject-matter course requirements is illustrated in the report to the North Carolina commission on university consolidation by Ford, McVey, and Works in 1932. The report says:

... The academic departments [of two higher education institutions] ... object both to the amount of the professional prescription and to the rigidity of the subject-matter requirements. ... The facts secured in this study show clearly that the rigid requirements now in force have served the period of their usefulness. The patterns of training which must be provided for both elementary and secondary teachers may be vigorously attacked at various points (59: 37-38).

On the other hand, a much greater danger exists in issuing "blanket" certificates good in fields in which the applicant has had no specific preparation than in prescribing specific amounts of preparation in each field to be taught. Stoutemeyer says:

... The actual practices in certification assume a carry-over into teaching regardless of the amount or kind of training in the specific duties to be performed. Judging by their fruits, there seems, therefore, to be a more profound faith in the worn-out creed of formal discipline than in the experimental evidence of scientific education (128: 46).

In actual practice, requirements expressed in specific quantitative terms are found much more workable, even if theoretically less defensible, than when expressed in general terms such as "satisfactory levels of competency" or "college graduation." The time does not yet appear at hand when specific quantitative requirements may safely be eliminated from certification regulations. Differentiation in requirements, however, may easily go to extremes in fields having obviously close relationships.

Concerning the nature of specialized requirements, Evenden in the National Survey of the Education of Teachers says that regulations can secure the desired results by either of two methods: By specifying that students complete certain approved curricula in institutions approved by the State for the preparation of specific groups of teachers, or by specifying in certification regulations, in addition to the total education pattern of work in high school and college in the fields to be taught, the number of advanced courses in the teaching field, and the contacts with fields related to the teaching fields. Certification should not be reduced to a clerical checking of requirements met, because the value of any one item depends upon the remainder of the pattern. Certification should serve as a check upon the extent to which institutions meet the approved standards of preparation for any type of position. Minimum standards should be set for vari-

ous kinds of positions by the regularly constituted State educational authorities, but this should be done in cooperation with approved public and private teacher-education institutions (54: 168-169).

Bachman believes that certification requirements should be a very definite guide to teachers and to teacher-educating institutions as to what should be done to prepare for a definite type of elementary school work. More careful thinking is necessary concerning the types of teachers needed in elementary schools (11: 117-118).

Bennett stated that the certificate should inform the employing superintendent as to the nature of the candidate's specific qualifications. Graduates of teacher-education institutions should have specialized to a reasonable extent in 2 or 3 of the subjects taught in high schools if they plan to teach there (17: 94).

Switzer expresses the opinions of most investigators of the problem concerning the prescription for specific subjects for high-school teachers. Specific subject requirements should be definitely prescribed; otherwise sufficient flexibility will exist to make it possible for employers to assign teachers to subjects in which they have had little or no preparation. The name of the subjects to be taught should be entered upon the certificate and, as a general principle, other subjects should not be taught. Determination of the norms of preparation for majors and minors should also be made more uniform for the entire country. The amount and material of the courses to be pursued in fulfillment of the major and minor requirements should be definitely outlined by the States. Preparation and certification in two or three subjects appears highly desirable in typical situations (181: 188-189). More than half of the high schools of this country enroll fewer than 125 pupils each, and teachers in such schools are very often assigned to two or more subjects.

Some suggestions concerning the amounts and nature of prescriptions for individual subjects or fields of work are afforded by the standards of some of the regional accrediting associations. The Northwest Association of Secondary and Higher Schools makes this requirement:

All teachers in new schools and all new teachers in secondary schools must teach in the fields of their major and minor specialization in college preparation. A minor shall be interpreted to mean not less than twelve semester hours. Any exception to this requirement shall be accompanied with full explanation. Two or more years of successful experience in teaching a subject may, on recommendation of the state committee, be accepted in lieu of major or minor college specialization (103: 7).

The standards of the Southern Association of Colleges and Secondary Schools include this statement:

Beginning teachers . . . should not teach outside the fields of their college specialization (125: 149).

The standards of the North Central Association adopted April 1937 provide that:

All teachers of academic subjects in new schools and all new teachers of academic subjects in accredited schools must teach only in those fields in which they have made adequate preparation.

The following are the minimum requirements:

English, 15 semester hours.

Foreign languages, 15 semester hours in the language taught.

Science, 15 semester hours, of which 5 shall be in the science taught.

Mathematics, 15 semester hours.

Social studies, 15 semester hours, which must include preparation in specific subjects taught . . . . (117:104).

Practices of State universities or corresponding higher education institutions in respect to requirements of major and minor subject matter for the highest grade high-school certificate were indicated by Bachman in 1930. Thirty-one of 44 State universities and corresponding higher institutions required of prospective academic teachers a single major. Eleven States required two majors, and 2 permitted either one or two. Nineteen States required a single major; 5, two minors; 5 permitted an election between one and two minors; 1, either two or three; 2 required three minors. Bachman believes that the requirement of two majors is the most promising practice. Twenty-seven of the 44 institutions restricted to a greater or less extent the majors or minors which prospective academic high-school teachers were permitted to elect. It should not be assumed that teachers who have met major and minor requirements are necessarily qualified to teach a given high-school subject that appears to belong in the major or minor taken. There is often little limitation by the institutions upon the specific courses taken to meet major or minor requirements (12:22-27).

Educational requirements for employing teachers in cities have long set the pace for small school systems. Sullivan in 1932 found that 18 semester-hours in the subject to be taught by applicants for academic senior high school positions was the most common minimum requirement in cities stating such requirements. There was not much difference in the amounts required for the different academic subjects, but requirements in the specific subject taught were much higher for teachers of special subjects than for teachers of academic subjects (130:72-73).

This recommendation is made by Peik in the National Survey of the Education of Teachers:

The certification of a teacher should be limited, respectively, to the elementary or secondary school levels, and if for the secondary level, it should be restricted to those fields in which the holder possessed a

major or a minor of not less than 12 and preferably 15 semester-hours of preparation (120:348).

Requirements, when made for highly specialized types of educational service, such as teaching handicapped children, should be flexible and easily changed, since specialization is recent and is continuing rapidly in such fields. Specialized offerings in such fields are few, and standards have not yet been satisfactorily determined in many States (121:24-40).

Morrison believes that each administrator to a considerable degree must find his own field of greatest service. Hence not all courses in his preparation should be prescribed (95:6-11). Cybberley said in 1927:

For a time [an administration and supervision certificate] may well be of two grades, one for the successful practitioner who makes special preparation along the lines of administration and supervision, and the other for the professional student of educational problems. Evidence of some years of successful experience as a teacher should be necessary before either of these certificates may be obtained (40:637).

The report of the Carnegie Foundation in respect to certification in California, recommends that the State department of education formulate an inclusive and stable policy and plan for the recruiting and licensing of educational functionaries for all types of service required by the common schools up to and including the junior college. Where university management extends to collegiate lower division units of the university system, it is believed that staff members should be free from the requirements of State licensure with the understanding that the standards maintained by the managing board in control should not be lower than an approximate, but not specific, equivalent to those required in schools of similar level directly under the jurisdiction of the State board (26:56).

*Courses in professional education to be required.*—While the requirement of courses in professional education as a part of the preparation of a high-school teacher is no longer seriously questioned, there is disagreement in practice (tables 6 and 7), and among authorities, concerning the total amounts and the specific courses that should be taken. On the one hand, 7 States in 1937 required 12 semester-hours' credit or less in professional education for high-school certificates issued to inexperienced teachers of academic high-school subjects on a basis of 4 years of college preparation (table 6). Committee Q of the American Association of University Professors has made a statement to the effect that a maximum of 12 semester-hours is ample (142:180-181). On the other hand, at least 22 States require 18 semester-hours or more, and the weight of authority among educators indicates that the minimum of 12 semester-hours advocated by Committee Q is too low. The limitations of current practice as a

criterion are well recognized, but the typical minimum requirement of approximately 18 semester-hours made by State departments at present is worthy of serious consideration.

In respect to both elementary and high-school teachers, Rugg shows in the National Survey of the Education of Teachers that catalog prescriptions of selected teachers colleges and normal schools in 1933 included as a minimum about 18 semester-hours of education and educational psychology (120:86-87), or a little less than one-seventh of the entire course of approximately 120 semester-hours. The amounts actually taken by students as shown by transcripts of credits were substantially larger on the average. From one-fifth to one-fourth of all their work was taken in strictly professional subjects.

Six hundred instructors of representative courses in 18 subject fields whose opinions were sought in the National Survey of the Education of Teachers voted for an average of about 13 percent of education and psychology and 10 percent of observation and teaching, in the 4-year course. The total of 23 percent corresponds roughly to the proportion actually taken by students—20 to 25 percent—in strictly professional work (120:88). In this connection, the recommendations of a committee of the American Association of Teachers Colleges in 1931 may also be considered. The committee then advocated a minimum requirement in professional training of 24 semester-hours for all certificates (112:908).

Bagley, Evenden, and others advocate the more widespread integration and coordination of materials or activities taken from or associated with academic, nonacademic, strictly professional, and practice work. It is argued that if this were done, the number of courses in professional education could be substantially reduced. State certification officers, however, have not yet widely adapted their requirements so that clearly expressed recognition may be given to the professional type of preparation just indicated.

So far as the practice of publicly supported institutions that prepare prospective high-school teachers is concerned, average first-degree requirements in professional education for such teachers are usually higher than certification requirements for them. Bachman found in 1930 that the median requirement in professional education in 45 State universities or corresponding institutions was 20 semester-hours. Requirements for highest grade certificates and for supervisors and administrators were included; hence the median would probably be slightly lower for certificates issued to inexperienced teachers only.

The standards of the various accrediting associations must make provisions for many old and successful teachers who were certificated years ago, sometimes for life, but who have had little or no work in professional education; hence, standards of accrediting asso-

ciations are not as definite, and sometimes not as high, as current certification requirements. The standards of the North Central Association for 1937 make the following requirement for workers in high schools accredited by the Association:

The minimum professional training of a teacher of any academic subject, of the superintendent, and of the principal, shall be 15 semester hours in education (117:104).

The standards of the Northwest Association of Secondary and Higher Schools read as follows:

The minimum professional training of teachers of any subject shall be at least 15 semester-hours in Education. This should include special study of the subjects to be taught. This requirement shall not be construed as retroactive. . . . The Commission will interpret courses in education as the same courses are interpreted by the colleges or universities offering them (108:7).

The standards of the Southern Association of Colleges and Secondary Schools state that: "All beginning teachers and principals shall have had a minimum of 12 semester hours in education" (125:149). The standards of the New England Association of Colleges and Secondary Schools for secondary teachers of academic subjects include: "Professional training equivalent to 12 semester hours" (102:1).

Sullivan found in 1932 in 114 typical cities with populations of 17,000 and over, that the requirements in professional education for the employment of senior high school teachers of academic subjects ranged from none to 30 semester-hours. The median requirements among the cities that specified the number of semester-hours were as follows: Senior high schools, 15; junior high schools, 18; special teachers in high schools, 15 (130:67-69).

It has been shown previously that certification regulations increasingly prescribe the specific courses to be taken in professional education; that such courses may be either required or elective; and that they shall be appropriate in content to the grade level or subject taught, or to the type of service rendered. Authorities usually are in accord concerning the desirability of these tendencies, with some reservations concerning greatly detailed requirements of specific courses in States where approved teacher-education institutions presumably give well-balanced professional preparation.

Assuming that, for a time at least, certification requirements should prescribe the titles of at least some professional courses, what shall they be? A wholly satisfactory answer is impossible. Course titles in professional education are not sufficiently descriptive to indicate accurately the content of instruction desired. Furthermore, agreement has not yet been reached as to just what should constitute the content of each of the several courses. With these difficulties in mind, refer-

ence may be made to table 7 for an indication of the present status of course requirements, as shown by the frequency of mention of such courses in certification regulations. If present practice is used as a guide, the following courses will be given first preference in the listing of required and elective professional courses for high-school teachers: Student teaching, including observation, educational psychology, principles of education and teaching, special methods in the subject or grade level taught, school administration (especially for administrators), history of education, secondary education (for high-school teachers), and educational measurements. Other courses are listed in table 7. Present practice alone would scarcely justify the prescription of more than the first two or three subjects mentioned as absolute requirements with no possibility of electives.

The 10 courses in education most frequently mentioned as prescriptions in the catalogs of 57 selected colleges and universities that prepare secondary teachers of academic subjects, were ascertained in the National Survey of the Education of Teachers. These courses, in descending rank order of frequency, were educational psychology, general psychology, student teaching (separate or combined with other courses), general methods, special methods, free electives, secondary education, observation (separate, or combined with other courses), history of education, and introduction to education. The order of frequency of these courses becomes somewhat different if the courses actually taken by the students in the same institutions are listed in order. Professional courses taken by students majoring in special or nonacademic subjects differ somewhat in emphasis from those taken by students in academic subjects but in general outline, the courses taken by the two groups of students are much the same (120:260-261).

Judgments of former students concerning the value of courses they took in professional education are suggestive. Typical among studies securing such judgments is one by Peik. The courses in professional education that were believed by 100 University of Minnesota alumni, classes of 1923, 1924, and 1925, to be most helpful and of most general value, were reported as follows in descending rank order of frequency: Practice teaching, special methods, educational psychology, technique of high-school instruction, the high school, educational sociology, and history of education. It will be observed that the courses ordinarily presumed most practical received highest rank (110:77-84).

In the opinion of a growing number of teachers of professional education, much more stress should be placed upon courses giving insight and perspective to future teachers. The theory of curriculum construction, of teaching, and of school management should not be

neglected. Principles of education and of teaching, and practical work in the laboratory school are increasingly stressed in the certification requirements of progressive States.

Certification requirements in the past have often been conceived with the needs of teachers with only 2 or 3 years of preparation in mind. With the increase in the education of teachers on graduate levels, may be expected a broadening of outlook in the formulation of certification requirements in keeping with the needs of teachers who more and more are attaining their professional majority. As elsewhere indicated, such requirements cannot always be expressed in terms of additional schooling. Travel, excursions, contributions to the literature of their field, and other activities characteristic of professional workers are increasingly finding a place in the process of teacher education and certification.

That student teaching should be required for all inexperienced elementary and high-school teachers is believed highly desirable by most authorities (34 : 282; 100, Part II : 120; 114 : 308; 120 : 510). This course is required for certification of inexperienced high-school teachers in 33 States, to the extent most commonly of 3 or 4 semester-hours (table 6). All accredited State teachers colleges and normal schools require inexperienced candidates for graduation to secure credit in student teaching or observation.

The standards of the American Association of Teachers Colleges in 1937 prescribe a minimum amount of 90 [clock] hours of supervised teaching for every graduate of an accredited teachers college or normal school (5 : 2). The average amount actually prescribed for graduation by the institutions themselves is known to be greater. In terms of credits, the median student-teaching requirement in 47 teachers colleges in 1932 was 6.5 semester-hours for elementary teachers; and the median requirement in 92 colleges and universities for secondary teachers was 3.5 semester-hours (120 : 376). Allen secured a high percentage of agreement in a jury of 255 members, to the proposal that any institution, in order to be accredited for the education of public-school teachers in Pennsylvania, should require of each prospective teacher a minimum of 8 semester-hours or equivalent, of supervised student teaching (3 : 70).

The fact that each of the foregoing groups of agencies, or individuals, rely heavily upon the practices, opinions, or requirements of the others should be borne in mind in deciding upon the weight to be given the proposals or practices indicated. Thus, institutions are prone to set their requirements so as to meet certification requirements, which in turn cannot be much higher than the qualifications of applicants for certificates; accrediting institutions consider existing certification and institutional practices; students can evaluate

only the courses they have had; and authorities form their judgments too often from a consideration of present practice of all agencies concerned. In the existing state of educational knowledge, therefore, the relative merits of slightly different requirements expressed in quantitative terms, cannot be finally stated. Under such conditions, extremes should be avoided in setting up requirements, except in experimental situations.

#### SPECIAL REQUIREMENTS

*Age.*—In States where minimum scholastic requirements are 4 years above high-school graduation, the average age of beginning teachers is about 22 years. The present minimum age requirement of 18 years required by most States for certification would appear largely without point in States requiring 3 or 4 years of college preparation. The chances are good that applicants for certificates who have completed 4 years of college work in accredited institutions at an age younger than that of the average graduate, will rank with college students of average or above-average intelligence and scholastic ability. Minimum age requirements appear to be of most value in safeguarding the schools from immature applicants or those lacking in life experience, in States where certification by examination and low certification standards prevail (100, Part II : 117-118). To use a minimum age requirement solely as a means for reducing an oversupply of certificated teachers of average or better preparation would appear arbitrary and not particularly fruitful.

If the purpose of minimum age requirements is to assure stability and maturity in the professional life of the teacher, as suggested by one writer (150:33), then the minimum age should certainly not be less than 18 years, the minimum proposed in a number of State surveys and other studies (41 : 98; 100, Part II : 118). As minimum educational requirements for teachers are raised to 4-year levels and beyond, the minimum age requirement of 18 years should be raised.

The possibility of using maximum age requirements as a means of protecting the schools from the ineffectiveness of prospective teachers of advanced age and declining ability should not be overlooked. Recognition of this means of protection, as well as of a financial problem, is found in some State requirement systems (150 : 5-6, 24):

*Health and physical fitness.*—There is a need for definite and positive assurance of the physical fitness of teachers, that is not sufficiently recognized in certification requirements. The absence of requirements of this nature in half the States, and the indefinite requirements prevailing in some of the remaining States make it possible for many applicants who are physically unfitted for classroom work to enter the profession. Provisions for physical exami-

nation of teachers by approved health officers would assist materially in the enforcement of the certification requirements made.

The specific requirements that should be made in respect to health and physical fitness are not finally determined. Fred Englehardt says:

There is little evidence to show to what extent physical disabilities are handicaps to success in teaching. The nature of the work, however, leads one to conclude that certain weaknesses or physical defects would be distinctly undesirable because of the psychological effect which a person who is constantly among young people may have on them (53 : 175).

Certainly teachers with communicable diseases have no place in the classroom. Those whose physical condition is such that unjustifiable economic loss in all probability will be incurred by the schools through excessive sick leaves or premature retirement for disability are highly questionable risks. Teachers whose vitality and teaching effectiveness is markedly impaired, should be barred from the classroom until such defects have been remedied (21 : 37, 44; 82 : 98, 109; 128 : 38; 100, Part II : 118; 150 : 24-25). There are other considerations also that may receive increased emphasis in the future. If teacher personality is to be given more recognition in requirements, as is widely advocated, more attention should be given to the teacher's health and physical vitality.

The experience of teacher-education institutions that have put into effect genuine programs of selective admission of students, and of school-employing officers who require physical examinations as a prerequisite for employment of teachers, are worthy of careful study by officials who set the health requirements for certification.

*Miscellaneous requirements.*—Concerning certain miscellaneous requirements of local, occasional, or traditional interest a proposal by Lewis applies:

The authority to issue teachers' certificates should be removed so far as possible from undue personal, charitable, political, local, social, or religious influences (82 : 97-99).

The foregoing proposal implies that teacher competency should be the criterion for certification. This ideal meets with common acceptance by educators. It is the obligation of certification authorities to exercise their influence on behalf of society as a whole when proposals for harmful changes in certification requirements are made by minority pressure groups. It follows also that miscellaneous requirements peculiar to a given State should not be such that the free movement of competent out-of-State teachers into that State is in any way discouraged.

The necessity for a certain amount of flexibility in the administration of certification requirements is accepted in the practices of

most progressive States. For example, inter-city exchanges of highly competent teachers may involve complications in certification which should be met by certification authorities, with a view to facilitate, rather than to hinder, such exchanges. Promising curriculum innovations designed to integrate compartmentalized subject-matter fields should not be rendered difficult or impossible by the arbitrary administration of requirements expressed in terms of credit hours. The common-sense management of certification requirements will do much to obviate criticisms that are not infrequently made of quantitative prescriptions.

Demands for assurance that teachers have satisfactory personality traits are frequently found in the literature. While admittedly desirable, superior personality is not yet susceptible in many respects to objective measurement. The formulation of certification requirements that have the requisite objectivity must therefore await the time when satisfactory evaluation of personality traits can be made. As soon as this is possible Cooke among others believes that such qualities should be considered in granting certificates (33:60-61).

#### DURATION OF PERIOD OF VALIDITY AND CONDITIONS OF RENEWAL OR EXCHANGE

The practice of most States is to issue initial certificates valid for a limited time only, but the practice is by no means universal. According to a study by the National Education Association, authorities engaged in State school surveys and others agree that all initial certificates should be limited in validity to a period of a few years (100, Part II : 119). Brodie secured jury agreement by a considerable number of judges to the proposal that certification of new entrants in the profession should always be probationary (21 : 36, 44).

George E. Myers secured majority agreement of a jury, that the tendency is desirable to issue probationary certificates only, upon completion of the required training in teacher-preparation institutions. The tendency to require successful teaching experience and continued professional training on a probationary certificate before a life certificate is issued was likewise considered desirable (97 : 2). Cubberley proposes that there be not more than two grades of general elementary school certificates, based upon varying amounts of preparation and experience, and that both be granted at first for a short period, perhaps 2 years, and then be renewable for longer periods, e. g., 5 years, on evidence of teaching success and professional growth. After standards are raised somewhat only one grade of certificate would be issued. For life certificates, reasonably long teaching experience, above-average teaching success, standard preparation, additional professional study, good character, and evidences

of sound thinking on problems of their work should be demanded of teachers (40 : 637-638).

It is increasingly considered good practice to issue probationary certificates (86:106-117). Cushing recommends a definitely defined period of apprenticeship (41:96).

The reasons proposed for the limitation of the validity of initial certificates are numerous. Teaching success cannot be predicted or assured wholly as the result of examination for certification or by institutional preparation. Teachers who fail early in service can be eliminated from the schools by refusal to renew their certificates. Since first certificates in low-standard States often demand very little scholarship (table 1), holders of emergency, temporary, or low-grade certificates often obtain foothold in the teaching staff, and thence progress with little if any additional scholastic preparation into semi-permanent or even permanent tenure status (147:51-57). The system of gradation through certification by examination is particularly deficient from the viewpoint of substantially raising the educational qualifications of the teachers (57:630). Extension of the life of a certificate should mean more than merely qualifying a teacher to continue in a given position in the schools.

Morrison states that any scheme of certification should look toward improving the teacher personnel to be reelected in the future, and that the terms of provisional certificates should be such as to stimulate professional growth on the part of those who aspire to a permanent certificate (94:49-50).

In many States the period of validity of low-grade certificates would appear entirely too long. An initial certificate good for 5 years or less is in effect good for the entire teaching life of thousands of rural school teachers (51:30).

Stine says:

If the value of in-service education is admitted in the matter of renewal requirements, the importance of in-service education as a requirement for exchanging a low-grade certificate to one of a higher grade in the same field cannot be minimized. \* \* \* Stringent regulations requiring more in-service education for renewable and exchangeable certificates are desirable. \* \* \* A much larger percentage of life certificates should be issued on the basis of in-service education. \* \* \* Certificates on low preservice scholastic standards should have high renewal and exchange requirements. \* \* \* More stringent renewal requirements in the secondary and special fields are necessary (127:187-191).

A sound certification plan designed to encourage teachers to grow in service must consider the problem of their retention in service long enough to enable them to grow and develop in their profession (147:123-125). Increasing certification requirements may be effected to best advantage when definite recognition in a well-constructed sal-

ary schedule is given to improved qualifications (150:155-158). The compensation and opportunities for promotion in classroom teaching do not alone appear to induce a sufficient number of teachers to continue their professional preparation to the extent demanded by commonly accepted standards. During the recent economic depression it was financially impossible for tens of thousands of teachers to do more than provide necessities for themselves and their dependents. This situation still exists in the case of most low-salaried teachers. Hence, there is a practical limit to the amount of additional college work that can be required of them.

Successful experience is the most common requirement for the renewal or exchange of certificates. Before renewing certificates more careful definition of and check upon the actual records of "successful" experience are needed. Variations among States in the amount of experience required for the renewal of certificates or the issuance of permanent certificates of approximately the same type show widely different estimates of its value. Such variations cannot be accounted for by differences in the quality of teaching experience in different States.

After teachers have reached fairly high levels of education, instanced perhaps by 4, 5, or more years of college or university preparation, it is reasonable to expect that certification requirements applicable to them will be expressed in terms appropriate to the continuing growth of genuine professional workers. The function of certification may well become chiefly one of stimulating professional growth; and such function is not best discharged through narrow or arbitrary prescriptions and requirements. Proved attainment in the profession of education, contributions to the group activities of teachers, and similar outcomes of successful teaching, supervisory, or administrative experience afford some of the best possible evidences of professional competency.

The bases upon which certificates are kept alive should not be confined to routine teaching experience (131:140) and to advanced college preparation alone. Various other bases have been proposed, including travel of an educational nature, rigorously controlled study outside colleges, educational research or experimental work, curriculum revision, study eventuating in educational writings that are published and approved, and other evidences of professional life and growth certified to and approved by duly constituted authorities (34:284; 41:54, 56, 58-59; 57:218).

That permanent or long-term certificates not used for long periods of time should be invalidated and not renewed unless assurance of satisfactory professional growth in the meantime is given, is agreed to by many authorities (40:629, 638; 92:141; 96:192; 97:2; 100, Part II:117). Cubberley suggests that life certificates be suspended

after 3 to 5 years of non-use (40:638). Certificates not used for a period of years should be validated by evidence of additional training (40:638; 97:2; 129:106-117). Teachers not in service soon become out-of-date in their profession, for teaching is characterized by rapid changes in methodology, standards, and practices. It is almost impossible to ascertain the exact number and regulate the supply of teachers available for employment so long as there are thousands of holders of certificates still valid who have been out of teaching for many years, but who may return to the profession at any time.

The exact length of time for which certificates should be valid is not a matter of common agreement, since many factors are involved. Much depends upon the amount of initial preparation secured by the applicant. Zaugg states that all original grants of certificates should be for periods not longer than 5 years, such periods to be utilized for a comprehensive program of in-service preparation. He thinks that the length of periods of renewal of original certificates should be conditioned by the degree of teaching success and professional growth of the teacher, and should not exceed 7 years (150:166-168). McMullen proposes that "provision shall be made for the renewal or validation of permanent certificates every 5 years, provided the holder has met the additional requirement of training and professional growth" (86:125-126). Dilley recommends that existing 4-year Ohio State provisional certificates be continued for all certificates, and that they be renewable for 4 more years after evidence is presented of successful teaching experience and professional interest. Upon similar conditions, the certificate would become permanent at the end of the eighth year (46:161).

Burkman in 1931 found that a satisfactory sampling of California teachers who held life diplomas earned an average of 2 semester-hours of credit annually; and that they earned credit during approximately 2 out of every 5 years. Elementary teachers earned an average of 2.3 semester-hours annually, and earned credit almost every second year. High-school teachers earned 1.5 semester-hours annually, and earned credit during approximately 1 year in 3 (23:108). High-school teachers in the large school districts earned more credit than those in the smaller districts. Teachers with higher initial training at the time the life certificate was received, on the whole earned somewhat less credit in succeeding years. Burkman concluded that "the States could, without imposing undue hardship, limit the duration of teachers' certificates to three years." He stated further that "the States would not be imposing an unreasonable burden to require as a minimum . . . (two semester-hours of credit annually) for the renewal of teachers' certificates" (23:159).

The practical application of some of the foregoing proposals is illustrated in the certification regulations of New York State. A new entrant to elementary teaching service must have a minimum of 3 years of specialized preparation subsequent to high-school graduation, and a new entrant to high school and to special-subject teaching, 4 years. The new entrant receives a provisional certificate good for 5 years. It may be extended for 5 years more upon completion of 15 semester-hours credit and at least 3 years of satisfactory teaching. When the validity of the extension of the provisional certificate expires at the end of the 10 years, a renewable certificate is issued upon the basis of 6 years of satisfactory teaching and a year of preparation above the original minimum requirement of 3 years for the first provisional certificate. The time validity of the renewable certificate is 10 years, and it may be renewed for additional 10-year periods on evidence that during the previous 10 years the teacher has completed at least 6 years of satisfactory teaching and 6 semester-hours' credit in approved courses or equivalent preparation. The renewable certificate is the final one (34:283-284).

Should life certificates be totally abolished? There is considerable variance among authoritative opinions on this question.

The facts indicate that permanent unconditional certification has serious drawbacks. Thompson, in a study of 1,139 graduates of two Indiana State teacher-education institutions, who received life certificates or provisional life certificates between 1872 and 1918, found that only 49.4 percent of the number who were still engaged in school work as teachers or students in 1927-28 had continued their formal schooling prior to or during that year. Of 2,581 graduates who were granted provisional life or life certificates during the period from 1919 to 1927, and of 1,247 granted bachelors' degrees during this period, only 21 and 21.8 percent, respectively, who were in school work in 1927-28, had continued their formal schooling (133:765).

Burkman, in 1931, found in a study of 435 high-school teachers and 619 elementary teachers in California, where very high standards prevail, that approximately 35 percent of the high-school teachers and 20 percent of the elementary teachers had earned no scholastic credits since the life diploma was granted (23:153-154). Approximately 17 percent of the high-school teachers and 16 percent of the elementary teachers neither earned scholastic credit nor engaged in any other form of self-improvement activity concerning which information was requested (23:148-154).

Difficulties occasioned by unconditional life certification become most apparent as efforts increase to raise the qualifications of teachers. As minimum requirements for new teachers are raised beyond the level of qualifications of present holders of life certificates, the

situation becomes increasingly unsatisfactory. Hence, authorities nowadays almost universally advocate either the total abolition of life certificates, or their issuance only upon conditions of continued professional growth in service (26:55; 57:217; 86:106-117; 89:8-9; 150:168). A general principle which meets with common acceptance was stated by Lewis in 1925 in connection with all certificates:

The period of validity of all kinds of certificates should be limited and extensions and renewals should be based upon evidence of continued or additional professional attainment (82:98).

Brodie secured agreement of a considerable number of authorities to the statement that permanent certification, or certification for life, is wholly undesirable. Some of these authorities would grant the certificate, but under safeguards that would ensure professional growth and protect the teaching profession (21:36, 44, 50). Cubberley proposed the following as principles:

Life diplomas, of all types, should be open only to those who give clear evidence of reasonably long teaching experience, above-average teaching success, at least standard academic and professional preparation, good character, and additional professional study, and who offer evidence, in the form of credits, diplomas, or specially prepared theses, of sound thinking as to the problems of their work.

Life diplomas ought not to continue in force for more than a limited number of years after the holder turns from educational work to other occupations. After, say, three to five years the certificate should be suspended, and reinstated only on evidence of some further academic and professional study (40:637-638).

Switzer says:

A life certificate should not be obtained until the teacher has had at least fifteen years of experience, and at least a Master's degree. This life certificate should be valid on condition that the holder teach or present additional academic or professional credit at least two out of every five years. Thus the life certificate would be the badge of a successful teacher. . . . Certification should be arranged so that a teacher might pass through a series of graduated steps upon evidence of successful experience and professional and academic growth to a life certificate which would be the final step in certification (131:140).

Strayer and Engelhardt in proposed rules and regulations governing the qualifications of teachers in Missouri in 1929 said:

All life certificates shall be voidable at the discretion of the State Department of Education, if the holder thereof either leaves the profession of teaching, leaves the State of Missouri, or leaves the public school system of Missouri for whatever cause, for a period of three or more consecutive years. Conditions for reinstatement as a holder of a life certificate shall be determined by the State department (92:141).

The theory underlying certification for life appears to be that of rewarding successful teaching experience and professional effort by a

certificate of strictly professional character. The life certificate, Cubberley believes, should be only for the professional teacher; one who has made education a profession and a life career. Teachers of proved abilities of a superior order who continue in the profession and keep up to date should be singled out, he thinks, and given professional or life certificates (40: 628-629).

To keep abreast of the constant changes in education the holders of permanent certificates must continue to engage in study. It is a reasonable requirement that the holder of a life certificate maintain a standard of proficiency at least equal to that attained at the time the certificate was first issued. This standard, which is often too low, cannot be maintained without study (23:8). To raise the standard, a fairly continuous program of self-improvement is necessary.

There is perhaps some feeling of insecurity on the part of teachers in States where life certificates are not issued. This can be obviated, some think, by a properly devised system of renewals (40: 629).

Probably agreement would not be difficult to reach on the proposal of Learned and Bagley that no student fresh from the normal school should be given a life certificate to teach anywhere; and on the proposal that, if granted at all, the life certificate should be issued only after a prolonged and thorough test under the scrutiny of careful supervisors of the candidate's actual ability in active service (81: 349). If issued, the practice of Rhode Island as expressed in the State certification rules and regulations is worthy of emulation: "The life professional certificate or commission is awarded in higher recognition of the professional status of the holder as a master teacher." Further, it should not be assumed that the master teacher of today will remain a master teacher throughout his future teaching life. Cushing summarizes the opinion of most authorities in saying that:

Certificates should never be permanent in the sense that they become valid for life regardless of whether the holder stays in the profession or makes additional preparation (41: 97; see also 105: 155).

### SUMMARY

Great diversity characterizes the requirements for certification in the several States, in respect to amounts and kinds of subject-matter demanded, amount of experience required for the exchange or renewal of certificates, and special State requirements other than preparation and experience. More than 500 different kinds of certificates have been identified by different writers, but the numbers reported would be reduced considerably if differences in certification terminology were disregarded.

Wide variations in the number of certificates of different kinds issued by the several States indicate correspondingly wide differences

in the amounts of preparation required, and in the extent to which certificates are specialized for different subjects, grade levels, or fields of work. In some States "blanket" certificates individually cover most of the work done in the public schools. In other States, a certificate may be valid only for work in a single grade, subject, or field. Issuance of certificates specifically for teachers or other workers in special or nonacademic subjects or fields is fairly common practice in the case of some of the subjects or fields demanding prolonged or intensive preparation. The need for assuring specialized preparation through certification requirements in all such subjects or fields has been completely met in few, if any, States. The subjects or fields named in the certification regulations of more than three-fourths of the States include agriculture, art, commerce and business, home-making, industrial arts, music, physical education and health, administration and general supervision, school librarianship, and trade and industrial education.

Thirty-one States issue specialized administrative or general supervisory certificates in 1937. Specialized certificates for superintendents of schools are issued by 31 States; for high-school principals, by 23 States; for elementary-school principals, by 21 States; and for general supervisors, exclusive of special-subject supervisors, by 23 States. Ten States issue one or more types of certificates for teachers of exceptional children.

Minimum amounts of preparation required by the several States for elementary teachers' certificates range from unspecified amounts of elementary or secondary school education sufficient to enable the applicant to pass an examination, to 4 years of college work. An indefinite examination requirement prevails in at least 6 States, and a 4-year college requirement in 5 States and the District of Columbia. The median of the minimum requirements for elementary certificates issued upon the basis of college credentials is 2 years of college work; the corresponding median for junior high-school certificates is almost 4 years; and the median for senior or regular 4-year high-school certificates is 4 years.

Requirements for the employment of teachers are somewhat higher, on the average, than minimum requirements for certification. Four years of college work was required in 1932 for the employment of elementary teachers in half of the cities with populations of 500,000 or more, and 5 years was required for the employment of high-school teachers in about one-third of such cities.

The average educational levels reached by elementary, junior high, and senior high school teachers in service in 1930-31 were approximately 2 years, 3-4 years, and 4 years, respectively. The average level in the case of elementary school teachers rose rapidly

during the depression. The level rose to the extent of one-half year or more from 1930-31 to 1937-38. Wide variations still exist, however, in the average scholastic levels attained by teachers in different States. Such variations, while due to a number of causes, are to be attributed in considerable part to marked differences in certification requirements.

Teachers in small high schools are often required to teach 3 or more subjects, whereas they may have received adequate preparation in only 1 or 2 subjects; and the subjects in which such teachers were prepared may have been different from those to which they are assigned when employed.

The single requirement of college graduation made by approximately half the States for high-school certificates, does not safeguard the schools from the employment of teachers not prepared for their specific teaching assignments. The additional requirement in a number of States, of a major or minor in general fields, rather than preparation in specific subjects to be taught, also does not fully meet uncontrolled placement demands.

Requirements of specified amounts of work in professional education are made by all States, for one or more types of certificates. The minimum amounts required for certificates issued upon a basis of 4 years of college work, to inexperienced teachers of academic high-school subjects, range from 8 to 25 semester-hours, and the approximate median requirement is 18 semester-hours. Student teaching is required for one or more types of high-school certificates in 33 States, and the median amount required is 3 semester-hours.

Experience requirements for the renewal or exchange of certificates vary from 1 to 10 years or more. The highest requirements are made for certificates that are valid for life or for extended periods, and for the higher grade certificates. Experience is also a requirement for nearly all administrative and supervisory certificates. Experience requirements of 1 or 2 years are frequently made for the employment of teachers in cities.

Several special requirements of a nonscholastic nature are made to varying extents, for certification in different States. Minimum age requirements are specified in 37 States, as follows: 17 years in 4 States; 18 years, in 30 States; 19 years, in 1 State; and 20 years, in 2 States. Proof of good health is required in 24 States; citizenship, or declaration of intention to assume citizenship, in 17 States; and an oath of allegiance to the Constitution of the United States or to the State Constitution, in 19 States.

The duration of the validity of certificates varies from 1 year to life, depending upon the type and grade of certificate. The length of validity of low-grade certificates is typically 1 year. Life certifi-

ates are still issued in 35 States. The duration before extension of all certificates considered as a group is typically 3 to 5 years.

In 1931 only 39.2 percent of all the kinds of renewable certificates issued required in-service education for renewal. Only 47.7 percent of the kinds of exchangeable certificates required in-service education for exchange for an advanced grade of certificate. Of the life certificates, only 54.6 percent were issued on the basis of in-service education. The emphasis was upon experience rather than additional education. Such emphasis seriously retards the advancement of the scholastic preparation of teachers in service.

Included among significant trends is the steady decrease for many years in the number of different types and grades of certificates issued by county and by local school district authorities. The number of different types of certificates issued upon examination has decreased steadily. On the other hand, there has been a marked increase in the number of types of specialized State certificates classified according to grade levels, subjects, or types of work.

As late as 1921 no State had reached the scholastic requirement of 1 year of college or normal school work as the minimum prerequisite for the lowest grade certificate issued to inexperienced elementary teachers. In 1926, 4 States had reached the 2-year level as a minimum for their lowest grade certificates. Since 1926 the upward movement has been very rapid. In 1937 half the States have reached or exceeded the 2-year minimum level; and of these, 5 have reached the 4-year level.

The average level of education attained by teachers in service has risen at least 6 years during the past century. In 1910 the average amount of education possessed by teachers was about 4 years of high-school work; in 1937, 2½ years or more of college work. An increased supply of teachers with advanced preparation has made it possible to raise certification requirements accordingly; and at the same time, the heightening of certification requirements has stimulated teachers to increase the amount of their education.

The extent of teacher supply has varied periodically, in accordance with changing economic conditions, and in accordance with teacher certification and employment requirements. A condition of under-supply during and shortly after the World War, occasioned by unsettled occupational conditions and low salaries for teachers, was followed during the 1920's by better salaries. A condition of teacher oversupply developed shortly before and during the depression. Consequently, it has been possible to raise certification requirements rapidly during the past decade.

The upward trend in the amounts of education required for certification has been accompanied by increasingly specialized require-

ments in subject-matter. As late as 1906 a teacher's certificate of any grade was sufficient in almost all States to enable a teacher to qualify legally for work in any part of the school system in which employed. Since early in the century differentiation of certificates has proceeded rapidly.

High-school and elementary school teaching were first separately recognized by specific types of certificates. Thereafter, further differentiation in grade levels was provided for, and specialized certificates were increasingly required for different subjects and fields of work. The trend has been especially marked toward issuing specialized certificates for the special and vocational subjects, and for administrative and supervisory officers. For example, the number of States issuing administrative and general supervisory certificates increased from 1 in 1906 to 31 in 1937.

All States now have professional requirements. The number of States specifying specialized professional subjects as prerequisites for certification has increased materially. For example, the number of States requiring student teaching for one or more types of high-school certificates, has increased from 22 in 1925 to 33 in 1937.

Minimum age requirements have risen little since 1911; the approximate median of such requirements has remained 18 years throughout the period. The requirement of religious affiliation or belief, which was a very important item in the earlier history of certification, is no longer specified in certification requirements. Civic requirements, especially the requirement of citizenship, have been increasingly introduced since the World War.

There has been a marked tendency in recent revisions of certification requirements to place more emphasis on the provision for the issuance of initial certificates as probationary certificates only. Under such provisions, initial certificates are issued for limited periods only, and additional preparation while the holders are in service is demanded for the renewal or exchange of such certificates.

The number of States issuing life certificates decreased from 42 in 1911 to 35 in 1937. Some States issuing life certificates in both years, issued them in smaller numbers in 1937. There has been a trend also toward raising the prerequisite requirements for life certificates, and toward setting requirements at the time of issuance of semipermanent certificates that tend to keep their holders professionally up to date.

Statements that have received jury validation, and a summary of authoritative proposals relative to certification requirements and patterns follow.

\*A State system of certification for public school service should be simple enough to be easily administered (21:31; 41:21).

\*Have received jury validation.

\*Certificates should be phrased in terms which are in a large degree self-explanatory (41:21; 21:32).

\*Certificates should provide the following items of information: Scope of validity (phases of school service for which the certificate is issued); length of validity; basis of issuance (amount or kinds of preparation); and terms or conditions of renewal or exchange (21:32).

\*The improvement of minimum certification standards should be a continuous administrative responsibility [of certification officers] (21:32). This statement applies also to the responsibility of all authorities concerned with the improvement of the teacher-personnel program of a State. Practical or feasible minimum standards are largely dependent upon the available supply of teachers for any given phase of teaching (21:30). The supply is affected by the salaries, nature of institutional curricula, and other factors often not under the control of certification officers.

\*The minimum amount of preparation to be required for elementary school certificates should be from two to four years of work of college grade, and for high school certificates, four years (41:28-30, 35; 21:38-42; 100, Part II:113-114). An absolute minimum of high school graduation and varying amounts of college work are approved by the great majority of all authorities (41:77).

\*Changes in certification requirements should not be retroactive (21:32).

\*Certification should apply to all forms of school service (21:33).

\*Certification should be in terms of preparation for a given phase of school service. It should recognize that special preparation is essential in some degree for each distinctive type of school service (21:36; 41:21; 21:33).

\*The kinds of certificates differentiated by types of work for which valid, should include, as a minimum: High-school certificates for the several academic, special, and vocational subjects; kindergarten; elementary; rural school; administrative, including certificates for superintendents, principals of high schools, and principals of elementary schools; general supervisors; and supervisors of special subjects. Other grade levels, subjects, and fields of work of distinctive nature should also be considered (21:36; 41:28, 35; 100, Part II:115-116).

\*Have received jury validation.

\*There should be no distinction between the minimum requirements of certificates valid in the rural schools and those valid in the city and village schools (41:30, 33). There should be equivalent (although not necessarily identical) minimum certification standards for rural and city teachers (100, Part II: 120). This means that the minimum amount of scholarship should not be less for rural than for other teachers. It does not mean that there should not be specialized courses or curricula for rural teachers.

\*The number of semester hours of specialized work to be required for a high school certificate for the teaching of academic and vocational subjects should be from 12 to 30; preferably 18 to 24 or more (41:34).

\*The credits in professional education required for the issuance of an elementary certificate, and of a high school certificate, should have particular reference to teaching in the elementary school or in the high school, respectively, at least to the extent of a considerable part of such work (41:28, 32).

\*Student teaching, observation, or field experience should be required of candidates for all teachers' certificates (100, Part II: 120).

\*From two to five years of experience should be required for the issuance of professional, permanent, or life certificates for rural or city elementary or secondary teachers; and for the issuance of administrative and supervisory certificates (41:42-45). Three or 5 years are suggested by some authorities; others would require more than 5 years.

\*Permanent (unconditional) certification for life is wholly undesirable (21:36). A professional, permanent, or life certificate should lapse if the holder discontinues educational work for a period of years (41:42; 100, Part II:117). All initial certificates should be of a probationary nature, valid for a limited period (100, Part II:119-120; 21:36). A period of apprenticeship should be provided (41:21, 37). Different lengths of this period are variously advocated, ranging from one to six years, dependent in part upon the qualifications demanded by the initial certificates (21:38; 41:38, 50). Two, three, or five years are most frequently suggested.

\*The number of semester hours which should be required for the renewal of a lapsed certificate varies with the grade of the expired certificate, and with the length of time during which

\*Have received jury validation.

the certificate is not in force. A reasonable range of requirements for the renewal of lapsed certificates is from 6 to 24 semester hours, preferably 9 to 15 semester hours. From one-fourth to one-half of the required amount should be in professional education. More than half the credits required should be taken in residence (41:47, 52, 55, 77).

\*There should be an age qualification for a teacher's certificate. The minimum age should be from 18 to 21 years (41:76; 100, Part II:117-118).

\*Applicants for certificates should be required to submit evidence of good physical health (41; 82; 21:37). This requirement is advocated by some authorities for initial certificates only (100, Part II:118).

\*Applicants for certificates should be citizens of the United States (41:76).

\*Applicants for certificates should be required to submit evidence of good moral character (41:77; 100, Part II:118).

\*Personal fitness as well as physical and technical fitness should be a prerequisite to teacher certification (21:37).

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\*Have received jury validation.

## CHAPTER VI: RELATION OF TEACHER-EDUCATION INSTITUTIONS TO CERTIFICATION

### STATUS OF INSTITUTIONAL RELATIONSHIPS TO CERTIFICATION

The relationship of certification to teacher education is close and vital. Regier says:

The preparation, the certification, and the employment of teachers are all dependent upon each other, and therefore should be adjusted to each other (114:14)

On the one hand, the administration of certification, and the nature of the requirements set up, are directly conditioned by the organization and functioning of institutions that educate teachers before or during service. Institutional factors that condition certification practices and requirements are numerous. They include, among other factors, the extent to which students drop out and enter teaching before graduation, the number of graduates, nature of curriculum offerings and requirements, qualifications of staffs, effectiveness of instruction, provisions for in-service teacher education, including summer sessions and extension classes, and effectiveness of placement services. On the other hand, the requirements and activities of certification authorities are of considerable influence in determining the nature of the programs of the teacher-education institutions. Changes in certification requirements often necessitate changes in the course requirements of institutions that prepare teachers. Unity in, or coordination of, the work of certification authorities and of teacher-education institutions therefore must exist in all effective State-certification programs.

#### EXTENT OF UNITY OF EFFORT

In typical States, unity of effort between certification offices and teacher-education institutions is far from complete. The greatest degree of unity exists in States where direct administrative control by one centralized State agency is exercised over both certification and teacher education. In other States, varying degrees of unity are attained through cooperative action of the authorities concerned with both functions.

*Number and administrative control of teacher-education institutions.*—In most States, the authorities in charge of certification are not administratively in a position to exercise effective control over

the curriculum requirements and enrollments of the institutions that prepare teachers. Any one of several officers or agencies, including among others, the State board, superintendent, or department of education, may be in charge of teacher certification; whereas other officers may be responsible for teacher education in the same State. In typical states the privately controlled colleges and universities operate administratively with a high degree of independence of the State office in charge of teacher education. Even in the case of State institutions, State coordination of control is often lacking for reasons indicated by Chambers:

The number of separate institutions in each State varies from one to eighteen. In a few States all the separate institutions are governed by a single board; in three-fourths of the States the government of several, but not all, of the institutions is consolidated in one board; in one-fourth of the States there is a separate governing board for each and every institution. The number of separate governing boards in each State varies from one to fifteen (28: 268).

Unity of curriculum requirements and standards brought about by voluntary action of the teacher-education institutions themselves, rather than by centralized State control, is likewise lacking in many significant respects. This lack of unity is more easily understood when the variety of public and private institutions which prepare teachers is considered. Even the exact number of such institutions cannot easily be stated. Of the 1,704 institutions of higher education listed in the 1937 Educational Directory of the Office of Education (135, Part III), more than 1,000 report that they have students who are preparing to teach. In many of these institutions, however, teacher education is only one of several functions. In some, it is distinctly an incidental function. Graduates and former students of certain institutions of higher education may enter teaching, even though the institutions themselves disavow the objective of teacher education.

Of the 255 teachers colleges and normal schools, less than half are included among the colleges of arts and science that are accredited by the regional accrediting associations (113); and 141 were accredited in 1936-37 by the American Association of Teachers Colleges (4: 179-183). Of the total, 190 are State controlled (table 12).

In addition to teachers colleges and normal schools, there was in 1926-27 a total of at least 578 colleges and universities that had departments, schools, or colleges of education (table 12). Of these, only 109 had schools or colleges of education. In all, there was a total of at least 833 teachers colleges, normal schools, and schools, colleges, and departments of education. These do not include all of the institutions and agencies that contribute to the supply of teachers, however. For example, many applicants secure certificates by ex-

amination; or upon college credentials after transfer from colleges of arts and sciences offering no work in education, to institutions that do. Particularly significant from the viewpoint of certification officials, is the fact that large numbers of small colleges, including junior colleges, that contribute to the supply of applicants for certification are not accredited by any recognized regional or national accrediting association and are not State-controlled (113; 135, Part III; 4:179-183).

Significant also in raising minimum certification standards is the persistence of teacher-training high schools, and county normal schools. Reports were received in September 1937, from 6 States having teacher-training high schools in operation, and from 2 additional States having county normal schools. The following States reported a total of 491 teacher-training high schools: Iowa, Kansas, Minnesota, Missouri, Nebraska (data for 1936), and Wyoming. Michigan and Wisconsin reported a total of 52 county normal schools. Teacher-training high schools and county normal schools together numbered 543 (126). With a few exceptions, as in Minnesota and Wyoming, the teacher-training high schools do not offer work beyond the regular 4-year high-school course. The county normal schools usually offer 1 year of post high-school work. Complete enrollment figures were not available at the time the reports were made, but the total number of students enrolled in the teacher-training courses is estimated on the basis of 1933-34 figures, to be in excess of 5,000.

*Control over the supply of graduates who wish to teach.*—There is relatively little administrative control exercised over the extent of supply of teachers in this country. Probably not more than 80,000 teachers entirely new to the profession were demanded to fill vacancies in the public schools in 1931-32, and possibly not more than 50,000 in 1933-34 (120:13-14). Most of the new teachers who were appointed had less than 4 years of preparation. Nevertheless, in 1929-30 the arts and science colleges and the universities conferred first degrees upon 91,623 individuals (126:26). Of these, 45 percent or 41,230 may be estimated as belonging in the supply of new teachers in that year (120:9-10).<sup>1</sup>

This figure is the best estimate available of the number of recruits from arts and science institutions in 1932. In addition to these graduates there were 15,311 teachers-college graduates of 4-year teacher-education curricula in 1931-32 (136:21). The total number of 4-year degree graduates from both types of higher institutions who were in the teacher market in 1931-32 may be estimated at 56,541. In ad-

<sup>1</sup> Compare this 1930 estimate for liberal arts colleges in the country as a whole with reports to the State department by 56 accredited liberal arts colleges and universities in Pennsylvania. In 1936, 47.8 percent, and in 1937, 35.1 percent of the graduates of these institutions were prepared to teach.

dition there were 21,655 graduate degrees conferred in 1931-32, and there is evidence that two-thirds or more of the holders were in the market for positions in the schools. Even after allowance is made for employed teachers who were working for degrees through summer or other courses, in 1932 there was probably a sufficient supply of 4-year graduates and of graduate students who desired to secure teaching positions to fill more than three-fourths of the public-school vacancies in the country that were actually filled with teachers new to the profession. In 1934 the number of such well-educated applicants available may actually have exceeded the total number of vacancies. In the same year, however, there were 29,963 nondegree graduates of short teacher-education curricula of teachers colleges and normal schools alone (136:33). These were almost always eligible for certification in the States where they completed short curricula. In addition, there were more than 5,000 graduates of high-school and county normal training classes, and additional thousands of college and junior college students not included in the foregoing figures who were eligible for certification and in the teacher market. Furthermore, there was a large surplus of applicants not placed in the preceding years. In all, the supply of certificated applicants for teaching positions during the depression was probably two or three times the number of positions that were available. While this was a depression condition, it is significant that no effective means have yet been set up on a wide scale to prevent a recurrence of the recent unbalanced condition of teacher supply and demand—a condition that still persists in the case of high-school teachers of academic subjects.

In only a minority of State teacher-education institutions, such as those in some of the New England and Middle Atlantic States, is limitation of the number of students seriously undertaken with a view to reducing the supply of teachers. Private institutions rarely limit freshman enrollments because of an oversupply of teachers; yet of all teachers with 4-year degrees reporting in the National Survey of the Education of Teachers in 1930-31, 37.3 percent of elementary teachers, 43.2 percent of the junior high school teachers, and 49 percent of the senior high school teachers received their degrees in privately controlled institutions (55:49-50). Progress has been made by some colleges and universities that do not limit freshman enrollments, however, by limiting the number of students later admitted to professional courses leading to teaching.

No uniform criteria have yet been devised for the recruitment of prospective teachers by the institutions. Many of the traits or qualities desired can be evaluated only by subjective judgments. Their possession by prospective teachers is not sufficiently assured by present admission and graduation requirements of the institutions, by the

regulations of certification divisions, nor by the demands of school employment officers.

In selecting teachers, the traits or qualities most frequently considered are: scholarship; social intelligence; skill in expression; health and physical fitness; freedom from physical defects, such as unsightly deformities, vision, hearing, and marked over- and under-weight; character; personal fitness; personality; social attitudes; emotional stability; freedom from neurotic tendencies . . . (7: 251-252).

Certification requirements take into account only a minority of the foregoing traits or qualities; and the admission requirements of only a small fraction of the teacher-education institutions are more restrictive in operation than certification requirements.

*Control over teacher-education curricula.*—Certification authorities rely heavily upon the teacher-education institutions for providing effective and well-balanced preparation for the teachers who apply for certification. One or more kinds of certificates are issued upon the basis of college credentials in every State in the Union. Some States and even a few private institutions issue certificates directly to applicants. Graduates from teacher-education curricula in State universities are almost without exception certificated by the State departments of education upon recommendation of the universities (12: 20-21). Certificates are commonly issued to graduates of State teachers colleges and normal schools upon the recommendation of these institutions. The spirit as well as the letter of certification requirements are affected by this dependence upon institutional credentials.

Bachman said in 1930:

In determining the desirable academic training of high-school teachers, the States, with minor exceptions . . . have exerted little or no leadership . . . 35 of the 48 States have practically surrendered all responsibility for the character and type of the academic education their academic high-school teachers receive. Only 13 are exercising to any considerable extent their rightful prerogative and determining what shall be the character and type of such training (12 : 16-17).

Can this policy be safely accepted under present conditions in developing a program of teacher certification? It must be confessed at once that there is a decided lack of unity of purpose and uniformity in the curricula and courses of the institutions that prepare teachers. The institutional prescription of courses in education, in part inspired by certification requirements, should be as definite as any other curriculum content requirements made in the preparation of teachers. Yet of such requirements Peik says:

The literature reveals a decided lack of clear conceptions regarding such important matters as the number of hours of professional work that should be required or allowed for the bachelor's degree; the courses to be included; the facilities for and extent and nature of practice teaching, ob-

ervation, or special methods; the content of texts that are used in fundamental courses; and the titles of courses purporting to carry similar content . . . and the accrediting associations . . . are found from time to time to vary in the minimal amount, in the character, and in the rigidity of the training that they prescribe. . . . Institutional diplomas and secondary teaching certificates have therefore come to possess very unequal and often very uncertain professional values, and the institution that wishes to check up its own training program finds itself at sea in a chaotic situation (110 : 1-4).

The wide institutional variations in subject-matter requirements for graduation from teacher-education curricula have been indicated elsewhere. "College graduation," an easily phrased requirement for high-grade certificates, in reality may mean many things. It covers a multitude of types and amounts of preparation of varying effectiveness, which are rarely if ever exactly alike even in the accredited or approved institutions in which the States appear to place the utmost reliance. Obviously, if reasonable equivalence or uniformity in value of the same types of certificates is desired, further steps must be taken in teacher-education and certification programs to assure such equivalency.

Not infrequently, surprisingly low levels of certification and of teacher education are found in States with above-average ability to pay for well-qualified teachers. Usually such States rely for part of their teacher supply upon teacher-training high schools or county normal schools, or upon short 1- or 2-year curricula in the State normal schools or teachers colleges (55:216-231). The existence of a large supply of poorly prepared applicants for certification prepared by such means appears to retard the raising of certification requirements, even though there is an abundant supply of more highly educated applicants available for positions.

Lack of a reasonable degree of uniformity in the offerings of higher education institutions that prepare teachers has led to an attempt in a growing number of States to distinguish in certification requirements the courses which meet the specific needs of teachers. It has led also to an increasing assumption by the States of direct or indirect control over institutional curricula. Most of the States, however, do not yet express certification requirements in a manner specific enough to suggest very definite curriculum patterns to the teacher-education institutions. Bachman says:

Obviously, any attempt to construct curricula for the education of elementary teachers from the specific liberal, cultural, and technical certification requirements of the several States making such requirements would result in failure. The requirements of 24 of the 25 attempting some academic or technical prescriptions or both are so incomplete and indefinite as to give little assistance . . . with the exception of Indiana, it is difficult to believe that the other 24 States . . . are exercising any very considerable leadership over the education of elementary teachers (12:35).

The efforts toward curriculum determination through certification in the States not attempting specific course prescriptions are confined largely to the designation of the minimum length of preparation above high school, to the approval of specific curricula, or to the accrediting of institutions. The unconditional acceptance of the credentials of the institutions is more common than highly specialized and restricted subject or grade-level requirements. It is conceded that in a few States such requirements are difficult to meet by graduates of progressive teacher-education institutions that integrate their curricula to meet current demands in methodology, such as those of the activity program. In such cases, the concerted demands of teacher-education institutions of acknowledged standing may usually be depended upon to bring about either a change or increased flexibility in State requirements.

*In-service teacher-education programs.*—State requirements of additional college credit as a prerequisite for the exchange or renewal of certificates is emphasized less than the requirement of successful experience. More emphasis upon additional education would advance standards more rapidly.

The experience of Pennsylvania during a period of rapid rise of requirements which necessitated much in-service work by teachers disclosed some of the difficulties that may require consideration in the working out of a similar program elsewhere. The attempt was made through the Edmonds Act of 1921 to secure a trained elementary teacher for every classroom in the State. For a time the teacher-education institutions found very heavy the responsibility of participating in the general program of elevation of standards. Enrollments increased greatly, and numerous curriculum and course adjustments were necessary. Summer sessions and extension classes were utilized by teachers much more than before: even correspondence courses came into demand. It was found desirable for a time to center the administration of correspondence work in one institution. Part-time residence courses of a special type later found to be of limited value were also provided by the colleges. Special-type institutions of various kinds contributed to the education of large numbers of teachers needed with advanced preparation. Not only were curriculum needs faced by the institutions, but special admission requirements also became necessary.

The length of summer sessions was increased. A tendency toward conservatism was found in respect to changing the nature of many institutional courses. Needs for follow-up contacts by the institutions with their graduates during their probationary period were disclosed (147:59-114, 141-188).

*Difficulties in placement.*—Unity of effort is often lacking on the part of the several officers who certificate, employ, and place teachers.

It is difficult to adjust teacher supply and demand, or even to secure fundamental data necessary for such adjustment (74: 49-52). While placement officers endeavor to contribute to the success of graduates by locating them in the positions for which they are best prepared, they often cannot do so. Employers are faced with administrative difficulties which cause them to assign teachers to positions for which they are not well fitted. In the absence of other positions, teachers usually accede to or even invite such assignments. As elsewhere shown, certification requirements often do not prevent such unfortunate assignments by prescribing the amount and kind of preparation demanded for specific teaching positions.

The tremendous expansion and specialization of college curricula and courses utilized in the preparation of high-school teachers on the one hand, and the great variations in the curricula and course to be taught in the high schools on the other, have created a situation in which the placement of a high-school teacher in the teaching position for which he has been prepared, too often becomes a matter of sheer chance. Present-day graduation requirements for the usual academic degrees are so general that it is next to impossible to ascertain what the graduate has studied, without an inspection of his transcript of studies (12: 11-13).

#### OTHER PROBLEMS OF RELATIONSHIP

*Certification by teacher-education institutions.*—Not only are institutional credentials accepted in every State as a basis for the certification of one or more types of teachers, but the institutions themselves, or their governing boards, exercise the certification function directly in at least 10 States (p. 13). In all but exceptional cases, the institutions that certificate teachers are State teachers college or normal schools, State universities (usually functioning through the school or college of education), and State colleges.

*Institutional participation in the formulation of certification requirements.*—Much of the progress in developing modern standards in public-school education have come from the better schools and colleges of education in universities. These, with the teachers colleges and normal schools, are in a position to conduct research on various problems related to teacher personnel, to develop standards, and to perform other services contributing to the better conduct of certification. State departments of education are primarily administrative units, and are often handicapped by lack of staff to undertake detailed research that would be of assistance in the determination of certification requirements and practices. Institutional authorities may and often do advise individually or as members of committees, with the State superintendent of education and his staff, or with the State

## 26. STATE PROGRAMS FOR THE CERTIFICATION OF TEACHERS

board of education; and faculty members and officers including the president may be members of the State board of education, or of the board of examiners. The institutional officers also, by the continuous elevation of teacher-education standards to a place in advance of certification requirements often set a wholesome pace for the elevation of certification requirements (64:136-137).

Much work remains to be done by research workers in teacher-education institutions and elsewhere, before wholly satisfactory standards of teacher competency can be formulated. A review of the literature on teacher personnel conducted by the American Educational Research Association in 1934 contained the following statement by Torgerson:

A great deal of time and energy has been expended during the past two decades in an attempt to determine the specific traits, qualities, and teaching activities that are related to teaching ability. The results in terms of positive relationships are not highly encouraging (6:266).

A later report by the association, made in 1937, has this to say:

The current investigations have in general made but slight contribution to the study of the measurement of teaching success, and have not suggested new techniques for the study of the problem. Increasing evidence seems to indicate the futility of studying isolated teacher traits (7:245).

Lack of sufficient knowledge on the part of the teacher-education institutions concerning the specific traits, qualities, and teaching activities that are related to teaching ability is reflected in the great diversity of teacher-education curricula and instructional procedures. Such diversity to a very large extent is responsible for variations in the specific requirements set up by certification officers.

### TRENDS IN RELATIONSHIPS

While the course of evolution of State educational administration toward unified control or coordination is far from complete, the trend toward making the State the unit for educational administration is unmistakable (28:269-270; 40:119-133; 61:12, 25, 44-48). Considerations of much practical force, some of which have their origin far back in the economic, social, and political history of the States, prevent the realization of completely unified administration of State teacher-education and certification programs. In addition to the slow growth of unity in administration of these functions, there is a tendency toward increasing unity of effort attained through the voluntary cooperative action of the offices responsible for such programs. Cooperative action, usually inspired or guided by State departments of education, has been taken in many States, of which Pennsylvania affords an example (78:131).

Changes in the number of the teacher-education institutions of different types, and changes in the length of the curricula offered by them, determine to a large extent the supply and qualifications of prospective teachers available for certification. Some very significant changes among such institutions that help to explain recent rapid advances in minimum certification requirements and in certification practices, are revealed in table 12.

TABLE 12.—NUMBER OF TEACHER-EDUCATION INSTITUTIONS CLASSIFIED BY TYPES, 1910-38<sup>1</sup>

Type of Institution	Number of Institutions				
	1909-10	1919-20	1929-30	1936-37	1937-38
	2	3	4	5	6
State normal schools.....	141	138	66	40	33
State teachers colleges.....	10	39	125	150	153
City normal schools.....	31	33	26	9	9
City teachers colleges.....	1	1	3	6	6
Private normal schools.....	67	60	52	33	33
Private teachers colleges.....	1	6	6	17	16
<b>Total</b> .....	<b>251</b>	<b>377</b>	<b>378</b>	<b>255</b>	<b>250</b>
Number of teacher-training high schools and county normal schools.....	(9)	1,743	1,146	615	543
Number of departments, schools, and colleges of education in colleges and universities <sup>7</sup> .....	156	491	623	578	570

<sup>1</sup> References: 60 : 52; 62 : 14; 135 : 6; 116 : 66; 126; and unpublished data taken from reports available in the Office of Education.

<sup>2</sup> Data not available.

<sup>3</sup> 1922-23.

<sup>4</sup> 1929-29.

<sup>5</sup> 1934-35.

<sup>6</sup> September 1937.

<sup>7</sup> The figures include some institutions in which only one professor of education was employed. The size of the departments was usually not reported.

<sup>8</sup> Partially derived from 1933 reports.

The number of normal schools of all types, exclusive of county normal schools, decreased from 230 in 1919-20 to 82 in 1936-37. Most of the decrease, which in effect strengthened the teacher-education program as a whole, occurred because of the development of normal schools into teachers colleges, or because of the discontinuance of small local city and private normal schools. During the same period the number of 4-year teachers colleges increased from 46 to 173. The effect was to increase greatly the number of 4-year college graduates prepared to teach. Departments, schools, and colleges of education in colleges and universities increased in number from 491 to approximately 578. The number of graduates with superior scholastic and professional preparation increased in these institutions much more rapidly than this increase in number of institutions indicates. The pace set by all the institutions in the professional education of teachers hastened greatly the rise in certification requirements.

The number of teacher-training high schools and county normal schools has decreased greatly in recent years. Such schools have been legalized at one time or another in 34 States (27:358). In 1922-23 these schools existed in 23 States, in 1931-32 in 12 States (116:66), and in 1937-38 in 8 States (126). The number of low-grade certificates issued upon the basis of work in such schools is decreasing steadily.

Accreditation of teacher-education institutions by regional or by national accrediting associations, including the American Association of Teachers Colleges, and the approval or recognition of such institutions by the States themselves, have now reached a place of importance in practice and possess a considerable degree of effectiveness in raising standards (113; 46:138-147). In the past national and regional associations have in general led the way in raising academic requirements for high-school teachers (12:7).

The trend is steadily in the direction of discontinuing short 1- or 2-year teacher-education curricula. The number of graduates of non-degree teacher-education curricula in teachers colleges and normal schools decreased from 49,227 in 1929-30 to 18,749 in 1933-34. The number of first-degree graduates increased from 11,073 to 16,303 in the same period (136:33).

Trends between 1911 and 1933 in the in-service education of teachers are indicated in detail by Witherington. His findings are based upon statutory provisions. Among others, two trends relating to the certification of teachers are mentioned: (1) The number of States making statutory provisions for the renewal of certificates based on professional work increased from 21 to 31 during the period; (2) correspondence and extension work, recognized for certification purposes by the statutes of no State in 1911, were recognized and accepted for the renewal of certificates by 11 States in 1933 (143:2-3).

Outstanding among trends in the relationships between certification and teacher-education activities is the increased recognition given in certification requirements to college credentials. The movement in one State, Texas, is still in progress and illustrates certain general evolutionary features common to most States. Texas, in a law of 1879, first authorized the issuance of certificates based upon college work. Holders of normal diplomas were not required to take examinations for certificates to teach. By a law of 1891, a summer normal certificate, a certificate from a Texas normal school, a diploma from a State normal school, or from Peabody Normal at Nashville, Tenn., were made valid throughout the State. Experienced graduates of certain colleges and universities, and graduates of normal schools, were eligible for certificates of the first class. In 1905, degree graduates from colleges were given the right to secure permanent certificates.

Later laws extended the privilege; and in 1931 the statutes added still more to the number and importance of certificates obtainable through college credits and degrees. After 1929 all first-grade certificates were obtained through college work alone. In addition to accredited out-of-State colleges and universities, there were more than 80 Texas colleges and universities accredited by the State superintendent January 1, 1931, the graduates of which were eligible for certification on a basis of college credits. The vast majority of certificates, including all those of the higher types, were issued on such basis in 1932 (21:4, 8, 17-18, 27).

### EVALUATION OF RELATIONSHIPS

*Administrative control; voluntary coordination.*—Proposals advocating, or implying the desirability of, homogeneous preparation and certification of teachers are numerous and authoritative (54:242-253; 81:63-65, 349; 107:213-216; 112:897-911). A trend toward such homogeneity exists, and it may be expected to continue in the future.

The establishment of a plan of certification by the State implies the responsibility of the State for assuring the availability of institutions and agencies competent to prepare all workers governed by the certification requirements. Limitation of teacher education solely to State institutions is not approved by the majority of authorities, including State superintendents (145:54). When private agencies are not available or do not provide the services demanded by public policy, the provision of adequate public agencies is necessary (21:35, 43). Fairly general agreement has prevailed for some time that private and denominational institutions should be required to give as thorough-going and effective training as the State institutions (107:214-218; 96:189-190).

To insure efficiency in teacher education and certification, the State departments of education should keep carefully informed concerning the professional work of the teacher-education institutions or agencies, by some such means as accreditation, inspection, supervision, or possibly examination for certification of the product of such agencies (3:69; 21:35, 43-44; 24:938). A committee of the American Association of Teachers Colleges has this to say concerning the relationship of a centralized State certification agency to teacher-education institutions:

The proper functioning of this centralized certification agency requires that it be given supervisory power over all teacher-training institutions within the State . . . This agency should have also the power to accredit all teacher-training institutions (112:907).

Parkinson says:

Where certifying authority is centralized in a State board of education or a State department of education, State supervision of teacher training is implied. This supervision integrates and coordinates the work of the public schools and the work of the teacher-training institutions. It tends to make the training offered by these institutions relevant and definite, and thereby renders pertinent the training offered as a basis for certification (108:437-438).

Most authorities, including many State superintendents (145:54), agree to the proposal that all institutions whose credits are accepted for certification purposes should be accredited or approved by one or more of the recognized national or regional accrediting associations. However, under existing conditions of elementary teacher supply and demand, the application of such a proposal is almost impossible. State lists of institutions approved for certification purposes therefore often include institutions not accredited by recognized national and regional accrediting associations (113). A definite need appears to exist for the State departments of education, in cooperation with the teacher-education institutions, to formulate standards for all of the institutions whose graduates are certificated to teach.

Klonower says:

Departments of public instruction must be given authority to approve specific institutions for the preparation of teachers . . . Departments of public instruction should not issue certificates to teachers merely because they have completed courses of preparation, but should, thru supervisory responsibilities, maintain standards generally recognized as proper for teacher-education programs (78:27).

Allen secured 95 percent agreement from a jury of 255 that any institution, in order to be accredited for the preparation of teachers for certification to teach in the public schools of Pennsylvania, should have as one of its major and distinctive aims the preparation of teachers (3:70).

The proposal for the abandonment of teacher preparation in high schools and in county normal schools meets widespread approval of educational authorities. On the other hand, arguments are sometimes offered that students planning to teach for low salaries in short-term schools cannot afford to attend teachers colleges and normal schools; and that such institutions do not provide courses planned for rural teachers. If such conditions exist, they should be removed by State action, otherwise the county normals, at least, will persist for some time to come. It is also maintained that many rural school teachers would profit by attending high-school teacher-training classes, even though their offerings are limited. Cushing said in 1930 that "the high school normal training program [in Nebraska] cannot well be abandoned until some adequate provision is made for the training of teachers for the rural schools" (41:84-85). It would

appear to be a responsibility of the teacher-education institutions of collegiate grade to make such provisions if their need is agreed to by those responsible for developing a State program of teacher education and certification.

Strayer and Engelhardt pointed out in a survey of Missouri schools in 1929 that—

The usefulness of the teacher-training high school in America has long since passed. Not only is it desirable for teachers to have a background of 4 years of high-school training before taking professional work, but it is desirable that they study under the best possible conditions. The teaching staff in these high schools are not prepared to offer the training needed, nor are the facilities for training teachers at all adequate . . . special instruction at the teachers colleges must be given those planning to teach in rural communities (92: 143).

In 1932, 26 out of 27 State superintendents of education responding to the question approved the tendency to eliminate county normal schools as desirable, and 29 out of 31 approved the tendency to eliminate teacher-training work in high schools (145: 53-54).

*Control of teacher supply.*—Lack of a well-defined centrally controlled or coordinated system of teacher education and of certification in a given State leads to almost insuperable difficulties in the control of the supply of teachers. After a student graduates with a fair record from a teacher-education institution, it is extremely difficult in practice to refuse him certification. The social and financial waste involved in preparing large numbers of young people for work which does not exist is considerable, and the long-continued practice is indefensible. The whole burden of controlling the supply of teachers cannot be assumed by certification authorities alone. Coordination of effort in this respect by teacher-education institutions and certification offices appears desirable: In this connection, a committee report adopted by the American Association of Teachers Colleges recommends that State departments of education make studies of teacher supply and demand in their respective States, and make such studies available to the teacher-education institutions, as a basis of guidance for prospective teachers. The report further recommends that certificates be issued only to graduates of teacher-education institutions conforming to the standards fixed for such institutions (112: 897-899). Under that plan the teacher-education institutions could limit teacher output by more rigid selection of prospective teachers either before or after admission. State control of such institutions, however, would probably be necessary to limit enrollments if competition for students is intense. Allen secured a high percentage of jury agreement on the following proposal:

Any institution, in order to be accredited for the preparation of teachers for the public schools of Pennsylvania, shall have a program of selective

admission emphasizing general scholarship, character, personality, health, and physical vigor (3:69).

In States where selective admission of freshmen is not practicable admission requirements in teacher-education curricula in junior and senior years could be strengthened, and students not fitted for teaching could be diverted to other lines of work.

Control over the supply of teachers, and also control over the quality of their instruction, is made more difficult by a multiplicity of teacher-education institutions and consequent duplication of offerings. Such duplication, commonly found among institutions that prepare teachers in a given State, is often unnecessary, despite the fact that normal schools and teachers colleges typically serve more or less distinctive local areas within the States in which they are located. Undesirable duplication may be obviated to some extent in a given State by the allocation of specific curricula to the State institution or institutions best equipped or otherwise in the best position to give adequate preparation in such curricula. Examples of this procedure may be found in Massachusetts, Pennsylvania, New Jersey, New York and elsewhere (60:53).

*Control over curricula and courses.*—To what extent should responsibility be placed upon certification authorities, and to what extent upon the institutions, in respect to determining the nature and amount of the preparation required for certification? While believing that the resources and influence of teacher-education institutions created by the State for the education of elementary teachers should be freely employed in the battle for the elevation of standards, Bachman has suggested that the responsibility of such institutions is largely fixed by State certification requirements when the latter are 4 years in amount and is decreasingly fixed with lower requirements. If the lowest-grade certificate is issued on examination without scholastic prerequisites and with little or no professional preparation required, State teacher-education institutions have no responsibility to prepare elementary teachers for this type of certificate.

Responsibility of the institutions actually begins at the point where the State requires technical preparation to teach. Responsibility cannot be denied when college preparation is demanded. Upper levels of responsibility of State institutions for preparing elementary teachers are determined largely by the maximum State requirements (10:20-23, 180).

Field in 1930 proposed for Tennessee that 4-year certificates be based upon definite curricula approved by the State director of teacher training. He said:

At the present time such certificates are issued upon the completion of forty-five quarter hours, nine of which must be in education. Aside from the nine hours in education, the thirty-six may be in anything . . . The

teacher . . . (may be) no better prepared to teach than if he had gone directly into the school without ever going to college (57:216).

Not a few educational authorities are inclined to the belief that the logical area for the advancement of centralized control lies in those external aspects of administration having to do with the development of local initiative and experimentation. While advancement in curricula, methods of instruction, textbooks, and standards are conceded to be legitimate functions of State agencies, prescription of institutional curricula beyond necessary minima that safeguard the welfare of the school population in backward or indifferent communities is not especially welcomed by some institutions. This is especially true if the institutions are well staffed and equipped with adequate facilities for research, experimentation, study, and instruction and feel themselves in a better position to exert educational leadership than the State departments of education. Cooperative group action of teacher-education institutions and State departments of education looking toward higher standards and better practices continues to constitute in many sections the most hopeful or at least the most locally acceptable means of securing progress.

*Relationships governing the in-service education of teachers.*

In-service growth of teachers is one of the prime responsibilities of certifying agencies. For this reason every State plan of certification should sponsor summer schools, extension teaching, and other provisions for in-service growth (106 : 444).

Most of the proposals and suggestions made in reference to the pre-service education of teachers apply to their in-service education as well. According to Yeager, experience during a period of comparatively rapid elevation of standards in Pennsylvania indicated to those most affected, the desirability of providing in-service courses of immediate value in the classroom during the limited periods available for the teacher in service to undertake additional work; eventual substitution of voluntary efforts by the teachers rather than compulsion as a motive for preparation; proper sequence of work, e. g., from one summer to another; the avoidance of overly large classes in the institutions; and special adaptation of instructors to the exigencies of extension work. Teachers induced to attend teacher-preparation institutions primarily or largely by certification requirements tended to be influenced largely in their selection of courses by the requirements themselves. Approval of the institutions by the State departments was necessary. Residence courses, class extension, and correspondence courses appeared to be of value somewhat in the order mentioned. Courses most directly related to class-room teaching appeared most popular with teachers and were believed to be of most value to them (147 : 247-252, 322-325).

*Relationships governing placement of teachers.*—It has been previously shown that certification by individual subjects or by a combination of subjects, by grade levels, or by important non-instructional fields of work appear essential for the protection of the welfare of the pupils and the professional interests of teachers. Institutional curricula should be organized accordingly. It is clearly the responsibility of the institutions to guide prospective teachers toward subjects for which teachers are in demand. Centralized, complete, and continuous State records of all teachers certificated and placed in each State would assist the teacher-education institutions markedly in the guidance of students and in the provision of suitable curricula for them.

*Certification by teacher-education institutions.*—While most proposals for the centralization of certification in the State department of education imply the discontinuance of certification by the institutions themselves, authoritative proposals directly on this point are lacking in finality. If the principle of centralized control is accepted, supervision of the exercise of delegated authority should be maintained by the State. If effective control of teacher supply is exerted, records of the certificates granted by the institutions and essential data concerning the holders of such certificates must be kept in the State office.

*Direct institutional participation in the formulation of certification requirements.*—It is commonly recognized that large, well-staffed institutions with highly developed research facilities are in a very advantageous position to advance the theory and in many respects the practice of education to a degree that typical State departments of education with their limited staffs cannot reach. Hence it appears plain that the State departments should capitalize their opportunities to make use of institutional facilities, findings, and leadership through conferences, cooperative research projects, and other means.

Dilley proposed for Ohio that the State department of education have an advisory body to assist it in formulating academic and professional certification requirements. He suggested further that this body consist of the dean or a representative from each of the colleges of education in the three State universities and the two State colleges, and one representative each from (1) the private liberal arts colleges, (2) the municipal universities, and (3) public-school superintendents. Representatives of all institutions approved by the State department of education could be called once or twice a year for the purpose of discussing matters pertaining to certification, and representatives of the public schools could be asked to join such conferences (46: 157-158).

Cushing suggested that before any attempt be made to incorporate into State law the extensive recommendations and principles that he proposed, that a conference made up of representatives of the present certificating agencies, school administrators, school board members, teachers' associations, farm organizations, and business organizations be called to work out a practical plan which would apply in the main to the principles and recommendations he set forth (41:100).

Elliff, in a study of teacher supply and demand in Missouri, proposed in 1935 that an association of all the collegiate institutions preparing teachers at or above the 2-year level form an association in which staff heads of the State department of education be included. This association would concern itself only with cooperative functions, including the molding of public opinion, proper maintenance of data, training, certification, and placement, and the formation and execution of policies governing teacher education and certification (51:60-61).

Under such plans as the foregoing, the viewpoints, ideas, and practices of the institutions could be made of much assistance in the final determination of certification requirements and practices. Even the weaker institutions approved for the preparation of teachers should participate in cooperative conferences and activities, from which they may profit by a mutual interchange of ideas even more than the stronger institutions. Important also, of course, is the probability that the cooperation of the institutions concerned would be secured in realizing the plans for improvement upon which they agree.

The institutions themselves should agree by conference or otherwise upon a State institutional program of teacher preparation (81:348). Failing such agreement, confused, wasteful, or ineffective work may persist. In such case the State department of education may have to step in and exert more authority in respect to detailed certification prescriptions than it is perhaps willing or able to exert in highly technical or professional matters traditionally the primary concern of the institutions themselves. Under such conditions certification is likely to become too arbitrary and restrictive. It should be an ally of teacher education, and should become a powerful means of stimulating and encouraging professional growth (21:35, 43-44).

In addition to some of the foregoing points, Allen, in 23 standards validated by a jury of 255 members, covers a number of other points of relationship that are of current interest. His standards, while formulated with particular reference to Pennsylvania, are worthy of consideration wholly or in part in constructing certification and teacher-education programs in all States (3:62-73):

Cooperative programs undertaken by teacher education and by certification officers can be completely successful only with the cooperation of public-school officers who employ teachers.

Four corner stones upon which standards governing teachers' qualifications must be built are: First, the functioning of the teacher-education institutions; second, activities of teacher employment officers of public schools; third, supervision and in-service teacher education; and, fourth, State teacher certification. In the upbuilding of professional standards all four corner stones must be constructed each in relation to the others (63: 32).

### SUMMARY

The education and the certification of teachers are interdependent. Although unity of effort in the work of certification and of teacher-education officers is essential in an effective certification program, a satisfactory degree of unity has been attained in very few States. Activities of the State departments of education relating to teacher education and to certification are often not centralized in one State office. More than 800 institutions of different types educate teachers. Control by the State board, department, or superintendent of education over the curricula and courses of publicly controlled institutions is not extensive in typical States. Control by State officers is decidedly limited over the offerings of privately supported institutions, which out number those that are publicly controlled.

With the exception of the American Association of Teachers Colleges, none of the national or regional accrediting associations accredits or approves 4-year colleges or universities specifically for teacher-education. While the influence of the national and regional accrediting associations has contributed greatly to the development of better standards in higher education, and thus indirectly to the development of higher standards in teacher-education, it remains necessary for each State to establish its own list of institutions approved for teacher-education.

Difficulties in the establishment of State lists of teacher-education institutions have resulted in numerous States in the acceptance for certification of credits from large numbers of institutions that do not meet commonly recognized standards. Furthermore, institutions such as county normal schools or junior colleges accredited or approved by certain States for certification purposes are not approved by certain other States for such purposes. Because State certification officers for the most part rely upon the teacher-education institutions to determine the detailed character and type of academic and professional education secured by teachers, the need is great for more agreement on the part of teacher-education institutions concerning the nature of the professional, cultural, and specialized education needed by teachers. Failing such agreement, a satisfactory degree of equivalence or uniformity in certification requirements is scarcely to be expected. Furthermore, highly restrictive State certification

requirements that may be arbitrary and unscientifically determined are invited if institutional standards and offerings differ unduly.

Much research has been undertaken during the past two decades to ascertain the specific traits, qualities, and teaching activities that are related to teaching ability, but so many factors are involved in teaching success that the relative influence of each factor has not yet been ascertained to a satisfactory degree. Such evidence as exists, however, indicates that there are numerous qualifications in addition to scholarship and experience that should be recognized in prescriptions for entrance to teaching. Although the personal fitness of teachers in respect to social intelligence, skill in expression, proper emotional balance, and the like is an important consideration, existing certification requirements are inadequate to assure possession of the personal traits involved. Staff members in teacher-education institutions have better opportunities than certification officers to select desirable candidates for teaching and to develop the traits that determine their success.

Despite serious periodic disturbances of the balance between teacher supply and demand, most institutions do not limit their enrollments on a highly selective basis. Certification requirements alone do not sufficiently serve to regulate the supply of teachers.

◆ The placement by institutional officers of graduates in the positions for which they are best prepared is rendered difficult by unplanned conditions of teacher supply, lack of sufficiently specialized certification requirements, and the assignment of teachers in small schools to positions for which they are not specifically prepared. A remedial program for assuring proper placement of teachers requires the concerted efforts of certification officers, teacher-education institutions, and employers of teachers.

An important trend in the relationships of teacher-education and of certification officers is a slow but perceptible increase in the unity of their efforts toward assuring the competency of teachers. Such unity has increasingly been secured through (1) centralization of certification and of teacher-education in the State board or department of education, and (2) voluntary cooperation by the certification office and the teacher-education institutions in raising or maintaining standards. Although both methods of securing unity of action will be needed for some time to come, educational leaders have to an increasing extent turned to voluntary, cooperative action as a means to progress in States where a fixed pattern of decentralized educational administration appears to constitute an obstacle to progress in advancing the educational interests of the State as a whole.

Particularly significant is the steady increase in the reliance of certification officials upon college credentials as a basis of certification.

Once an infrequent practice, one or more types of certificates are now issued upon this basis in every State. The movement has proceeded so far, that strengthening of teacher-education requirements by the institutions doubtless will more and more set the pace for improvements in certification requirements in the future. It is significant, therefore, that a steady trend toward the strengthening and improvement of teacher-education institutions exists. This trend is shown especially in the lengthening, broadening, and general enrichment of curricula, and of courses in professional education. The decrease has been marked in the number of high schools and county normal schools offering work for prospective teachers. Legalized at some time in 34 States, only 8 States reported such schools in 1937. The number of normal schools offering curricula less than 4 years in length decreased from 230 in 1920 to 82 in 1937, and the number of 4-year teachers colleges increased from 46 to 173 during the same period. Teacher-education in the colleges and universities was also strengthened. A greatly increased number of teachers with advanced preparation resulted, and certification requirements were raised accordingly.

Emphasis in certification requirements upon further education as a condition for the renewal or exchange of certificates, has led to many demands by teachers for class extension, correspondence, and summer session work. Such demands to a large extent have been responsible for the development of these types of institutional offerings. Difficulties were frequently experienced until comparatively recent years, in making the instructional and scholastic requirements for such work the equivalent of those for regular-session resident work. These difficulties have now been obviated to a considerable extent in the better institutions, by the enforcement of self-imposed standards, as well as by the observance of State requirements.

A summary of jury judgments and agreements by authorities concerning the relationships of certification offices and teacher-education institutions follows:

\*Certification regulations should stand primarily on a foundation of professional education, including all types of [preparation] that are directed primarily towards the vocational preparation for school service (21:35).

\*State certification is accompanied by a responsibility for providing adequate educational facilities for all phases of school service recognized in the certification plan. This does not imply that State agencies should duplicate work done adequately in the State by private agencies (21:34).

\* Have received jury validation.

\*All sources of teacher supply within a given State should be subject to suitable checks by the State education department with reference to efficiency in teacher education (21:35).

Certification on the basis of teacher-training work in high schools should be discontinued (100, Part II:14).

\*Requirements for the issuance or renewal of certificates should not permit more than 50 percent of the total number of semester-hours required; to be earned through extension, correspondence, absentia, or study center work; preferably the percentage should be considerably less (41:55-58).

\*Majority opinion indicates that years of experience should not be evaluated in terms of semester-hours of college credit. A minority of authorities who would so evaluate experience, tend to agree on six semester-hours as the equivalent of a year of experience (41:77-78).

The State department of education should be given authority and staff sufficient to enable it to develop and maintain a unified and effective program of teacher education and certification. This program should provide for the continuous counsel of recognized teacher-education institutions in the prescription of the more significant scholastic and professional requirements set forth in certification regulations.

Much greater efforts should be made by teacher-education institutions to determine the qualifications essential to the success of teachers; to develop more homogeneous teacher-education programs; and to provide effective means whereby State certification officers may distinguish institutions within or without the State, that are worthy of State approval for teacher education.

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\*Have received jury validation.

## CHAPTER VII: SUSPENSION AND REVOCATION OF CERTIFICATES; THE TEACHER'S CONTRACT

*Suspension and revocation of certificates.*—A certificate to teach is not a contract between the teacher and the State. It is held subject to the laws governing its issuance or providing for its forfeiture. A mere license by a State is always revocable. However, where a statute authorizes revocation of certificates for certain enumerated causes, the general principle is that a certificate cannot be revoked for any causes other than those specified (49:404; 2:12-13).

Most State laws enumerate specific causes for which certificates may be revoked. Four States are silent on specific causes, and four others make no provision for the revocation of certificates. Seventeen States enumerate general causes in addition to specific causes. This makes their statutes elastic and permits certificates to be revoked more easily. The specific causes enumerated by the State codes are often expressed in terms sufficiently general to admit of rather broad interpretations. The causes enumerated by five or more States are, in descending order of frequency: Immorality, negligence, incompetency, violation of contract, intemperance, violation of law, cruelty, unprofessional conduct, and evident unfitness to teach. In all, 21 States list general causes for revocation (69:39).

In general, any duly constituted authorities who grant certificates are empowered to suspend or revoke them if such proceedings remain within the limits of the statutes. Two or more different officials or agencies in the same State may exercise this function, either singly or jointly. In 21 States, the State superintendent has this power; and in 16 States, the State board of education. In 5 States, only local authorities have this power; and in 14, both local and State authorities (69:39).

Generally, protection against injustice, including the right of appeal to superior officers, is given the teacher (2:12-13). In 20 States, a teacher must be notified of the charges and given a hearing. In 12 States he may appeal his case, usually to authorities who have the power to issue and revoke certificates. Eighteen State codes are silent on the rights of teachers and the methods of appeal. However, the teacher can undoubtedly find some means through which he can appeal, even when the school code does not specifically provide it (69:69).

In practice, no great number of teachers' certificates are suspended or revoked. Barlow stated in 1936:

All through the history of revocation cases, one fact stands out. Certificates are very rarely revoked (almost never revoked considering the vast number of teachers) mainly because people are reticent in putting the law to use. There is a feeling that this law is a very distasteful one to use and should be used only in very rare circumstances. It is, more than anything else, a proverbial whip to hold over the heads of teachers . . . In 10 States during the last 15 years (approximately) there have been 41 or 42 actual cases of revocation of certificates. . . . Immorality leads the list with 23 or 24 revoked certificates in its name (14 : 3, 24).

*Certification in relation to the teacher's contract.*—Before a teacher can enter into a valid contract to teach a legal [public] school, he must possess such certificate of qualification as is required by law; otherwise his contract is void. Boards of education have no discretion in the matter, and uncertificated teachers cannot recover salaries for services rendered. The rights of teachers who enter into contracts without possessing a certificate but secure a certificate before entering upon teaching, depend upon the wording of the statutes of the State in which they are employed (2 : 14-15; 49 : 404-408).

A contract is not validated by virtue of the granting of a certificate after the date of making the contract, or at the time of beginning teaching, if the law requires possession of the certificate when the teacher makes his contract. When, however, a teacher is permitted to teach after he has secured his certificate, an implied contract may arise (49 : 409-410).

It is generally permissible for a board of education to require that the teachers it employs possess certain scholastic or professional fitness in addition to that required by the State for certification (49 : 413). In general, the board of education may refuse to contract with teachers who do not meet reasonable requirements set up by the board itself (49 : 411; 2 : 113-114).

Possession of a certificate does not protect a teacher from dismissal or failure to secure reemployment at the close of the school year. In 1936, 35 percent of all public-school teachers worked in States that had no tenure legislation of any type, and 19 percent were subject to an annual election plan. Causes for dismissal were sometimes political or personal (7 : 294).

*Rights of pupils, teachers, and school officers.*—It is axiomatic that the schools exist for the pupils, and that their welfare, which is the primary interest of the State, should be given first consideration. Under certain conditions not necessarily interfering with the rights of pupils, the fact may be forgotten that revoking the certificate of a teacher deprives him of the right to follow his profession, and is therefore a serious matter. Brodie secured jury agreements to the following principle, which applies alike to the issuance of certificates and to their revocation.

The administration of certification should recognize the rights of both employer and employee (21 : 33).

Action of local school authorities adversely affecting the interests of teachers may not always be consistent with the welfare or best interests of the pupils or of the State as a whole. Concerning the authorities who should have the right to revoke certificates, Hostetler says:

The fact that approximately twice as many state as local agencies have the authority shows the trend toward centralization. The state superintendent of schools, the state board of education, and other state agencies are, as a rule, composed of men better qualified than local officials, which is a better guarantee of justice to both teachers and pupils (69 : 39).

McMullen proposes that any local boards of education on the recommendation of their superintendent of schools, may suspend any teacher, supervisor, principal, or assistant superintendent for gross neglect, incompetency, immorality, or other reprehensible conduct, and may also recommend in the form of written charges to the State department of education the revocation of the certificate of such person. In the case of superintendents, the board may take such action by a four-fifths vote. If the charges are substantiated, the board's recommendations approved, and the holder of the certificate be given an opportunity to be heard, the revocation of the certificate shall be approved (86 : 126-127).

In general, there appears to be no disposition on the part of educational authorities to question seriously present legal provisions and decisions governing the rights of teachers and employers. Cushing secured satisfactory jury agreement to this proposal:

Authority should be given to some administrative officer for the revocation of all certificates (41 : 78-79).

Barlow in 1936 offered the following suggestions for the betterment or increased effectiveness of certification:

- (1) Although undue publicity is not to be encouraged, the right kind and right amount of publicity does not hurt unjustly. . . .
- (2) There should be a better system of recording information in regard to revocation. . . .
- (3) This information concerning revocation should be accessible for purposes of analysis. . . .
- (4) There should be some interstate publicity concerning revocation. . . . (14 : 55-56).

More than three-fourths of Cushing's jury checked the following items which in their opinion should bar an applicant from the issuance of a certificate, or be considered as sufficient cause for revocation of a certificate by the authority which issued it: Incompetence, gross immorality, intemperance, crime against the law of the State, and

physical disability. Five other items were also checked by half or more of the jury (41:79).

*Summary.*—Before a teacher can enter into a valid contract to teach a public school, he must possess such certificate of qualification as is required by law, otherwise the contract is void.

A certificate is held by a teacher subject to the laws governing its issuance or providing for its forfeiture. In general, however, a certificate cannot be revoked for causes other than those specified in the laws. The five specific causes that are most frequently mentioned are immorality, negligence, incompetency, violation of contract, and intemperance. Certain general causes are also stated in the laws of many States. In practice, no great number of teachers' certificates are suspended or revoked.

The authorities who grant certificates are usually empowered to suspend or revoke them. Protection against injustice and the right of appeal to superior officers are usually given the teacher.

That the officers empowered to revoke certificates should be State rather than local school officials, follows from the principle that certification should be in the hands of State school officers. When the just rights of certification officials, employing officers, teachers, or pupils appear to be infringed, a remedy may be found by resort to the courts; and a still better remedy may be found by a due observance of the ethics of the teaching profession.

## CHAPTER VIII: SUMMARY OF FINDINGS AND RECOMMENDATIONS

At the close of preceding chapters, summaries of certification practices and requirements are given in respect to: (1) status; (2) trends; and (3) validated principles and authoritative proposals. This chapter reviews in somewhat less detail the major findings and recommendations of the report that appear to merit immediate attention in the long-time development of improved State programs of certification. This review includes also some suggestions concerning the practical application of the general recommendations made.

### PURPOSES AND NATURE OF CERTIFICATION; CONDITIONING FACTORS

*Findings.*—The most commonly recognized purpose of certification is to protect the State against the employment of incompetent teachers. Related or subsidiary purposes include the advancement of the education of teachers in service, the protection of teachers against the competition of other teachers not equally well qualified, and the yielding of information upon which a continuous inventory of teachers and their qualifications may be based.

The realization of the foregoing purposes differs significantly among the several States. Variations in the degree of protection afforded by certification are illustrated by differences in the minimum requirements of the several States for certificating elementary teachers. Such requirements vary from a high-school education or less in 13 States, to college graduation in 5 States. Advancement of the education of teachers in service through the requirement of additional scholarship for the renewal of certificates, proceeds at the same rate in no two States; more than half of all the kinds of renewable or exchangeable certificates issued require no further education for renewal or exchange. Most State departments of education do not maintain a continuous inventory of teachers and their qualifications; hence, they do not have sufficiently exact data for use in regulating teacher supply and demand.

The realization of the purposes of certification is limited, in part because: Certification requirements are concerned primarily with minimum standards; teacher employment and certification requirements are only partially related; and the requirements made for certification are largely conditioned by the supply of teachers and the nature of the training provided them by teacher-education institutions.

Certification practices and requirements differ significantly among States not only in respect to the realization of the purposes of certification but also in terminology, administration, number of kinds of certificates issued, bases of issuance, and in other respects. Among other reasons for such differences, are widely varying social, economic, and educational factors peculiar to individual States.

*Recommendations.*—(1) The realization of the purposes of State certification should serve not only to protect the State and its pupils in the schools against incompetent teachers, but should also serve to: (a) Protect qualified teachers from the competition of other teachers not as well qualified; (b) afford more control by the State over teacher-personnel activities common to the State; (c) assist in improving the professional qualifications of teachers in service; and (d) yield information on which a continuous inventory of teachers and their qualifications may be based.

(2) Certification terminology should be simplified and made more uniform among States. A desirable first step in this direction is adherence in the published certification regulations of a given State to the terms commonly used by other States. Under present conditions it is helpful to include in the regulations, definitions of certain terms likely to be misunderstood, as done by Connecticut, New Jersey, and New York. Further simplification of terminology for the most part must await group action by the several States, and further simplification of diverse certification practices and requirements later described that demand a wide variety of terms for expression.

(3) Certification must take into account the varying conditions under which the schools are organized and maintained in different States. While such conditions vary so widely that exact uniformity is not to be expected in certification standards and practices, greater uniformity is highly desirable and may be expected as the underlying causes for present differences are removed.

### ADMINISTRATION OF CERTIFICATION

*Findings.*—The administration of certification varies to a noteworthy extent among the several States in respect to the items that follow.

(1) The degree of control exercised over certification specifically by statutes varies from very little control, to the prescription of professional requirements in much detail.

(2) The State agencies or officers directly in control of certification include the State board of education and its executive staff; but other agencies or officers may issue certificates as follows: County authorities, in 6 States; local town committees, in 1 State; certain cities, in at least 11 States; and teacher-education institutions, in at

least 10 States. In most States, however, the trend in respect to the most important aspects of certification, has practically reached its logical conclusion in the complete centralization of certification in the State board or department of education.

(3) Certification is administered by State staffs of varying size and effectiveness. A certification clerk is all that is provided in some States, while a strong division of teacher-education and certification, more or less integrated with other State teacher-personnel offices, is provided in others.

(4) Variations exist among States in the amount of cooperation in raising standards that is accorded the State certification office by other educational agencies. The extent of such cooperation is largely dependent upon State department leadership.

An important trend in the administration of certification has been its centralization in the hands of the State board, superintendent, or department of education. The number of State systems in which the issuance of all certificates is completely controlled by the State (city and institutional issuance not considered) increased from 3 in 1898 to 41 in 1937. The number of certificates issued by counties, and by local school districts including cities, decreased correspondingly.

Promising trends exist in the upbuilding of State professional staffs concerned with the administration of a unified program of teacher-education and certification; and in delegation of some of the authority exercised directly by the legislatures in determining detailed certification requirements, to State boards or departments of education.

*Recommendations.*—(1) Certification requirements, other than those expressing minimum or general standards, should be set by the State board of education, rather than by statute. Certification laws should be relatively brief. They should do little more than fix minimum standards and empower the board of education to interpret these standards into rules and regulations, and to set higher standards whenever possible. States with relatively brief certification laws include, among others, Arizona, Wyoming, and New York.

(2) Teachers in non-public schools should be required to meet standards essentially equivalent to those required for public-school teachers. The fact that in a majority of the States, certificates are not required of non-public-school teachers, indicates that other means for maintaining standards may be more satisfactory in practice.

(3) Complete control over the administration of certification, and over the issuance of certificates, should be in the hands of the State board of education and its professional staff. This means that the issuance of certificates if now permitted on the part of counties, local school districts including cities, and higher education institutions

must be under the direct control and supervision of the State certification office, and that issuance by any agency other than the State will eventually be abandoned.

(4) Control over teacher certification in a given State and the control or supervision exercised over teacher-education in that State should be consolidated in the same division of the chief State education office. Among other States, New York and Pennsylvania afford examples of this practice. Other State activities relating to teacher personnel should be coordinated with these functions.

(5) The cooperation of local school officers, teachers, teacher-education institutions, and other individuals and agencies concerned, should be secured in the development of a State program of certification. Such cooperation is invaluable in securing new legislation, and in the revision of certification requirements, including the raising of standards. The State department of education, or the corresponding State office, should assume the leadership in securing such cooperation.

(6) Realization of the foregoing and later recommendations demands that a highly competent professional staff be provided for the State administration of teacher-education and certification, and that these staff members be given reasonable security of tenure.

### INTERSTATE EXCHANGE OF CERTIFICATES

*Findings:*—Out-of-State teachers are certificated in all States upon a basis of institutional credits; but in 7 States, certificates are issued also upon a basis of interstate exchange of equivalent certificates.

Certification upon an interstate exchange basis was practiced in 1903 by 14 States; in 1921, by 38 States; and in 1937, by 7 States. Increased reliance by certification officers upon out-of-State institutional credentials as a basis for certification, and the difficulty of evaluating out-of-State certificates, explain the rapid decline since 1921 in certification upon an interstate exchange basis.

Almost from the beginning of certification in this country, differences in standards and requirements for certificates issued by different local school districts and by counties within a given State rendered the exchange of certificates among such units difficult. The establishment of reciprocal relationships has now become almost altogether a problem for the several States. Differences in standards and requirements, including requirements of a nonscholastic nature that sometimes have no significant relationship to teaching ability, constitute formidable obstacles to the establishment of interstate reciprocity in certification on a national scale.

While the acceptance of institutional credits as a basis for certification appears to offer certain practical advantages over the accept-

ance of out-of-State certificates on an exchange basis, appreciable differences in the standards and requirements of teacher-education institutions in different States constitute a serious difficulty in the accurate evaluation of out-of-State institutional credits.

*Recommendations.*—(1) The interstate migration of teachers should not be hindered by certification regulations or requirements based upon any considerations other than the professional competency of teachers. It follows that certification will not be refused because of lack of State residence and similar reasons, and that the meeting of special subject-matter requirements peculiar to a State, such as a knowledge of State school law or State history, will be demanded only after the new teacher has had time to meet such requirements.

(2) The practice of issuing certificates in exchange for equivalent out-of-State certificates is commendable; but under present conditions it is probably more difficult to administer with satisfactory results than to issue certificates upon the basis of out-of-State college credentials. The equivalence of certificates issued upon an interstate exchange basis should be safeguarded, and standards in no State should be lowered as a result of such exchange. The requirements of Kentucky, Maine, and Vermont, among other States, illustrate conditions that are set up for the exchange of certificates.

(3) Out-of-State institutional credentials that represent preparation for teaching equivalent to that provided by the approved institutions of any given State, should be accepted as a basis of certification in that State. Under existing conditions, each State must maintain its own list of institutions approved for teacher-certification purposes. The accredited lists of the recognized regional and national accrediting associations may be used in the establishment of State lists, but the uses of the former are limited. Group action by the States and by the teacher-education institutions through their appropriate group organizations that would result in the establishment of a list of approved teacher-education institutions for the Nation as a whole would be of much assistance in certification upon the basis of institutional credentials and also in the employment of teachers.

#### STATE ISSUANCE OF CERTIFICATES UPON CREDENTIALS AND UPON EXAMINATION

*Findings.*—One or more kinds of certificates are issued upon the basis of institutional credentials in all States; and one or more additional kinds of certificates are issued upon examination, in 20 States. Certificates issued upon examination are usually of low grade, and their use tends to perpetuate low standards of scholarship. Such

certificates are issued in all States where county certification is permitted.

Examinations are used as a substitute for systematic high-school or college preparation, and also as a supplementary device in certifying or employing teachers whose college education has already reached satisfactory levels. The former use is defended by few if any authorities; the latter is defended only as a means to ascertain certain abilities not assured by completion of the offerings of the teacher-education institutions available to applicants for certification or employment.

Once the predominant method of certifying teachers, certification by examination is gradually being superseded by certification upon the basis of institutions credentials. Certification by examination tends to disappear as complete State control is exercised over certification, and as minimum scholarship prerequisites for certificates are raised.

*Recommendations.*—(1) The issuance of low grade certificates upon the basis of examinations should be abandoned as rapidly as local conditions permit. Certificates should be issued instead upon the basis of credentials from approved teacher-education institutions. In the discontinuance of certification by examination, a desirable first step is to require successively increasing minimum amounts of scholarship, beginning with high-school graduation or a limited amount of college work, as prerequisites for the examinations. The duration of validity of certificates issued solely upon examination should be strictly limited, and definite scholarship requirements should be made for their renewal or exchange.

2. Examinations for certificates, if temporarily permitted, should be under the complete control and direction of the State.

3. Examinations, if permitted as a supplementary device in the issuance of certificates to applicants whose general scholarship has reached high levels, or if required as a prerequisite for teacher employment, should be constructed in accordance with modern educational practices, and should be extended when possible, to provide for the evaluation of a wider variety of qualifications than scholarship alone.

### CERTIFICATION REQUIREMENTS AND PATTERNS

*Findings.*—The most significant differences in certification among the several States are found in the scholarship requirements for certificates. Minimum requirements for elementary teachers range from the indefinite requirements of examinations covering elementary or secondary school subjects found in 6 States to 4 years of college work required by 5 States. The minimum requirement in typical States is 2

years of college work for elementary teachers and 4 years for high-school teachers.

While minimum scholarship requirements for low grade certificates in a given State are often the same as the requirements for the employment of teachers in low-standard schools of that State, there is a decided tendency in high-standard schools to employ teachers whose scholarship exceeds the minimum requirements set by the State for certification. The average amount of education of elementary school teachers in service is at least  $2\frac{1}{2}$  years of college work.

The degree of specialized preparation required in subjects to be taught ranges from little or none in subjects covered by an unspecialized "blanket" certificate to a major in a subject covered by a specialized certificate. More than one-third of the States issue specialized certificates covering agriculture, art, commerce and business, home-making, industrial arts, music, physical education and health, school librarianship, and trade and industrial education. Certificates are also issued for specialized subjects in some of the foregoing fields. For example, of the 31 States that issue specialized administrative or general supervisory certificates, 31 issue certificates more or less specialized for superintendents, 23 for high-school principals, 21 for elementary school principals, and 23 for general supervisors.

Minimum requirements in professional education for inexperienced teachers of academic subjects in 4-year high schools range from 8 to 25 semester-hours; the median of such requirements is approximately 18 semester-hours. Among important prescribed courses is student teaching, required in 33 States.

There is a lack of coordination between certification requirements and employment demands. Teachers when employed in small schools are often assigned to subjects or fields of work for which they are not adequately prepared, partially because certification requirements do not require them to have specific preparation for teaching such subjects.

Minimum age requirements, specified in 37 States, range from 17 to 20 years; typically, the requirement is 18 years. Half or less of the States require citizenship, proof of good health, or allegiance to the Constitution of the United States or to the State constitution.

The duration of validity of certificates varies from 1 year to life. Life certificates are still issued in 35 States.

Less than half of the different kinds of the renewable or exchangeable certificates issued require in-service education for renewal or exchange. Emphasis upon successful teaching experience, rather than upon additional scholarship, tends to retard the advancement of the scholastic preparation of teachers in service.

Among the more significant of the trends in respect to certification requirements are: (1) a steady elevation of the scholastic requirements for certification, which has assisted greatly in advancing the average level of teacher-education from an upper elementary or lower secondary level prevailing a century ago, to 2½ years or more of college work; (2) an increased specialization of certificates, from the unspecialized "blanket" type that predominated throughout the nineteenth century, to a great variety of certificates specialized in a growing number of States for different grade levels, subjects, and types of work; (3) a decrease in the number of kinds of certificates issued by counties and local school districts; (4) a rapid development during recent decades of the field of professional education and a rapid extension in this field of certification requirements for high-school teachers; and (5) a growing emphasis upon the issuance of initial certificates as probationary certificates, including increased emphasis upon additional scholarship as a condition for their renewal.

*Recommendations.*—(1) Certificates should provide the following items of information as a minimum: Scope and length of validity, amount and kinds of preparation required; and terms or conditions of renewal or exchange. Insofar as possible, certificates should be phrased in terms that are self-explanatory.

(2) Certificates should be differentiated for all distinctive types of public-school service that demand extensive or prolonged preparation of a specialized nature; for example, all academic, special, or vocational subjects demanding specialized preparation, such as English, music, or agriculture; grade levels demanding specific preparation, such as kindergarten-primary; and specialized fields of service, such as administration and supervision.

(3) Minimum scholastic requirements for certification should be set at the highest levels that the supply of teachers permits. Under present conditions, uniform standards cannot be expected for all States. Levels of teacher-education that are a year, more or less, in advance of present minimum levels should be set as goals for early attainment in nearly all States. Such goals will vary from a minimum prerequisite of high-school graduation and some college work for elementary teachers in some States to graduate work in others. In typical States the 3-year college level should be attained as a minimum at a very early date. The States with the highest minimum certification requirements for elementary teachers are: Arizona, California, Connecticut, Delaware, and Rhode Island, which have reached the 4-year college level.

(4) Changes in certification requirements should not be retroactive.

(5) Until the needs of teachers in respect to strictly professional education are more exactly determined, current practice appears to

justify the prescription of from 15 to 20 semester-hours of work for the certification of inexperienced teachers in 4-year high schools; and a somewhat larger amount for elementary teachers who are college graduates. Student teaching should be required for all initial certificates. The prescription of certain other professional courses, such as educational psychology, and principles or methods of teaching, and the designation of certain electives that would be acceptable for certification purposes, is also suggested by current certification practices. These courses, especially student teaching and methods, should be related to the subjects, grade levels, or educational services for which the applicant is certificated.

(6) All certificates issued to inexperienced teachers should be of a probationary nature, and their duration should be limited. Their renewal or exchange should be contingent not only upon demonstrated success in teaching but also upon additional education when the holders have not reached the standards set by the State for its higher-grade certificates covering the same type of service.

(7) Life certificates, if issued, should not be granted unconditionally. Provision should be made requiring the holders to keep professionally up-to-date. Requirements for the issuance of conditional permanent certificates should include initial preparation approximating in amount that required for the highest-grade certificates issued by the State, and at least 3 to 5 years of successful experience.

(8) A certificate not used by the holder for a period of years should lapse, and should not be renewed until he has secured additional scholastic and professional education.

(9) Miscellaneous prerequisites other than scholarship that should be required for all certificates include: (a) A minimum age of 18 to 21 years, depending somewhat upon the minimum level of education required in the State making the age requirement; (b) United States citizenship, or declaration of intention to assume citizenship; (c) personal fitness, including good moral character and physical fitness.

#### RELATION OF TEACHER-EDUCATION INSTITUTIONS TO CERTIFICATION

*Findings.*—Certification requirements are determined to a very large extent by the supply of teachers and the nature of the education given them by teacher-education institutions. Institutional curricula and courses and enrollments of prospective teachers are affected in turn by certification requirements. Close coordination of teacher-education and certification requirements is, therefore, highly desirable in an effective program of teacher recruitment, education, and placement. Such coordination exists in varying degrees among States, and is entirely complete in none.

Coordination of effort differs in effectiveness among States because of great variations in the degree of centralized control exercised by the several State education offices, and because of the lack of coordination of the work of the different teacher-education institutions by the institutions themselves. The typical State board or department of education does not exercise effective control over all the teacher-education institutions in the State, especially private colleges and universities. With the exception of the American Association of Teachers Colleges, which in 1936-37 accredited less than one-fifth of the 833 or more higher education institutions known to prepare teachers, no national or regional accrediting association accredits colleges or universities specifically for teacher education. In addition to, and included among, the colleges and universities known to prepare teachers in 1937, there are numerous institutions not accredited or approved by any recognized agency that contribute to the supply of applicants for teachers' certificates. The evaluation by the State certification office of credentials offered from many of these institutions is extremely difficult and unsatisfactory.

Teacher-training high schools or county normals are still found in 8 States. The certification of the graduates of such schools tends to perpetuate low standards of teacher education.

While much research has been conducted during the present century to ascertain the specific qualifications of teachers that contribute to teaching success, beginnings only have been made in the determination by scientific methods of the precise qualifications they should have. It appears, however, that more attention should be given to certain personal qualifications in addition to scholarship and teaching experience, as prerequisites to admission to teaching. Because of the greater opportunities of the teacher-education institutions to ascertain and develop such qualifications during the applicants' period of preparation, the State must necessarily delegate primary responsibility for these functions to the institutions.

The balance of teacher supply and teacher demand is periodically upset, but so far relatively few States have made appreciable headway in the regulation of the supply of prospective teachers turned out by the teacher-education institutions. Except in a few States, these institutions do not limit on a selective basis the number of graduates from approved high schools who are admitted to the institutions. Some progress is being made in limiting enrollments in professional curricula and courses, after the first or second year in college.

In the absence of effective centralized control over teacher-education, the State certification and teacher-education office, and the teacher-education institutions have joined in cooperative efforts in

a number of States to establish minimum standards for such work and to agree upon State lists of approved teacher-education institutions. Such efforts have been very fruitful, and have resulted in definite improvements in teacher-education and certification programs.

Accompanying the trend toward centralization of certification in the State board or department of education has been a less marked trend toward State control of teacher-education. The trend toward the issuance of certificates upon the basis of institutional credentials, and away from certification by examination, has necessitated much greater reliance by certification officers upon the standards and work of the teacher-education institutions.

Outstanding trends in the development of teacher-education institutions that have affected teacher certification include the lengthening, broadening, and general enrichment of the curricula and courses offered. Indications of such improvements include the development of teachers colleges, which increased in number from 46 in 1920 to 173 in 1937; the growth of schools, colleges, and departments of education in colleges and universities; a rapid decrease in the number of short curricula in normal schools and teachers colleges; and a corresponding decrease in the number of teacher-training high schools and county normals.

*Recommendations.*—(1) Certification requirements should stand primarily on a foundation of preparation in approved teacher-education institutions.

(2) The State teacher-education and certification office should be given authority to develop and maintain a unified and effective program of teacher-education and certification. While the work in teacher-education given by all agencies contributing to the supply of teachers in a given State should be subject to supervision or check by the State office, the extent of State supervision exercised in individual institutions may be limited in accordance with the effectiveness of work that is judged by the State office to exist. Cooperative action by the institutions themselves for the purpose of assuring the observance of satisfactory minimum standards by all teacher-education institutions within a State is highly desirable. By cooperative action of the State department of education and the teacher-education institutions, the development of a worth-while State program of teacher-education and certification may be materially hastened.

(3) Each State teacher-education and certification office, in cooperation with recognized teacher-education institutions, should formulate definite standards governing teacher-education within the State. The State office should maintain and disseminate to other States, lists of higher education institutions approved under these standards for

teacher-certification purposes. Such lists should be prepared with sufficient care to merit their acceptance without reservation by other State certification offices. Appreciable progress in this respect has been made by such States as Indiana and Pennsylvania.

(4) As rapidly as the supply of adequately educated teachers permits, teacher-training high schools and county normals, and short curricula in teachers colleges and normal schools, should be eliminated.

(5) Continued efforts should be made by teacher-education institutions to determine the qualifications essential to the teaching success of their graduates, and to redirect their programs accordingly. Future progress in this direction may be expected to result in more effectiveness and homogeneity in teacher-education, and in requirements for certification.

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