A THESIS ENTITLED

THE PREPARATION AND CERTIFICATION OF HIGH SCHOOL TEACHERS WITH SPECIAL REFERENCE TO TENNESSEE.

Prepared by

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THE PREPARATION AND CERTIFICATION OF HIGH SCHOOL TEACHERS WITH SPECIAL REFERENCE TO TENNESSEE.

PART 1.

A- THE PRESENT STANDARD OF PREPARATION FOR HIGH SCHOOL TEACHERS: WHAT IT IS: WHAT IT SHOULD BE.

I- THE PRESENT STANDARD:- Statistics relative to the actual preparation that the high school teachers of Tennessee have had are very difficult to obtain. At the beginning of the study of this subject, the writer sent the accompaning questionaire, to all the high school teachers-including both county and city schools-of the state, but the number returned was not sufficient to form any scientific conclusion on the subject. Of the four hundred fifty blanks sent to the various high school teachers of the state only sixty were returned giving the desired information.

Of the sixty returned, twenty-seven hold certificates issued on diplomas which is evidence that they hold a bachelor's degree from a college or university requiring four years of work to obtain the degree. Three were graduates of some high school with only a high school diploma, while thirty hold diplomas from some college but have not had the full four year course necessary to obtain a certificate on diploma.

Careful consideration of the blanks that were returned indicate significant facts; facts that preclude judging the standard of those who failed to respond by the data furnished by the few who did respond. In most cases those who furnished

SUMMER SCHOOL OF THE SOUTH
UNIVERSITY OF TENNESSEE, KNOXVILLE
TWELFTH SESSION—SIX WEEKS
JUNE 24-AUGUST 1, 1913

Blank for securing information concerning the preparation and certification of high school teachers in Tennessee.

Name- - - - - - - - - - - - - -Address- - - - - - - - - - - -Date- - - - -

Give below all schools attended including High School, Normal, College, University:

Name of school or college	Location	Dates Inclusive	Degree rec'd.

Give below Courses taken in Education, Psychology, etc.

Name and nature of Course	Where studied.	Hrs. per wk.	No. weeks.

Record of experience in teaching: Total number of years- - - - - - -

Former positions: Name of school	Location	Dates Inclusive	Subjects taught in each case	Salary in each case

Present position: Name of school, when accepted, subjects taught, salary

- -

Kind of certificate now held- - - - - - - - - -, How obtained (county, city, state examination - state which)- - - - - - - - - - - - - - - - - -

Or diploma- - - - - - - - - - - - If so from what school?- - - - - - - -

Fill out carefully and return to H. B. Hall, University of Tennessee Knoxville.

the desired information were teachers of several years experience, with scholastic attainments and salary far above the average. The average experience of those who responded was ten and one half years; average salary was $724.30 for a school year of nine months; and average of $80.74 per month. The minimum number of years experience was one year, with only one teacher of that experience; the maximum number of years of experience was 27. The lowest salary received by any teacher who reported was $495.00 or $55.00 per month for nine months and the highest salary reported was $1800.00 or $200.00 per month.

In the absence of statistical information I quote the following: "A large number of teachers employed in the high schools are college graduates. All teachers are licensed under rigid regulations of the State Board of Education. Those who do not meet the requirements as college graduates must take an examination under the direction of the State Board of Education in order to receive either a county or a state certificate to teach. The interest of the pupil as well as the interest of the qualified teachers is thus well protected. During the past two years, since these requirements were made, there has not come to this department a single complaint that any teacher, regularly licensed, is incompetent. I do not believe that any state has a better class of high school teachers, and where the local conditions will permit, I do not believe that better work is done"(51:3)*

*Note: Numbers refer to bibliography attached to this paper.

The following figures from the same report are interesting and instructive in forming an opinion concerning adequate preparation of high school teachers.

Total number of certificates issued during the year....238.
State certificates issued on diplomas.....64.
State certificates issued by examination.....49.
County certificates..... 125.
College graduates 26.9%
State certificates (both on diploma and examination)... 47.5%
(51:20)

It is very clearly seenthat in Tennessee the college or university prepared teacher in county high schools is considerably in the minority.

II-COMPARATIVE STATISTICS FROM OTHER STATES.

Kansas,- Of the 1342 teachers reported for the accredited high schools of Kansas for 1912, 1026 have had some college or university training; 256 some normal school training; 26 high school training and 37 have had some training in special schools.(63:39)

Minnesota- In 1904-the most recent statistics at my command-there were 582 high school teachers in the state; 491 ofthat number being college graduates; 50 normal graduates; and only 41 high school graduates.

College graduates..... 84.2%
Normal graduates..... 8.6%
High school graduates..... 7.04% (76:6-10)

North Carolina-
Number of high school teachers (reporting) ..... 454.
Number holding degrees..... 336.
College degrees..... 74.%

Miscellaneous training:
College training from one year to four..... 9.3%
High school trained 2.2%
Normal school trained..... 2.4%
High school teachers who have had some college or university or normal school training 93.3% (82:73)

South Carolina.

High school teachers-college graduates-	355.
High school teachers-partial college education-	50.
High school teachers-high school education-	34.
Total number of high school teachers	439.
College graduates	80.9%(97:12)

Vermont.

Total number of high school teachers	370.
College graduates	73.8%
Partial college training	4.5%
Below college training	21.7%

The above statistics are based on reports from 290 secondary teachers who make up the staff in the schools that were inspected.(72:18-19)

Washington(State)."Eighty two percent. of secondary teachers are of college grade" (72:19)

West Virginia: "In 1911-'12 there were 427 teachers employed in the high schools of the state-210men and 217 wemen. This was an increase of 71 over the year 1910-'11. In 1910-'11, 43.3 percent. of the high school teachers of the state were graduates of the standard colleges and universities. In 1911-'12 the percent. of such graduates had increased to 51.3. With few exceptions all other high school teachers are graduates of standard normal schools or have completed one or more years of college work. In 1911-'12, 91 high school teachers were enrolled in college or university summer schools and 23 teachers did college wokr by correspondence."(109:7)

III-The North Central Association of Colleges and Secondary Schools requires of accredited high schools that all the teachers in said high schools be college graduates.

Association of Colleges and Preparatory Schools of the Southern States requires of accredited high schools that at least three fourths of the academic teachers be college graduates.

IV- Brief summary.

Kansas- High school teachers with some college or university training.....,.....76.3%
Minnesota- High school teachers, college graduates,.....84.2%
North Carolina- High School teachers,college graduates,.....74.2%
High school teachers with some college training.....93.3%
South Carolina- High school teachers,college graduates,.....80.8%
Vermont-High school teachers,college graduates.....73.8%
WashingtonzState) High school teachers,colege graduates.....82.0%
West Virginia- High school teachers,college graduates,.....43.0%
Tennessee, High School teachers,college graduates,.....26.9%

We find that Tennessee is 16.11 percent. below the lowest percentage of college graduates of any of the above states,and 55.11 percent. below the highest percent. We must,however, consider the fact that the high school system in Tennessee is comparatively new and we are making progress but are still in the developing period.

The following quotation from State Superintendent Brister's Report for 1911-12 shows the progress being made by the teachers of the state to increase their efficiency. While this report includes teachers of all grades, we may regard a good percent. of them as being high school teachers.

"In 1912 it was estimated that 1000 teachers of the state were in attendance upon the Summer session of the Summer School of the South at Knoxville; 1000 more were at the summer sessions of the white normal schools;1500 attended the five state institutes and 700 colored teachers enrolled in the Agricultural and Industrial Normal School for Negroes and the two state institutes. This makes approximately 4200 of the public school teachers of the state in school for four weeks or more during the past summer. In addition to this, institutes were held in at least 65 counties with enrollment ranging from 50 to 200; so that it is safe to estimate that 7500 teachers of the public schools of Tennessee

during last summer were in attendance at some kind of school, with the hope of increasing their efficiency and benefiting their schools. This is a most remarkable record when the meagre salary which is paid to teachers in this state is taken into consideration" (3:431)

B- WHAT SHOULD BE THE PREPARATION OF HIGH SCHOOL TEACHERS?

I- The characteristic elements of a thoroughly prepared high school teacher are next to be discussed.

Sympathy- Doubtless the high school teacher is called upon to, in a measure, handle the most critical period of student life-that of adolescence. President G. Stanley Hall was correct when he said:"These years are the best decade of life. No age is so responsive to all the best and wisest adult endeavor. In no psychic soil does seed, bad as well as good, strike such deep root, grow so rankly or bear fruit so quickly or so surely as in this"(50:18)

Professor William F. Brooks in his study of the high school teacher from the student's point of view gives interesting facts concerning some essential elements of high school teachers.

In this investigation 1067 high school students were asked to write a composition on high school education with ten points in view, one of which was concerning their favorite teacher. Of the 1067students, 82.5 percent. or 881 students discussed the sympathetic teacher. Fifty two declared that they had never had a sympathetic teacher. The other 829 described in detail the sympathetic teacher.

The following quotation is significant. "In defining this

quality such expressions as the following were used";"The favorite teacher","the teacher best liked", "the best teacher I ever had", "the one who understood me most","the teacher for whom it is a great pleasure to work","the one whose memory I will always cherish","the teacher who is respected and loved by all".

"Of the 720 papers(161M. and 359F.)in which an accurate account of the numbers who named or emphasized the various qualifications and qualities of character especially admired,144 mentioned the fact that their favorite teacher was kind,forgiving,generous, or negatively stated said he was never rude,harsh,sarcastic, nor given to the use of ridicule.(7:244). 112 students said their most helpful teacher was pleasant,cheerful,sociable,or that he was never cross,or unpleasant,never scolded,criticised harshly, or continually found fault."(7:245)

The following quotation from the same article is significant- "The most striking result that the study reveals is the burning need which high school students feel for encouragement, sympathetic direction and help. No teacher who fails to give this sort of help was a favorite,while of almost any teacher disliked it was said that he discouraged his pupils and could not or would not,give the direction and encouragement required....In the study of why pupils drop out of school(referred to in this study) it was found that loss of interest and discouragement were the two chief causes assigned by the pupils for their classmates leaving school. Taking this in connection with the present result,it would seem that the most important function of the high school teacher is to give his students the direction and encouragement they so much crave and need. According to the pupils

reports, sympathy, kindness, personal interest on the part of the teacher, favorable recognition, guidance, direction and daily encouragement are absolutely nesessary for high school students to thrive" (7:278-80)

With the high school teacher sympathy is almost an indispensible characteristic. He deals with the students who are at the age -adolescence-that craves sympathy more than any other age. He must feel with the pupil, must know the pupil; know his good qualities as well as his faults. He should stimulate the worthy characteristics by encouragement and inhibit as far as possible the bad qualities by ~~the~~ sympathetic control and re-direction.

With sympathy intelligently used the high school teacher can accomplish wonderful results with his pupils; but without that sympathetic nature and disposition he may cause to be developed in the students such a spirit of stubbornness that they will sacrifice their privilege for a high school education before they will do the work required by the teacher.

To be convinced of this fact one has only to observe the number of high school students who leave school because of a failure in some subject, and in which the teacher makes no sympathetic effort to reach them and have the deficiency removed. (47:27,8

Imagination- To be truly sympathetic requires imagination. The teacher who is unable to look at things from the student's point of view is at a great disadvantage. To be able to get close to the students and make them feel that they indeed have a friend in the person of the teacher, one who places himself as one among them, is not a trait common to all teachers. No one can teach a high school boy to the best advantage who does

not have an abiding confidence of the boy, of his traits, characteristics, nature, environments, and all things connected with his life. The way of approach to the teacher ought to be made easy by him in leading the student to see that every interest of his is carefully guarded.

Progressive improvement.- To be successful as a teacher in the high school one must keep abreast with the advance in modern thought and methods along pedagogical lines. He must know what advancement is being made along the lines of his work. Certainly the teaching profession is a profession that is making rapid strides along certain lines of improvement.

The teacher who is content to plod along in the same old channel from year to year without attending meetings of school officers or reading the most important literature which gives the best to be had, at present, along these lines is indeed a detriment not to the teaching profession alone but to society as a whole.

The live teacher, the teacher who puts his whole time, energy and thought in his class-room work while there, and a majority of his waking hours while not in the class room, in preparation for the work and in searching for the best thought to be had on school work, is the teacher whose influence goes far in moulding the high ideals to be found in the best schools.

Progressive improvement is a question with which all good high school teachers are concerned at the present time. One has only to visit a summer school to find there a number of progressive high school teachers spending from six to eight weeks during the hot part of the year trying to improve their efficiency

in the school room.

This indeed may be considered as deserving of much praise for the high school teacher when the low salaries paid to such teachers ~~is taken~~ are taken into consideration.

Relative to the amount of time that a progressive teacher should spend in school seeking to be more thoroughly prepared for work Professor J. Stanley Brown says:"No ideal teacher can remain so who does not spend at least every fifth year or one fifth of each year in mastering the best and newest theories presented by the best colleges of education and normal schools".(10:32)

While there are a number of other characteristic elements, all of which are important ,that enter into a thorough preparation of a high school teacher-such as personality,humor, social efficiency,understanding of youth,the spirit of research, power of example etc.- but which would prolong this paper to too great a length to give space for a thorough treatment of each; yet I feel that I would do a great injustice should I fail to make some special mention of the element of moral character.

The high school teachers is called upon to mould and shape the character of the lives of students at the most critical age-adolescence-,an age when children respond readily to influence either good or bad. It is an age when the life is just entering into manhood or womanhood, and entering into a life of useful or useless citizenship. In view of this fact teachers of high school students are greatly responsible for the life of the boy or girl after he or she is through the high school. Ideals and habits are formed during that period that tend to shape their lives ever afterward

II- ACADEMIC TRAINING.

a-General Academic Training.- To my mind it is very clear that one of the greatest troubles with the high schools of Tennessee is the lack of teachers who have had a broad and thorough training in the Liberal Arts. Too many of the high schools are taught by teachers who have completed only the four year high school course . With only 26.9 percent. of all the teachers employed in the county high schools of the state being graduates from standard colleges or universities one can very readily see that lack of scholarship on the part of the teachers is a weakness in the high school system. This is not only true in Tennessee but in other states as well.

Professor George F. James says:" The best teaching in the public schools is found in the kintergarten and in the primary grades. Here the teacher is drawn to the occupation by natural ability and inclination and is fairly well equipped for duty by some years of general study and special training. She can point to something like twelve years of liberal study and two years of technical preparation as measuring the difference between herself and the pupils who are put in her charge. It is not surprising that careful investigation seems to indicate a greater efficiency in the elementary school than in any other part of the system of public education.

The teaching in the high school represents too often a training which is not much beyond that of the pupils in the same school in respect to years of study.....To put it simply, the high school teacher compares unfavorably with the elementary teacher both in general and special training

proportionate to the respective tasks."(59:26)

The person who makes adequate preparation for teaching by spending four years in pursuing a university course and obtaining a bachelor's degree and doing special work in education is given no special advantage by most of our school legislation as over against the untrained or poorly trained teacher. One has only to glance through the laws governing the certification of teachers in many of our states to see that side by side with the license issued on the basis of graduation from a reputable college or university, another certificate of equal validity is granted to other candidates by many years inferior in scholarship, training and experience. In a number of states, all proud of their educational systems, we find, for example, no legal advantage offered to normal school or university graduates as compared with young men and young women who have within the limits of a public high school course received some instruction in the methods of instruction and school management.

Our practice is and has been, one that, instead of urging liberal scholastic training, rather discourages the idea. Indeed, the practice rather inclines prospective teachers to try to get into the teaching profession by means of an examination rather than by the completion of a definite course in a recognized school.

It is often the case that the teaching in the high schools represents a training which is too little in excess of the pupils in the same school with respect to years of study. It is true that a number of high school teachers of Tennessee take special training in some one of the state normals or Summer School

of the South at Knoxville for a short period-six or eight weeks-during the summer; but a teacher who enters the teaching force of the high schools immediately after graduation from a four year course in some high school,and expects to secure the necessary university training by attending summer schools will have to attend about twenty summer sessions before completing a sufficient number of courses to be given a bachelor' s degree. In other words such a teacher will have taught for ten years before she can point to even two years of liberal study between her and the advance pupils of the school in which she is an instructor.

Again I quote from Professor George F. James:"The men who are in charge of school systems have come to demand three things of all candidates: first, a reasonable amount of native teaching ability; second, a fair acquaintance with the subjects to be taught; third, a definite idea of the nature of the school and some acquaintance with school room management and the ordinary routine of instruction and government. Each of these is a perfectly legitimate demand,and no one need be hypocritical in asking on which of them the greatest stress is or should be laid. If some superintendents make a special point of acquaintance with school procedure and are inclined,sometimes a little unduly, to give the advantage to experienced candidates even when they lack fair scholarship,the reason may easily be seen in the indifference toward professional preparation manifested by certain institutions from which young men and young women seek appointment as high school teachers although

in them they cannot in any technical sense be said to have been trained" (59:29)

These three demands of candidates are all very good and perfectly legitimate, but the second demand is now being urged as a thorough and broad acquaintance with the subjects to be taught. In many systems of high school education the demand for university training for high school teachers is being insisted upon.

b- STANDARD SUGGESTED FOR TENNESSEE HIGH SCHOOL TEACHERS.

To suggest a standard very much in advance of what is now required, and insist upon ~~the~~ its immediate fulfillment would not be practicable. But we can place a standard and work toward it. It is, however, impossible to reach the proper standard until boards of education realize that the "cheap" teacher is indeed the most expensive. When communities and boards of education realize that it is an infringement upon the rights of children to place them under incompetent teachers, laws requiring thoroughly prepared teachers and placing a minimum salary commensurate with well trained teachers, will be asked for and their enforcement welcomed.

As a minimum requirement it seems to me fair to ask that all teachers who enter the high school work should have had at least the equivalent of a college education. To place the standard lower to me seems but to put the school in the hands of immature, unscholarly boys and girls, and undeserving place hunters. The high schools are the colleges of the masses and should ever remain the centers of liberal culture.

That of course they can never be when in charge of teachers who have not had college training nor learned to love scholarship. I believe that only in exceptional instances should teachers who have not studied in a standard higher instution be permitted to teach in our high schools. Those who prefer to obtain certificates through examination only should be required to pass most thorough examinations. What we need in Tennessee is more difficulty in getting into the profession of teaching and less difficulty to remain in. Teachers who get into the profession should be given more encouragement to stay in by recognising their work in their specific department, and not by reading a prescribed course in other departments.

What if occasionally a very deserving individual were thus debarred and forced to enter some other profession? In most states the right to practice medicine is conditioned upon previous study in some reputable medical college. No mere cramming for examination- as might be possible to do- will suffice. The right to enter the examination, as in Germany, is conditioned by previous study for a number of years in some medical college. Many states have similar protective legislation in the profession of law. Why this protection ? I answer this in the language of Dr. Bolton: "Are the needs not as great in teaching? The results of mistakes are not always so immediately apparent to the public in education as in medicine, but to the specialist in education they cannot be hidden. Why intrust the most precious possession of the human race to ruthless hands of ignorant beginners and confirmed quacks and charlatans? Every poor teacher helps to spoil scores of children every year, while the quack

doctor of medicine occasionally harms an individual. The malpractice of the imperfect teacher is ten-fold more harmful to society than that of the quack doctor. The teacher guilty of malpractice dwarfs, distorts and poisons the mind and body of the budding, developing child; while the quack doctor merely fails to cure bodily disease. The quack teacher sows the seed of disease: the quack doctor simply fails to cure."(4:120)

No doubt the Germans are wise in requiring actual residential study in a university as a condition for teaching in the secondary schools. Normal school training is required of all who teach in the elementary schools. It is practically impossible for one to gain modern ideas of scholarship without university or college training. Private study, however beneficial it may be, can not adequately take the place of the laboratory methods of modern institutions.

c- Special Training in the Subjects the Student Expects to Teach.- Just how much training a person should have in any particular subject before attempting to teach is a question about which opinions of leading educators of to day are vastly different. While there is no uniformity of opinion as to how many years should be spent in preparation for teaching any spacific subject such as, Latin, English, German, French, Domestic Science, Domestic Art, Manual Training etc., yet there is uninimity of opinion that no person can teach a subject successfully without a thorough mastery of the subject.

This is an age of specialization, and every year witnesses a greater number of high schools that establish departments of Manual Training, Domestic Science, Domestic Art, Agriculture etc.,

all of which are taught by those who have specialized in the particular department in which they teach. In fact the day has passed when it was thaught that a teacher should know every thing about all departments of school work. It was a great step for progress when school authorities began to realize that the successful teahher is not he who spreads his work out over the entire curriculum and endeavors to teach all of the subjects contained therein; but he who specializes and is able to teach, perhaps only a few subjects, but can teach them well is the teacher saught for to day.

But just how much specialization should be done is a question that is not taken into consideration in the laws governing the qualifications of high school teachers in any of the states. Even Claifornia which has raised the standard of preparation for high school teachers higher than any other state fails to make any provision along that line except to state that a part of the year spent in graduate study must be devoted to one or more of the subjects taught in the high school.(12)

1- The German system of specialization in the subjscts the teacher expects to teach is doubtless a system worthy of careful consideration.

In most German states the minimum amount of work in the university required of high school teachers is placed at three years. Although three years of work is the minimum requirement and students who have completed that amount of work are eligible for the examinations, yet four or five years is nearer the average length of time spent by German students in preparation for the subject or subjects they expect to teach. In fact the student when he enters the university has, as a general thing, already

determined what profession he is to follow; and the intending teacher has decided upon his specialties. The problem of his life work being settled, as a rule the greater part of his university work is devoted to specializing in the subjects which he expects to teach or rather those subjects in which he will later be examined and hopes to teach.

It is a significant fact about the German system of education that no amount of specialization or thorough preparation along any certain line, no degree-not even the doctor of philosophy-nor any other scholarly distinction, is considered as evidence of sufficient preparation to entitle the student to teach in the high schools. The state examination is the only test of a candidate's preparation for the position as teacher in the high schools. In fact, one of the four specific aims -viz: to test (1)the candidate's proficiency in pedagogy and philosophy, including psychology, logic, and ethics; (2) his familiarity with the German language and literature;(3) his acquaintance with the doctrine of his religion, and (4) his knowledge of the subjects which he expects to teach- of the German examinations is to test the applicant's knowledge of the subjects he expects to teach and in all four of these lines, with the possible exception of religion, he will have had special training under university professors. (92:355)

Even in addition to the above requirements which appear, indeed, far-reaching to most teachers of the United States, the Russian system requires a teacher, in addition to the general requirements, to be qualified-as evidenced by the examination-in at least four subjects or their equivalent, and he must not presume to teach any thing in which he is not properly qualified.

A certificate-while in Tennessee and other states confers ~~the~~ the right to teach-gives no such right. The holder is required to spend two years specializing as trial teacher in some approved high school under the supervision of a competent instructor.(92:363-4)

What a vast difference in the amount of specialization in the subjects the teacher expects to teach required of German teachers and that required-and if not required possessed by-high school teachers in Tennessee! Witness the number of teachers in our high schools who are teaching subjects-such as drawing and domestic science- in which they have had no special training other than that gathered from text books studied in their rooms.

The writer within the past four years has had under his supervision more than one teacher who was compelled to teach subjects- these being in the prescribed curriculum-their sole knowledge of which had been gotten without specific instruction,because of local conditions and the inability to secure a teacher specially prepared in those subjects.

Conditions are slowly changing,however,and some universities recommend from two to three years training in any subject that high school teachers are expected to teach. While comparatively few of the state universities make any mention of this in their catalogues, yet there is considerable uniformity in the amount of training recommended by those universities that have taken any action along that line. The following examples of three of the state universities will give some idea of the progress being made.

University of Iowa.- Students who are preparing to teach botany are recommended to complete three courses in that subject.(One course being six semester hours).

As a preparation for teaching Chemistry the university recommends that at least two courses should be mastered.

Students who are preparing to teach German are urged to complete a minimum of four courses in that subject above Freshman electives.

For students specializing in history expecting to teach in that department at least sixteen semester hours of work in the department of history is recommended for the sophomore, junior and senior years.

The minimum requirement in mathematics for those seeking recommendation as teacher of that branch in the high schools includes the work outlined in the first two years of undergraduate study. (24:216-218)

University of Missouri--Before the University of Missouri will grant a life certificate candidates must specialize in at least one subject, doing the minimum amount of work as recommended by the university. The following is the minimum amount of work in each subject recommended.

In Agriculture the minimum requirement is fifteen hours of university credit, (a credit being one semester hour) in agronomy, animal husbandry and horticulture.

For teaching biology twenty hours of university credits in botany and zoology with not less than ten hours credit in either subject and in addition a course in the teaching of botany, or the teaching of zoology, with two hours of university credit.

For students preparing to teach chemistry fifteen hours of university credit in chemistry and in addition a course in the teaching of chemistry with two hours of university credit is the minimum requirement.

Students who expect to teach English are required to have eighteen hours of university credit in English and in addition a course in the teaching of English with two hours of credit.

For competency in teaching French the minimum requirement is eighteen hours of university credit not including credit for the elementary course in French.

Students who expect to teach German should have eighteen hours of university credit above credits for elementary German and in addition a course in the teaching of German with two hours of university credit.

For teaching history fifteen hours of university credit in history, three hours in American government and a course in the teaching of history with two hours credit is required as a minimum.

To be able to teach home economics fifteen hours of university credit and a course in the teaching of home economics with two hours credit is the minimum requirement.(28:245-247)(University credit is equivalent to one semester hour)

University of Texas- The amount of work in each subject recommended by the university to be completed by students before teaching the subjects in the curriculum of the high schools is as follows: For teaching English four courses- a course being six semester hours-one of which should be an advanced course in English is recommended.

To teach French three courses and one advanced course in French is the minimum amount of work recommended .

To teach geology the university recommends that students complete at least three courses.

Students who expect to teach German should complete four courses, one of which should be in Germanic literature.

To be a competent teacher of Greek in the high schools the university recommends the completion of five courses.

Students preparing to teach history should have had at least three courses, one of which should be in advanced history.

For teaching Latin the university recommends that students complete at least five courses as a minimum and two additional courses if possible.

For teaching physics in the high school at least four courses are recommended.

Three courses in Spanish are required to be successful in teaching that subject. (35:190-191.

III- PROFESSIONAL TRAINING.

The professional improvement of teachers in America, while it has not kept pace with the professional training of physicians, lawyers and other vocations in life, is not altogether a new idea. This improvement for american teachers was begun in the early part of the nineteenth century. Horace Mann, Henry Bernard, and other educational leaders believed, and rightly so, that the development of the public school system depends entirely and unconditionally upon the development of the teachers under whose care and instruction the children are to be places.

The task would be too arduous-and indeed it is not necessary for a paper of this nature-to recount the struggles for ~~the~~ the professional education of teachers during the last century. Suffice it to say, however, that while the professional education of the lawyer, the minister and the physician were practically settled in the nineteenth century, it remains for the future to establish upon a firm and enduring basis the necessary professional

qualifications of the teacher.

We have, indeed, already made great progress in that direction. The first normal school established in the United States was opened for work in Lexington, Massachusetts, on the third day of July, 1839, only three pupils being in attendance, and only twelve pupils being enrolled for the first three months, and not more than thirty-one at any one time during the first three years. (99). According to the report of the United States Commissioner of Education for 1911, there were in our country at that time 223 public and 65 private normal schools with instructors numbering 4127 and students pursuing courses in professional education numbering 8095. In addition to these there were 19926 students pursuing similar courses in public and private high schools and academies. The total number of students pursuing courses in professional education in these institutions being 105021. (106:1089, vol. 2) While a large majority of these students are being trained for elementary and special work, the figures show a wonderful awakening along the line of professional preparation of teachers within the last half century.

Furthermore the colleges and universities have entered the field of professional training of teachers and are accomplishing a great deal; especially with respect to the training of teachers for the high schools. The first professorship of education effectively established in America was created by the University of Michigan and in 1878, the late Dr. William H. Payne was called to that professorship. At that time there were only two other institutions in the English speaking world that made any attempt toward the professional training of teachers-the University of

Glasgow and the University of Edinburg.(99:5-6). There are to day possibly not fewer than 1500 students in American colleges and universities pursuing courses in professional education. The number of such students reported by the United States Commissioner of Education for the year ending June 30,1911 was 11256.(106:1089,v.2)

In Tennessee alone there were for the year 1911-1912 according to State Superintendent Brister's report 7500 students pursuing such courses in summer schools,normals and institutes.(6:431) In the Summer School of the South at Knoxville alone there were 2406 students pursuing such courses.

In connection with professional education of high school teachers,two questions naturally arise,namely: first, what should be the minimum amount of work required in education before being permitted to teach in the high schools? and second, what should be the content of a professional course in education?

A SUGGESTED MINIMUM COURSE OF PROFESSIONAL TRAINING

As to the minimum amount of professional training that should be required of students who expect to teach, school authorities, and leading educators are quite different in their opinions. This difference of opinions is clearly seen by a glance at the professional requirments which the laws of the various sates provide as a prerequisite for high school teachers.

While in most states the minimum amount of professional training required is surprisingly low,yet we must take into consideration the fact that ideals are not made in a day,and that possibly the minimum requirements are as high as present conditions will permit. The tendency, however,in practically all the states seems to be toward raising the standard-as in California ,for

example,-as public sentiment and changing educational ideals of the country will warrant.

Certainly we should not place the minimum amount of professional training that should be required of all high school teachers below the minimum amount of work required by the universities for granting degrees or certificates in the department of education, and as an outline of what would constitute this requirement I give the amount of work necessary to receive a certificate or a degree from the following state universities, together with the *courses in education given by the Universities of Iowa, Nebraska and Texas.

University of Alabama- Students preparing for educational leadership in the state must complete at least fifteen hours of prescribed work in the school of education in addition to the regular college work before receiving a degree in education from the university.(14: 74)

University of Colorado- The course of study in the college of education is for four years, 120 hours of credit being required for graduation. Graduates receive B.A. degree and Bachelor's diploma in education.(19)

University of Iowa- The following courses are offered by the university. Principles of education, which includes education from the standpoints of (1) biology, (2) neurology, (3) psychology, (4) anthropology, (5) sociology; methodology; history of education, ancient, medieval and modern; school supervision; childhood and adolescence; the high school, social sphases of education (the

*Note. All courses have been reduced to semester hours.

place and function of the school in society); philosophy of education; educational psychology; educational legislation, organization etc.; foreign school systems; state school systems; city school systems; the education of defectives; moral education; school support and religious education. (24:114-117)

Certificate from the school of education- First, to secure this certificate students must meet all requirements for the degree of bachelor of arts or of science, Second, those who elect education as a major are required to take forty-eight hours* in that department. Third, the candidate must have completed the professional studies required for the highest grade state certificate which includes (a) fourteen hours in education and (b) six hours in psychology. (24:214-215)

University of Missouri- The school of education gives only the Bachelor of Science degree.

To receive this degree the student must complete (a) a major course of twenty four hours in education including three hours of educational psychology, taken prior to entrance; four hours of history of education; three hours of theory of teaching; two hours of school economy, and one hour in school hygiene: and (b) a minor course of twelve hours chosen with the consent of the Dean in subjects related to education. (28:244-245)

University of Nebraska- The following departments embrace the professional courses offered by the university. (1) Education; (2) educational psychology; (3) educational theory and practice; (4) secondary eduaction; (5) agricultural education.

*Note. Hours means semester hours.

In addition to these five principal departments, courses are offered in various subjects the student may desire to teach. (29:85-86)

Degrees and certificates- The teachers college offers no undergraduate degree; but offers the Master of Arts degree in education upon completion of an approved professional three years course, beginning in the junior year and extending to one year of graduate study.

Teachers diploma- This requires completion of two years of professional work in the major subjects for which the candidate is preparing to teach.

The university teachers certificate will be granted to candidates as follows: (1) Candidate must hold bachelor's degree; (2) must have completed forty hours of non professional work divided between two major subjects or one major and two minor subjects which the student expects to teach-no major subject to be less than sixteen hours, and no minor subject less than twelve hours; (3) professional knowledge-the completion of fifteen hours in education and six hours in psychology. (29:79-80)

University of Texas. The following courses are offered to regular students: psychology of education, psychology of development, history of education, philosophy of education, seminary in education (psychology of adolescence); seminary in the administration of higher education; secondary education (courses of study and organization of high schools); school supervision and administration; seminary in psychology of education; the practice of teaching; experimental problems in reading; experimental education; seminary in the history of education. (35:198)

Teacher's diploma.- To receive the teacher's diploma students

must complete 126 hours, 102 in college of arts and 24 in the department of education, must satisfy the requirements for bachelor of arts degree.(35:187)

c- THE CONTENT OF A PROFESSIONAL COURSE.

To formulate a course of study for professional training and expect it to be the basis upon which future teachers are to be trained would result in disappointment. In fact, I doubt the possibility of a uniformly fixed course of study for teachers; for the training of teachers will change with the change in civilization, and with the changing ideals of education.

Quite a number of states and even more cities are beginning to require four years of college or university training of all high school teachers. Certainly then, the professional training that is so essential for the wellfare of both teachers and schools should be a part of this four years of college work.

At present it seems to me that an ideal professional course in education may rightfully include certain academic courses in those subjects which the student is preparing himself to teach. These courses may at least be considered semi-professional, for while the lawyer or the doctor does not expect to make any practical use of the arts courses which he masters,the teacher works continuously along the arts courses he studies. Even during this period of academic study special instruction in methods of teaching the courses taken would be entirely in place.

For the strictly professional training which should be given in the junior and senior years I would advocate the following course,namely;(1) educational psychology including child psychology.

There has been a considerable amount of discussion within recent years, as to the real place of educational psychology. The departments of psychology in the universities and colleges had failed to give any special attention to the educational learning of psychology until the development of the departments of education in which the term educational psychology had its beginning.

Recognizing the importance of psochological training for the teacher, Dr. A. Caswell Ellis has said: "If education means any thing, it means that the student is to acquire knowledge, as well as skill, in a number of useful activities, while, at the same time, his own various human powers are to be developed in a normal, healthy way. Now the teacher in order to be economical and efficient in the expenditure of his own energy, must know the processes by which the mind best receives, assimilates, remembers, recalls and uses ideas. He must know, furthermore, the processes by which the mind and nervous system most easily make and perfect new reactions and new habits, either physical or mental. The teacher needs to know what are the normal processes at the several stages of development, and what helps and what hinders each stage. For a teacher to operate without this knowledge is as sinful as for surgeons to perform operations upon the body without a knowledge of its anatomy and the psychological functions of the several organs." (99:8-9)

In the study of child psychology which is included under the above heading, special stress should be placed upon the development of the child up to and including adolescence.

(2) The high school teacher should have a knowledge of the history of education-ancient, mediaeval and modern.

(3) There should be a comprehensive course in the philosophy of education stating the underlying principals of education,and their influence in determining the material curricula.

(4) High school problems. This course should consist of a consideration of the main problems now confronting secondary education. Such topics as relation of the high school to the elementary school,college and community, equipment,government,reorganization of curriculum with special attention to vocational training, physical education and social life of the high school.

(5) Methods in high school subjects. It matters not how well a teacher may have mastered the subject-matter of any high school study,if he has had no training in the manner of presenting the subject to students he cannot have the success that he could were he trained in the method of presenting the subject. A teacher may know the principles of Arithmetic so thoroughly as to be able to readily solve any problem in the text and still fail in presenting it to his class.

(5) Practice teaching and observation. It is needless to say that few colleges or universities do but very little of this work. Only a few universities maintain well organized practice shools where students can teach under the critical observation of a trained teacher. Most universities give what practice teaching and observation work they do by special arrangement with city schools.

Though few universities maintain practice schools for students in education, yet university professors of education advocate such methods and realize the importance of teachers being trained in the actual work of the school,under the supervision of competent professors.

C- UNIVERSITIES AND NORMALS AS TRAINING SCHOOLS FOR HIGH SCHOOL TEACHERS.

For several years there has been sonsiderable rivalry in the various states between the universities and the normal schools as to the right of each to share in the professional training of teachers; the universities claim that from the standpoint of superior equipment and expert professors that should have in their care the training of secondary teachers. The claim of the normal schools is that the universities do not and can not supply the demand for well trained high school teachers and hence the normal schools should train secondary teachers also.

In this connection it may be said, however, that one has no exclusive right over the other in regard to training teachers; the main object is that the teachers really be trained and fitted for service.

I am of the opinion that if the normal schools are to attempt the work of training teachers for the high schools they must necessarily have a department separate and distinct from the department for the training of elementary teachers with entrance requirements quite in advance of that required of teachers for the elementary grades. If this arrangements is not made and one common entrance standard be required for all, it will tend to lower the standard for high school teachers equal to or at least very little above that for the elementary school.

Relative to this subject I quote from the following leading educators opinions for both the university and normal as training schools for high school teachers.

Hall, G. Stanley- "I think preparation of secondary teachers

should never be permitted in a normal school where primary teachers are trained, but should be entirely given over to the university. This is essentially the case in Germany..... I think there is very little in common either in method or matter in the curriculum proper for these classes of teachers."(50:84)

DeGarmo, Charles- "The most obvious distinction between the normal school and the university as a training ground for secondary teachers is that the normal school is obliged by its conditions, its primary aims, and its traditions to devote its chief energies to the preparation of elementary teachers. Only in a large and general way can it devote more than a fraction of its attention to the training for secondary schools."(42:89)

Van Liew, C. C. - " The weakness of the normal school, especially in the matter of training secondary teachers, lies in its ability to supply general culture. So far as secondary teachers are concerned, at least, it ought not to try it."(107:92)

President Thompson, of Ohio Sate University- "I think it goes without discussion that for the cause of education the teachers in our high schools should have the university spirit and that they ought to have college training. This argument is based not so much upon the particular subject studied as upon the superior value of association with university faculties and university methods. Our high schools have suffered for lack of such teachers on the one hand and on the other hand they have suffered from having too many teachers whose normal school training or other education has not been with a view to training them for high school work. It would seem therefore that in some form the teachers'college ought to be a part of the university organization." (4)

Buchner,E.F.-"By reason of more maturity of students the college can do more effective work in education for preparing high school teachers. Specialization and scholarship are possible in the college and not always so in the normal school organization. The college is not a fertile field,however, for the development of the educational spirit as compared with the normal school. The experiences of practical school man such as superintendents and principals of city systems seem to agree in pronouncing the average college graduate a better high school teacher than the average normal school graduate".(5)

Thorndike, Edward L.-"The proper professional training of an intending high school teacher can be given more economically and more effectively in connection with a university".(5:)

Arvin, S. Olin,- "The university is much better than the normal school,-at least double the value,I should think".(5:164)

Rose, Wickliffe,-"I am convinced that university work in education is better than the ordinary normal school work for those who are to teach in high schools. If the department of education in universities could have such liberal support as to enable them to do all the work for training teachers, I think they would be better for this purpose than advanced normal schools. The association of teachers with men and women of liberal culture preparing for other professions can not fail to have a broadening tendency which is much needed by a teacher whose greatest danger is becoming too narrow in thought and sympathy".(5:166)

Sutton,W. S.,-"Preparation in colleges and universities is superior because:(a) the academic training is broader and more thorough.(b) The atmosphere,ideals and outlook of universities is

necessarily better than in normal schools. (c) Normal schools tend to over emphasize the mechanics of teaching,devices etc. to the neglect of principles. The universities have been and always will be the chief source of supply for teachers in high schools and should therefore provide for their professional training. Professional and academic training should be carried on pari passu and this can best be done in a university. The university itself gains in many ways by the presence of a department."(5:167)

Maxwell, Guy E.,-"The educational demands of the present day place upon the normal school the responsibility for an extension of its course of study,equipment, and faculty,as will enable it adequately to fit teachers for principalships, supervision and general educational leadership in the common or public schools of the state."(71:571)

Hill, Joseph H.,-"Whether in a given state the training of teachers in any field be done in one institution rather than another is a local question: the important thing is that it really be done."(53:565-566)

Felmley, David,-"The normal school should not abandon the high school field. The colleges and universities while claiming the exclusive right to furnish high school teachers,have not made adequate provision for equiping such teachers. In many college circles pedagogy is still sneered at. Any body,they say, can teach a subject if he knows it. In actual training in the art of teaching under the diraction and criticism of skilled trained teachers the college does practically nothing. Hence most these college fledgelings, when installed as high school teachers,have little to guide them except their recollection of the practice of their professors."(45:736)

McGregor, D.,-"The work of training teachers for secondary schools is at present divided in most of the states between normal schools, colleges and universities. There is,however,a well defined movement in our higher institutions of learning,especially in universities,to limit the product of normal schools to the grades and to create a monopoly whereby only graduates of colleges and universities shall be eligible as teachers in secondary schools. On behalf of normal schools we unqualifiedly condemn such movements and protest against the creation of such mopoly.....

Let it be observed that university graduates have the advantage of normal graduates in being prepared in only university accredited schools;in being more mature by two years at the time ofgraduation; and in having two years more training;yet in spite of these favoring circumstances there is no evidence that the university graduate is the more efficient teacher in the ordinary work of the high school....

A recent census of teachers in the high schools of Wisconsin for the school year 1907-1908 show that during that year 476 people entered upon the work of teaching in high schools in the state. Of that number,the normal schools of Wisconsin furnished 166, the University of Wisconsin 121; 36 were not classified, and the remaining 176 were graduates of 66 different institutions-6 of them normal schools,31colleges and 15 universities.....

If the field should be left to the universities, it does not seem possible that its output could be sufficient for the needs of even one half of the high schools of the state. At present statistics show that the university furnishes about one quarter of the number needed.....

In the normal schools alone does the business of teaching over-

shadow every other school interest. There the business is to teach so that teaching power may be developed in the person taught.....

Normal schools are especially equipped for training teachers while no other institutions are so equipped." (73:581-587)

PART 2.

THE CERTIFICATION OF HIGH SCHOOL TEACHERS WITH SPECIAL REFERENCE TO TENNESSEE.

A- THE PRESENT REQUIREMENTS IN TENNESSEE FOR THE CERTIFICATION OF HIGH SCHOOL TEACHERS.

I- County High Schools- "All teachers of the public high schools of Tennessee receiving aid from the state high school fund as provided by section 5 of the General Educational Bill of 1909 are licensed under regulations prescribed by the Sate Board of Education." (101:79-80)

Of course the rules and regulations of the State Board of Education are subject to such changes from year to year as may, in the opinion of said Board, seem necessary for the betterment of the high schools of the state.

The following are the regulations governing the certification of high school teachers as adopted by the Sate Board of Education for 1912-1913.

(1)"All teachers must hold certificates before they can enter into a contract,begin service or draw their salary from the high school fund.

(2)To obtain a certificate,either state or county,one must make an average of 85 percent on all subjects of one or more departments,and not fall below 70 percent on any.

(3) A county certificate,good for two years in the county in which issued, will be given persons making the required grades in one or more departments in the county examinations.

(4) A State Certificate, good in any county in the state for a period of five years and renewable for efficient service, will be given persons making the required average in the first five departments under Course of Study. Persons making the required average in any one or more, but less than five, of the departments are given a certificate good for three years, and renewable for two years only.

(5) A certificate good for one year in any county in the state, renewable annually for efficient and continuous service, will be issued on a bachelor's diploma from a standard college or university, provided the holder thereof presented as many as fourteen credits at the time of entrance, did four years residence college work, and has credit on some professional subject equivalent to twenty-four weeks when such diploma and certificate of entrance requirements and professional work have been approved by the State Superintendent and State High School Inspector.

(6) County certificates expiring this year are not transferable to any other county, but may be renewed on application, endorsed by the county superintendent of the county in which the certificate was issued, for a period of one year, provided such applicant passes the examination on the high school reading course for the scholastic year 1911-1912. Davenport's "Education for Efficiency" and Monroe's "A Brief Course in the History of Education" - and is re-elected to a position in the county" (51:47-48)

Examinations- All examinations in 1912 were held on Tuesday, Wednesday and Thursday, June 11-13, and September 3-5, and the departments came in the following order.

Tuesday, Mathematics, Commercial and Home Economics; Wednesday,

English and Latin. Thursday, History and Science.

The state examination was conducted in the City High School, Knoxville;Sate Capitol,Nashville; and in Court house,Memphis in June. In September the state examination was conducted at the same places for East and Middle Tennessee, but at Jackson instead of Memphis for West Tennessee.

On the same dates county examinations were conducted under the regulations of the State Board of Education at the county seat of every county in which there is a high school,by a committee composed of the county superintendent and two other capable members elected by the county high school board of education. In these examinations papers are graded by the examining committee and with certified statements of grades filed with the High School Inspector.(51:48)

Course of Study- The following is the course of study given by departments in any one or more of which a teacher must be examined to secure a certificate,according to grade and duration of certificate desired.

(1) Mathematics-Arithmetic,Algebra and Geometry;(2) English- Rhetoric, Leterature;(3)History-American History,History of England, General History, Civil Government;(4)Latin-Latin Grammar,Caesar, Cicero,Virgil. Greek,French or Spanish may be taken with Latin; (5) Science-Biology,Psychology,Physics,Physical Geography,Chemistry,Geology of Tennessee and Agriculture;(6) Commercial-Commercial Arithmetic,Commercial Law,Bookkeeping,Stenography and Typewriting; (7)Home Economics- Cookery,Sewing and Sanitation. Spelling and English Grammar are included in all departments.

II-Town and City High Schools- Under the laws of Tennessee, cities and incorporated towns may establish school systems independent of the

control of the State Board of Education. In towns where such school systems exist, the Board of Mayor and Aldermen are given the power to appoint a Board of Education"which board when so appointed, shall have full power as trustees or directors to manage and control such schools, to elect or emply well-qualified teachers, and to prescribe all needful rules and regulations". (101:33-35)

According to the above law the certification of the high school teachers of towns and cities maintaining such school systems does not come under the rules and regulations of the State Board of Education, but under the management of the local board of education appointed by the Board of Mayor and Aldermen of said towns and cities.

In an effort to secure accurate information concerning the preparation of high school teachers in the towns and cities of the state that have school systems independent of the state management, the accompaning letter was sent to all superintendents of such systems but only four made any reply.

The failure of other town and city superintendents to furnish any information indicates that there is no provision made in their school systems for the high school teacher other than that made for the elementary teacher.

Letter sent to town and city superintendents.

Loudon, Tenn. Jan. 7, 1913.

Dear Sir:-

I am preparing a thesis on The Preparation and Certification of High School Teachers with Special Reference to Tennessee and am in need of information concerning the rules and regulations you have for the preparation and certification of high school teachers.

Will you, therefore, be so kind as to send me any pamphlets

you may have that will furnish the desired information?

If you have no rules and regulations in printed form please write me-using enclosed stamped envelope-stating the ~~requirements~~ requirements for your high school teachers.

Thanking you in advance for aprompt reply I am,

Very truly yours,

R. A. Moser.

Chattanooga-"We now require each new high school teacher to be a graduate from a good college or university with A. B. or B. S. degree; also to have had one or more years teaching experience in high school subjects."(Letter from Professor D. A. Graves, Supt, of Chattanooga City Schools)

Knoxville- "We do not have any specific rules or regulations for the high school teachers in Knoxville. We recognize diplomas from reputable universities for license to teach in the city high schools."(Letter from Professor W. E. Miller, Supt. of Knoxville Public Schools)

Memphis-"Our high school applicants are examined in algebra, physical geography,advanced grammar,and rhetoric together with two high school branches selected by the applicant and approved by the high school principal."(Letter from Professor L.E. Wolfe, Supt. of Memphis City Schools)

Nashville- "All applicants for work in our public school system must pass a satisfactory examination given by the Board of Education. For four or five years it has been the policy of the Board to require of candidates for high school work,in addition to the general examination,a degree from a recognized college or university." (Letter from Professor J. J. Keys,Supt. Nashville City Schools)

We see that in Chattanooga and Nashville considerable emphasis is placed on scholastic attainment based on college or university degrees, while in Memphis and Knoxville all that is necessary to be eligible for high school positions is to be able to pass a satisfactory examination for high school work.

III- A New Certification Law.- The above is a statement of the rules and regulations governing the licensing of high school teachers at the present time, but a bill has been passed by the legislature now in session which will bring about some changes in the manner of the certification of high school teachers in the future. The following are the main features as taken from the new law:

Sec. 1. "Be it enacted by the General Assembly of the State of Tennessee that no person shall be employed to teach in any public elementary or high school of the state or receive pay for teaching out of the public school funds of any county until he has received a certificate as prescribed in this act.....

No person shall receive a certificate to teach in the public schools of this state unless he has a good moral character and under no circumstances shall certificates be granted to persons addicted to the use of intoxicants, or opiates or cigaretts."

Sec. 6.-"Be it further enacted, that after the first day of July, 1914 the requirements for certificates to teach in the public schools of this state shall be uniform in all counties. Every certificate shall be issued by the State Superintendent of Public Instruction in accordance with regulations here after prescribed"

"Except as hereinafter provided.....every person receiving a certificate to teach in the public high schools of the state shall have passed a satisfactory examination in the history of secondary

education,principles and practice of teaching and school management,with special reference to high school work,English language and literature,and other subjects named on the certificate issued by him.....

High school certificates are designated and graded as of the first or second grade; first grade valid for a period of five years from date of issue,second grade certificate for a period of two years.

Certificates granted on examination taken in the various counties under the supervision of the local examining committee as hereinafter provided,shall be good only in the county in which the examinations are held. Certificates granted on examination taken at special places under the supervision of the State Board of Education shall be good in any county in the state.

To obtain a first grade certificate, applicant must be at least nineteen years of age,and must have had at least eight months successful experience,and must make an average of 85 percent.on the subjects prescribed for examination and must not fall below 70 per cent. on any subject.....An applicant who makes the first grade average as required but who has not the requisite teaching experience will be granted a second grade certificate which may be changed to a first grade certificate after eight months successful teaching.

Professional Certificates shall be issued by the State Superintendent of Public Instruction as follows.

A certificate good in all schools,except high schools of the first class, to the applicant who has completed the normal course of the State Normal Schools.

A high school certificate of the first grade to the applicant

who is a graduate of the State University who has completed any six half-year courses offered by the university in psychology, history of education, principles of teaching and school management, not less than two of which shall have special reference to high school work.

Graduates of other institutions of the same rank as the State Normals or State University may be licensed under the same rules and regulations as for the normal and university graduates of this state.

All certificates granted by the State Superintendant of Public Instruction on diplomas or degrees from institutions of learning shall be good in any county in the state.

Any person holding a first grade certificate-either elementary or high school-may have same converted into a permanent certificate of the same class or grade by passing a satisfactory examination in the courses provided for such certificate by the State Board of Education. Such courses to cover the principal subjects named in the certificate. Permanent certificates may be revoked if holder ceases to do school work for more than three successive years, or if they fail to attend institutes and do the work of the reading circle or meet all the requirements as prescribed by the State Superintendent of Public Instruction and State Board of Education.

Before entering upon examination every applicant for a high school license shall pay a fee of three and one half dollars($3.50)

An applicant for license who presents a diploma or certificate or other credentials in lieu of examination shall pay afee of two and one half dollars($2.50); one half of this fund to be retained by the county for institute purposes.

These provisions apply to all public school teachers in the state except those employed by Boards of Education having a population of more than 7500 by the Federal census of 1910 or any subsequent Federal census."

B- A SUGGESTED PLAN FOR THE CERTIFICATION OF HIGH SCHOOL TEACHERS.

I- High School Certificates Should be Distinct from Elementary Certificates.

While it seems to me a very essential thing for the high school certificate to be separate and distinct from elementary certificates yet more than two-thirds of the states have no laws providing for special high school certificates. Only the following seventeen states have made special provision for high school certificates, namely; California, Connecticut, Georgia, Illinois, Indiana, Louisiana, Massachusetts, Nebraska, Nevada, North Carolina, Ohio, Oklahoma, Tennessee, Utah, Virginia, West Virginia and Wisconsin.

The fact, however, that only the above seventeen states have made special provision for high school certificates does not indicate that high schools are not established in the other states. It merely shows that in most states certificates are more general and the high school field is covered by the elementary certificate and that Boards of Education make no additional requirements such as college degrees, courses in education etc.

The opinion that high school certificates should be distinct from other forms of certificates is getting to be more general among educators and doubtless the day is near when many more if not all of the states, will have special rules and regulations for issuing certificates to high school teachers.

Dr. E. E. Rall of the University of Tennessee has recently prepared a paper on "The Certification of Teachers in the South" and during the preparation of the paper sent a questionaire -one of the questions being, should there be a distinction between elementary and high school certificates?-to twenty-one presidents of the leading universities and state normals of the South and twenty of that number answered that there should be a distinction; only one answering in the negative.

While probably too few were asked for their opinions on the subject to form any definite conclusion as to the sentiment of school men in general, yet we can see that the tendency is toward a distinction.

II-Grades of High School Certificates.- It seems to me that two grades of certificates would be sufficient to meet all present needs of the high schools of Tennessee. These two to be of the first grade and second grade respectively .

a-First Grade High School Certificates- This certificate should be granted on applicant's presentation of satisfactory evidence of having completed a full four years college course in some reputable college or university provided such college or university training included preparation to teach one or more lines of high school work. The diploma of graduation should be accepted as evidence of general academic preparation, but the candidate should, in addition to the above be required to submit satisfactory evidence from the faculty of the institution from which he secured his diploma of having satisfactorily completed courses in history and general theory of secondary education; the methods of instruction in the subjects, or subjects, he is prepared to teach; and class

examination

management, or pass a satisfactory in these subjects.

This certificate should be issued at first for a period not exceeding three years, but if candidate gives satisfactory evidence of successful teaching, it may at the expiration of the time for which it was issued, be converted into a permanent certificate valid for life provided that holder does not cease to be engaged in school work for a period of more than three consecutive years.

b- Second Grade High School Certificate.- This certificate should be issued to candidates presenting satisfactory evidence of having completed at least two years of study beyond a full four year high school course in a reputable college or university and on passing a satisfactory examination on two or more lines of high school work which the candidate is prepared to teach; and the theory of secondary education, the method of instruction in the two lines of work offered, and class management.

This certificate should be valid in any high school except as principal of first class high school. Certificate should be issued at first for a period not to exceed three years but upon evidence of successful teaching certificate may be renewed for a like period for which it was issued. Such certificate should not be renewed more than twice.

Diplomas from normal schools should be accepted in lieu of an examination provided such schools give courses at least two years in advance of a regular four year high school course and professional courses equivalent to the above requirement for examination.

III- Special Certificates.- Special certificates in music, drawing, manual training etc. may be issued to candidates presenting satis-

factory evidence of having completed courses in the above subjects as offered by reputable universities or normal schools ; or by passing satisfactory examinations in the above subjects as directed by the State Board of Education.

IV- City High School Certificates.- The necessity for special provision for city certificates is a disputed question. In states where the standard for certification is low there may exist a need for supplemental examinations for the larger cities; but where the state and county systems of certification are uniform and the standard high-such as in California-it seems but a needless expenditure of time and energy for cities to examine and certificate their teachers independently of the state. Such a system puts an unnecessary barrier in the way of the freedom of the changing of territory of good teachers and its tendency is to limit competition for positions to home product, which ~~in~~ results in an enbreeding process, low standards low salaries, which in turn counter balance any gain which the cities may be able to receive from independant examination and certification privileges.

It is a much better plan for all cities-unless the state standards are exceedingly low-to accept the regular state or county certificate and to require all candidates for a position to secure a certain grade of certificate before being considered by the City Board of Education. It is not necessary that cities accept the lower grade certificate at all; they may easily require candidates to hold first grade ~~state~~ State certificates before being eligible to a position in the high school.

And if this should prove not to be sufficient to meet the requirements, then an additional examination in professional

or additional subject-matter subjects may be superimposed for those who have no degree from a reputable college or university, or the city authorities may easily require a degree from some standard college or university of all candidates for a position as a prerequisite for eligibility to consideration by city authorities.

V- Examinations for High School Certificates.- In recent years there has been a tendency to minimize the importance of examinations for certificates and to place more stress upon scholastic attainments as evidenced by diplomas or degree from reputable colleges or universities. Not many years ago it was a general custom in many states-and the custom still prevails in some states- to provide monthly examinations for teachers certificates and to give an applicant an indefinite number of trials provided he had enough dollars to pay for the attempts. In fact, in some states it was possible for a candidate to store up grades on subjects in which he passed and thus finally secure a certificate by passing on part of the subjects at each of the examinations.(40:38)

While it seems that an examination is the most efficient test of a person's ability to teach unless they be a college or university graduate,yet every one knows that even the examination test is an inadequate one. At best the examination is mostly a test of memory and not of ability to instruct or organize and manage.

An example of the inadequacy of examination tests isgiven in the case of New York. A man was selected as associate superintendent of schools because of his special fitness for the work of superintending,but who failed to pass the examination; and a high school student passed a similar examination with a grade above ninety percent.

In adopting a new method of certificating high school teachers in Tennessee some difficulty would necessarily be experienced in supplying the demand for qualified teachers. Hence at first it would be necessary to have examinations in every county in the state in which are located one or more high schools; these examinations to be two or three in number under the direction of the State Board of Education.

As soon as the number entering the teaching profession on credentials will warrant, the examinations may be reduced to not more than one or two a year and these to be directly under the control of the State Board of Education and limited to three or four places in the state. Question should be prepared and papers graded by the State Board of Education.

In fact as soon as conditions will warrant such procedure, I am of the opinion that all examinations for high school certificates should be eliminated and certificates issued only on credentials.

California which has the highest standard of any state in the union issues high school certificates only on credentials and the requirement for credentials is that the applicant must hold a bachelor's degree from a college or university requiring four full years of work beyond a four year high school course, and in addition one year of graduate study.(12)

In Massachusetts it is the purpose of the State Board of Education to grant high school certificates on credentials from colleges or universities and to require examination only in exceptional cases.(70)

C- STANDARDS IN OTHER COUNTRIES.

a-Scotland- Under the rules of certification of teachers in Scotland secondary school teachers fall into two groups. (a) Teachers of higher subjects-English,Latin and Greek,Mathematics, Science, Modern language, History, Geography; and(b) teachers of special subjects-Art(including drawing),Applied Science or Technical industry,Agriculture,Commercial Subjects,Domestic Economay ,Physical Training, Manual Training or Crafts,Music etc.

For the first group it is now necessary that the candidate, after having obtained a master of arts or of Science degree, submit himself to the provincial committee-a committee on the training of teachers;four such committess were established in 1905,each having its center at the university of its area-for practically a year of professional training. In most cases either an honors degree is required or,at least, attendance at honors classes(a procedure which implies intensive work,with considerable specialization). Under the provincial committee the candidate must take courses in personal and school hygiene,psychology(experimental and observational), logic,and ethics; principles and history of education,with a course on present day problems;and practical teaching. Under present arrangement(1910) the last two subjects occupy ten hours per week for one semester.

For teachers of special subjects(group b) neither technical preparation nor professional training can yet be subjected to general rules and individual cases must be treated largely on their own merits. But here also the final professional preparation including the special method that the subject may need and also requisite practice teaching in it, are under the provincial committees which

are beginning to map out lines of operation".(95:433-454)

b-Standards in Germany.- "The training required of the German secondary school teacher is much more ideal than that demanded of teachers in the same kind of school work in the United States. In Germany advanced,critical,academic and professional scholarship are absolute prerequisites to teaching in the secondary schools. No deviations are allowed. No mere "pull" with the board will suffice; for the matter does not rest with the local board,but with the State authorities.

In Germany all secondary school teachers are university trained, as ought to be every where. The candidates for a position in the secondary schools must have had at least three years of university study before being admitted to the examination for the certificate which all must possess. This means a high grade of academic scholarship,since university entrance is conditioned upon graduation from the secondary schools,which is fully equivalent to the completion of the sophomore year in our very best colleges. Therefore every teacher in the German secondary schools has done work equivalent to that required for our master's degree. As a matter of fact, the majority of German secondary school teachers have studied more than three years in a university. The majority are possessors of the doctorate degree,which cannot be secured with less than three years of university work,and usually requires four or five. Each teacher is required a major line of work and a minor. The examination in the minor must reveal complete comprehension and mastery of the subject far beyond any limits to which it is taught in the secondary schools. Even with this preparation they are not permitted to give instruction in that branch in the advanced classes of the

school. In the major subject, not only thorough mastery is required, but there must be evidence of critical and exhaustive research to the extent of becoming, not only a master but an authority. A thesis on the major must reveal independence of method, acquaintance with the history and literature of the subject. The thesis and the examination are intended to test the candidate's knowledge of its philosophic aspect. In a general way we may say that the academic training of the German secondary school teacher is quite on a par with the attainments of instructors in our best colleges, and the majority are comparable with well-seasoned college professors; promotions are so slow there that the majority are about thirty years of age before acquiring permanent positions.

Knowledge of the subject-matter, however, is happily deemed insufficient for any German teacher. All teachers in the secondary schools are required to include psychology, philosophy, and theoretical pedagogy in the state examination. In addition, they must take a two years course of professional training. This can be begun only after passing the state examination." (4:118-119)

c- Standards in France.- To an American the French system of education is indeed a complicated one. The term high school as we use it does not appear in the French system at all. The term secondary education while covering the period designated by the term high school in Tennessee, indeed covers a great deal more. In France the secondary schools have their primary departments which are intended as preparatory for the secondary school. The standard of preparation for the teachers of the secondary schools is considerable higher than that generally required of teachers in American schools of the same class.

In giving the standard of French secondary teachers I shall quote, at length, from Dr. F. E. Farrington's French Secondary Schools.

"The public secondary schools thus fall into two general categories, the Lycees and the Colleges. The former are state schools pure and simple, being established, directed, inspected and financed by the central government or its accredited representatives. The establishments of the same nature, founded and supported by the communes under the surveillance and the direction of the state are" called colleges". (44:103)

"The teaching force proper of the lycees includes first, the professors and the acting professors in charge of the classes; these are the teachers down through the sixth form; second, the professors of the elementary classes, the teachers of the seventh and eighth forms; third, the primary teachers, in the two years of the preparatory division and the beginning class; fourth, the professors and acting professors of drawing; fifth, the professors of gymnastics; and sixth, the laboratory assistants..

No one may be appointed a regular professor unless he is twenty-five years old, has been five years in the educational service of the state, and holds a title of agrégés. The acting professors in charge of classes receive their appointment only when there is a lack of agreges for the positions in question. They are required to hold only the master's degree in letters or science, or one of the certificates for teaching modern languages and academically, at least, form a class distinctly inferior to the agreges. Most of them at first look forward to the agregation and a regular professorship, but after several failures to pass the competitive examination they apparently accept the inevitable and settle down". (44:108-109)

Class of Teachers and Promotions.- By the decree of Dec.28,1903 the very complex system of the teaching force of the secondary schools was considerably simplified. Except for a few of the tutors and professors,agreges, all the officers of every order in the boy's and girls' lycees and colleges are divided into six classes. Every new appointee begins in the lowest class of his order. Two years of service are required in the sixth class before the individual is eligible for promotion to the fifth and in the fifth class the minimum service is three years; in the fourth class four years and in the third and second classes,five years each.(44:115-116)

Beginning with the lowest, we find the following grades of certificates for teachers of the French secondary schools.

Certificate For Teaching in Girls' Secondary Schools.-This certificate is secured by means of competitive examination, partly written and partly oral. "The written examinations are held annually in the department centers;the orals are always at Paris." The examination includes four papers for each of two sections, letters and science, four hours being given to each section. The papers for the letters section are(1) "a literary or a grammatical subject; (2) ethics or psychology applied to education;(3) history;(4) a modern language. The science papers are(1) mathematics;(2) physics and chemistry;(3) natural science;(4) literature or ethics..... For the oral examination various periods from half an hour to three hours are allowed for preparation of the subject after the topic is assigned ....The subjects for the letters examination are(1) reading and selection in French,with historical,grammatical,and literary commentary;(2)development of a topic in history or geography;(3)questions on the subject not assigned in (2); (4) questions

on ethics and the methods of education and instruction;(5) interpretation of a modern language selection,followed by questions asked and answered in that language....The oral examination for the science candidates is conducted in the same manner as that for the letters candidates, the subjects being the strictly scientific subjects in the written examination,and in addition an examination in a modern language as in the letters section".(44:339)

Certificates of Competency.- These certificates are divided into two general classes,namely,certificates of competency for modern language; and for teaching in the elementary classes of the secondary schools. Both certificates are secured by examinations, the number of places being fixed from year to year by the minister according to the needs of the service. The first is common to both men and women and is about equivalent academically to the master's degree. In fact it answers every purpose of the master's degree as far as the eligibility for the diploma and the agregation is concerned, but the men to avoid shutting themselves off from the possibility of a doctorate degree later,usually take the master's degree.

The Master's Degree, Diploma of Higher Study,and the Agrege. These are the three highest degrees and carry with them great honor. In fact such a rigid scholastic standard would necessarily be accompanied by honor to those who chanced to survive the examinations,since the system is practically one of the survival of the fitest.

Those who seek the above degrees-and they must do so in the order named- are usually the possessors of a scholarship.

The examination for the master's degree is very extensive - for

a sample of an examination for the master of letters degree I refer the reader to Farrington's French Secondary Schools page 362- ~~and~~ which is taken at the close of the first year of the normal school course.

The examination for the master of science degree falls into three goups, according to the subjects of instruction in the secondary schools, ;(1)differential and integral calculus, rational mechanics, and either general physics, or another mathematical subject;(2) general physics, general chemistry, and either mineralogy, or one of a series of general science subjects;(3) zoology or general physiology, botany and geology.

The second years work of the normal student is in special preparation for the Diploma of Higher Study which in the science groups is based on two requirements:(1)"An original piece of scientific work written under the general supervision of a university professor, and (2) an oral examination on this same work together with certain topics taken from the general field, announced three months in advance".(44:365-366)

The third year has been termed the"general culture period withing a definite field of knowledge"and is devoted to purely pedagogical preparation, including theoretical instruction, practice teaching etc., and after all this preliminary work comes the final test, the examination for the agregation, of which there are eight orders. It is needless to outline this examination;suffice it to say that it is even more far-reaching than either of the two previous ones.

Surely no system of teacher-training can be more complex and

reach a climax more steadily. A high standard of preparation is demanded and maintained and from the point of academic qualifications certainly the French teachers are not to be surpassed. Indeed, Tennessee high school teachers are not serious rivals.

D- THE PRINCIPAL FEATURES OF HIGH SCHOOL TEACHERS' CERTIFICATES IN THE VARIOUS STATES.

Alabama- No provision is made for special high school certificates. There are six classes of certificates, four of which are valid any where in the state.

Life certificate: issued by the State Superintendent and secretary of the board of education; five years experience under Alabama first grade certificate. High degree of proficiency and professional attainments required.

First grade certificate: issued by same as above, valid in any school in the state for six years; renewable, no experience required; examination in algebra, natural philosophy, plane geometry, school law, theory and practice of teaching, English and literature in addition to subjects required for second grade certificate: average 75 percent; nothing below 50 percent accepted. All certificates are issued by state authorities.

Second and third grade certificates: issued by same; good for four and two years respectively: examination in subjects from the grammar grades down; percent same as above. (105:12)

Arizona- No special high school certificate provided, but a first grade state certificate is required for teaching in the high schools. This certificate is granted without examination to graduates of universities, and chartered colleges of similar rank provided applicant has completed four full years work above a four

year high school course; must have had at least one year's work in education in a state normal school, college or university covering the subjects of pedagogy, history of education, school economy and school government, or shall hold an unexpired teacher's certificate or diploma, and shall have had two years successful teaching experience. Also will be issued to graduates of advanced courses of state normal schools.

This certificate may be secured by examination; average of 80 percent, with no grade below 50 percent. Certificates are issued by State Board of Education; certificates are renewable for a like period for which they are issued.

State certificates may be converted into life certificate after ten years successful experience inteaching, six of which shall have been in the public schools of the state. (1 1/2)

Arkansas- No special high school certificate provided; six grades of certificates, valid throughout the state are issued.

Professional license: issued by State Superintendent, valid for six years; renewable indefinitely; examination in rhetoric, general history, plane geometry and complete algebra, in addition to subjects required for first grade county certificate.

State certificate: Valid for life in any school in the state; examination, in addition to that required for professional license, in zoology, geology, botany, physics, Latin, Latin Grammar, and composition, geometry and mental philosophy; average 80 percent, minimum 70 percent.

Diploma from state normal schools is a license valid throughout state for six years, and may be extended for life.

L. I. degree from the University of Arkansas is a license to

teach; valid for six years and subject to extension for life, Diploma from normal training departments of state high schools is a license to teach valid throughout state and convertable into regular normal diplomas after twelve months teaching experience.

State first grade certificate: valid throughout state for two years, renewable indefinitely; issued on examination, to holders of first grade county license; papers graded by State Superintendent. (105:14-15),(1).

California- High School certificate: Issued by county board of education, rules prescribed by State Board of Education; valid for life throughout state; issued only on credentials. Applicant Must hold bachelor's degree from university or college requiring not less than eight years of high school and college training; must have done at least six months of graduate study, and six months practice teaching; twelve hours per week for one half year of pedagogy; graduate of a California state normal or twenty months successful teaching esperience may be substituted for the above pedagogical work.(12)

Colorado- No provision for special high school certificate is made. State diploma without examination: issued by the State Board of Education; valid for five years thoughout the state; renewable for five years; after five years renewable for life; twenty-four months experience is required; also graduation from a Colorado college requiring eight years of high school and college work; Professional training, equivalent to one sixth of a standard four year course in atleast three of the following subjects is required:(1) general and educational psychology;(2) history of education;(3) science and principles of education;(4) practice teaching;(5) organization and management of schools;(6) philosophy,

sociology,and anthropology.

State diploma upon examination: diploma is issued as above, valid for five years throughout state. Academic and professional attainments are practically equivalent to above.(105:19)

Connecticut- No high school certificate except local certificate is provided.

Supervisors certificate. This certificate is issued by the State Board of Education; is valid indefinitely throughout the state and is renewable. Certificate is issued after candidate has had five years successful teaching experience, on examination unless he is a graduate of a college,university or normal school.

Honors certificate: issued as above; valid for two years; renewable; examination in subjects for elementary certificate.

Local high school certificate: issued by high school committee; valid in town or district; renewable; issued on examination; standard is at discretion of committee.

Delaware- No high school certificate specified; four kinds of certificates; professional,first grade,second grade,and temporary certificates.

Professional certificate: issued by county superintendent in accordance with rules of the State Board of Education; Valid in county for ten years but may be countersigned by superintendent of any other county; nonrenewable; no experience is required. Applicant must answer 90 percent of questions asked for first grade certificate.

First grade certificate: issued by county superintendent; valid in county for five years; non-renewable; no experience is required. Applicant must answer 90 percent in each of the following subjects:

orthography, reading, writing, mental arithmetic, written arithmetic, geography, physiology and hygiene, United States history, United States and Delaware constitutions, pedagogy and grammar; 75 percent on such other subjects as prescribed by the State Board of Education.

Second grade certificate: issued by county superintendent; valid in county for two years and is nonrenewable. Applicant must answer 75 percent of questions asked for first grade certificate.

Temporary certificate: issued by county superintendent; valid in county for one year; no experience is required. Is issued on diploma or certificate from any reputable normal school or college. (105:22-23)

Florida- No high school certificate is specified. All principals of senior high schools must hold state certificate.

Life certificate: issued by State Superintendent for life; valid throughout the state; eighteen months experience under state certificate is required. Applicant must be a teacher in a high school or college in the state; must possess eminent ability in teaching testified to by three persons holding state certificates.

State certificate: issued by State Superintendent; valid for five years throughout the state; nonrenewable. Twenty four months teaching experience, eight months under a first grade certificate, is required. Applicant must be examined in geometry, trigonometry, physics, botany, zoology, Latin, rhetoric, English literature, psychology and general history. The minimum average is 80 percent, minimum grade in any subject is 60 percent. (105:24-25)

Georgia- There are three grades of high school certificates- first, second and third grades - issued by county superintendent under the direction of the State Board of Education. Examinations

may be taken in any of the following groups:(1) arithmetic, algebra, plane geometry. (2) English, grammar, composition and thetoric, English and American literature.(3) Agriculture, physice, biology(elementary psychology,botany,zoology);(4) Latin, French,German,Spanish,Greek(any two);(5) Ancient history, English history,examination in school management and methods of teaching high school subjects. For first,second and third grade certificates, applicants must average 90 percent, 75 percent,and 50 percent respectively; Certificate is valid in county for three, two and one year respectively. First grade is renewable for a like period.

Professional state certificate: issued by State Board of Education to graduates holding a bachelor's degree from an approved college of the state provided applicant has taken three courses of three hours per week each for a year in education. Certificate is valid throughout the state for three years and renewable by examination in the reading course; minimum average is 75 percent or thorough courses completed at summer schools,approved by State Board of Education.(47:4-7)

Idaho- No high school certificate is specified.

Life certificate: issued by State Board of Education;valid throughout the state for life; five years experience-two in the state- is required. Applicant must be a holder of state certificate,and be examined in such subjects as the State Board may direct. Certificate may be granted without examination to holders of similar certificates from states of approved educational standard.

State certificate: issued by State Board of Education;valid throughout state for eight years and is renewable; three years experience is required; must hold a valid first grade county cer-

tificate and examined as State Board of Education may direct.

Certificate may be issued without examination (1) if applicant hold a B. A. or a B. S. degree from the State University, has done the required work in education or taught five years in the state.(2) If applicant is a graduate of advanced course of a state normal of another state,holding state or life certificate in such state, or a graduate of a college the A. B. degree of which is recognized by the university of the state and has had eighteen months teaching experience.

First grade certificate: This certificate is issued by county superintendent and is valid for five years throughout the state when filed in the county; is renewable after five years of successful teaching experience. Applicant is examined in English literature,principles of teaching,algebra,physics or botany and medieval and modern English history, in addition to subjects required for a second grade certificate.(105:26-27)

Illinois- State high school certificate: issued by State Superintendent, valid in any high school in the state during good behavior; one year's experience is required; applicant must be a graduate from an approved college or university offering four years of work beyond a four year high school course,and pass satisfactory examination in English, educational psychology,the principles of teaching. Applicant must present a satisfactory thesis upon a secondary school subject selected from a list prepared by the State Superintendent of Public Instruction or approved by him. Minimum average is 75 percent ; minimum grade of 65 percent. Fir First grade certificate: issued by County superintendent,valid in any school in the county for two years; renewable; no experience is required for issuing. 64

Applicant must pass satisfactory examination in subjects required for second grade certificate, and also in elements of natural science and physiology and laws of health.(105:28-30),(55).

Indiana- State normal school diploma: issued by Board of Trustees two years after graduation if successful in teaching during that time; is valid for life throughout the state.

Sixty month's high school certificate: issued by State Superintendent;valid throughout the state for any common branch and licensed high school branches. Applicant must hold a thirty-six month's certificate to be eligible for examination. Certificate is nonrenewable. An average grade of 95 percent with 85 percent as lowest grade on any subject is required.

Thirty- six month's high school certificate: issued by State Superintendent;valid throughout state to teach subjects designated, and may be issued upon any number of subjects if science of education requirements are met; average 95 percent with minimum grade of 85 percent.

Twenty-four month's high school certificate: issued by State Superintendent; valid throughout state to teach designated subjects in any high school; average grade 90 percent with a minimum grade of 80 percent.

Twelve month's high school certificate: issued by State Superintendent; valid throughout state to teach designated subjects; minimum average 85 percent with a minimum grade of 75 percent.

There are also twelve month's,twenty-four month's,and thirty-six month's county high school certificates issued by county superintendent. Scholastic attainments are the same as for corresponding certificates issued by State Superintendent.(105:30-35)

Iowa- No special high school certificate is provided. The high school field is covered by the following.

State diploma- issued by State Board of Examinars;valid for life throughout state;five years experience is required; examination in geometry,trigonometry,chemistry,zoology,geology,astronomy,political economy,English,English literature and general history, in addition to requirements for first grade state certificate.

State Certificate: issued by State Board of Examiners;valid for five years throughout state;two years experience is required. Applicant must be examined in common and high school branches.

This certificate may be issued to graduates from schools of approved rank, and is renewable for life after five years of successful teaching.(105:34-37)

Kansas- No provision for special high school certificates is made. State certificates and normal school diplomas are valid for teaching in the high schools.(Letter from W. D. Ross,State Supt.)

Life diploma: issued by State Board of Education,valid throughout state; examination in all subjects required for a three years certificate, and also political economy,zoology,Latin,German and French; minimum average 85 percent with a minimum grade of 70 percent.

Life certificate: issued as above; no examination required; must hold a three year renewable certificate. For information concerning requirements for the three year certificate 105:38-39.(105:36), (62).

Kentucky- No special high school certificate is provided. High school teachers must hold state certificate,state diploma or a first class county certificate.(Letter from State Supt.)

State diploma: issued by State Board of Examiners; valid throughout state for eight years;renewable for a like period;

examination in subjects required for a county certificate and in English, algebra, higher arithmetic, physiology; minimum average of 90 percent with minimum grade of 70 percent.

This certificate is issued without examination to holders of B.A. degree in education from state universities.

First class county certificate: issued by County Board of Examiners; valid in county for four years; renewable for a like period if holder has taught eight years; examination in common school branches with a minimum average of 85 percent and minimum grade of 65 percent. (105:42-43)

Louisiana-"Under our laws, graduates of standard college and state normal schools are exempted from all examinations. High school teachers not so exempted may take our regular examinations for a first grade certificate or may take an examination in the subjects of the particular department in which they work." (Letter from J.H. Harris, State Supt.)

First grade certificate- issued by Parish Board of Examiners; valid for five years in the parish where issued; may be sent to any other parish superintendent upon his request. Certificate may be extended for one year for nine week's attendance at State Normal; examination in common and high school branches not included in second grade certificate. (105:44-45)

Maine-No special high school certificate is provided. The two highest certificates cover the high school work. These are:

State certificates; superintendence grade; issued by State Superintendent; valid throughout the state for five years. After five year's successful experience in teaching this certificate is valid for life. Applicant must pass examinations in school law, methods

of teaching, school management, educational psychology, history of education, and school administration.

Public school grade certificate: issued by State Superintendent; valid for five, three and one years respectively. After five years successful teaching certificate is valid for life. Applicants must pass examination in common and high school branches with a minimum average of 90 percent and minimum grade of 70 percent; applicants must be graduate of college of full college preparatory course, with ability to teach college preparatory subjects.(105:46-47)

Maryland- No special high school certificate is provided.

Life certificate: issued by State Board of Education; valid throughout state; must have had seven years experience-five in the state-must hold first class certificate, or pass a satisfactory examination.

State normal diploma: This diploma is issued as above certificate.

State normal certificate: This certificate is valid for five years and renewable for life.

University, college or normal diploma: Issued as Life certificate valid as same and renewable for life; graduation from approved higher instutions in Maryland and completion of two years professional course are prerequisites for the issuing of these deplomas.(105:48-49)

Massachusetts- Only in exceptional cases are certificates granted upon examination. They are granted on credentials.

General life certificate: granted prior to July 1,1912 to persons having taught for six months in Massachusetts high schools.

Preliminary certificates (valid for two years): requirements;

(a) possession of a bachelor's degree from approved colleges. (b) Preparation in at least two subjects each not less than three year-hours of work. (c) preparation in two subjects of not less than one and one half year-hours of work.

Professional requirements; (a) Completion of courses in at least two professional subjects with not less than three year-hours of work. (b) Diploma from normal school. (c) Two years teaching experience. (d) Completion of thirty hours of a professional course in a summer school.

Permanent certificate (valid for life). This certificate is issued on two years experience and completion of such professional study as the Board of Education may require.

Special certificates will be issued to persons found to be qualified to teach one or more of the professional subjects, music, drawing etc. (105:50-51), (70)

Michigan- No special high school certificate is provided. High school field is covered by University of Michigan certificate, State Life certificate, and college certificates. First two are valid throughout the state for life; third for four years and renewable for life. Applicant must possess bachelor's degree or higher degrees.

Graduates of state normal schools are given life certificates (105:50-53)

Minnesota- No special provision is made for high school certificates. Two certificates cover the high school work.

First grade professional certificate: issued by State Superintendent; valid throughout state, first for ten years and for life after that time of successful teaching. Examination in

branches required for first grade certificate,also high school subjects including pedagogy.

First grade certificate without examination. This certificate may be granted without examination to graduates of State University or reputable colleges.(105:52-54)

Mississippi- No provision for high school certificate is made- The high school work is covered by two certificates.

Professional licence: issued by State Board of Education; valid throughout state for life;examination in algebra,physics, geometry, rhetoric,English literature,botany,chemistry,science of teaching,civil government and Latin.

State license: issued by State Board of Education; valid throughout state for one,two or three years according to standing. Certificate may be renewed by examination. Holder of second three year certificate is exempt from further examination. Examination must be in subjects required for first grade certificate.

County license(first,second and third grades):issued by county superintendent; valid in county,first grade for one,two or three years according to standing; second and third grades for one year. Examination must be in common and high school branches. For first grade certificate average must be at least 90 percent with minimum grade of 50 percent. Second and third grade certificates include elementary branches with averages of 75 percent and 65 percent with minimum grades of 50percent and 40 percent respectively.(105:54-57)

Missouri-There are no legal regulations of high school teachers beyond regulations of State Board of Education.(Letter from State Superintendednt)

There are nine different certificates all of which entitle the holder to teach in any public school of the state. For scholastic requirements, 105:56-59.(

Montana- No special provision is made for high school certificates. There are five different certificates that entitle holder to teach in any high school of the state. All but one are issued by State Board of Education, one issued by State Superindentend. Certificates are valid from three years in case of the normal diploma which is renewable for life after one year, to life. (105:60-61)

Nebraska- There are the three following grades of high school certificates.

Second grade certificate;valid for one year in any high school for designated subjects. Requirements; first grade county certificate and the equivalent of eight college hours above the four year high school. Professional requirements: pedagogy and a year's experience in training school or one year's teaching.

First grade certificate; valid for three years in any high school in the state. Requirements; second grade high school. professional requirements; second grade high school certificate and three additional subjects. Experience; second grade certificate and one years teaching high school.

Professional certificate(valid for life). Requirements : First grade high school certificate. Professional requirements: First grade certificate and all subjects from list B. (See 79:39),79:25).

Nevada- Life diploma(high school) issued by State Board of Education; valid throughout state in any high school. Seventy-two months experience is required.

High school certificate(upon examination); issued by State

Board of Education; certificate is valid throughout state for four years and is renewable. Examination must be in high school branches and one of the following languages: Latin, French, German or Spanish.

High school certificate: issued by State Board of Education; valid throughout state for five years. Certificate is issued to graduates of advanced state normal schools. (105:66-67)

New Hampshire- High school certificate (permanent); issued by State Superintendent; valid in high schools throughout state for life. Graduation from an approved college with some additional examination is a prerequisite.

High school certificate (probationary); issued by Sate Superintendent; valid throughout state for one year; permanent certificate may be issued upon completion of examinations. Examination is the same as for permanent certificate with minimum average grade 70 percent and minimum grade 50 percent. (105:68-69)

New Jersey- No provision is made for special high school certificates. Eight different certificates, issued by State Board of Examiners, covers the field. (see 105:70-73)

New Mexico- No special high school certificates are issued. Two classes of certificates- professional and county. "In most high schools of the state teachers are employed who hold county first grade certificates or higher. All certificates are issued by the State Department of Education except for the seven larger cities. No certificates are issued on diplomas from colleges or universities except temporary license good until the next examination." (Letter from Alvin N. White, State Supt.)

New York- No provision is made for special high school certificates.

North Carolina- High school certificate; issued by State Board of Education; valid throughout state for three years. Certificate is nonrenewable. Requirements: (1) graduation from college of high rank and examination in English, theory and practice of teaching, and school law. (2) Also examination in additional high school subjects including one foreign language.

Special high school certificate (for assistants): issued by State Board of Education; valid throughout state for branches named and for three years. Examination must be in English, theory and practice of teaching, school law, and in such other branches as applicant desires to teach. (105:80-81)

North Dakota- No provision is made for special high school certificates. There are six different certificates that cover the high school field.

(1) Professional certificates (first grade): Issued by State Board of Examiners; valid throughout state for five years; College education and eighteen months experience are prerequisites.

(2) Professional certificate (without examination): issued by State Board of Examiners; valid throughout state for life. Applicant must be graduate of a four year course of teachers college of the state university.

(3) Professional certificate (2nd grade without examination): Issued by State Board of Examiners; valid throughout state for five years; after five years experience certificate becomes valid for life. Graduation with bachelor's degree from a reputable college with two years professional training or three years experience are prerequisites.

(4) Professional certificate (2nd grade upon rexamination): issued by State Board of Examiners; valid for five years but not in four

College graduate certificates(professional); issued by Commissioner of Education; valid throughout state for life. Three years experience under professional provincial is a prerequisite.

Professional provincial certificate; issued by Commissioner of Education; valid throughout state for three years; certificate is nonrenewable; no experience is required. Applicant must be a graduate from an approved college course including education.

Permanent certificate; issued by Commissioner of Education; valid throughout state for life. Three years of experience is required. Applicant must be a graduate from an approved college course including education.

Limited certificate; issued by Commissioner of Education; valid throughout state for two years except in grammar grades and villages and towns of five thoudand or more

Normal diploma. This diploma is a certificate valid throughout state for life. No experience except practice teaching(600 periods) is required.

Diploma from a New York state normal school or college is accepted in lieu of a certificate.

State life certificate: issued by Commissioner of Education; valid throughout state for life; three years experience required. Examination must be in subjects required for elementary certificate with average grade of 75 percent and minimum grade of 60 percent and in addition an examination in three groups of high school subjects including pedagogy.

State limited certificate: issued by Commissioner of Education; valid for five years and is nonrenewable. Examination must be in subjects required for elementary certificate with ten addition al credits.(105:76-77)

year high schools. Requirements are the same as for first grade elementary certificate with additional high school examination.

(5) Professional certficate(second grade with out examination): issued by State Board of Examiners for two years;renewable for five yaars and then for life. Diploma from five years course of State normal school is a prerequisite.

(6) Diploma from teachers college of the state university entitles holder to same privileges as above certificates. Also a normal school diploma entitles holder to same privileges.(105:80-83)

Ohio- Ohio high school certificates are issued under two plans. Plan 1- High school life certificate. This certificate is valid throughout state for life; fifty months experience is required, Examinations in subjects required for common school life certificate, and in addition high school subjects including padagogy with an average of 85 percent and minimum grade of 80 percent is required.

Plan 2. High school life certificate: issued by State Board of Examiners; valid throughout state for life. Twenty-four months experience is required. Applicant must hold a provisional high school certificate and must be examined in theory and practice of teaching, history of education, and science of education.

Provisional high school certificates: issued by State Commissioner; valid throughout state for life. Applicant must be a graduate from a two year academic and professional course in approved normals, colleges or universities.

Teachers high school certificate(professional): issued by County or City Board of Education; valid in cities or county for five to eight years. Renewable if holder has taught four years. Forty months experience is required for issuing. Applicant must

be examined in literature,algebra,physics,physiology,theory and practice of teaching and any four of the following; Latin,German, rhetoric,civil government,geometry,physical geography,botany and chemistry. Average must be at least 92 percent with minimum grade of 85 percent. These do not apply to city certificates. (105:84-87)

Oklahoma- Life diploma; valid throughout state for life. Diploma is issued only to university or college graduates, to superintendents,presidents of institutions of learning, and to such as present qualifications for high school or grammar certificates.

High school certificate: issued by State Board of Education; valid in state for life , ten or five years according to grade of certificate. Examination must be in subjects required for grammar school certfifcate and in addition, advanced algebra,plane geometry,history of education,advanced physics and physiology, and one branch each of groups 1,5 and 7, and two of groups 2,3,4 and 6. These groups are composed of advanced subjects(105:88-91)

Oregon No special high school certificate is provided for.

State certificates are issued to graduates of standard colleges and universities. Certificates are valid for one year throughout state; may be converted into a five year certificate after six months of successful teaching. Five year certificate s are convertable into state life certificates after thirty months of successful teaching experience. (105:92-97)

Pennsylvania- No special high school certfficate is provided.

Permanent state certificate: issued by Superintendent of Public Instruction; valid throughout state for life.

College certficate(permanent):issued by State Superintendent to graduates of approved institutions; valid for designated

subjects in state for life.

Provisional certificate: issued by State Superintendent to graduates of approved institutions; valid throughout state for three years in branches named.

State normal school diploma: issued by state normal school, to graduates of normal school; valid for life.

State normal school certificate: issued by state normal school and is valid throughout state for two years.(105:96-97)

Rhode Island- No provision for special high school certificates is made.

There are thirteen different certificates covering the high school field valid for from one year to life. This is too many to brief in this paper.see(105:98-101)

South Carolina- No provision is made for special high school certificates.

State certificate: this certificate is valid throughout state for two years and is renewable; is issued on diploma from reputable university or college.

L. I. diploma: valid throughout state for two years; course of study of institution must be approved by State Board of Education.

County certificate(grades 1,2,and 3.);valid in county- but registration in other counties permitted-for two years. Examination must be in algebra,arithmetic,United States history,civics and current events,grammar,physiology,geography,pedagogy and agriculture. Averages must be at least 80 percent,70 percent and 60 percent with minimum grades of 55 percent,45 percent and 40 percent respectively

This certificate is granted without examination on completion of courses at county or district summer school or a diploma from accredited higher institutions within the state.(105:100-101)

South Dakota- No provision for special high school certificates is made.

Life diploma: valid throughout state;issued upon examination in both common and high school branches and pedagogy, or to graduates from approved colleges or universities, with professional courses of one fourth work for eighteen months. Also to graduates of approved normal schools with a two year course above a four year high school.

State certificate: valid throughout state for five years and is renewable. Certificate is issued upon examination in common school branches,with some high school branches and pedagogy. Or to graduates from approved normal schools,with one years work above a four year high school.

Provisional state certificate: valid throughout state for two years. Requirements same as above.(105:103-105)

Tennessee- County high school State certificate: issued by State Superintendent upon examination in high school branches(spelling and grammar included) or without examination to holders of a bachelor's degree from the University of Tennessee or an equivalent institution, who has had two six months courses in education. Certificate is valid throughout state for one and five years respectively and is renewable.

High school certificate: valid in state for three years in subjects named on certificate.

High school certificate : valid in county for two years only

in subjects mentioned on certificate. Examination is in one or more subjects with a minimum average of 80 percent and minimum grade of 70 percent.(105:104-107)

Texas- No special high school certificate is specified.

Permanent state certificate: granted on examination in common and high school subjects;minimum average 85 percent and minimum grade of 50 percent or to holders of bachelor's degree from first class institutions giving a full course in pegagogy.

State normal college diploma: valid in state for life; issued on diploma from normal college.

State normal college certificate(first grade):valid in state for six years. Completion of two years of state normal course is required.

State certificate(first grade):valid in the state for four or six years;issued upon examination in all subjects of second grade high school certificate and additional subjects, or to graduates of reputable institutions with two full courses in education.(105:106-111)

Utah- State professional high school diploma: issued by State Board of Education; valid throughout state for life. Certificate is granted to graduates from reputable colleges.

University diploma: valid in state for life.Applicant must complete prescribed courses in school of education of a university.

Temporary state high school certificate: valid throughout state for one year and is renewable; credentials covering a college course are accepted.

City high school certificate: valid in cities only. Time for which certificate is valid varied and examination varies. (105:110-113)

Vermont- No provision for special high school certificate is made. There are ten different forms of certificates that entitle holder to teahh in high schools. Certificates are valid throughout the state from one year to life.(see 105: 12-115)

Virginia- No special high school certificate is provided. There are twelve kinds of certificates that entitle holder to teach in high schools. Certificates are valid throughout the state for from one to twelve years.(see 105:116-121)

Washington- No provision for special high school certisiicates is made. There are fifteen different certificates entitling holder to teahh in high schools(see 105:120-125)

West Virginia- High School teachers certificate. Certificate is issued by State Board of Education. Certificate is valid throughout state for five years and is renewable after one years experience.

There are five other certificates that are valid in high schools (see 105:124-127)

Wisconsin- High school teachers certificate: issued by State Superintendent. Certificate is valid for subjects specified and the time varies from five years to life; is issued ~~for~~ only for subjects not covered by local certificates.(

Emergency high school principal's certificate: valid in locality designated for principals only and for one year. The certificate is issued to superintendents elected as principals of high schools. There are eight other certificates entitling holder to teach in high schools. (see 105:126-129)

Wyoming- No special high school certificate is provided for. There are eleven different certificates entitling the holder to teach in high schools(see 105:132-135)

BIBLIOGRAPHY.

1. Arkansas, Circular Cuncering Certification of Teachers.
1½ Arizona, Ruleand Regulation Regarding the Certification of Teachers, Revised 1918.
2. Bahlsen, Dr. L., The Preparation of Teachers in Germany. N.E.A. Proc. (1904); 140-145.

3. Barrett, H. M., The High School Teacher Himself. N.E.A. Proc. (1911); 576-581.

4. Bolton, F. E., The Preparation of High School Teachers: What they do Secure and What they Should Secure. School Review (Feb. 1907); 15:97-122.

5. Bolton, F. W., The Relation of the Department of Education to Other Departments in Colleges and Universities, passim. Journal of Pedagogy, (Dec. 1906-March 1907); 19:137-176.

6. Brister, J. W. Biennial Report 1911-1912.

7. Brooks, William F. The High School Teacher from the Students' Point of View, passim. Pedagogical Seminary (1905); 12:239-281.

8. Brown, J. F. A Prussian Gymnasial Seminar, passim. Educational Review, March 1910; 39: 269-288.

9. Brown, E. E., Distinctive Functions of University, College and Normal School in the Preparation of Teachers. N.E.A. Proc. (1908); 457-461.

10. Brown, J. Stanley, The Ideal Teacher. Fourth Year Book of the National Society for the Scientific Study of Education, part 1; 29-32.

11. Buchner, E. F. The Professional Preparation of Secondary Teachers in the Fifteen Southern States. N.E.A. Proc (1907); 618-628.

12. California, Circular # 4 Concerning High School Certification in California.
13. Circular # 5 Information about California School System.

14. Catalogues.
Alabama University, ... 1911-1912.
15. Arizona " . . . . . 1911-1912.

*Note. First number refers to volume; second number to page.

16. Arkansas University. . . . . .1911-1912.
17. California " . . . . . .1910-1911.
18. Chicago " . . . . . .1911-1912.
19. Colorado " . . . . . .1910-1911.
20. Georgia " . . . . . .1911-1912.
21. Idaho " . . . . . .1911-1912.
22. Illinois " . . . . . .1910-1911.
23. Indiana " . . . . . .1911-1912.
24. Iowa " . . . . . .1910-1911.
25. Kentucky " . . . . . .1911-1912.
26. Louisiana " . . . . . .1910-1911.
27. Mississippi " . . . . . .1910-1911.
28. Missouri " . . . . . .1911-1912.
29. Nebraska " Bulletin # 8 . . . . . 1911-1912.
30. North Carolina " . . . . . .1911-1912.
31. Ohio " . . . . . .1910-1911.
32. Oklahoma " . . . . . .1911-1912.
33. South Carolian " . . . . . .1911-1912.
34. Tennessee " . . . . . .1911-1912.
35. Texas " Bulletin # 20 . . . . .1911-1912.
36. Virginia " . . . . . .1910-1911.

37. Chattanooga, Rules and Regulations of Board of Education, passim.

38. Clark, Eoline, Training of High School Teachers. N.E.A. Proc.(1894);781-787.

39. Conaty, F. J.,The Personality of the Teacher. N.E.A. Proc.(1907);77-87.

40. Cubberley, E. P.,The Certification of Teachers,passim. Fifth Year Book of the National Society for the Scientific Study of Education, part 2; 7-88.

41. DeGarmo, Charles, Professional Training of Teachers for Secondary Schools in Germany. N.E.A.Proc.(1907); 638-644.

42. DeGarmo, Charles, A Fundamental Distinction between Normal Schools and Universities in their Relation to Preparing Secondary Teachers,passim. Fourth Year Book of the National Society for the Scientific Study of Education, part 1; 89-92.

43. Dexter, E. G.,The Present Training of Teachers for Secondary Schools,passim. N.E.A. Proc.(1907); 644-661.

44. Farrington, F. E.,French Secondary Schools,passim.

45. Felmley, David, Preparation and Certification. N.E.A. Proc.(1908);735-737.

46 Florida, High School Manual.

47. Georgia, System of Certification of Georgia Teachers.

48. Halleck, R. P.,The Profession Preparation of High School Teachers,(Report of Committee of Seventeen),N.E.A. Proc. (1907):523-617.

49. Halleck, R. P.and others, The Ideal Teacher. Fourth Year Book of the National Society for the Scientific Study of Education part 1,(1905):27-48.

50. Hall, G. Stanley, Relative Advantages and Limitations of University and Normal Schools in Preparing Secondary Teachers. Fourth Year Book of The National Society for the Scientific Study of Education part 1,(1905): 84.

51. Harned, P. L.,Third Annual Report of Tennessee High Schools. June 30,1912.

52. Hill, Joseph H.,The Preparation of High School Teachers from the Standpoint of the Normal School. NE.A. Proc. (1907):712-717.

53. Hill, Joseph H.,The Distinctively Professional Content of Normal School and College Courses. N.E.A. Proc.(1910): 564-568.

54. Horn, H. H.,The Study of Education by Prospective College Instructors. School Review(March 1908) ; 16:145-153.

55. Illinois, Circular # 66,Examinations for State Certificates.

56. Indiana, Circular, Teachers Licenses for 1913.

57. Iowa, Regulations of State Board of Examiners Governing the Issuing of Iowa State Certificates.

58. Circular # 5 (1911),Extracts from School Laws.

59. James, George F.,The Relation of Normal Schools to Departments and Schools of Education in Universities. School Review Monographs # 2(Feb. 1912):21-35.

60. Johnson, Charles H.,The Relation of First Class Normal Schools to Departments and Schools of Education in Universities,passim. School Review Monographs #2,(Feb.1912): 36-62.

61. Judd, C. H.,The Department of Education in American Universities,passim. School Review(Nov.1909x;17:593-608.

62. Kansas, Manual of Kansas State Board of Education.
63. Bulletin # 5 of the University of Kansas,passim.(Jan.15,1912.)

64. Kendall, C. N.,The Training of High School Teachers. School Review,(Feb.1913); 21: 92-102.

65. Pamphlet,Examination and Certificates.

66. Lange,A. F.,The Preparation of High School Teachers from the Standpoint of the University,passim. N.E.A. Proc. (1907);718-723.

67. Loomis, H. H.,State Normal Schools and the Rural School Problem,passim. Educational Review,(May1910);39:484-499.

68. Lord, L. C. and Others.,Relative Advantages and Limitation of Universities and Normal Schools in Preparing Secondary Teachers. Fourth Year Book of The National Society for the Scientific Study of Education,part 1; 83-103.

69. Maine, Circulars Giving Conditiond for Granting Certificates.

70. Massachusetts, Circular of Information Governing Certification of Teachers in State-Aided High Schools.

71. Maxwell, Guy, Legitimate Spheres of Influence for the Normal School in Public Life,passim. N.E. A. Proc. (1910); 569-575.

72. McFarland, Secondary Education in Virginia.

73. McGregor, D.,The Normal School as a Training School for Teachers.N.E.A. Proc. (1909);581-587.

74. Michigan, Circular # 11, Legally Qualified Teachers,(Sept.1912)
75. Bulletin # 16, County Teachers Examination(1912).

76. Minnesota, Annual Report of State High Schools.(1904).

77. Mississippi, School Laws of the State of Mississippi.

78. Missouri, High School Bulletin,(1912) .

79. Nebraska, Employment and Certification of Teachers.

80. Nightingale, A. F.,The Ideal Secondary Teacher. Fourth Year Book of The National Society for the Scientific Study of Education part 1; 38-45.

81. North Carolina, Public School Laws of the State
82. North Carolina, High School Bulletin # 2,(1911)

83. Norton,A. C.,The Professional Training of Teachers in College Departments of Education. School Review,(March 1908);16:182-189.

84. Ohio, Schools Laws of the Sate of Ohio,(1912).

85. Oklahoma, School Laws of Oklahoma,(1912).
86. Rules and Regulations of the Sate Board of Education Governing the Issuing of Oklahoma State Teachers Certificates.

87. Oregon, Circular Giving a synopsis of the Certification of Teachers.

88. O'Shea, M. V.,Training of High School Teachers. N.E.A. Proc.(1898(;709-717.

89. Pennsylvania, School Laws of Pennsylvania(1911).

90. Robertson, C. B.,The Training of Secondary Teachers. School Review,(April 1913) ;21:225-234.

91. Ruediger,W. C.,Agencies for the Improvement of Teachers in Service,passim. United States Bureau of Education, Bulletin # 3,(1911).

92. Russell, J. E.,German Higher Schools,Professional Training of Teachers; 354-369.

93. Salisbury, Albert,Teacher Training in Great Britain. N.E.A. Proc.(1909):573-579.

94. Showerman, Grant, The Making of a Professor, Atlantic Monthly,(Nov. 1909);104:611-620.

95. Snedden, David, The New Scheme for the Training of Teachers in Scotland, Educational Review,(May 1910);39:433-444.

96. South Carolina, School Laws of South Carolina,(1910).
97. Report of the High School Inspector,(1909-1910).

98. Sutton, W. S.,The Organization of the Department of Education in Relation to Other Departments in Colleges and Universities,passim. Journal of Pedagogy,(Dec.1901-Nov. 1907);19:81-136.

99. Sutton, W. S.,A Four Year Cours in Education in Oure Colleges and Universities. University of Texas Bulletin # 143,(March 1910).

100. Sutton, W. S.,What Should be Done by Universities to Foster the Professional Education of Teachers? University of Texas Bulletin #50,(1905)

101. Tennessee, Public School Laws of Tennessee,(1911).
102. Rules and Regulation Governing the Certification of High School Teachers,(1912-1913)

103. Thomas, J. W.,The Teacher and the Community. Educational Review,(May 1910);39:459-471.

104. Thorndike, E. L.,The Teaching Staff of Secondary Schools, passim. United States Bureau of Education Bulletin # 4, 1909.

105. Updegraff, Harland, Teachers Certificates Issued under General State Laws and Regulations, United States Bureau of Education Buletin # 18, 1911.

106. United States Commissioner of Education, Report for 1911.

107. Van Liew, C. C., Relative Advantages and Limitations of University and Normal Schools in Preparing Secondary Teachers. Fourth Year Book of The National Society for the Scientific Study of Education part 1; 92-93.

108. Virginia, Circular Concerning Certification of Teachers.

109. West Virginia, Report of High School Inspector,(1912).