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THE TRAINING OF TEACHERS IN ENGLAND, SCOTLAND AND GERMANY

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CONTENTS.

	Page.
Letter of transmittal	5
Preface	6
I. The training of teachers in England	7
The training of elementary teachers	18
Key to diagram on preceding page	19
Training colleges and university departments of education	28
Bibliography of official publications of the English board of education used in preparing this report	45
II. The training of teachers in Scotland	46
Bibliography of education in Scotland	53
III. The training of teachers in Germany	54
Bibliography of official and semiofficial publications used in preparation of this report	84

LETTER OF TRANSMITTAL.

Department of the Interior,
Bureau of Education,
Washington, October 24, 1914.

Sir: The matter of the preparation of teachers for the schools of this country is of so great importance that any information which may contribute to our knowledge of the most effective ways of doing it is eagerly sought by those directly interested in the subject. The example of methods used in other countries is especially helpful. For this reason, in the summer of 1913 I detailed Charles H. Judd, professor of education in the University of Chicago, and at that time this bureau's specialist in higher education, to go to Europe and make a careful study of the education and training of teachers for the schools in England, Scotland, Germany, and some other countries. The manuscript submitted herewith is one of the results of this study. I recommend that it be published as a bulletin of the Bureau of Education.

Respectfully submitted.

P. P. Claxton,
Commissioner.

The Secretary of the Interior.

ERIC

PREFACE.

The obligations of the writer of this report are so numerous that he despairs of being able adequately to acknowledge all of them. The way was hospitably prepared in all quarters; so that he found in England, Scotland, and Germany no difficulty in securing information of every kind and in obtaining the opportunity for personal observation wherever he sought such opportunity. One obligation incurred in Scotland is, however, of such a character that it calls for special acknowledgment. Mr. J. Malloch, director of studies of the Training College of Dundee, was kind enough to read over the pages of this report on Scotland. He offered a number of suggestions, which improved the statement and eliminated errors in the first draft. In England the vice chancellor of the University of Leeds, Dr. M. E. Sadler, contributed so much in the way of suggestion and personal introductions that the writer's visits were in very large measure guided by his kindness. Several gentlemen of the board of education were both officially and personally most helpful. The writer is under special obligation to Mr. F. Heath and Mr. A. E. Twentyman. In Germany Prof. Meumann, of Hamburg, gave indispensable advice and prepared the way for easy access to the institutions both in that city and in other States. In Berlin the gentlemen at the Amerika Institute and Herr Kullnick at the Preussische Auskunftstelle für Schulwesen greatly facilitated the preparation of material for the report. Finally, Dr. Kerschensteiner, of Munich, added one more to the list of Americans who stand under obligation to him by aiding the writer in conference and with suggestions.

CHARLES H. JUDD.

CHICAGO, *April 16, 1914.*

THE TRAINING OF TEACHERS IN ENGLAND, SCOTLAND, AND GERMANY.

I.

THE TRAINING OF TEACHERS IN ENGLAND.

There are as many different varieties of teachers in England as there are in the United States. There is, for example, the private teacher who has no special training and has never submitted himself to a certificating test by the State. Then there is the partially qualified teacher employed by the community which can not, or will not, pay for a well-trained teacher. This ill-fitted teacher is often recognized by the State and given some credential which puts the school in which he serves on the list of institutions receiving Government grants. If a school is to receive grants, its teachers must be "recognized" by the board of education. If a school does not receive State grants, it is free to do anything which its patrons will accept and support. In England there are many private schools which do not ask for State aid and do not submit to inspection. These private foundations are not included in the statistics or reports of the board of education. The teachers in these schools may be regarded as for the most part without the special training which is encouraged, but not absolutely required, by the State in the grant-supported schools.

Even in the schools inspected by the board of education and supported by its grants there is the greatest variation in the training of teachers. The following facts make it clear that special professional training is not required for appointment to teaching positions in England. Of the 9,126[1] full-time teachers in secondary schools which in 1912 received grants from the board of education, 5,348[2] were without professional training. Of this group of untrained teachers, 2,371 were also without degrees from college or university. The total number of secondary teachers without degrees was 3,715. In the ordinary public elementary schools there were, out of 29,552

[1] Statistics of Public Education in England and Wales, 1911–12 (Cd. 6934), p. 114.
[2] Ibid, pp. 28 and 29.

head teachers, 12,346 not trained. Out of a total of 97,104 certificated staff teachers, 41,607 were not professionally trained. In addition, there were employed in the schools 39,125 uncertificated teachers and 12,249 supplementary teachers. This does not include part-time teachers.

The foregoing figures make it evident that the description of the English system of training of teachers must be recognized as covering only a part of the facts with regard to the teaching profession as that profession is actually constituted. The gravity of the situation is further indicated by the fact, which is repeatedly discussed in the official reports, that there is at the present time a marked undersupply of candidates for teaching positions, and that the number of students who are entering upon training is so small as to arouse serious apprehension regarding the future of the teaching profession.[1]

The training and certification of teachers is recognized as the function of the board of education, which has authority over the school affairs of all England. The board of education performs its work, however, through various local agencies. Thus there are training colleges for teachers, some of which were established by the churches, some by municipalities, and some by endowment from individual sources. Such training colleges are adopted by the board, and through grants to students and grants for buildings the board helps in their maintenance. Again, local educational authorities provide in secondary schools and in local training centers facilities for the education of designated students who are preparing for entrance upon the teaching profession. All these types of encouragement to students to become teachers are supervised and subsidized by the board, the board requiring in return conformity to its general principles of organization of the courses. The result of this method of procedure is great variation in the actual preparation of candidates for the profession, and a persistence of the traditional practices that have grown out of the older local methods. The present situation can perhaps be best explained by reviewing briefly the history of the training of elementary teachers in England.

The material for this historical statement is presented in a publication issued by the board of education, entitled "General Report on the Instruction and Training of Pupil-Teachers, 1903–1907, with Historical Introduction."

In the period 1839–40 the pupil-teacher system was developed in England through the activities of Dr. Kay, the first secretary of the committees of the council. Prior to the activities of Dr. Kay, the monitorial system, which had been developed by Bell and Lancaster,

[1] Report of the Board of Education, 1911–12 (Cd. 6707), p. 108 et seq.

was very common in England. This monitorial system, it will be remembered, provided in every school a number of children of from 8 to 12 years of age who conveyed the information which they received from the teacher to younger children who were placed under their charge. This system proved to be very unsatisfactory, because of the immaturity of the monitors and because of their utter lack of interest in actual preparation for the teaching profession, most of the monitors being persons who did not intend to become teachers and who did not regard their monitorial duties as in any sense a part of their training for later life. Dr. Kay's plan was a modification of the monitorial system, and created a class of apprentices in the schools known as pupil-teachers.

The pupil-teacher is—

a young teacher, in the first instance introduced to the notice of the master by his good qualities as one of the best instructed and most intelligent of the children, whose attainments and skill are full of promise, and who, having consented to remain at a low rate of remuneration in the school, is further rewarded by being enabled to avail himself of the opportunities afforded him for attaining particular skill in the art of teaching by daily practice in the school and by the gratuitous superintendence of his reading and studies by the master from whom he receives lessons on technical subjects of school instruction every evening.[1]

One additional fact regarding Dr. Kay's organization is to be noted as important. Not only was a salary paid to the pupil-teacher under this plan, but the head master who had the pupil in charge received also an increase in his salary paid by the central board of education.

The advance made by this pupil-teacher system over the monitorial system is described as great. A different and better qualified class of pupils undertook the work and remained in the teaching profession after their experience in the school. The number of such apprentices increased rapidly. Indeed, the inducements offered to pupils to enter upon the teaching profession, and the inducement offered to the head teachers to bring pupils into the pupil-teacher class, were so great that by 1862 the cost of the system became too great to permit its continuance. In 1861 the maximum number of pupil-teachers employed was 13,871. At this time the State was contributing a yearly grant of £15, or about $75, toward the salary of each pupil-teacher and was at the same time making a grant toward the cost of instruction.

In 1862, because of the pressure of numbers above referred to, a new plan was adopted whereby the teachers were no longer to receive from the board additions to their salaries, but a single arrangement was made directly with the managers of schools, and the managers

[1] Report of the Board of Education, 1911–12 (Cd. 6707), p. 3.

were in turn to negotiate with pupil-teachers and masters any adjustment which they could make. This new arrangement not only affected the number of pupil-teachers very materially, but led to a loss of interest on the part of the teachers in the work of their pupils. The supplementary instruction which the scheme required the teachers to give to the pupil-teachers at night became less and less effective on the academic side, and the pupil-teacher system began to exhibit weaknesses which threatened the whole scheme. Not only were some of the teachers increasingly neglectful, but an additional difficulty came conspicuously to the surface in the fact that many teachers were found to be unable to give training to the pupil-teachers on the professional side.

The official reports of this period, as well as the official reports which began to appear even before the change of 1862, show that there was frequent ground for criticism on the part of the inspectors as to the intelligence and efficiency of pupil-teachers. A corrective measure which suggested itself and began to be adopted in many quarters was that of centralizing the instruction of pupil-teachers. The example of Holland, which had influenced Dr. Kay in starting the pupil-teacher movement in England, as well as the natural tendency of the system itself, suggested the feasibility of bringing together all of the pupil-teachers in a city system for instruction at a central institution or pupil-teacher center. We are told that in Liverpool, in 1874—

> two experiments were set on foot; one took the form of a pupil-teacher college, at which the younger pupil-teachers were instructed during one afternoon in the week and the older ones during evenings and on Saturday mornings; the other was the attachment to the Roman Catholic training college of an institution in which the pupil-teachers of the numerous Roman Catholic schools in Liverpool were both lodged and taught. In other places pupil-teacher associations were formed, which attempted to assist the organization of head-teacher instruction by holding periodical examinations.[1]

The development of separate institutions for the training of pupil-teachers went forward very rapidly. In some localities opposition was encountered to the organization of these institutions, but this type of institution was soon legalized by statutory enactment and became the common agency for the preliminary preparation of teachers.

The next step of a radical character which was made came through the fusion of secondary school and the special centers for the training of pupil-teachers.[2] At Scarborough an interesting example appeared of the establishment through the joint efforts of the borough council and the school board of a pupil-teacher class in the secondary schools.

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[2] Ibid., p. 2.

[1] Report of the Board of Education, 1911–12 (Cd. 6707), p. 8.

Even in so rural an area as Wiltshire the building and staffs of secondary schools were in the same way made available for the instruction of pupil-teachers, who attend there for from three to five half days each week, although they did not share their instruction or their recreation with the ordinary scholars.

After the adoption of the code of 1902, the use of secondary schools for the training of students who were to become teachers developed into a common practice. Complications of one sort or another began, however, to appear. The academic interests of the secondary-school instructors who were interested in the subject matter were in a measure in conflict with the practical or professional interests of the pupils. One of the criticisms, as indicated above, of the pupil-teacher system was the deficiency in the academic training given to candidates. The instruction of pupil teachers in secondary schools tended to correct this difficulty. On the other hand, one of the supposed advantages of the old system was the great emphasis placed upon actual contact with children in the schools. To secure this contact with the schools during the period of secondary instruction involved many sacrifices on the part of the pupils' programs. The problem is still a live one in the English system. It has been solved in what may be called the regular system of teacher training by omitting practical training during the secondary period. Thus in the struggle between academic interests and practical interests the academic interests have won.

With the adoption of the secondary school as the center for the academic training of pupils, we arrive at what may be described as the present period of development of the system in England. The special modification of the system which typifies the present period is to be found in the fact mentioned above, that the prospective teacher now goes to the secondary school for a long period before he comes into any contact with actual class-room management and instruction. In other words, he is no longer a pupil teacher in the old sense of that term, selected by the head master because of his qualifications and immediately put in charge of some of the younger children; he is rather selected for higher academic training with a view to ultimate return to the schools after a course of training which takes him away for the time from the classroom and its duties. Students who are thus selected to be trained for the teaching profession are known as student teachers rather than pupil teachers. They are, as a matter of fact, students preparing somewhat remotely for the profession rather than actual participants. The old conception of the pupils associated directly with a single master has thus disappeared so far as the regular system of training urged by the board of education and sanctioned by its authority is concerned.

The student-teacher system as contrasted with the pupil-teacher system is, however, not fully established. Perhaps the most striking

illustration of this is to be found in the fact that in Wales it has been thought impractical to carry out the student-teacher system, and there is a conscious return to the simpler form of training under the pupil-teacher system. It was found in Wales that it was quite impossible to recruit the ranks of the teaching profession through the system of secondary and advanced training provided by the student-teacher plan. The effort to get a full series of academic courses before the student begins to apply his knowledge to instruction of pupils broke down in Wales on the economic side because it produced a dearth of candidates willing to take this longer training before entering upon their professional duties.

It was noted in an earlier introductory paragraph that this same difficulty is confronting all England. Those who are optimistic about the present system do not believe that the present dearth of teachers will permanently handicap the system. On the other hand, there are those who are pessimistic about enforcing the elaborate system of secondary training which now constitutes one of the principal requirements in the training of teachers.

Going back, for the moment, to the situation in Wales, those who are concerned with the training of teachers in that State are satisfied to return to the earlier plan, because they believe that the apprenticeship system has certain inherent advantages that are in danger of being lost in the student-teacher plan. The apprenticeship system, they point out, is the natural system in small schools where the head master comes into intimate contact with the pupils. The small schools are most common in rural districts. If the children who might be selected and trained for teachers in rural districts are not allowed to enter the profession through a simple apprenticeship system, they will be lost to the profession altogether. Possible candidates from these small rural schools often can not go to secondary schools because such schools do not exist within easy reach; and, furthermore, the longer preliminary preparation discourages boys and girls whose ability is such that they would grow into very desirable additions to the profession. Moreover, it is believed by many that the practical experience to be gained through this apprenticeship system is a complete compensation for the limitations in academic training that constitute the major criticism against the pupil-teacher system. The knowledge which the pupil teacher gets is, it is argued, much more effective and practical than the knowledge secured in secondary schools. Whether these arguments in favor of the pupil-teacher system really justify a return to that system in Wales or are merely brought forward to support a social movement which is under way, is difficult for a casual observer to decide. Certain it is that in this district there is a recoil from the more elaborate

student-teacher system authorized in England and now maintained as vigorously as possible by the board of education.

This historical and critical survey of the development of the pupil-teacher system has dealt only with the preliminary stage of the teacher's training. There are, indeed, many teachers classified by the board of education as not trained who derive their whole preparation for professional work without going beyond what is here described as the preliminary stage. Pupil teachers are still very common in England. On the other hand, the best-trained members of the profession are those who, after completing a term of years as student teachers, take a course in a training college. Here they complete a full academic and professional course. As indicated above, some of these training colleges were established by churches, some grew out of municipal pupil-teacher centers, and some have been established in the universities.

The history of training colleges would constitute an interesting parallel statement to accompany the foregoing statement of the development of the pupil-teacher system, but such a study of training colleges would not contribute any necessary elements of a comprehension of the present situation.

On the other hand, the evolution of the pupil-teacher plan explains many of the characteristics of the training colleges. Especially is this true with respect to the great emphasis which is laid in all training colleges upon practice teaching. The apprenticeship idea has been carried over and influences the actual organization of the teaching force and the program of teachers' colleges in a most emphatic degree. For example, one finds the professors in university training colleges devoting much time to demonstration lessons given by themselves to children brought from a neighboring public elementary school. Criticism lessons given by students and attended by other teachers in training are among the most common exercises in these training colleges. American audiences have from time to time had opportunities to observe some English professor of education conduct a class of children successfully before an audience. This is a sort of exercise which is very common in the English training colleges.

A second characteristic of the training colleges which impresses the observer very forcibly is the fact that all the regular agencies devoted to the training of teachers concentrate on the preparation of elementary teachers. Thus, in 1911–12[1] there were 80 colleges training 11,149 students to become elementary teachers. At the same time there were only 18[2] training colleges, and these graduated only 182 students with credentials showing that they were trained as teachers

[1] Statistics of Public Education, 1911–12, p. 285.
[2] Ibid., p. 301.

for the secondary schools. Even this statement is misleading if we do not keep in mind the fact that secondary teaching means in England something entirely different from what it means in the United States. Of the 182 students preparing to become secondary teachers, 145 were women, most of whom were preparing to teach in lower grades of the secondary schools.

The situation in this respect will be clearer if we digress for a moment to comment ou the meaning of the term "secondary school," as that term is employed in England. The secondary school in England is characterized by the following facts: First, it is a tuition school; and second, its course of study is formulated, even in the lower grades, with a view to preparing pupils for admission to the higher schools. For example, the instruction in foreign language begins when the pupils in these schools are 10 years of age. The rest of the course is modified in the same general spirit of preparation for the upper classes. The English secondary school is not characterized by the fact that it admits only the older students. In fact, the secondary school has primary grades and upper grades.

The secondary schools are primarily the schools of the "better classes" of society. To be sure, all classes of children may sooner or later, through transfers, get into these schools, provided they attain a sufficient rank to secure scholarships. This is especially true where secondary schools are maintained by local authorities. Transfers from the elementary school always involve friction, however. There is constant complaint on the part of head masters of the municipal secondary schools that children are transferred at too late a date to the secondary schools. For example, in the case of the boy who completes the work of the elementary school and is transferred at the age of 13 or 14 from an elementary school where foreign language is never taught to a secondary school where the ordinary pupils have had languages for a period of three or four years, the transferred boy is at a distinct disadvantage in his later educational career. The secondary school is therefore to be considered, as in all continental countries, a parallel school covering the ground of the elementary school and not connected with it at the end of the course, as in our American system of education. When therefore one finds that the State is concerned more with the training of elementary school-teachers than with the training of secondary school-teachers he must recognize that the secondary schools are assumed to be better able to provide for themselves teachers of an adequate grade of excellence. The better salaries paid in these secondary schools and the higher standards of academic scholarship leave the central board of education free to concentrate attention upon the elementary schools. The result is, as pointed out above, that the training colleges of England,

even the university departments, are characterized by their attention to elementary education.

Another characteristic of the training colleges which grows directly out of the traditional apprenticeship idea is the elaborate provision made in the organization of these institutions for practice schools. Formerly each training college conducted its own practice school, and in some of the older foundations the visitor finds such a practice school still in existence. For the most part, however, the public elementary schools of the city are organically related to the training college and furnish opportunity for practice. This necessitates much outside supervision on the part of the teachers of the training colleges. Indeed, in some cases practical critic teachers are taken on for part of the year to aid the regular staff in supervising outside practice teaching. In any case the corps of teachers devotes a very large amount of energy to this outside work, and the students often go a long way from the training college in order to work in schools.

The organization of practice teaching in schools not under direct control of the training college raises many issues and involves the discussion of many problems. Some of the common schools are not equipped with teachers who furnish good examples for the candidates. Therefore arrangements are made with the city authorities to concentrate their good teachers in one school. A better salary is paid to some of these better teachers. Personal conferences with the members of the training college staff also serve to improve the school. In short, the schools which are thus affiliated with the training colleges are often greatly advantaged by their affiliation with the training college.

Before turning to the details of the training of an individual teacher a brief statement should be made of the method of support of these training colleges and of the method of selecting candidates for admission.

In matters of support the training colleges are like all higher institutions of learning in England. All higher institutions exact a fee of the student; none are free.

The only free school in England is the elementary school. Originally the elementary school was open only to the poorer classes. It was maintained by some charitable or religious organization, and the students were socially looked down upon because they attended the free school. Families which could afford to send their children to schools which required a fee always did so. In view of this fee system a large number of scholarships or bursaries, as they are called, have grown up. The establishment of scholarships in various schools is one of the favorite forms of endowment. Scholarships, after

being established, are awarded, usually on the basis of examination, to students who are regarded as superior. The individual student therefore very frequently gets his higher education without having to pay his own fee. In this sense of the word his education is free, but the school which he attends does not have to recognize him as a free student since it is reimbursed by the scholarship. When the act of 1902 led to the establishment of municipal secondary schools, the demand for such scholarships in these higher schools became immediately obvious, and funds of a public sort were set aside to support worthy students in these fee schools. There never was any movement, and probably never will be, to make the school free as our American high school is free. In other words, the support of the school is derived through its pupils, and even the public funds which are to be used in the schools must be paid for individual students who are attending these schools.

The same general formula applies in the institutions which train teachers. The preparation of a teacher is a State function. Funds for the training of these teachers must be provided by the Central Government, and yet these funds are to be paid to the institutions where the teachers are actually trained in terms of the individuals who attend the institutions. In some cases the central authorities make a grant for buildings. Indeed, 75 per cent of the cost of the buildings of a training college may be paid by the board of education in London, but as soon as the buildings are erected and the institution begins operation, further funds derived from the board of education are paid only as grants for the students who attend the school. In some cases the training colleges demand a fee which is in excess of the grant paid per student by the board of education. In some cases the grant from the board of education is supplemented by funds supplied by the local education authorities, but so far as the training college has current financial relations with the board of education, it is always in the form of sums paid for recognized scholars. The theory on which this system is maintained is the theory that the Government is thus able to select the students who are supported by public funds.

The selection of students for the higher institutions is one of the absorbing problems in English education. An observer from the United States, where institutions are free and anxious to welcome students, enters only slowly into the spirit of a system which is fundamentally interested only in selected individuals. This is the most essential difference between the higher schools of England and those of the United States.

The method of selecting students is everywhere the examination. Advancement from one school to another depends on some form of examination. Perhaps the fact that schools in England have been

so diverse in character, and are consequently so unwilling to accept each other's products, explains in some measure the reliance placed on examinations, but the life of the system depends upon the fact that there is confidence in examinations as selecting instruments.

Examining candidates of all stages and degrees has become a profession. For example, there is a corporation at Oxford which conducts examinations in all parts of England. If a school wishes to be rated as efficient, it puts itself in communication with this Oxford corporation and asks for examinations in various subjects in which its students have been trained. The papers are prepared at Oxford by persons who have been employed by the examination corporation to set a series of questions, and after the answers have been written, the corporation corrects the answer papers.

What is done at Oxford is done also at various other institutions. Thus there is a general matriculation board which conducts examinations for the northern universities. The University of London is another examining institution which has a large influence in classifying students and admitting them to various educational and professional institutions. A host of other lesser examining agencies might be added to the list.

When one of these examining corporations or institutions has been in operation for a time, the board of education allows it sanction by accepting its examinations as official credentials. Students who pass the Oxford locals will be accepted as candidates for the teaching profession by the board of education. The Oxford local is accepted as a substitute for the examination conducted by the board itself. Not only the Oxford locals, but various other examinations, are listed by the board of education as acceptable in establishing the claim of a candidate for admission to a training college or for recognition as a student teacher.

It would hardly be appropriate for the American visitor to pass judgment after a few months of experience upon this whole scheme of selecting candidates for the higher schools of England. Certain it is, however, that English educators themselves see grave difficulties in the plan. Some of these appear in the fact that there are many different examining agencies, with standards which seem to differ radically from each other. Another serious difficulty is that the examination is set by some agency other than the teacher. Indeed, there is always a conscious effort to detach the examining agency from the teaching force. As in other parts of the world, the candidate who has native or acquired assurance and fluency shines in examination as contrasted with his slower fellow.

Whatever the objections to examination, the system is established and is the regular method of sending candidates on their careers of training for the teaching profession.

THE TRAINING OF ELEMENTARY TEACHERS.

The next section of this report will deal with the typical lines of training which qualify persons to enter the teaching profession as elementary teachers. As will be indicated later, and as has been intimated before, there is practically no professional training of secondary school-teachers in England. A number of different plans

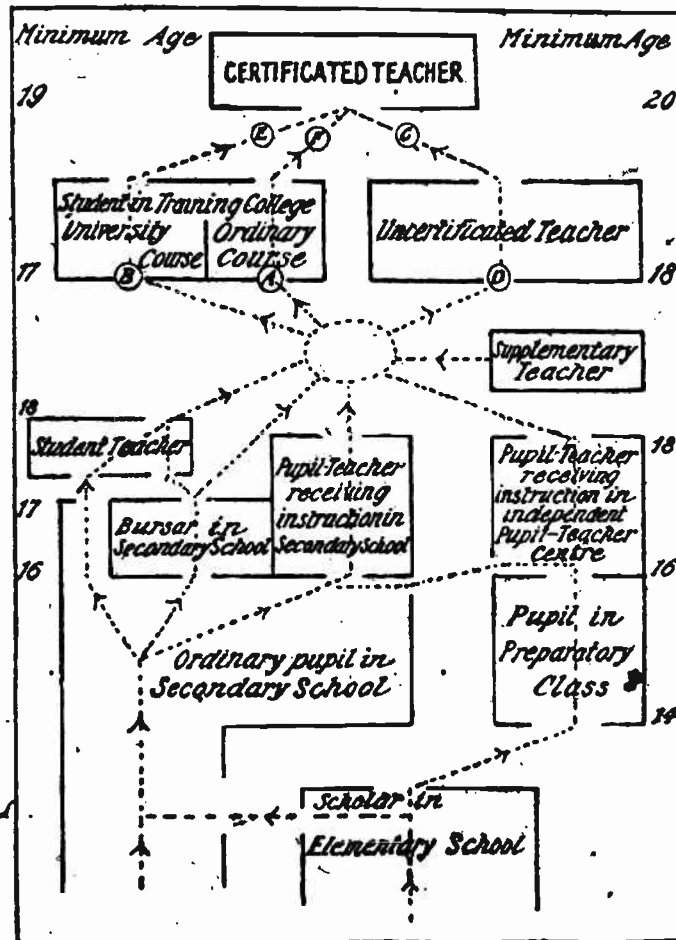

Diagram showing English plans of training for elementary school teachers.

may be followed by the student who is looking forward to a teacher's certificate for elementary schools. These are all summarized in a pamphlet published by the board of education in 1912 entitled, "How to become a teacher in a public elementary school." On page 20 of that pamphlet there is a chart which is here reproduced. This chart

shows all of the different plans of training in very compact form. We may now proceed to trace within this chart by means of explanatory statements a number of typical methods of entering the teaching profession.

It will be noted at the bottom of the chart that two types of pupils are able to enter the teaching profession, either those who come from the elementary school or those who come from the secondary school. As has already been pointed out, these two schools represent two different lines of progress, which ascend in parallel from the lowest grades upward. The transfer from the elementary school to the secondary school, which is indicated by the dotted horizontal line going out of the elementary school into the secondary school, represents the passage of pupils who have secured scholarships from the elementary school into the secondary. About 25 per cent of the places in secondary schools on the grant list of the board of education are free to elementary pupils who can pass an examination.

KEY TO DIAGRAM ON PRECEDING PAGE.

This diagram is intended to represent the various ways in which a person may proceed through the different stages of the teaching profession.

The rectangles represent the status of the teacher at the various stages of his or her career; the dotted lines represent the several means of progress of the teacher through these stages; the letters inclosed in circles represent the examinations which the teacher has to pass in this progress.

It will be observed that the lines leading from the rectangles representing the early stages of the teaching career meet in an ellipse, from which other lines proceed leading to the rectangles representing the later stages. It is intended by this to represent the fact that teachers who have passed through these earlier stages by any one of the alternative routes indicated by the dotted lines may then proceed to the later stages, either by entering a training college, whether as an ordinary or a degree student, or by becoming uncertificated teachers. The examinations to be passed in each of these three cases are shown on the diagram by their appropriate letters. It should be observed that bursars and pupil teachers may have passed one of these examinations during their period of recognition as such, and that student teachers will have done so, as a rule, previous to the beginning of their recognition.

The minimum age at which intending teachers passing through a secondary school course and going direct to a training college can pass each stage is shown on the left-hand side of the diagram, for those passing through the pupil-teacher course is shown on the right-hand side.

The various examinations are indicated in the diagram by the following letters:

(A) =One of the examinations mentioned in Appendix I. A.

(B) =One of the examinations mentioned in Appendix I. B.

(D) =One of the examinations mentioned in Appendix I. D.

(E) =An approved final examination, conducted wholly or partly by a university.

(F) =The board's final examination for students in training colleges.

(G) =The board's certificate examination for teachers in elementary schools.

The pupil who comes from the elementary school into the secondary school or the pupil who has begun his work in the secondary school now passes forward through the ordinary academic training of the secondary school until he has reached a minimum age of 16. At this point he may be recognized by the board of education as a bursar. This is the middle group of the three indicated on the left-hand side of the chart. A bursar is a boy, or girl, who has declared his intention of entering the teaching profession and seeks a grant from the board of education on the ground of his scholarship and his plans for professional service to the State. He must be somewhere between 16 and 18 years of age. He must give evidence of physical fitness. Indeed, it is to be pointed out that at every stage of the teacher's training the board of education demands this qualification of physical fitness. The bursar must also have the recommendation of local authorities that he is a student of good qualifications. The particular method of determining these qualifications is left by the board of education to the local authorities, in consultation with the board's inspector. The candidate to become a bursar must also give special promise of being able to pass the examination which will qualify him for admission to the teachers' training college. It is not necessary that he shall have taken this examination, although in some cases he has actually passed the examinations and continues his training in the secondary school after absolving this examination. It is expected in any case that he will complete the examination during the year of his bursarship. He now goes on with his secondary school training without doing any teaching in the elementary school. Indeed, this is a striking example of the fact that under the present system the practical experience of the student has been postponed as it was not under the older pupil-teacher plan. A bursar is therefore to be recognized as a person who differentiates himself very notably from the ordinary pupil-teacher, whose career is represented on the right-hand side of the chart and will be the subject of later detailed explanation.

The bursar receives education free from all fees at the secondary school which he attends, and in addition he may have a maintenance allowance. This maintenance allowance and the free tuition may be in part paid by the local education authorities and in part by the board of education through grants made to the school. If a maintenance allowance is given to the bursar of between 5 and 10 pounds, the board of education pays half of the amount. Under certain conditions the board of education will cooperate in paying a somewhat larger maintenance allowance. The board gives £10 for the tuition grant, and under special conditions may increase this grant somewhat for each bursar. Bursars are not under ordinary circumstances

appointed to these stipends unless they have been for three years in the secondary school prior to date of appointment.

There is, therefore, in this appointment a clear indication that the board of education and the local authorities are cooperating wherever it is reasonably possible to do so in the academic training of students who are later going into the teaching profession. The emphasis is here upon academic training; the practical experience is to be had at a later date. This mode of procedure is the one which the board of education favors as distinguished from the older system of pupil-teacher training, which is seen on the right side of the chart.

After the bursar has enjoyed his stipend for one year he may go forward directly into a teachers' training college. He may, on the other hand, be appointed to the position of student-teacher. It will be noted in the diagram that a person may become a student-teacher without having gone through the preliminary bursar stage. In any case, the student-teacher must be a person who has passed the examination for admission to a teachers' training college. He is therefore well on his way to complete training for the teaching profession, but he pauses at this time to get some further academic training in the secondary school and at the same time to accumulate some practical experience in the elementary school. He may be employed in an elementary school or he must, in any case, be in attendance upon the exercises of such school during the period when he is a student-teacher. For work in the elementary school he may receive such pay as the local education authorities determine. Furthermore, the local education authorities are allowed to lay out a program, subject to the inspection of the board of education, for the continuation of the training of these student-teachers. The student-teacher is a new type of pupil-teacher. He is to be found in those districts where the secondary school has given serious attention to the task of training teachers and where at the same time there is a demand for some assistance in the instruction in the elementary school. The advantage to the student-teacher himself is that he gets at this early date the kind of practical experience that was recognized as valuable all through the period when the only persons in training were pupil-teachers.

Special attention is called to the explanatory note which accompanies the chart. It would appear from the chart that the examination for admission to the training college occurs after the period of student-teacher training. It is noted in the explanatory paragraphs that this examination is regularly absolved, and the candidate must be qualified for admission to a training college before he can be appointed to the position of student-teacher.

Ordinarily the period for which a person may be a student-teacher is a single year. This may under special conditions be extended to a period of two years. After this training the candidate goes forward to his regular course in a training college or in a university department of education. In the training college he finds himself, under ordinary conditions, in a two-year course which will issue in a certificate allowing him to teach in the elementary schools.

The two-year course may be extended under special conditions to a three-year course; and if the student is attending a university department of education he may take a four-year "degree course," as it is called, the major part of which is devoted to general education, and only a small portion of which is given over to his special professional training. Students who take work in the university departments, if they receive board grants, begin their training on the theory that they are going into the elementary schools to teach after their graduation. Indeed, it is with this expectation that Parliament has made the grants which give to such students the opportunity which they enjoy of attending university courses with their fees paid and something more for maintenance. As a matter of fact, many of those who become interested in the degree courses in the college departments of education either seek positions later in the secondary schools of the country, where salaries are very much better than they are in the elementary schools, or they are deflected out of the teaching profession altogether. It is to be noted that the grants which are given by the board at different stages are all of them of such character that the student puts himself under obligation actually to teach in schools. If at any time he attempts to withdraw from this obligation, he is subject to the collection of heavy repayments of the sums that have been expended upon him; so that the pressure is very strong in all directions for the student to fulfill his obligation. It is noted that these obligations may, however, be fulfilled if the student teaches in secondary schools as well as if he teaches in elementary schools.

For the moment we shall turn away from the details of the training given in the teachers' colleges and university departments of education for the purpose of drawing attention to the less favored, but traditional, mode of entering the teaching profession through apprenticeship as pupil-teacher. If one examines the lines that run up on the right-hand side of the diagram, he will find a representation of conditions that are wholly different from those in which the secondary school plays a large part. The right-hand side of the diagram describes the conditions which are unavoidable in many rural districts and in many small towns where secondary schools are not easily accessible. Here the good student in the elementary school who is recognized by his teachers as a suitable candidate for the

teaching profession is allowed to go forward with his training either in a special preparatory department which is connected with some local institution organized for the training of pupil-teachers, or he may find himself going forward with his training in certain independent preparatory classes which are sanctioned by the board for the simple reason that there is not at hand any special training center that can be charged with the responsibility of training teachers.

Preparatory classes for pupils who are going into the teaching profession are safeguarded by regulations of the board of education as far as possible. In the first place, there can be no such preparatory class in a secondary school; it must be where that kind of institution is impossible. And these classes must provide—

at least nine meetings each week, of not less than two hours each, held after 7.30 in the morning and before 6 p. m., during 36 or more weeks in the year, and must provide a suitable course of instruction during either one or two years for pupils who are intending to become pupil-teachers. Pupils receiving instruction in a preparatory class may not be employed in any capacity in a public elementary school; [1]

that is, they are not pupil-teachers in any proper sense of the word at all. They are merely in preparation for later entrance upon practical employment. In other words, they are selected for the purpose of more intensive training; they represent a stage beyond the ordinary elementary school course, but they do not represent yet full entrance upon the privileges even of the lower stages of the teaching profession. It will be noted that the ages at which pupils may thus be provided for in preparatory centers are 14 to 16; that is, the period during which the ordinary child if he were in a community supplied with full education facilities would be taking courses in the secondary school. At 16 years of age a pupil who has been taking special preparatory work may be recognized as a pupil-teacher. This means that he will receive some further academic instruction, but he will also be doing some work in public elementary schools. The safeguards which the board of education has thrown around this type of training are very much more explicit in character than those which are thrown about the secondary schools which deal with the training of teachers. It is evident that long experience has made the board of education skeptical of the efficiency of the pupil-teacher system of training. We find, therefore, such regulations as the following, which express the attitude of the board of education that this type of training needs to be very explicitly directed:

The center must be efficient; must not compete unduly with any other center, or with a neighboring school providing higher education; and, from its character and financial position, must be eligible to receive aid from public funds.

[1] Regulations for the Preliminary Education of Elementary School Teachers (Cd. 7008), 1913, p. 12.

A center to the governing board of which grants are to be paid under these regulations, must not be conducted for private profit or farmed out to the head master or mistress. The salaries of the teaching staff must in no case be subject to variations according to the amount of grant received.[1]

These regulations make it clear that the board of education ordinarily looks upon the development of secondary schools as the best agencies for the training of teachers. Nevertheless, the special pupil-teacher center is described in detail in the following regulation, viz.:

The curriculum of the center must make provision for instruction in English language, literature and composition, history, geography, mathematics (including arithmetic), science (including practical work), reading and recitation (including voice production), music, drawing, and physical exercises; and, unless special dispensation has been obtained from the board, in at least one language other than English. In a center for girls provision must be made for needlework, and in a center for boys, as a rule, for manual work. The course of study followed by each pupil-teacher must, except with the special approval of the board, be so arranged as to cover during the period of his recognition all the subjects included in the curriculum.[2]

The pupil-teacher who enters upon this type of training also has the opportunity of employment in the local school system.[3]

Salaries, the amounts of which vary in the case of different local education authorities, are paid to pupil-teachers in respect to their services in the public elementary schools. On the other hand, the amount of instruction which they received is safeguarded by the following regulation:[4]

A center must, unless some other arrangement has received the special consent of the board, be open for at least five meetings each week during 36 or more weeks of the year. * * * These meetings must be held after 7.30 in the morning and before 6 in the afternoon, and the minimum duration of a meeting must be two hours. The board may, by special arrangement made at the time of recognition of any center, accept meetings of exceptional length as the equivalent of more than one meeting in each case for the purpose of this article and of article 24 of these regulations. The pupil-teachers must attend with due regularity.

The pupil-teacher is expected through this type of special training to prepare himself for the leaving examination which will admit him to the teachers' training college or to the university department. It is to be noted that if the pupil-teacher has the latter ambition, of attending the university training department, his academic training must be intensive, so that he may meet the requirements of the university department. Many pupil-teachers thus trained enter the training colleges; indeed, in a later summary of the statistics of the different types of admission to the training colleges this matter will be touched upon again.

In this connection attention may be drawn to the fact that these special centers for the training of pupil-teachers do not always have an independent existence. There may be a special pupil-teacher cen-

[1] Regulations for the Preliminary Education of Elementary School Teachers (Cd. 7003), 1913, p. 10.
[2] Ibid., p. 8.
[3] Ibid., p. 5.
[4] Ibid., pp. 7–8.

ter within a secondary school. This is represented in the middle part of the chart, where the pupil-teacher receiving instruction in the secondary school is set apart as a third group within the secondary school.

Finally, attention is to be drawn to the fact that in addition to all of this preliminary training which has here been described as recognized by the board, there is a good deal of private training which does not draw from the board any grants. The term "recognition," as technically employed in the English educational system, means an official recognition on the part of the board of education with an accompanying grant. In many schools pupils are serving as pupil-teachers but are not being supported by the board of education. In some cases local authorities are providing themselves with candidates for the teaching profession by making local grants, and in a few cases pupils are carrying themselves forward without special aid for the purpose of training themselves for the teaching profession. Even in the training colleges for teachers there are so-called private students, or persons who are received and given training without any payment from the board of education either of their tuition or of their maintenance.

The whole system of preliminary preparation, accordingly, may be described as a series of parallel lines, one of which emphasizes the academic side of the training and passes through the bursarship into the training college. The other is the extreme case of a pupil who is employed during his training as pupil-teacher. Intermediate between these two are various stages of pupil-teacher or student-teacher training carried on institutionally or by interested head masters. In all except the distinctly academic plan at first described there are clear traces of the historical development of the system out of the apprenticeship system in which the pupil early becomes a part of the teaching machinery of the public-school system, giving instruction in some elementary school.

The grants paid for pupil-teachers who are recognized for one year are £7 10s.; for pupil-teachers recognized for two years, £15. Other grants of less amount will be paid for teachers who have complied with a part of the requirements only. Special grants are also made for the establishment of teachers' centers where they do not now exist. The following paragraph, which is included in the regulations for the preliminary education of elementary teachers, is so typical that it is here quoted to indicate the extent to which the board of education is disposed to cooperate in any scheme that will provide teachers:

The board are prepared to consider proposals from local education authorities for the preliminary education of elementary school-teachers by systems other than those aided under the foregoing chapters of these regulations.

If they approve of the proposal, they make a grant to the authority in aid of their expenditure.

An authority having such an alternative scheme to submit must state the reasons for which it is required in their area to supplement or to take the place of the systems aided under the chapters named above, and must give a detailed estimate of the expenditures which the scheme will involve. In assessing the grant in aid of such a scheme the board will take into account, first, the extent to which it succeeds or is likely to succeed in producing qualified teachers; second, the expenditure incurred by the authority in respect of it out of funds available under part 2 of the Education Act of 1902; and, third, the amount of the funds at the board's disposal for the purpose of this chapter.[1]

In other words, the board of education, while favoring a secondary academic training as a preliminary to practical experience and as preparatory to entrance into teachers' colleges, will recognize a variety of other forms of training and will cooperate with local authorities in devising new means of supplying teachers for the school system.

The social level from which pupil-teachers and bursars are drawn is set forth in the following table, which is quoted from page 145 of the Statistics of the Board of Education:

Occupations of fathers of pupil teachers and bursars recognized for the first time in 1911–12.

Occupation of fathers.	Boys.				Girls.			
	Bursars.		Pupil teachers.		Pupil teachers.		Bursars.	
	Number.	Percentage.	Number.	Percentage.	Number.	Percentage.	Number.	Percentage.
1	2	3	4	5	6	7	8	9
Total number	723	100.0	393	100.0	1,562	100.0	2,13[illegible]	100.0
Ministers of religion	7	0.3	4	1.0	14	0.9	19	0.9
Teachers	49	6.8	30	7.6	89	5.7	154	7.2
Members of other professions	13	1.8	6	1.5	77	4.9	82	3.8
Farmers	23	3.2	13	3.3	76	4.9	84	3.9
Wholesale traders (proprietors and managers)	16	2.2	12	3.1	105	6.7	88	4.1
Retail traders (proprietors and managers)	120	16.6	61	15.5	270	17.3	348	16.4
Traders' assistants	10	1.4	6	1.5	35	2.2	39	1.8
Contractors	10	1.4	4	1.0	23	1.5	53	2.5
Minor officials	39	5.4	16	4.1	88	5.6	105	4.9
Clerks, commercial travelers, and agents	81	11.2	45	11.5	181	11.6	307	14.4
Postmen, policemen, seamen, and soldiers	24	3.3	21	5.3	36	2.3	65	3.0
Domestic and other servants	22	3.0	7	1.8	52	3.3	87	4.1
Skilled workmen	273	37.7	148	37.7	454	29.1	616	28.9
Unskilled workmen	38	5.3	19	4.8	50	3.2	79	3.7
No occupation given	3	.4	1	.3	13	.8	9	.4

Before closing this discussion of the preliminary training of teachers a quotation may be inserted from the report of the board of

[1] Regulations for the Preliminary Education of Elementary School Teachers, pp. 24–25.

education for 1911–12, which shows the difficulties of working the plan which is favored by the board of education, namely, the student-teacher plan of qualifying teachers. On page 108 of this report the following statement is made:

The decline in the number of entrants to the profession of elementary school-teacher, which is conspicuous at all stages of their preliminary education and training, appears also in the number of student teachers recognized during the year 1911-12. The numbers whose recognition began during that and during the two preceding years were as follows:

	Boys.	Girls.	Total.
1909-10	980	2,067	3,047
1910-11	887	1,920	2,807
1911-12	702	1,787	2,489

The student teachers in any year are drawn in the main from those of the previous year's bursars who do not either continue to attend their secondary schools whole time or proceed direct to a training college. The decline in the number of student teachers is therefore the consequence of the decline in the number of bursars in the previous year. The number of bursars recognized in 1908-9 was 3,507; for 1909-10 it was 3,342; and for 1910-11 it was 2,764. It is a condition of recognition of all candidates as student teachers and in the case of ex-bursars the only condition that they shall have passed before recognition as student teachers begins an examination recognized by the board as qualifying for admission to a training college as a two-year student. Failure to pass such an examination by the end of the bursarship precludes a certain number of bursars from at once obtaining recognition as student teachers. The total number of candidates recommended to the board for recognition as student teachers for 1911-12 was 2,919, of whom 771 were boys and 2,148 girls. Of these, 86 boys and 432 girls failed to qualify for recognition from the beginning of the year, the reason in almost all cases being that they had failed to pass the necessary examination either in all or in one or more of the prescribed subjects.

Without attempting to follow the details of the discussion it will appear that the board of education is encountering a good deal of difficulty in its efforts to establish the regular procedure from bursarship through student teachership into training in the colleges. As pointed out in an earlier paragraph, the return in Wales to the pupil-teacher system indicates the necessity of keeping up in some fashion a supply of teachers in spite of the difficulties which the longer system of training through the secondary school seems to present. There is no immediate probability of a return on a large scale to the pure pupil-teacher system in England, but while there is a constant effort on the part of the board of education to turn this training in the direction of the secondary schools the actual forces of community life are pulling back again in the direction of a simpler pupil-teacher system.

TRAINING COLLEGES AND UNIVERSITY DEPARTMENTS OF EDUCATION.

We turn now to a discussion of the training colleges for teachers and the departments of education in universities which prepare the students for their certification examinations after they have concluded the period of preliminary training which has, up to this time, been the subject of discussion. In this discussion we shall hold, as before, to the training of elementary teachers.

During the year 1911–12 there were 80 training colleges for elementary teachers. Six of these were university training colleges providing a four-year course. There were 11 other training colleges connected with universities providing a shorter course than the full four-year degree course; 18 training colleges were conducted by local councils of education, and may be regarded therefore as part of the city or county systems. Finally, there were 45 voluntary training colleges.[1] This latter figure makes it perfectly clear that the tradition of training teachers in colleges privately organized, especially by the churches, is still very strong.

The training college may be either a residential college or a day college. If it is a residential college, it must conduct a hostel with boarding arrangements and may conduct a residence with rooming arrangements under the direct supervision of the board. There are 39 institutions among the 80 training colleges which conduct recognized hostels. Certain other institutions which receive no grant from the board are allowed to train "private" students and are classified as *certified*.

With regard to their staff the following regulations are made for training colleges by the board of education:

The teaching staff of the institution must be such as to provide adequately for each of the following branches of study: 1. Education; 2. English language and literature; 3. History; 4. Geography; 5. Mathematics; 6. Elementary science.

In training colleges in Wales, provision must also be made for the teaching of Welsh.[2]

The number and qualifications of the teaching staff, their salaries, and their hours of duty must be approved by the board. The staff of a college at which some of the students are women must include a reasonable proportion of women, and in the case of a college attended mainly by women students, at least half of the permanent staff other than the principal must be women. At least two-thirds of the teaching staff of an institution applying for recognition as a training college for the first time must consist of persons holding university qualifications approved by the board. Until the proper proportion be attained, alternate vacancies, at least, in the nongraduate portion of

[1] Of these 45 training colleges 29 belong to the Church of England, 7 to the Roman Catholic Church, 2 to the Wesleyan denomination, and 7 are undenominational.

[2] Regulations for the Training of Teachers for Elementary Schools (Cd. 6795), 1913, p. 2.

the staff of existing colleges must be filled by the appointment of persons holding such qualifications. All proposals for appointments to the teaching staff of a college, including the post of principal, must be submitted for approval to the board, together with the fullest possible details as to qualifications before they are confirmed by the governing body. A man proposed as principal of a college who does not hold a degree with honors of a British university will not, save in exceptional circumstances, be recognized for this purpose by the board.[1]

These regulations make it clear that the board of education is taking over in a very important sense even the voluntary training colleges.

The following table shows the size and training of the faculties or "staffs" of these colleges for 1912:[2]

Size and training of college faculties.

Institution and teachers.	Men.		Women.	
	Full time.	Part time.	Full time.	Part time.
University training colleges	43	[1] 60	48	25
Council training colleges	62	79	148	42
Voluntary training colleges	126	83	270	59
Certificated teachers (graduates):				
Professionally trained	107		93	
Not professionally trained	6		4	
Certificated (not graduates):				
Professionally trained	27		93	
Not professionally trained			2	
Graduates (not certificated)	83		170	
Other teachers	8		104	

[1] Not including professors and lecturers whose courses in academic subjects were attended by students in the training college.

With regard to the admission of students, these training colleges are also to be recognized as public institutions. Each training college seeks to fill up its student body through its own efforts, either by advertising or through the traditional connections which it has in the community about it. It is not uncommon to find in the newspapers of England the advertisement of a training college which is seeking candidates for admission. It will be remembered that these candidates constitute a source of income to the training college, because the board of education pays the fees of such candidates. Each one of the training colleges has an officer whose business it is to pass upon the qualifications of applicants. The one difficulty which seems to stand out conspicuously after the candidate has presented his proper examination credentials for admission is the difficulty of religious affiliations. Apparently some of the institutions are disposed to select only those candidates belonging to the same

[1] Regulations for the Training of Teachers for Elementary Schools (Cd. 6795), 1913, p. 4.
[2] Statistics of public Education, 1913, p. 284.

faith as the institution itself. The board has therefore found it necessary to set up the following regulation:

In the selection of candidates for half the number of places which will be vacant, the authorities of a college may not reject, or invite the withdrawal of, the application of any candidate not belonging to the denomination of the college on the ground of religious faith or by reason of his refusal to undertake to attend or abstain from attending any place of religious worship, or any religious observance, or instruction in religious subjects in the college or elsewhere; nor may they require any candidate not belonging to the denomination of the college to enter for any examination in religious knowledge. No student may be refused admission to a college except on reasonable grounds, and in particular no student may be refused admission on the ground that he has not been vaccinated, or on the ground of social antecedents.[1]

These quotations indicate the gradual evolution of a system which was private in its origin into a public system, responsible to the State for the training of teachers for elementary schools. With reference to the whole religious controversy, it was the observation of the writer that this controversy does not present itself very commonly in the administration of training colleges. In fact, the statement was repeatedly made, especially in the council training colleges, that the matter of religious preference and religious prejudice was of no significance in actual administration. On the other hand, the authorities in some of the private institutions seem to magnify religious matters, and friction certainly threatens to arise if particular candidates for admission do not conform to the prejudices and expectations of the institution. It may be said, however, that these religious matters do not at the present time play any large part in the actual organization of these institutions.

Number of students in training colleges of different types in 1911–12.[1]

	Men.	Women.		Men.	Women.
University training colleges:			Voluntary colleges:		
Hostel students	111	255	Resident students	1,523	3,526
Day students	1,379	992	Hostel students	....	138
Total	1,490	1,247	Day students	64	141
Council colleges:			Total	1,587	3,806
Resident students	....	260			
Hostel students	151	658			
Day students	637	1,314			
Total	788	2,232			

[1] Statistics of Public Education, 1913, p. 285.

Statistics are not available to show directly the preparatory training of all of these students. Certain facts, however, can easily be drawn from the statistical reports to show the kind of candidates

[1] Regulations for the Training of Teachers for Elementary Schools, pp. 8–9.

which are prepared for admission to the training colleges. These facts are presented in the following table:

Number of pupil teachers and bursars reported in 1912 as passing examination qualifying them for admission to training colleges.[1]

I. Pupil teachers recognized from Aug. 1, 1909, for a normal period of two years	2,514
II. Bursars recognized from Aug. 1, 1910	1,725
Total	4,239

Student teachers admitted to training colleges in 1912:[2]

Men	647
Women	1,241
Total	1,888

The foregoing table shows that a very large percentage of teachers in training have come through centers of training other than the secondary schools. On the other hand, the large number of bursars and student teachers shown by the table indicates how far the present system has evolved away from the original pupil-teacher plan.

Turning from the student body to the course of study, we have seen, in connection with the description of the faculty or "staff," what are the chief elements of this course. The subjects of instruction there enumerated are divided into two classes, known as "General subjects, group A," and "Professional subjects, group B." The general subjects are English, history, geography, mathematics, elementary science, and in Welsh colleges Welsh. The professional subjects are the principles and practice of teaching, hygiene and physical training, theory of music and singing, reading and recitation, drawing, and, for women, needlework.[3]

The course of study in each one of these subjects is defined in a syllabus, which, however, gives a good deal of latitude to the local authorities in modifying the content of the work. Indeed, here, as throughout the system, emphasis is laid upon local initiative, but supervision is rigid in the expectation of reaching through supervision a high standard of work, whatever may be the variations in the particular local course of study administered.

The colleges also offer certain optional subjects. In this group may be mentioned French, German, Latin, physics, chemistry, botany, rural science, and housecraft. The successful completion of a course in any one of these optional subjects is recognized in the certificate granted to the teacher at the time of leaving.

[1] Statistics of Public Education, 1913, pp. 196-97.
[2] Ibid., p. 208.
[3] Regulations, etc., p. 14.

Subjects under group A and group B were formerly required in full of all candidates for certification. With the increase of emphasis upon preparatory academic courses, it has come to be regarded as decreasingly necessary to emphasize the general subjects in the work done at the training colleges. The board of education now takes the position that the professional courses are essential to the equipment of any teacher, and these must be taken by the candidates in the course of their training. General subjects, however, do not need to be taken in full. The board of education requires students to complete only three of these general subjects, and in certain cases, with the special approval of the board, this number may be reduced to two. This latter provision of reduction to two is intended particularly to meet the case of students who desire to specialize on a certain side of their professional work.

Beyond this fundamental course which requires two years of training there is, in a limited number of cases, recognition of students for a third year of training. This recognition for a third year makes it possible for a student to specialize beyond the ordinary two-year course. Finally, as was indicated above, when the training course is administered in a university department it is entirely possible for a candidate to supplement his academic training so as to take four years of such academic training.

Returning now to the details of the course, one finds great emphasis laid in each of the training-college courses upon practice teaching. In this matter the regulations of the board are very explicit. On page X of the "Regulations" the board recommends that a certain amount of practice teaching be required in the first year's work in order that the college authorities may have an early opportunity of forming some opinion as to the teaching capacity of the students. Furthermore, on page XV the board states that students—

> who have not had practical experience as teachers in elementary schools in some capacity recognized by the board before entering the training college will be required to spend at least 12 weeks during their course of training in class teaching; and that, in the case of students who have had such practical experience before entering the training college, the period to be given to practice in class teaching may vary from 6 to 12 weeks, as may be determined by the college authorities in view of the circumstances in the particular case.

These regulations, the board points out, are intended to enforce the general principle that the primary purpose of a professional college is to afford a professional training to persons who are intending to become teachers. As reiterated in a number of the foregoing discussions, the board has attempted to require, so far as possible, adequate academic courses before the student enters the training college. In the college itself professional work is to have the right of way.

When one visits a training college, he finds himself surrounded by evidences of the overwhelming importance in these institutions of practical work. A very large fraction of the energy of students and staff is devoted directly to practice teaching. All of the members of the faculty or staff of the training college participate in the supervision of this practice teaching. This is true of those who teach special subjects, such as history, geography, mathematics, etc., as well as of those in the education courses. Indeed, as indicated before in this paper, the members of the faculty themselves take charge of classes of children and give exhibitions to the students of the way in which these classes can properly be conducted. A great deal of time is devoted to the careful personal criticism of the teachers-in-preparation, who have given a class exhibition before the instructor and their colleagues. These criticism exercises take the place in a very large measure of the courses which in America we designate courses in general method.

In striking contrast with this emphasis on practical education is the relative neglect of educational theory. One is very much impressed by the fact that in the English training colleges the whole theoretical side of pedagogy has a very meager and abstract treatment. One finds that the textbooks employed in the theoretical courses deal with the general science of psychology and with the discipline of logic and ethics, rather than with any of those practical applications which are being attempted in our American normal schools and college departments of education. In this respect there is so wide a breach between pedagogical theory and actual emphasis upon practice teaching in English institutions that one is tempted to say that the teachers in English training colleges have not realized the possibility of dealing in a scientific way with the practical problems of school organization and the practical problems which come up in the conduct of recitations.

Turning from the course of study to the financial conduct of the training colleges, it is to be pointed out once more that the board of education practically maintains these training colleges. A grant is made for each one of the students "recognized" under the regulations reviewed in the earlier paragraphs of this report. A grant of £13 a year is payable to the governing body of all approved training colleges as payment for the instruction given to a recognized student. If, in addition to giving instruction, the institution provides the rooming and boarding facilities, an additional grant of £40 is given for men and a grant of £25 for women. This makes an aggregate maintenance and tuition allowance of £53 for men and £38 for women. If a recognized student is a resident of one of the colleges of the universities of Oxford and Cambridge, personal grants are made

to the students at the rate of £40 for the year. Any college may exact of the student a further fee above the board's grant.

In all of these cases it will be noted that the board of education is bearing a very heavy part of the cost of training the individual teacher. Not only so, but the board of education participates in the equipment and establishment of training colleges and hostels. A building grant will be made to any municipality or governing body, which must, however, not exceed 75 per cent of the cost of the land or 75 per cent of the capital expenditure invested in buildings. The buildings must conform to certain regulations with regard to their capacity for the accommodation of students. This Government subsidy of 75 per cent of the cost of buildings makes it possible for a municipality or for a governing board to have ample physical accommodations for the institution which it is conducting. Some magnificent new plants have been erected through the grants from the board of education. These plants in some cases provide for the living quarters of the students quite as much as for their instruction.

The foregoing paragraph makes it clear that the board of education has provided very generously for the early stages of the training of a teacher who is to give instruction in the elementary schools of England. Indeed, the English teacher-in-preparation receives from the board much more in the way of a maintenance grant than is common in America. If the teaching profession can be made attractive by providing a ready and inviting road into the profession, certainly England has done much to solve the problem. But it turns out, as has been indicated in earlier paragraphs, that there is a dearth of candidates. One begins to inquire immediately why it is that with all these attractive possibilities provided through the payment of fees and maintenance English young men and women are not crowding into the teaching profession. The answer is to be found in the fact that the payments made by the schools for teachers' salaries are so meager that the profession is not attractive, even though the path leading to the profession is made easy by the board of education. The writer heard repeatedly the pleas made by various teachers' organizations for an increase in the compensation of teachers, and it is the opinion of many of the leaders in English education that a radical change will have to be made in the salaries paid to teachers before the profession can be made as attractive as it ought to be. In other words, a profession can not be made attractive by subsidizing preparation for the profession. The career itself must be put upon a sound financial basis, and then students will be willing to invest their private resources in preparation. Evidence confirming this conclusion is to be found in the German school sys-

tem where salaries are good and there are more candidates than can be accepted, as well as in the English civil service where, again, salaries are good and the admission examinations are very severe. The civil-service positions of England are more sought after by far than the positions in the schools.

After a student has passed through his period of training in the training college he is examined by the board and receives a certificate authorizing him to teach in the elementary schools of England and to participate in the retiring scheme which is in operation for certificated teachers. There are two methods by which the examination may be absolved. In the first place, there is an examination known as the final examination for students in training colleges, which is conducted by the board itself. Written papers are set in the courses in English, history, geography, mathematics, principles of teaching, hygiene, and theory of music. No written examination is given in the practice of teaching, physical training, reading and recitation, drawing, and needlework, but in this latter group of subjects the judgment of the staff or faculty of the training college is taken subject to careful scrutiny. The faculty must keep the record of each student in such form that it can be examined by the inspector of the board, and this record of the training college is a part of the evidence that a student is qualified to receive his certificate.

There is a second method by which the efficiency of the candidate may be determined. According to this second method, a joint examining body is organized for the purpose of examining candidates. One or more of the board's officers act as "assessors" of this examining body. Certain members of the commission are chosen from the staff of the training college, and there are included also other persons designated by the board to act on the commission. Not more than half of the number of the joint examining body may be members of the staff of the training college from which the candidate is to be examined. The theory on which such a board is constituted is, of course, that the impartial judgment of an outside board must be passed upon the work of the candidate. The judgments of this board are further safeguarded by the statement that the board of education reserves the right to accept or veto any proposals put forward by this joint examining body. After the examining board has been constituted it may canvass the ability of each candidate by written examinations in English, history, geography, and mathematics and by written examination or practical test in elementary science. Every student must be examined or tested in at least three of these subjects. In addition to the examination, there is to be a careful scrutiny of the candidate's record. The whole matter is to

be submitted to the assessors appointed by the board of education, they in turn to pass upon the findings of the examining board. When a candidate for the certificate is a member of university classes and is taking the full degree course, examinations may be conducted by the university staff with the cooperation and approval of the officers of the board.

Those candidates who pass through this examination ordeal successfully are granted certificates. A variety of provisions are set down whereby candidates who at any stage of their work have failed to pass the examination satisfactorily may recover the loss if they make up the work.

There are numerous candidates who take the certificate examination from the board without having completed the course of training offered by the training colleges. In its annual report for 1912 the board gives a description of this class of candidates for teachers' certificates. Candidates were asked at the time of the examination to indicate the kind of training which they had taken for this examination. The following table presents the results, together with the number of failures of each class:

Training received by candidates for teachers' certificates.[1]

	Candidates.		Failures.	
	Number.	Per cent.	Number	Per cent.
A. Oral classes for teachers provided by local authorities	914	21.1	577	63.1
B. Other oral classes	305	7.0	225	73.8
C. Correspondence classes	2,347	54.2	1,629	69.4
D. Oral and correspondence classes	131	3.0	88	67.2
E. Private tuition only	119	2.7	87	73.1
F. Private study only	493	11.4	349	70.8
Unclassified	22	......	......	......

[1] Report of the board of education, 1911-12, p. 118.

It is to be noted that the failures of those who come to the examination without the course of training given by the training college are evidently very heavy. In its report the board calls attention to the fact that many candidates enter for these examinations who have very slight chance of successfully completing them. They are persons of somewhat irregular training, who in most cases have entered the ranks of the teaching profession through the pupil-teacher system and are now employed as uncertificated or irregular teachers in public schools or in private schools. That the board of education regards this class as relatively undesirable, and the class itself is gradually diminishing, is indicated by the table following and by the comments which are made by the board of education.

Results of examinations for teachers' certificates.[1]

Years.	Number who entered examination.	Number who passed.	Number who failed.	Percentage of failures.
				Per cent.
1908	5,197	2,122	3,075	59.2
1909	6,186	2,330	3,856	62.3
1910	6,663	2,011	4,652	69.8
1911	4,321	1,356	2,975	68.7

[1] Report, 1911-12, p. 116.

The comments are as follows:

It will be observed that there was a very substantial decrease in the number who entered the examination in 1911. Various reasons may be assigned for this. The increase in the accommodation provided in training colleges has made it easy for all intending elementary-school teachers who have the inclination and the means to do so to take a course in training. * * * The action of the board in raising the standard required for a pass has no doubt contributed to this result. A contributory cause of the decrease in numbers may perhaps also have been the fact that the fee for the examination was raised from 5 shillings in 1910 to 10 shillings in 1911.

In other words, the whole effort of the board is turned in the direction of requiring a course of training in the training colleges, and irregular candidates show by the large number of failures which appear in this class that they are seriously handicapped in competition with those candidates who have taken the regular course.

Special teachers in domestic subjects and special teachers for the deaf and blind, as well as for special epileptic schools, are provided for in the regulations of the board. The board does not hold examinations for certificates in domestic subjects, but it does accept the diplomas given by certain recognized schools. Persons who have already qualified as certificated teachers may add this qualification to their certificates. On the other hand, persons who have not yet qualified as teachers, but are over 18 years of age and are recognized for their capacity in teaching as well as for their training, will be given recognition by the board as teachers of particular subjects. This latter type of permission to teach is restricted to special schools. For special teachers of the blind and deaf the board recognizes the examination conducted by the college of teachers of the blind and by the joint examination boards of the teachers of the deaf. These are two examining organizations which operate as private corporations, but are sanctioned by the board's authority as the instruments for selecting teachers who can carry on this special work.

There is a retiring allowance provided for every teacher who is certificated and engaged in teaching in schools receiving grants from the board. Under the law every teacher who is serving in

recorded service must contribute to the Deferred Annuity Fund. The rate of contribution is £3 5s for men and £2 8s for women. These sums are withdrawn annually by the board from the grants made to local authorities. The local authorities in turn have the right to deduct the amount from the salary of teachers. Only recognized and certificated teachers are eligible to enjoyment of this fund. After a teacher has reached the age of 65 years at any later date at which his certificate expires he becomes entitled to an annuity for the remainder of his life. This annuity is fixed according to certain definite tables, which are published in the pamphlet entitled "Elementary School Teachers' Superannuation Pamphlet, 1912." Furthermore, under certain conditions an annuity may be awarded to disabled teachers who have not reached the age of retirement.

Finally, some tables may be copied from the report of the board of education setting forth the actual condition at the present time with regard to the changes that have taken place in recent years in the character of the teaching body.

The following table shows for England for the last three years. under types of area. the number of adult teachers of various grades per 1.000 children in average attendance:[1]

Teachers and attendance.

Type of local education; authority and year.	Number of scholars in average attendance.	Number of teachers for every 1,000 scholars in average attendance.				
		Certificated.		Uncertificated.	Other adult teachers.	Total adult teachers.
		Head.	Assistant.			
London:						
1909-10	652,630	3.56	21.00	0.91	0.44	25.91
1910-11	653,246	3.58	21.68	.73	.59	25.57
1911-12	649,031	3.61	22.39	.58	.16	26.74
County boroughs:						
1909-10	1,557,136	3.91	15.64	7.18	1.41	28.14
1910-11	1,564,430	3.92	16.19	6.98	1.16	28.25
1911-12	1,611,495	3.93	16.57	6.68	1.08	28.21
Urban districts:						
1909-10	289,842	3.69	15.37	6.49	1.28	26.84
1910-11	284,629	3.71	15.87	6.19	1.06	26.82
1911-12	266,349	3.71	16.53	5.90	1.06	27.19
Boroughs:						
1909-10	540,651	5.01	12.04	9.93	2.48	29.46
1910-11	546,610	5.00	12.80	9.83	1.92	29.55
1911-12	532,094	5.01	13.35	9.57	1.82	29.75
Counties:						
1909-10	1,925,869	8.76	6.83	11.68	6.45	33.13
1910-11	1,922,241	8.77	7.51	11.31	5.86	33.45
1911-12	1,892,711	8.88	7.92	11.22	5.76	30.26
Total:						
1909-10	4,966,128	5.85	12.52	8.13	3.35	29.85
1910-11	4,971,156	5.86	13.16	8.10	2.98	30.10
1911-12	4,951,680	5.89	13.67	7.89	2.81	30.26

In the table following the actual numbers of adult teachers of various grades employed in ordinary public elementary schools, and the percentage of each grade to the total, are shown for England for the last three years.

[1] Report for the year 1911-12, pp. 50-52.

Number of teachers of various grades.

Grades of teachers.	1909-10		1910-11		1911-12	
	Number.	Percentage.	Number.	Percentage.	Number.	Percentage.
Certificated	91,452	61.75	94,788	63.20	97,103	64.66
Uncertificated	40,453	27.32	40,351	26.90	39,126	26.05
Student-teachers	2,324	1.57	2,124	1.42	1,706	1.14
Supplementary teachers	13,861	9.36	12,722	8.48	12,249	8.15
Total adult teachers	148,090	....	149,985	....	150,184	....

During 1911–12 the total number of certificated teachers on the staffs of ordinary public elementary schools in England increased by 2,315 to 97,103. This total gives approximately one certificated teacher for every 51 scholars in average attendance. Taking the types of area separately, there is approximately one certificated teacher for every 38 scholars in London, for every 49 in the county boroughs, for every 53 in the boroughs and urban districts, and for every 60 in the counties. These average figures cover extremely wide variations among areas of the same type.

The following table shows an appreciable rise during the last three years in the proportion of certificated teachers employed in ordinary public elementary schools in England who have been trained.

Certificated teachers.

Year.	Men.			Women.			Men and women.		
	Number.	Number trained.	Percentage trained.	Number.	Number trained.	Percentage trained.	Number.	Number trained.	Percentage trained.
1909-10	30,101	21,204	70.44	61,351	28,299	46.13	91,452	49,503	54.13
1910-11	31,214	22,152	70.97	63,574	30,441	47.88	94,788	52,593	55.48
1911-12	31,998	23,016	71.93	65,105	32,479	49.89	97,103	55,495	57.15

Teachers other than certificated.

Year.	Uncertificated teachers.			Supplementary teachers.			Student-teachers.[1]		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1909-10	5,022	35,431	40,453	43	13,818	13,861	773	1,551	2,324
1910-11	5,108	35,243	40,351	9	12,713	12,722	691	1,433	2,124
1911-12	4,814	34,312	39,126	....	12,249	12,249	509	1,197	1,706

[1] Includes only those employed in schools.

This report has, up to this point, concerned itself chiefly with the training of elementary school teachers. The reason for this is that there is no system of training for secondary school teachers in England. A brief pamphlet is issued by the board of education setting forth conditions on which secondary school teachers may be approved, and there are a number of institutions that give some attention to the preparation of teachers for secondary school work.

These special institutions, however, deal very largely with the preparation of teachers for the lower grades of the secondary school. The situation in England is even less organized in this respect than is the corresponding situation in America. There is no effort on the part of the universities to deal with the problem as there is in many of the State universities in America. The whole matter is so chaotic in England that one contrasts it very unfavorably with the situation either in France or in Germany. There is in England at this time a movement in the direction of a careful study of the German system of training of secondary teachers. In the meantime the board of education has set forth the matter vividly in its report of 1912, from which the following lengthy quotation may be drawn:[1]

The question of providing the best preparation for those who propose to be masters and mistresses in secondary schools continues to cause much anxiety. Reports which the board have received from their inspectors show clearly two things: (1) That only a small portion of those who teach in secondary schools have made any attempt to qualify themselves for their work by professional training; (2) that a large number of teachers are employed who are seriously deficient in professional skill.

As to the number, the following figures, which were collected some three years ago from certain groups of schools, comprising in all 1,339 teachers, are significant. There is no reason to believe that there has been any substantial change since then.

Qualifications of secondary school teachers.

	Untrained.	Secondary trained.	Elementary trained.
Men	365	19	160
Women	393	289	113

The figures in the last column include those women trained for kindergarten work.

As to the second point, the reports on the schools continue to show that the work of a large number of those engaged in teaching is to a large extent ineffective; that this ineffectiveness is, at any rate in many cases, partially caused by faults which are capable of remedy by advice and instruction; and that there are often serious defects in the work of even abler teachers, which are also such as might have been avoided by timely help.

Often they are graduates in honors of Oxford or Cambridge who have the knowledge but are not able to give effect to it, because they have never seriously studied the methods of doing so. Some might be doing much better work but for some peculiarity—a strident or indistinct voice, or a manner tinged with asperity—which would naturally have been corrected by training, but to which it is difficult to allude in later years without offense. Others who are quite scholarly but have not been trained are strangely indifferent to details, such as the need for a definite scheme of lessons, the careful correction of written work, insistence upon clear speech, alert attitude, and a general absence of slovenliness.

The deficiencies of the ordinary untrained man fresh from the universities are so marked that some sort of training may be hoped for as a corrective.

[1] Report, 1913, pp. 76-81.

I think the worst defect is a want of business-like management of time and opportunity.

The present system allows men to drift along in the teaching profession without any security that they have learned to teach. [In one school] there was not one master who really knew how to handle a class, and, at least in some cases, this inefficiency seemed to arise simply from the fact that they had never been taught how to do so.

The remedy for this is unfortunately less clear than the need for some remedy; there still appears to be much uncertainty among schoolmasters and schoolmistresses, an uncertainty which is shared by many of the inspectors, as to the value of any training course which has up to now been available. "The need of training is more noticeable than the benefits derived from training."

This doubt does not apply to those engaged in teaching the youngest pupils; it is assumed by practically all that for kindergarten work training is essential, though one inspector takes exception to the Froebel plan on the ground of "waste of time over a sentimental, irrelevant, and outworn psychology and the very meticulous elaboration of the handwork required of candidates for the current certificates."

The importance attached to training for those who work in the lower forms is illustrated by the high value which the inspectors attach to the work of those who have been trained as elementary teachers. It will be seen by the statistics given above that a large number of elementary teachers are employed in secondary schools, and the inspectors recognize in the warmest way the work which they do, especially in the lower forms, though there is much difference of opinion as to their capacity for dealing with the higher forms.

In schools of a particular type, especially in some municipal schools, in which the bulk of the pupils are drawn direct from the public elementary schools, and in the smaller country schools, where the scale of salaries is not high, I do not believe that there is any teacher superior to the elementary-trained graduate or any so thoroughly inefficient as the second-rate university man.

Their strength lies in the orderly presentation of the dry bones of a subject, while their weakness lies in the common defect of doing far too much for the pupils and of leaving too little to their independent efforts of thought and expression. They are often excellent instructors, and, as teachers, are specially of use with younger children, though they are comparatively a failure when teaching the upper forms of a secondary school. This is due to their lack of scholarship, and method can never take the place of scholarship.

They introduce a regard for order, method, and neatness, and a careful adjustment of means to ends which is often wanting, and they lay a secure foundation on which the specialist members of the staff can build.

While there is a unanimous recognition of the value of these teachers in the schools, it would not be wise to attribute this entirely to the training course through which they have passed or to argue that a similar course would be beneficial to all teachers.

The estimate put on the value of ex-elementary teachers is not necessarily an estimate of the value of their training in the strict sense. It is necessary to disentangle the influence of the training colleges from the other influences that have produced them. They have all had the experience of handling large classes; they have naturally, no doubt, been selected as the best among their class; their virtues and defects alike are derived largely from other sources than training colleges. Further, the work of the elementary training colleges has been largely academic rather than professional.

At any rate, among the men the number of those who have passed through a course of secondary training is so small that it would not be possible to base on it any secure opinion as to the value of the courses. There are, indeed, a considerable number of individual men and women who have derived real assistance from a course at a training college; on the other hand, there are

many who hold a diploma of practical training but are in fact inefficient teachers, and neither schoolmasters nor inspectors seem to be convinced that training as at present provided is an effective remedy for many of the prevailing faults.

It would be unwise to attach too much weight to criticism, which is often based on the observation of a very few cases; but some important principles emerge from the views expressed by and to the board's officers, which form a substantial contribution to the problem.

There is, for example, a strong consensus of opinion that many teachers fail in knowledge of the subjects which they teach, and that it would be most undesirable to encourage any system by which the time spent in training was taken from that which is now available for study. "Far more serious than lack of training in the vast mass of teachers is lack of scholarship." "Unless a man knows his subject, no amount of training can make him teach it efficiently."

There is reason to fear that those who take a complete year's training before becoming teachers will take the time out of that which would otherwise be available for university studies, and this will often make the difference between reading for a pass or an honor degree. But to do good work in the higher forms of a really efficient secondary school a knowledge and mastery of a subject is required which is not insured by the possession of only a pass degree.

This is not unconnected with the two most common criticisms which are made on the system of training in a college before entering on the career of teacher. These are, first, that the instruction is too general and does not give sufficient help to the students in dealing with the particular subjects that they will have to teach; and secondly, that it comes at the wrong time—it should be subsequent to and not precede the first experience; for until they have had some experience of the difficulties students can not appreciate the value of what they learn and may even get absolute harm from it.

I have no hesitation in saying that a year of training following immediately on an academic course and without any previous practical experience is both on general principles and in practice less satisfactory than a course undertaken in vacation after some year's teaching. Men have sacrificed an additional year's reading for a training course, and it is very doubtful whether the gain in training justified the sacrifice of scholarship. One or two men who have gone through the training course have told me that they only dimly realised the bearing on their teaching of the theoretical work done in their lectures, and got little from the hints on methods and courses of study on account of their unfamiliarity with the practical difficulties of teaching.

The actual experience in class mangement gained in the course is too short and too artificial in its conditions really to test a man's powers of discipline or his effectiveness as a teacher, and all this has to be learned from the beginning when he starts his professional work. On the other hand, the masters who, after some years' teaching, have taken a vacation course and a diploma, seem to me, and acknowledge themselves, to have gained very substantially from it. They come to the study of practical problems with the data of experience, and they have the critical attitude necessary for useful discussion.

I have come across one or two cases where a young trained teacher was making egregious mistakes owing to misunderstood theory learned in a course of training, and some really capable teachers have frankly confessed that they did not understand a great deal taught them in lectures on theory.

On one point there is a more general agreement, viz, that training is more valuable to a man when he has had a year or two of actual work in school, though it is admitted that the school suffers during this period.

The benefit gained is far greater if the student has had some school and classroom experience. Without this experience, he has not found out what are his own particular difficulies when confronted with the same set of boys day by day; his own capacity as a teacher is undiscovered even to himself.

It is the want of this which causes some head masters or mistresses to speak of the unreality of the teaching experience obtained when in training.

There is a general agreement that not only is a training course taken after some experience more valuable (one head mistress held training was useless without two years' previous experience), but that it should be more directly addressed to the handling of the special subjects with which the student will be chiefly occupied.

If it could be said that a course of secondary training meant a study of the method of teaching one or two subjects with observation of other teachers and a substantial period of practice in teaching them, both under supervision and under normal conditions, I do not think that any one at all would deny its value.

One point that has impressed itself on my attention very much has been the gain that a training course could be to teachers in setting before them points connected with the teaching of particular subjects, such as results of recent experiments, special developments, etc. Especially would such a study be valuable in the teaching of English, history, geography, and elementary mathematics.

It would clearly be of great use if it were possible to send men qualified in their subjects to spend a couple of vacations, or even a term, in hearing the best teachers in that subject; if possible, with some practice themselves.

While general preliminary training, as at present conducted, is not of noticeable profit, training in teaching a special subject already mastered is different; but it is doubtful how far such training can successfully be given till after a man has himself experimented. At present such training is, perhaps, more effectively given in an occasional fashion than systematically in training colleges.

Holiday courses, e. g., in modern languages, geography, manual work, and gymnastics, have also proved of great value. The teachers themselves have frequently assured me of the benefit and stimulus which they have derived from them. In another direction, an improved and most valuable form of training has been given by the peripatetic teachers of the local authority in art, physical training, English, and modern languages. The local authority does not intend this help in any way to be a substitute for training. But it has certainly helped many young teachers in an expeditious way over initial difficulties, and put them in the way of correcting their faults and getting to know how a subject ought to be tackled.

One reason why training is not looked on with much appreciation by head masters is probably the fact, of which there is much evidence, that it is often of little use in enabling masters to overcome the difficulties of discipline. One inspector goes so far as to suggest that in a school with well-established traditions, previous training in other principles is an actual hindrance, and, of course, failure in discipline will obscure any other benefits that may have been derived from a course of training. It is noted, however, by one inspector, that those who have been trained under the Jesuit system are almost without exception good disciplinarians.

In view of these expressions of opinion, it is clear that the best method of dealing with the problem is not easy to find. The board propose, on the one hand, to continue to give all the help and encouragement which they can to the training colleges, so as to help them to work out the best course, and in addition to this, they have schemes for helping teachers in other ways under consideration.

An American observer inevitably notes certain aspects of the educational situation in England which differentiate that situation from the conditions common in American schools. In the first place, one finds relatively less attention given to the problem of supervision in English schools than is given to the same problem in this country. When one visits an elementary school in England he finds the "head teacher," who is the officer corresponding roughly to the

American principal, engaged not in the duties which are occupying the attention of most of the principals in our American schools, but in conducting a class. He is primarily a teacher, and continues to be a teacher throughout his life. He does not devote himself to the study of the problems of supervision as do trained principals in this country. The chief officer of the system corresponding to the American superintendent is often a man remote from the actual operations of the school. Furthermore, he is by no means as influential in the smaller municipalities as the school superintendent in our smaller towns. Indeed, supervision is very largely taken care of by the inspector of the board of education. The board of education has about 200 inspectors whose duty it is to visit schools all over England and make reports to the board about the doings of these schools. The board of education, through its power to give or withhold grants, exercises a very large influence upon the schools, and the inspectors of the board are virtually the superintendent of the schools of England. The local officers have in corresponding degree failed to learn the supervisory function which has been so fully cultivated in our country, where the independent districts are not supervised from any central point.

Given a central board of education supervising education from London and a body of teachers working in relatively little supervised schools, it seems natural to expect the rise of powerful organizations of teachers. The facts more than fulfill this expectation. There is no more powerful teachers' organization in the world than the National Union of Teachers. Out of a possible number of about 200,000 teachers in England, more than 80,000 are registered annually as members of this teachers' union. The officers of this union are persons of large political importance, and they are in constant communication with the board of education and with the local authorities in the effort to protect the interests of individual teachers. In addition to this union of teachers, which is made up very largely of the elementary teachers, there are a great number of other organizations made up of teachers and head masters of various types, each undertaking to protect the interests of a special group of teachers.

The large number and importance of these teachers' organizations can in some measure be explained by the compactness of the population of England, but it must also be attributed in part to the fact that the supervision of schools by the board of education as a central authority has aroused the local groups of teachers to perfect a kind of organization which shall care for their interests as distinguished from the central interests of the country as a whole.

Recently efforts have been made to bring together all of these different organizations under one supreme organization, which shall be

the center of the whole teaching profession of England. This central organization is known as the Teachers' Registration Council. Following the example of the barristers of England, the teachers are attempting, through this council, to create a list which shall become the official list of the teaching profession. Certain qualifications have been set up. Fortunately these are qualifications that call for professional training. It is expected that ultimately the professional list thus created will be accepted by the board of education very much as the barristers' list is accepted by the courts.

It may be said that the board of education undertook to organize such a list of professional teachers some years ago, but the list did not attract the teachers of the country and was ultimately abandoned. There is very large prospect that the new list created by the teachers' organizations will be successful and will ultimately be accepted as the official register of professional teachers.

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II.

THE TRAINING OF TEACHERS IN SCOTLAND.

In 1905, Scotland was training teachers very much as England does at the present time. There were in that year 2,718 uncertificated teachers out of a total teacher population of 20,685. Furthermore, 4,191 of this total were pupil-teachers or young persons in process of training who were at the same time giving time in the elementary schools to more or less responsible instructorial duties. The certificated teachers at this date were drawn from (*a*) examinations back of which there was no special institutional training; (*b*) university courses in academic subjects and in professional courses in education, all of which were tested at their conclusion by a certificating examination; and (*c*) training in certain training colleges provided chiefly by the churches. These training schools were under the close supervision of the education department of Scotland, though in 1901 the department had given up the practice of prescribing rigidly the courses to be pursued by students. From 1901 to 1905 these semiprivate training schools prepared and submitted for approval to the department syllabuses of their courses. In the preparation of courses by this method they enjoyed greater freedom than before, when the department prepared the syllabuses.

The system which we find in operation in 1905 was felt to be inadequate in all the respects in which the pupil-teacher system of England came to be regarded as inadequate. Furthermore, the semiprivate training colleges were unable to supply a sufficient number of teachers; hence there were a large number of uncertificated teachers employed in the schools. At this point the strong central educational department of Scotland took over the whole problem and inaugurated a new system. This new system has operated to eliminate the two classes of teachers so large in 1905, namely, the uncertificated teachers and the pupil-teachers, as will be seen by reference to the following table:

Classes of teachers employed. 1906–1912.

	1906	1907	1908	1909	1910	1911	1912
Certificated teachers	14,186	15,021	16,019	17,011	18,124	18,942	19,592
Uncertificated teachers	2,794	2,614	2,129	2,035	1,544	1,096	831
Pupil-teachers	4,828	3,565	1,896	807	294	74	25

The date set for the complete disappearance of the last two categories in Scotland is 1915. It should be noted that these statements include teachers of the higher schools as well as primary teachers, and that certificates are not granted to teachers in service unless they fulfill before 1915 through special courses of training the minimum requirements imposed on new teachers.

The new system adopted in 1905 went into effect July 7, 1906. In order to explain this system a typical case will be traced from the earliest schooling of the prospective teacher to complete certification. The typical case described will be that of a student who is preparing to become a primary-school teacher in the common schools. Like the other young children of the district, this teacher-to-be enters the infants' division of the so-called primary or elementary school at 5 years of age. He continues in the infants' division for two years. He then passes through the junior and senior divisions of the primary school in three and two years, respectively. At this point he is separated from many of his school fellows with whom he has spent the first seven years of his school life. Many of the pupils from the primary schools go at 12 years of age into schools where they receive a short course of training for trade or business life. Our teacher-to-be goes to a school in which he begins to look forward to the profession of teaching. He may at this point (12 years of age) transfer directly to a secondary school—that is, a school which prepares for the university, but which for his purposes is known as a "junior student center," and provides a five years' course—or he may go into what is known as an intermediate or higher grade school offering a three years' course (12 to 15 years). If he goes to the higher-grade school, which in most instances is a free school, his parents must undertake an obligation that he will continue his schooling for three years. If he goes to a secondary school, he may pay his fee, though in many and usually in all necessitous cases he receives a scholarship and an additional payment known as a maintenance allowance which provides him with books and other materials.

Whether in an intermediate school or a secondary school, our candidate now takes three years of general education like that taken by his fellows who are preparing for the other professions or for the more highly trained business positions. At the end of these three years, or when he is 15, he passes an examination conducted by the department's inspector in conjunction with the school authorities, and if successful receives what is known as the intermediate certificate. He may at this stage delay announcing his intention to teach and continue as a secondary-school pupil, coming into line for teacher's training at a later date. But if he receives the intermediate certificate, he may be appointed to a *junior studentship*. Appointment to this position is the first formal recognition of the fact

that he is to become a teacher. He now has his fees paid by the local authority and may receive an allowance in addition. The appointment to junior studentship is confirmed by the education department on the recommendation of the local secondary education committee. It is assumed that the candidate recommended by the secondary committee is a selected person, and the principle of selection is the teacher's opinion of the likelihood of his becoming an efficient teacher. He is known to be academically qualified by the fact that he has passed the examination for the intermediate certificate. He must pass a health test. He must show such characteristics of a personal sort as to promise well for his future work as a teacher. It is to be remembered that the state department is taking him over for public service and is assuming the charges for his training.

The practical fact is that the selective process is not as rigorous as it was intended to be in theory. Here, as in England, the supply of candidates is so small as to cause anxiety for the future supply of teachers, and the nominating committees are very careful not to turn anyone who is available away. A member of one of the important secondary committees told the writer that not a single man who applied last year was rejected and very few women.

The candidate being selected and having become a junior student is now admitted to a school designated as a junior student center. This center must be approved by the department of education. The report of 1913 shows 115 such centers distributed over the country. Some of the centers are in public schools of higher grade, some in higher-grade Roman Catholic schools, some in academies, and some in secondary schools. The course of study provided in such a junior student center must include English, history, one language other than English, mathematics (including arithmetic), experimental science and nature study, geography, drawing, music, physical exercises.[1] It must further provide for each student additional instruction in suitable groups of subjects selected from those already enumerated, with which there may be conjoined, for the purposes of this selection, additional languages, and also such subjects as woodwork (for boys) or needlework and the domestic arts generally (for girls) or school gardening. There must also be provided "systematic training in the art of teaching each of the primary-school subjects. This training may be given either in the approved school or in a purely primary school."

The practical training of the junior students is a subject of much discussion. There are some who regard it as too little and compare it unfavorably with the practical experience formerly gained by

[1] Regulations for the preliminary education, training, and certification of teachers for various grades of schools, pp. 2–3.

pupil teachers. Others emphasize the value of academic training in such terms as the following, which are quoted with approval in one of the department's reports:

In some schools the outgoing students are quite equal to the outgoing pupil teachers of former days, while in almost all cases they are much more intelligent and much more conscious of the fact that their art must be based on sound method.

After three years of training at a junior training center, the student passes at 18 years of age to a senior center or training college. The present system of training colleges marks the most radical departure of the new system from the system in existence prior to 1905. Prior to 1905, as indicated in an earlier paragraph, the training colleges were under church auspices, inspected by the education department, as are the training colleges of England to-day. Sir John Struthers, the head of the education department, took the radical step of substituting for these private institutions four training centers which are virtually State institutions. These four training colleges are controlled by provincial committees. The committees are composed of representatives of the university in the province in which the training college is located, representatives of the technical and secondary schools in the area, and representatives of the school committees which employ teachers after they have completed their training. The State equips the colleges with buildings and apparatus and pays the fees of students in the form of grants. The colleges administer curricula which for the majority of students extend through two years, though in certain cases, to be noted later, the course differs from this normal period.[1]

The courses offered by the training colleges are approved in detail by the education department. Syllabuses of these courses are prepared by the individual instructors in each of the institutions and passed on by the central authorities. These courses review the subjects which the teacher will have to teach later in the school, such as English, history, arithmetic, etc., and, in addition, include certain strictly professional subjects, such as hygiene, physical training, psychology, logic, ethics, theory of education, history of education, and methods of teaching. Furthermore, the training colleges give much practice teaching. For the purposes of practice and demonstration teaching each training college uses the public schools of the city in which it is situated.

The usual course of study of a candidate for a primary teacher's certificate as set forth in the foregoing paragraphs is accordingly seven years (from 5 to 12) in the primary school, two or normally

[1] Training of Teachers, report of J. C. Smith, published as official document of the Scotch education department, 1913, p. 7.

three years (from 12 to 15) in a higher grade school, or the same in a secondary school, two or normally three years (from 15 to 18) in a junior student center, and two years in a training college. When his senior course has been successfully completed the teacher is given a probationary certificate and allowed to take a school. (After 1915, as noted above, no uncertificated teacher can be employed. The result is that older teachers who came into schools under the old plan have been qualifying since 1906 by taking short and appropriate courses especially provided by the provincial committees.) The permission to take a school is not the final step in the teacher's training. He is at first regarded as on probation and is subject to especially careful inspection. After two years of such probation a permanent certificate is issued, which is valid until the age of 65 years has been reached. Promotion after the granting of the permanent certificate depends upon acknowledged success in his teaching life and upon all those influences, social and domestic, that are operative in any line of professional work.

Here, as in England, the student signs an "undertaking" to fulfill the course and to teach from two to six years, accordng to the sums which have been paid to him in fees and allowances. In general, these "undertakings" are seriously regarded: and the student, recognizing that he would have to pay back to the State the amounts expended on his education if he did not complete the course and render the service for which he is trained, completes his contract with the State.

Indeed, the whole arrangement is attractive to young people without private means of securing an education, because the State has power to pay all the fees in this course and also often gives a considerable allowance in addition. The result is that girls and boys from families of the artisan class and from the homes of small tradesmen are the common candidates for these stipends. Students who pay their own fees and are otherwise qualified are welcomed, but come under no obligation as to after service in schools.

The impending dearth of teachers to which reference was made grows out of conditions similar to those which are discussed in the report on England. The compact, highly centralized education department in Scotland has, however, up to this time been able to control matters very well. About 1,400 new teachers are needed each year in Scotland, and the training colleges are turning out about this number. The conditions of service are, however, not satisfactory and an initial subsidy of the teachers in training is not likely to keep up the supply. The small salaries in some of the remoter schools, and especially the isolated location of some of the districts, making promotion uncertain and difficult, are subjects of anxious discussion among teachers. If the department is to succeed in keeping the pres-

ent nice balance between need for new teachers and the supply, there will have to be more attractive conditions supplied at the end of the course of training.

To the above description of the training of the majority of elementary teachers must be added statements regarding those students who do not go by the regular route, and also statements of additional opportunities offered to students in the training colleges through the fact that each of these training colleges is connected with a university. Finally, a description must be given of the requirements imposed on teachers in higher schools and in special subjects.

A number of the students in training colleges are at the same time attending university classes. In order to secure admission to the university classes the student must receive a Government "Leaving certificate" earned at an institution of secondary rank. This leaving certificate sometimes gets in the way of the practical training demanded of all junior students, because the academic requirements for the certificate leave no time for practice teaching. Some persons who intend to become teachers, therefore, do the work for the leaving certificate and go forward to the university without taking practical training in connection with the secondary course. Others do both the work for the leaving certificate and the work of junior students and mix their courses in the university and training colleges. Many of those who aim at higher subject teaching do not enter training colleges until after they have completed the university course, which is three years in length. For such students the training colleges provide a one-year course, which gives theoretical and practical—that is, the professional—training to supplement the courses in subject matter previously taken in the university. In certain cases where students combine the training college course with a university course, the combined course is three or four years in length. This adjustment of matters is relatively less common than the one year of practical training following a completed university course.

The requirement for the certificate of a teacher who is to teach in a higher-grade school, or in the upper grades of what we should call a high or secondary school, is that the candidate shall have, in addition to all that is required of a primary teacher, a university degree in an honors course in the special subject which he is to teach, and also in certain related courses in other cognate subjects. Thus the teacher of English must have, in addition to an honors degree in English, some courses in history; the teacher of mathematics must have, in addition to mathematics, science. In each subject the education department defines in detail the requirements in which a "teacher of higher subjects" must qualify.

Finally, there are special teachers in technical subjects, such as manual training, agriculture, domestic science, art, etc. These

teachers often take their special or technical courses in technical schools and not in the training colleges. When the technical-school course is completed, the candidate takes his professional course at the training centers. He is then given a probationary certificate permitting him to teach the technical subject in which he has been professionally prepared.

The education department here, as in England, assumes no responsibility for the employment of teachers. Through its more compact organization it can obviously control matters more fully than can the board of education in England. Furthermore, the supervision of the Scotch department is more intimate and vital, for the department is financially the sole supporter of the training colleges. The failure to deal effectively with the matter of employment becomes the more obvious here because of the more intimate relation of the department to the teaching profession at every other point. It is safe to prophesy that the department will have to take in hand the matter of salaries if the plan is to succeed. Subsidies for teachers' salaries in schools of poor communities will have to be provided as the counterpart of the legal demand that the remotest highland school shall employ a teacher whose professional training can not under the most favorable conditions be completed before the candidate is 21.

There is a retiring system whereby the teacher, the education department, and the local authorities all contribute to a fund which pays pensions to teachers who have completed service up to the age of retiral, or earlier if due to ill health.

The effort to make professional preparation for "higher-subject" teaching compulsory deserves special reference. Certain of the reports from the training colleges show that it is not possible to conform to the requirements and secure a sufficient number of candidates from the Scotch universities. In this respect Scotland has taken advantage of the training given to prospective teachers in the neighboring English universities. Such English-trained teachers are now freely brought in to supply the necessary higher-grade teachers for Scotland.

Many of the comments made on the English system apply here also. The obvious carrying over of the influence of the pupil-teacher system impresses an American observer as one of the most striking characteristics of the system. The interrelation between university training and preparation for elementary teaching is, if anything, more impressive here than in England, because each training college is directly related to a university. Theoretical courses are, as in England, carried into logic and ethics and theoretical psychology to a degree not seen in American normal schools or even colleges of education. This somewhat formal theoretical work is in

contrast with the large emphasis laid on practice teaching and demonstration lessons.

In certain other respects Scotland differs from England. Practical training begins regularly in Scotland in the earliest years of the junior student's training. The pupil-teacher system is wholly abolished. Finally, the most important contrast is to be found in the fact that here there is an effective requirement of professional training for teachers who are to teach "higher subjects."

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Especially is the report of J. C. Smith, Esq., His Majesty's chief inspector for the training of teachers, to be taken in hand. This report is included in the above and may be had separately. It is entitled: Training of Teachers, London, Wyman & sons, ltd., 1913.

III.

THE TRAINING OF TEACHERS IN GERMANY.

In order to understand the German system of training teachers one must keep in mind the fundamental fact that there are two distinct branches of the German school system, one which trains the common people and is known as the *Volksschule*, and the other which trains the students who are to go forward into the university and into the professions. There is very little relation between these two departments of the German school system; so far as pupils are concerned, there is no relation above the earliest years. It is possible for a student who begins his training in the volksschule to pass into the higher schools after four years of attendance upon the volksschule. Such a student is, however, penalized to the extent of one year by making the change; that is, it is assumed that the three years of training which he would have received in the *Vorschule*, or primary department of a *Gymnasium*, is equivalent to four years in the volksschule. With the exception of this one possibility of transfer, it may be stated definitely that the two branches of the German system are, so far as students are concerned, entirely separate from each other. The boys and girls who go forward in the volksschule never have any expectation of entering a secondary school; they never have any expectation of going to the university; and they are not looking forward to entrance upon any one of the professional careers.

As between the position of volksschule teacher and the position of teacher in the higher schools, there is no possibility of transition. Indeed, those who teach in the volksschule have never, for the most part, had the training which would qualify them to become candidates for positions in the higher schools. They are persons who pass through the volksschule itself and afterwards receive the special training which equips them to go back into the schools from which they came. Candidates for positions in the higher schools, on the other hand, have passed through a secondary school and in all except the few cases where foreign study is accepted, have taken a course in a German university. The higher schools are therefore constantly kept in contact with the university. This is appropriate, as most of the students who complete the course in the gymnasium expect to go

on to one of the divisions of the university and there receive their final training for admission to the profession.

The subsequent description of the training of German teachers will therefore fall for the most part into two wholly separate discussions. We shall take up in detail, first, the training of the teachers for the volksschule, since this is by all means the largest group, and shall later report on the training of the teachers who enter the secondary schools. Before turning to details, it may be pointed out in general that in both of these groups there are certain common characteristics. There is no possibility of getting into the teaching profession in Germany without a thoroughgoing equipment which has been carefully supervised by the State. Every teacher must satisfy State requirements of a very high order, and when the appointment is made in either branch of the German school system, it is an appointment for life, and an appointment to a position which is distinctly a Government position. In both branches of the service a teacher who has served to his sixty-fifth year is regularly pensioned, as is any other servant of the Government. The salaries also are comparatively good, with the result that there are in both branches of the profession many applicants above the actual needs of the schools. The results of competition are very satisfactory, in that weak candidates are readily eliminated, and the State has always the opportunity both in its training institutions and in its employment of teachers to make a rigid selection from among available candidates. Everything proceeds in the German system with great definiteness and regularity. The result is that the schools of Germany are supplied with a group of teachers of a very high degree of efficiency. There is also a uniformity in the school system which can be obtained only through the training of all the teachers through a dominant central authority.

The perfection of the system for training teachers is very notable in both branches of the service, but it is perhaps less striking in its treatment of volksschule teachers, because in most civilized countries provision has been made on a large scale for the training of elementary school teachers. The German system is unique, as contrasted with England and the United States, in the fact that there is a highly developed and very successful system for the training of the teachers of secondary schools. In fact, the American observer has his attention constantly turned to the fact that the secondary schools are much more completely organized than are the secondary schools of any other country; and the explanation of this fact is undoubtedly to be found in the training which is given to candidates for the teaching positions in these schools. Of all the unique characteristics of the German system, this special, rigid training of the secondary school teachers stands out as perhaps the most significant.

With these introductory remarks, we turn first to the description of the training of elementary school teachers. The course of study taken by the pupil who gets his education in the volksschule is eight years in length. Pupils enter at 6 years of age and are expected to complete the work, if they pass without interruption through the school, in their fourteenth year. Since most of those who teach in the volksschule come from this institution, this eight-year elementary course is the first stage in the ordinary teacher's training. Those who are to become candidates for the teaching profession must now take six additional years of training. The first three years beyond the volksschule may be taken in various ways. Some students attend certain institutions organized to give training preparatory to the regular normal course. Others study privately for three years before entering upon the regular normal course.

These preparatory and normal institutions constitute practically the only avenue for further academic training open to those who have passed through the volksschule. A boy who has completed the common-school course can not go on into any professional line of work, and he is not prepared to take training for secretaryships or other occupations that call for literary training. The boy may go into one of the lower technical schools where he becomes a craftsman, but the whole world of professional activity is practically closed to him, with the one exception of the teaching profession. Preparation for the teaching profession, as we shall see when we become acquainted with the details of the organization of the *Lehrerseminar*, as the normal school is called, is sufficiently subsidized by the Government, so that it is attractive to boys who are not well off financially, and it is open to those who have completed the course of the volksschule. The result is that there is a great crowding into the lehrerseminar. Every boy of the lower classes of society who feels himself capable of pursuing an intelluctual career aims to become a teacher, and he makes application after his three years of preparatory training to a lehrerseminar, with the result that he finds himself in competition with more people than can be received into the profession. In all of the States, therefore, there is a high degree of selection possible at the very beginning of the normal training. Indeed, there are more candidates applying for admission to the *Präparendenanstalten*, or preparatory schools, than can there be accommodated.

A recent investigation of the degree to which this selective process is going on is reported by the *Bund für Schul Reform* in its report[1] for 1912. Thus, in Saxony, 30 places being vacant in any given lehrerseminar, there are usually 80 candidates applying for these places. In Saxe-Weimar 75 per cent of the candidates are accepted.

[1] Vorbericht, published by Teubner, Leipzig, 1912, p. 50.

In Prussia as low as one-third of the candidates are accepted in many of the lehrerseminare. In general it may be said that approximately 50 per cent of the candidates who present themselves at the lehrerseminar are excluded. In the Province of Oldenburg it is customary to admit all of the candidates who apply and eliminate those who are unsatisfactory during the early years of the training. This device has certain advantages in that it gives the institutions a larger opportunity to become acquainted with the characteristics of the applicant. The elimination is therefore, on the whole, somewhat more rational and the resulting body of students more satisfactory to the institution.

The social status of the families from which candidates for the teaching profession in the volksschule are drawn is represented in the following study, which was made in preparation for the Brussels exposition. An investigation was made of 21,943 typical students in the Präparendenanstalten,[1] and it was found that the fathers of 1,335 of these preparatory students were laborers. The fathers of 2,610 were shopkeepers and restaurant keepers. Students to the number of 2,917 were the sons of teachers; 4,613 were the sons of small landowners; 5,084 were the sons of city and State officials of the lower grades, such as police officers, car conductors, etc.; and 5,384 were sons of factory workers. These figures show to what extent the humbler classes find in the teaching profession an opportunity for an intellectual career for the boys who are superior in mental ability to the common run of students in the volksschule.

The preparatory institutions are of two classes. They are either independent of the lehrerseminar or organized in connection with the normal institution. The largest of the German States, Prussia, has only meager provision of a preparatory sort for the training of candidates who are to enter the lehrerseminar. Very frequently the preparatory department is located within a lehrerseminar, but is not conducted by the State. The director of the lehrerseminar may conduct a Präparendenanstalt, but the State does not pay the expenses or undertake the responsibility of its maintenance.

The following table indicates the number of Präparendenanstalten belonging to Prussia and the number that exist within the State but are not conducted by the State itself:

Präparendenanstalten, 1912.

	Number.	Students.	Protestant students.	Catholic students.
Belonging to State	84	7,156	4,462	2,694
Not belonging to State	159	14,623	10,039	4,584

[1] Vorbericht, Bund für Schulreform, 1912, p. 60.

Incidentally, it will be noted in this table that a division is made between the Protestant students and the Catholic students. This sort of denominational division runs through the entire German common-school system from volksschule to teacher-training institutions. This is due to the fact that in all of the German schools religion is a regular subject of instruction, and the various religious bodies hold themselves aloof from each other and insist upon a separate type of instruction for their students.

These Präparendenanstalten administer a course which in kind is not fundamentally different from the course given in the later normal years. Indeed, in some of the States, as, for example, in Saxony, it has been found advantageous to increase the length of the total period of training of the teacher to seven years instead of the six now to be found in most of the States. The seventh year in Saxony is a year at the beginning of the student's training; that is, the student may have the last year of his ordinary training not in the volksschule itself, but rather in a preparatory department of a lehrerseminar. He will then receive some normal training at a period earlier than is common in the other States. On the other hand, in Bavaria the total period of normal training is five years. This indicates a general level of school organization which is somewhat lower than that of the northern German States.

Assuming Prussia as the typical State, the following table gives the course of study prescribed for the preparatory department and for the lehrerseminar itself:

Time table of preparatory institutions and normal schools in hours per week.[1]

Subjects.	Preparatory institutions.			Normal schools.		
	III	II	I	III	II	I
Pedagogy				3	3	3
Lesson-planning and model lessons					[2](4)	4
Practice teaching						4-6
Religion	4	4	3	3	4	[3]3
German	5	5	5	5	5	[3]3
Foreign languages	3	3	3	2	2	2
History	2	2	3	2	2	2
Mathematics	5	5	5	5	5	[4]1
Science and nature study	2	4	4	4	4	[4]1
Geography	2	2	2	3	2	[4]1
Writing	2	2	1			
Drawing	2	2	2	2	2	1
Gymnastics	3	3	3	3	3	[4]3
Music	3	4	5	4	4	4
Practice (music) and chorus work	1	1	1	1	1	1
Agriculture				1	1	
Totals	34	37	37	38	38	33-35

[1] Bestimmung vom 1. Juli, 1901, betreffend, etc., p. 23, or Von Bremen, p. 214.
[2] Included in hours set down for subject matter.
[3] One hour for method.
[4] Method.

The members of the faculty of the seminare are usually seven in number, namely, a director, a first instructor, and five teachers. They are drawn from the elementary schools. In order to become a member of the seminar faculty a man must have taken not only the preliminary examinations which admit him to the staff of the volksschule, but he must also have passed the second examination which would admit him to the higher grade of volksschule, known as the *Mittelschule*, and the final examination which would qualify him to become a *rector* or a principal of an elementary school. He may then be admitted to the faculty of the seminar.

Not all of the members of the faculty are, however, thus drawn from the elementary schools. Some of them come from the clergy. It is to remembered that the minister of education in Prussia and in some of the other Provinces is also the minister of religion. There is a strong religious emphasis everywhere in the schools of Germany. Indeed, these schools originated as catechism schools, and religion forms to-day one of the important items of instruction in every such school. Again, it will be remembered that the schools are commonly divided according to the religious affiliations of the pupils who attend them. In certain parts of Germany the distinction between the Catholic schools and the Protestant schools is very sharply drawn, and everywhere the children are divided during the period of religious instruction so as not to ignore their religious affiliations. With all of this devotion to religion as a part of the public educational system, it is natural that the institutions that train teachers should give full recognition to religious affiliations. Many of the directors of the seminare—that is, the chief executive officers of the institutions—were at one time students of theology or members of the clergy.

It is difficult for a casual observer to discover the full import of this relation between the teachers' seminar and the church. The writer had two different explanations of the situation offered to him. In the first place, he found a number of the heads of these institutions stoutly defending the relation between the seminare and the church on the ground that it is the duty of the seminar to provide proper religious instruction for those who are to become the teachers of the people. Here a strong devotion to religious matters was obvious, and many of these directors are prepared to go a step further and hold that the most significant work of the school is the training in religion. They are quite willing to subordinate any of the other interests to this major consideration. On the other hand, some of the younger directors pointed out explicitly that the motive which prompted them to give up the clerical career and take up teaching was their liberal attitude toward theology. They regard

the school as a civil institution rather than a strictly religious institution, and they hold that one can do for the people of the country more really beneficial service in the schools than by remaining in the church. For these men the schools therefore furnished especially inviting opportunity to be liberal in theological matters.

With these two contrasting points of view, both explicitly presented by members of the profession, it would be bold to undertake to evaluate the system from either point of view. Certainly in the conservative seminare, where the matters of religion are emphasized, there is a disposition to hold very tenaciously to the older traditions of the German schools. In these seminare there is very little disposition to undertake anything in the way of newer lines of instruction. There is a dense conservatism which reflects itself in the actual conduct of the volksschule, where one finds that both the subject matter of instruction and the methods of procedure have long remained unchanged.

The connection of the volksschule with the church is more intricate than is the connection of the volksschule with the higher schools and universities. Some of the teachers of the seminar are drawn from the higher schools. The higher schools are so crowded with candidates at the present time that these seminar positions are sometimes sought by men who have completed their university training and who have taken the examination for the higher schools. The number of such candidates coming into the seminare from the higher schools is relatively small, and the advantage to the volksschule of this migration from the higher schools is perhaps somewhat doubtful. The experience which is necessary to conduct sympathetically the work in the elementary school is commonly lacking in these cases. There is less sympathy for the shortcomings of the ill-trained pupils of the elementary school, and the demands made by these young men who have been trained in the higher schools upon the young boys of the volksschule are relatively unpsychological and often overstrenuous. On the other hand, the advantage which comes to the seminare from contact with higher education is probably in some cases great. The outlook of the students in the seminare is limited by the fact that they have all of them had a volksschule training rather than a higher training, and it is only through contact with the higher institutions and the universities that the modern scientific point of view and the new body of material that has been created in the German universities will ever find its way into the lower school. The only statement which can be made at the present moment is that not much of this university-made material has up to this time found its way into the volksschule. The influence which the few migrants from the upper schools have exercised can not, therefore, have been very large in opposition to the

conservative forces which tend to hold the volksschule true to its original program and method of work.

There is one movement in Germany which ought to be mentioned in this connection. A distinct effort is now made in many quarters to bring the teachers of the volksschule into contact with university opportunities. The seminar as it now stands is officially classified as a higher school. This means that those who complete its course are freed from the full military service. Graduates of the seminar have the same military privileges as the students who have completed the required work in the gymnasium and are called upon for military service only during a single year. This recognition of the seminar for the military privilege is a great asset and accounts in part for the number of candidates who seek admission to the institution. The seminar is not yet recognized in the full sense of the word as a higher school, however, because its graduates are not admitted to university privileges. This matter has frequently been discussed. The teachers' organizations all over Germany have insisted that the volksschule teachers ought to have the right, after completing the course of the seminar, to enter upon university classes. It is pointed out in answer that it is quite impossible for the German universities to accommodate the number of people who would thus be qualified for admission. In general it is one of the contentions of a large body of German educators that the universities at the present time are turning out more professionally qualified persons than it is possible for the country to accommodate. Beyond this, attention is drawn to the fact that the seminar does not give that kind of general training which is necessary for the proper pursuit of advanced university work. At all events, up to this time the volksschule teachers have not succeeded in gaining admission to the universities. In Saxony a kind of grudging permission has been given to the teachers of the volksschule. Here they may, if they have very high marks in their examination, be admitted to the university, where they may in turn complete the course and receive a degree, provided they do their work at an unusually high level. All along the path of the Saxon volksschule teacher, however, are obstacles that are almost insurmountable. The result is that the permission in Saxony is relatively inoperative, and in the other States, especially in Prussia, there is no such permission whatsoever.

This effort of the teachers' seminar to make its way, therefore, into the class of higher schools has thus far been successful only to a very small degree, and there is little probability at the present moment that the movement is likely to make rapid progress. The volksschule-seminar remains a relatively isolated institution. It is more isolated than the American normal school, and for this reason it shows all of the marks of conservatism arising from its lack of contact with the

major current of German intellectual life, which passes through the higher schools and the university, not through the volksschule or the lehrerseminar.

Admission to the lehrerseminar proper from any form of preliminary training is on the basis of an examination. This examination is both oral and written. Students are required to show their ability in reading, writing, and number work, and in other branches through oral examination. The ordinary procedure is usually a written examination, which serves to eliminate those candidates who are too immature to be considered further. Those who succeed in passing the written examination are admitted to an oral examination, where they are subjected to a general test of the work which they have done in the lower schools.

Attention is again drawn to the fact that more candidates present themselves for the lehrerseminar than it is possible to accommodate. The lehrerseminare proper are usually small institutions. In Prussia the number of each class is limited to 30, and the institutions themselves are usually located in small suburban towns or even in the country districts. It is the policy of the Prussian Government to remove the lehrerseminare from the great cities. Many of the institutions take the students into dormitories and board them and house them during the period of their training.

The Government pays for the buildings and grounds occupied by these institutions. The plans are commodious, though in each case the student body is kept small. The seminar usually has a total of from 60 to 90 students. It will be pointed out later that a part of the official salary of the teacher is based upon the cost of rent in the locality where the teacher does his work. Provision is made for this item in the case of the director of a seminar, and usually in the case of the member of the faculty who is in charge of the practice school by including in the buildings erected for the seminar residence quarters for these officers.

The total number of lehrerseminare in Prussia is indicated in the following table:

Prussian institutions for the training of volksschule teachers, 1912.[1]

	Number of institutions.		Students.		Teachers.	
	For men.	For women.	Men.	Women.	Men.	Women.
Protestant	118	8			867	38
Catholic	61	10	17,234	1,653	476	54
Mixed	4					

[1] Statistisches Jahrbuch für den Preussischen Staat, 1913, p. 427.

It will be noted immediately from this table that the major number of candidates for the teaching profession are men. This fact comports with the general fact that the teachers of the volksschule are predominantly men, as is shown in the following table, which presents the distribution of students and teachers in all classes of volksschulen throughout the Empire:

Volksschule, 1911.[1]

	Public.	Private.
Number of—		
Schools	61,557	480
Male teachers	148,217	....
Female teachers	39,268	....
Boys	5,157,446	11,894
Girls	5,152,503	14,257

[1] Statistisches Jahrbuch für das Deutsche Reich, 1913, p. 300.

Mittelschule.

	Public.	Private.
Number of—		
Schools	914	1,135
Male teachers	5,147	1,131
Female teachers	2,384	3,403
Boys	135,799	21,873
Girls	137,595	58,787

The course of training required for the women who enter the teaching profession is usually shorter than that required of the men. Thus in Prussia the period of training is five years for women as contrasted with six for men. These women are trained in special institutions known as *Lehrerinnenseminare*.

In general all schools in Germany are separate schools for boys and girls. This statement does not hold for the small schools in the rural districts and villages, but in the cities the girls are always separated from the boys. Women are not employed in the instruction of boys except in the lowest grades. Even here it is more common for the boys to receive their instruction from men. On the other hand, the girls in the elementary schools are very commonly instructed by male teachers.

Students who are admitted to the Lehrerseminar find that the State has provided them with free tuition. This is practically the only higher school of Germany where tuition is free. Even in the Präparendenanstalten a fee is commonly charged, although the fee is in some States remitted for worthy students. In the lehrerseminar itself not only is the tuition free, but in some States the student is given his room, in some his room and board. It is not uncommon for the State to give worthy students a stipend.

The course of study administered in these lehrerseminare is prescribed in great detail. Each of the subjects presented in the table given on page 58 is divided into three years; each year is described with reference to its content and also with reference to the mode of instruction which is to be followed. The following translation from the official description of work to be given in the history of education will illustrate the minuteness with which each subject is described:

In the history of education lifelike pictures are to be given of the most important periods and of those personalities which have been of the greatest significance in the development of instruction and training, especially in the volksschule. The period before the Reformation is to be described only in its chief outlines. More detailed presentation is to be given of the development of the schools during the last 400 years[1] In this connection the student is to be introduced to a knowledge of the chief pedagogical writings. These are to be read either in full or at least in their more important sections. The reading may be required in part as private study rather than as classroom work. These readings are then to be discussed, and that which is of greatest significance in determining the school organization is to be emphasized, as well as that which is necessary to a complete understanding of the pedagogical significance of the writer in question. Mere memorizing of this historical material is to be avoided. The relation between these pedagogical writings and the civilization of the period in which they were written is to be pointed out, as also their relation to the present practices of the school.

The history of education is to be brought down to the latest period. This historical study will then find its natural issue in a description of the present condition of the Prussian volksschule, as well as of those regulations which are of general importance or special importance for the particular area in which the students are doing their work.

The foregoing detailed description of the history of education is a part of the official regulations. Each subject is discussed at equal length. Perhaps it will be well to quote a part of another description which defines somewhat more concretely the work which must be taken by the student. This second subject will not be given in full; only the introductory sentences will be quoted. The subject in question is German.

The purpose of instruction in German is to cultivate a readiness in oral and written use of the mother tongue. This instruction is also intended to acquaint the student with the most important elements of our literary history and to introduce him to the reading of the most important selections from this literature. Such contact with the chief masterpieces of our literature ought to arouse the patriotic spirit of the student and cultivate in him ability to give instruction in the German language in the volksschule.

The cultivation of the power of oral expression, both in expressive reading and in discourse, is an important function in all cases of the Präparendenanstalt and of the seminar. In the seminar, especially in the upper classes, it is recommended that the student be given practice in the free oral presentation of something that he has read or of some set theme. This theme can in many

[1] Von Bremen, p. 216.

cases be advantageously chosen from the subjects of instruction, other than general language.

In both of these institutions and in all of the classes there should be some instruction in prose as well as in poetical literature. There should be a general recognition of the relation of this literature to the religious connections of the pupils.

In taking up poetical literature attention is to be given to the explanation of content and to an explanation of the use which is made of words and to scansion, only in so far as these are necessary for a clear understanding of the selection. Above all, the effort should be made to cultivate a fine sense for the poetic significance of the passage.[1]

When one remembers that these details are presented in an official publication defining the function and course of study of the institution, it is realized how actively the central educational authorities concern themselves with the training of teachers. Furthermore, one finds here, as throughout the German system, the highest degree of uniformity as he passes from institution to institution, and he comes to realize how thoroughly the systematic training which has been given in the German schools has been developed into a scheme which prevails throughout the whole Empire. One may venture to quote from Dr. Kerschensteiner, one of the leaders in German education, the remark that there is the greatest degree of uniformity in the German system and this uniformity is not altogether to the advantage of the system. In contrasting Germany with the United States, Dr. Kerschensteiner calls attention to the fact that we have in America teachers and schools that are excellent and teachers and schools that are mediocre and poor. In Germany, on the other hand, the schools and teachers are so uniform in type that one hesitates to select any example as distinctly superior to the average. Dr. Kerschensteiner regards this as a disadvantage for Germany, since the best schools in a system which has wide variation always rise to the eminence of examples, whereas in a system where uniformity prevails there is danger that no vigorous moving forces will tend in the direction of improvement.

The problems of the course of study and the problems of teacher-training in these lehrerseminare are very different from the problems which present themselves in an American normal school. The difference can be understood only by considering the methods of instruction which are common in the volksschule itself. The pupils in these schools are not expected to study textbooks as are the children in American schools. Indeed, in most subjects there are no textbooks. The teacher of the subject is the source of information. This information is given in the form of an informal lecture; or in the primary grades through simple devices by which the teacher presents letters or words to the class. The exercise in either case does not

[1] Von Bremen, p. 221.

depend upon any preparation at home. All of the work that is assigned to the children to do at home is in the nature of a continuation of what has been commenced in the class, and it is very little in amount. Furthermore, there are no study periods. All the lessons are presentation lessons. The teacher is thus called upon to take the place of the textbook, and his training must accordingly be very much fuller than is required of teachers in an American school where the children and teacher both derive their information from day to day very largely from some book which is in the hands of the class.

A complete description of what goes on in a class in the volksschule should include also a statement of what follows on the lecture to which reference has just been made. After the teacher has covered a certain period of history, or has given a description of some country in the geography class, the pupils are called upon to reproduce all they have heard from the teacher. Sometimes half of the period is given to this catechising of the pupils, the exposition occupying the rest of the time. Often the lecture occupies more than half of the time. Usually the class exercise begins with some review of the work of the foregoing period.

This method of procedure makes a demand on both teacher and pupils for more continuous oral expression than is commonly seen in American schools. A teacher who has to talk for half an hour on a given subject must make a more elaborate preparation than is common in our schools. Furthermore, the children are sometimes called on to give a continuous narrative for three or four or five minutes.

Not only is the demand in each subject greater than that made upon American teachers, but the range of instruction demanded of each teacher is as extensive as the course of study in the schools. Every teacher must, for example, give instruction in religion, geography, history, the German language and literature, arithmetic, and nature study. In this wide range of subjects he must have preparation adequate to the presentation of the material demanded by the course of study. There is relatively little specialized or departmental work in the schools. Sometimes, if a teacher has special interests, the rector of the school may arrange for him to pass from class to class and give instruction in his specialty. But, in the main, dependence is placed on all of the teachers for all of the different kinds of work.

One especially interesting illustration of this general requirement of all teachers that they give instruction in all the subjects in the school is to be found in the fact that every student in his seminar course is required to be sufficiently skilled in music to conduct classes in this subject. He must learn to play the violin, so that he can always have at hand an instrument with which he can accompany

the class exercises. The musical ability of the German people is recognized everywhere, and this requirement imposed on teachers in the volksschule goes far to explain the general training which the nation has in singing and instrumental music.

In the better institutions for the training of teachers the breadth of training required to meet the demands described is given by cultivating methods of use of libraries and source material. On the other hand, it is extremely difficult with students of the immaturity exhibited in many of the training schools to cultivate such habits of independent research; especially is this true in those institutions which draw their students from rural districts. These seminars often have to make shift with a body of men not qualified for the highest intellectual work. There is a grave danger, therefore, of dropping into mere formalism. The student gathers from the instructor, who teaches a given subject in the seminar, material which he carries over into the school without any very large modification. Furthermore, the ordinary teacher goes over and over again, year after year, the same material without any very great enlargement of his own horizon or of the information he offers students.

There is a movement in some parts of Germany at the present time for the creation of textbooks which shall supplement the work of teachers. The need for such textbooks is emphasized when one hears a teacher giving a class information about a geographical region which the teacher has never visited and about which he evidently has read very little. There is also danger of misinformation creeping into the instruction. This danger would be much less if the information were taken from a textbook which circulates through many hands and is subjected to the criticism of many people who are familiar with the subject treated in the book.

The training of teachers to enter schools conducted as the volksschulen are conducted would be altogether incomplete without much practice teaching. In order to meet this need every seminar has attached to it a practice school. This practice school is under the general supervision of the director of the seminar and under the immediate supervision of a member of the seminar faculty, who is delegated to take charge of the practice school. The actual teaching of the classes is performed by students who are members of the senior class of the seminar. There are no class teachers other than these candidates. Each of these practice schools is organized so as to give training not only for the regular graded schools of towns and cities, but also for what we should call the ungraded school of the country district.

A word of explanation may here be inserted in regard to the mode of organizing the volksschule in small towns and villages. There the

children are not divided into the eight classes which would normally appear in a completely organized volksschule. In the smaller towns there are sometimes three divisions of the school. These three divisions or stages of instruction will therefore include children who in a fully graded school would be divided into a number of grades. Thus, in a three-room school all of the primary children are put together, the intermediate children are put together, and the higher-grade children. Indeed, in some of the smaller towns there are only two teachers for three such rooms. The little children come later in the morning, and the older children go away in the middle of the forenoon, thus making it possible for the two teachers by circulating among the three rooms to fill out the program of the day.

Evidently the students who are to be prepared for such schools as these must have training not only in the conduct of a single grade, but they must also have training in the conduct of whole groups of children belonging in different parts of the school. This requirement is still more obvious where, as is sometimes the case, candidates have to take charge of a whole school in a single room.

In order to prepare students for these different types of organization, the practice school of the seminar contains the various classes which the candidates would find in a fully organized school and also an ungraded class or a single room where children are put together in the way in which they would be found in a small rural school. The candidates are then required by actual contact with these different types of organization to acquaint themselves with the methods of giving instruction. The further conduct of the candidates' work is so fully described in the statutory requirements and in the annotations attached that a lengthy translation[1] may be indulged in as the best method of expounding the situation.

The training of students in the seminar in practical school work begins in the second year. Throughout this second year the teachers of the seminar are to give model lessons in their several departments. These model lessons are to present all of the different forms of instruction in the subject in question, and in connection with the lesson itself there is to be an explanation of the method employed. After a model lesson has thus been presented, the same subject is to be taken up by the candidates, who will give trial lessons and submit to a criticism of the form and content of these lessons. In order that all forms of instruction may be adequately canvassed, compulsory exercises of this type are required throughout the year in religion, German, and mathematics. In the other subjects of instruction partial programs are to be presented through part of the year only, but in accordance with a fixed program. The time for these exercises in the different subjects will be taken from the regular time set down in the school program for each subject in the second year of training. For each practical exercise to be taught by students, the whole class must prepare in writing, and during the actual class exercise several of the students may be called upon to take charge of the class. Atten-

[1] Von Bremen, p. 210.

tion is to be given to preparation of the lessons in different departments so that in any given week students shall not be called upon to prepare more than two such trial lessons.

After the foregoing training in the second year, students who have reached the first year will be required to conduct every week throughout the whole year four to six periods of continuous instruction in the practice school under the direction and supervision of the seminar teachers. The only exception to this requirement is during the last weeks before the final examination. Opportunity should be given to each student in the seminar to give lessons in religion, German, mathematics, and at least one other of the subjects taught in the elementary school. At least three times a year a change shall be made in the assignments of the candidates. Each time this change is made, an examination is to be held by the seminar faculty in each class of the school. The candidates who have completed their work in any grade are to conduct classes before all other candidates. The director of the seminar sets the problems for this examination, and at the conclusion of the examination passes judgment on the work of each of the candidates.

Every departmental teacher in the seminar shall conduct weekly a period of instruction in which he sets forth all of the material in that particular subject which is to be taken up by the candidates during the next week, and also he shall during this period discuss the outcome of the work of the foregoing week. The candidates must prepare themselves in writing for each lesson which they give, and this work is to be looked over by the instructors in the various departments.

In addition, the director of the practice school, who is also to give instruction in at least one of the academic subjects in the seminar, shall hold as a rule weekly exercises for all of the students in the seminar. In these periods he shall discuss the teaching of the candidates and also all those matters which relate to school equipment and management. In this general exercise there shall also be a discussion of the discipline of the children in the school and reports of observations made by the candidates in regard to the characteristics of children in such matters as their natural ability, their achievements, their industry, their conduct, and their various individual peculiarities. The special methods of managing children with a view to these individual differences shall also be discussed.

Two hours of the school program shall be specially set aside for the demonstration lessons and for the trial lessons.

Furthermore, each candidate in the highest class shall visit the lessons given by other candidates in accordance with a prearranged program. It is especially desirable that candidates should visit instruction in those subjects in which they do not themselves give lessons. Provision should be made that every member of the highest class should come in contact for a period with instruction in the beginning reading class and in the beginnings of number work. A part of the time set down in the program for practice teaching should be given to this purpose. It should be carefully determined by examinations that every student who passes through the upper class of the seminar has cultivated before he leaves the institution adequate acquaintance with the method of beginning work in the fields designated.

Special methods in each of the different subjects are to be taught in detail by each of the departmental teachers. This instruction in method is to deal with all branches of the subject and with all of the different grades in which the subject is taught. It is to be illustrated by numerous concrete examples. The students of the seminar are also to be made acquainted with the chief books, maps and other means of instruction and training, as well as with the

sources from which they may derive material useful in the preparation of their own work of instruction and for their own further training. A brief statement of the history of methodology is also to be presented in its main outline.

At the conclusion of the whole curriculum a general review is to be given in pedagogy as well as in all of the subject-matter courses. During this review there will be a general summary of the content of the course organized under the different points of view which are appropriate to the subject.

At the conclusion of the course of study in the seminar, the candidates are subject to a rigid examination. It is possible for any one to present himself in this examination even though he has not passed through the regular seminar course. Since the examination is conducted, however, by the seminar faculty and is to be made more rigid for those who have not had regular training, it follows that very few candidates succeed in satisfying the examiners unless they have had the regular training of the institution. The statutory provision which allows outsiders to enter the teaching profession is therefore in practical operation of little significance.

The examination is conducted by a commission which in Prussia is under the direction of the provincial board and includes the full faculty of the seminar. The inspectors of the district are also ex officio members of the examining commission. If it is deemed desirable the minister of education may introduce other members into the examining board. Similar examining boards are organized in all the other States.

The examination itself consists of a written test followed by an oral test. The following details of this examination taken from the Prussion regulations are typical in most respects of the practice in all of the States of Germany. The written examination is made up of a thesis on the German language and literature, this thesis to exhibit both the candidate's mastery of the language and his preparation to give instruction in this subject. Second, there must be the preparation of a typical lesson in religion. Third, a paper is set involving the solution of three problems in geometry and arthmetic In like manner one question is set in history, one in nature study, and one in geography. Some candidates who have made special preparation in music and are to receive certificates, which indicate that they are prepared to give instruction on the organ, are examined on written music. Finally, a candidate may elect a foreign language, in which case an exercise will be given him in translating from the foreign language into German and the reverse. All of these written tests are preliminary to the admission of the candidate to the oral tests. The oral test refers to all of the matters that have been made the subject of instruction in the seminar. This oral test is intended to determine whether the candidate is able to give a clear and definite

statement of matters which he has been studying. It may be omitted if his earlier examinations and his seminar record are of a high order of excellence. Finally, the candidate is required to pass a practical test in which he is to conduct a class of some subject for which he has been preparing several days in advance of the examination.

It may be well at this point to introduce a statement which will show how far some of the States depart from the example of Prussia. The American reader is commonly informed in reports on German schools that the practice of all Germany is like that of its largest State. This statement is misleading, if it is accepted as literally true. To be sure the example of Prussia is of great influence in determining the practices of the smaller States, but in some respects other States are in advance of Prussia. Thus Saxony, which in contrast with Prussia is a small, compactly settled, manufacturing district, has made certain advances which, so far as the lower schools are concerned, place that State distinctly in the lead.

For the purpose of justifying this digression and at the same time explaining in detail why the States do not for the most part accept each other's certificates, a statement will here be made of some of the variations which the States exhibit in the matter of examinations at the end of the training course.

In the State of Brunswick the final examination in various subject-matter courses is held a year before the candidate concludes this seminar course. These examinations, if passed, absolve the candidate from further academic examinations, but leave him to take the pedagogical examinations and the practical tests. Like arrangements prevail in Hamburg, Anhalt, Saxe-Coburg-Gotha, Bremen, Lubeck, Schwarzburg-Sondershausen, and several other States.

In point of test lessons Wurttemberg requires two class exercises to be conducted, one of which must be in physical exercise. Saxe-Weimar also requires two lessons to be conducted, but specifies that the candidate must show in these his ability to give religious instruction. Schwarzburg-Sondershausen requires two lessons, but does not specify the subjects. Most of the States require only one.

The time which is to be devoted to the examinations varies from the elaborate requirements in Saxony to six or seven hours or even less, which is required in Bavaria. The program in Saxony is as follows: (1) Preparation of a German exercise and the catechism, 10 days; (2) written examinations—arithmetic 2 hours, grammar 2 hours, Latin 2 hours, history 1½ hours, geography 1 hour, natural science and science of music 2 hours, making a total of 10½ hours; (3) oral examination—religion 50 minutes, catechism 20 minutes, psychology and pedagogy 50 minutes, German 50 minutes, history

or geography 30 minutes, history of pedagogy 30 minutes, natural science or mathematics 30 minutes, making a total of 4 hours and 20 minutes.

In all the States if the candidate passes his examination, he is given a certificate which qualifies him to teach in the volksschule of the State in which he is examined, and he may now be appointed to a teaching position. This certificate does not, however, give the candidate a permanent position. After two or more years of service as a teacher he must take a second examination. In some of the States this examination may not be taken until the fourth year of service, and it is in some of the States further stipulated that the candidate must be 24 years of age when he presents himself for this examination. The second examination lays special emphasis not upon the subject matter of instruction, for the candidate is assumed to have passed examinations in these subjects in the first test. It is expected that at the time of the second test the teacher will be qualified by his experience in the schoolroom to show a higher degree of knowledge of methods of instruction, of school management, and of the theoretical subjects which relate to school activities. The second examination therefore lays special stress upon methods, school organization and management, and such fundamental sciences as psychology and pedagogy.

Candidates who pass this second examination now have a life position in the German schools in the Province in which they were trained. If the teacher wishes to secure a higher position, especially if he intends to become a candidate for the administrative headship of a school, he must take a third and fourth examination. The third examination qualifies him for the middle school, which is an advanced stage of the elementary school. In preparing for these middle school examinations and for the still higher examinations which admit candidates to the rectorship or principalship of elementary schools, candidates adopt various devices. They sometimes club together and secure instruction through their own voluntary organization. In some cases the municipality furnishes courses which are usually conducted by men who have already attained to the rectorship of some school. In still other cases the preparation is entirely private, undertaken by the individual candidate through his own initiative.

It may be noted in this connection by way of further digression that the teachers' organizations of Germany are wholly different in character from the associations which one finds in America and in England. Since the German teacher is a civil appointee, the teachers' associations can not in general take on the character of unions which they have in England, and they are not of the temporary and informal type which one finds in America. The subjects of interest

which naturally arise in these teachers' associations are academic in character. One finds, therefore, that the stronger teachers' associations, especially in the larger cities, very frequently maintain libraries and even laboratories for the experimental study of educational problems. Through the promotion of these strictly academic interests the teachers' associations are able to offer large educational opportunities to their members. Furthermore, the social side of the German teachers' organization is also frequently emphasized. The *Verein*, as it is called, sometimes builds a house which is to be compared to an Amerienn clubhouse, where all sorts of educational committees can meet and activities of a social character can be centered, and where the library and other academic interests are also housed.

The teachers of each of the States of Germany are paid according to an official schedule of salaries which advance steadily with the increasing experience of the individual teacher. Again selecting Prussia as the type, it was found some years ago that a uniform salary list for all parts of the State was inequitable, because in certain of the rural districts living is relatively cheap, while in the large cities and towns living is more expensive. In order to meet this difficulty the scheme was adopted of paying a teacher in addition to his regular salary a rental allowance. In order to adjust this rental allowance, places are classified into several different grades, each grade being supposed to have a uniform economic character. The lowest grade gives the teacher a small rent allowance, while the highest grade of position in the large cities pays a considerable addition to the teacher's salary for the purpose indicated.

Salary schedule—Increments with years of service.[1]

	Beginning salary.	7 years.	10 years.	13 years.	16 years.	19 years.	22 years.	25 years.	28 years.	31 years.
	Marks.	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*
Increments		200	200	250	250	200	200	200	200	200
Totals	1,400	1,600	1,800	2,050	2,300	2,500	2,700	2,900	3,100	3,3[illegible]0

[1] Monroe's Cyclopedia of Education, vol. 3, p. 71.

Special provision has to be made for teachers in technical subjects. In many cases teachers of these special subjects are employed without the full training demanded of the regular class teachers. Thus the teachers of woodworking and the teachers in the technical continuation schools are very frequently mechanics with only a little special pedagogical preparation.

There has recently been founded in the city of Berlin an institution for the training of technical teachers, but for the most part this phase of the profession has not been fully developed. The situation is somewhat relieved by the fact that in many of the continuation

and technical schools the teachers are on part time and are persons who are otherwise engaged in the elementary schools as regular teachers and have qualified themselves by private training to give lessons in the special technical subjects to which they devote a part of their time. Where a technical school needs the whole time of a teacher, it is not uncommon for this teacher to be sought in the staff of a regular elementary school. The total number of technical teachers who are without special training is therefore relatively small.

So far as the work for girls is concerned, the domestic subjects are usually added by the taking of special courses to the training of a regular woman teacher.

As indicated in the introductory paragraphs, the training of teachers for the secondary schools is entirely distinct from the training of teachers for the volksschule. Candidates for positions in the secondary schools must first of all have completed the course of one of the secondary schools. In the second place, the candidate must have attended a German university for at least six semesters. Here an exception is made in the case of those candidates who expect to teach in the sciences. They may take half of the university courses in one of the technical institutions rather than in university lectures.

After this preliminary training is completed, the candidate presents himself for an examination. Usually the period of training is much longer than the minimum above described. Indeed, in most cases candidates take the university doctor's degree before they come up for the examination. The examination consists of two parts. First, there is a general examination covering those subjects which are supposed to be essential as training for all departments; and, second, there is a special examination given in the particular subject in which the candidate is preparing to teach. Both examinations include written and oral divisions.

The general examination includes the subjects of philosophy, pedagogy, and German literature. If the candidate belongs to a Christian denomination, he will be examined in religion. The special examinations are in the following subjects: Christian religion, philosophical propædeutics, German, Latin, Greek, Hebrew, French, English, history, geography, pure and applied mathematics, physics, chemistry and mineralogy, botany and zoology, and under certain circumstances Polish and Danish.

Each of the special subjects except Hebrew is subdivided into a higher and a lower division. Candidates who pass only the lower division of a subject are regarded as prepared to give instruction in that subject only in the lower classes of the secondary schools, while candidates who pass in the upper division are recognized as quali-

fied to give instruction in all classes. This division may be illustrated by giving in full the description of the requirements in German.

For the lower division of German when taken as a special subject—

the candidate is required to have a definite knowledge of the elementary grammar and history of modern high German. He must have a thorough detailed knowledge of the classics written in the modern period of this language, especially of the works which are suitable for use with students in the schools. He must have an acquaintance with the evolution of the modern high German literature. Furthermore, he must have a knowledge of the outlines of rhetoric and prosody, and of the ancient and Teutonic legends which are important for use in the schools.[1]

For the higher division of this subject—

the candidate is required in addition to the above to possess a sufficient mastery of middle high German to make it possible for him to read without hesitation easy selections, and to explain the grammatical structures and word forms encountered. He must possess a full knowledge of the evolution of German literature during the middle high German and modern periods, and must give evidence of extensive readings from these periods. He must have a full knowledge of poetical forms and meters, and of those principles of rhetoric which will qualify him to direct the preparation of German composition in the higher classes of the secondary schools. Finally, the candidate will be examined, in accordance with his own election, either in historical grammar and the elements of Gothic and old high German, or in the introduction to philosophy.

Each of the special subjects is similarly subdivided, and it is stipulated that the candidate must pass both divisions of some one of the subjects and the lower divisions of two others. Furthermore, certain combinations are required. For example, if a candidate takes Latin for his complete subject, one of his partial subjects must be Greek; if he wishes to take applied mathematics, he must present pure mathematics. These required combinations are intended to guarantee some acquaintance with those fields of knowledge most closely related to the candidate's principal subject.

The examinations are formidable ordeals. They are conducted by special commissioners. On these commissions are university professors, officers of the education department, and representatives of the secondary schools. The candidate is first required to present two elaborate theses, one on some phase of the general subjects and one in the subject in which he has elected to take a complete examination. At the discretion of the commission the candidate's doctor's dissertation may be substituted for one of these theses. A period of 16 weeks is allowed for their preparation, and they are intended to show the ability of the candidate to carry on independent research in his selected field, and his ability to formulate material in a clear and systematic fashion. After the presentation of these theses there

[1] Brier, p. 522.

follows a written examination, followed in turn by an oral examination.

After the examination the successful candidate now has before him two years of contact with the schoolroom before he can become a teacher with a regular position. The first of these trial years is known as the Seminar year and the second as the Trial year. During both of these periods the candidate is connected with one of the secondary schools and is under the general direction of the principal or director of this school.

It will be noted that the institutional method here adopted for training candidates is altogether different from that which is adopted in the training of elementary teachers. There is no separate institution for the training of teachers for the secondary schools, but the secondary schools are themselves used as the means for recruiting the faculties. Germany is in this respect altogether unique.

It would not be possible to carry on the system which exists in Germany if it were not for the fact that the members of the faculties of the secondary schools, and especially the principals, are men of the highest intellectual qualification. Many of the directors of the German secondary schools have had a training equivalent to that of members of the university faculties. Many of these men have a national reputation in the departments in which they specialize. A good deal of research work is carried on in the laboratories of these secondary schools, and in general it may be said that the intellectual life within the walls of a German secondary school is of a type which fosters both scholarship in special departments and a general devotion to problems of higher education.

Not all of the secondary schools of Germany are utilized for the purpose of training teachers. It does not seem possible to lay down any general principle on which institutions are selected for the training of candidates. The minister of education designates the institutions which are to be so employed, and his judgment is based on a variety of considerations. The ability of the director to take charge of candidates and direct them in their training is in a general way the ground of this selection. The different directors follow a great variety of plans, however, so that it is obvious that the minister of education has no single formula which he wishes to enforce for the training of candidates.

After a candidate has been assigned to a particular school, it becomes his duty, first of all, to participate in the activities of that school in any way that he can. He is usually assigned to some teacher, whose reports he helps to prepare and whose classes he has to visit with regularity. In addition, he is expected to visit all of the classes in the institution, so as to observe different methods of instruction and class management. It is required that the candidate

meet with the director two hours a week for special training. At this point in particular the greatest diversity of practice appears. Before commenting in detail on the actual practices exhibited at these weekly meetings, the following statement may be quoted to indicate the requirements which are officially set down in Prussia for these meetings:

> The subject matter which is to be covered in these conferences is as follows:
>
> Principles of training and instruction, together with their applications to the general problems of the secondary schools, and with special reference to the conduct of the subject in which the candidate is preparing to teach.
>
> Historical survey of the evolution of secondary schools, including an account of the leaders in pedagogy and also including comments on the most important present-day situations in the educational world.
>
> The constitution and organization of secondary schools, the official course of study and regulations regarding examinations, the rules regarding student credentials and promotion.
>
> Principles of school discipline illustrated so far as possible by current examples, and by discussions of examples of a concrete type which have come up in the school at other times, rules of conduct for students, discussions of the relation between school and home.
>
> School hygiene with special reference to equipment of the classroom and to the conduct of the class work.
>
> The description of supervisory authorities, rules, and regulations governing the official relations of the teacher and school officers, including the forms of official communications and reports.
>
> Finally, the conferences shall furnish the occasion for supervision of the visits made by candidates to classes; for supervision of the preparations for instruction made in the subject which the candidate is himself to teach, of the methods of correcting and handing back the work of students; and for discussion of the personal or other aspects of the trial teaching of candidates.

Reports may be required of the candidates.

At each conference one of the candidates is designated to prepare very full minutes of the proceedings. These are kept as a formal record of the work done at the conference and are read at the opening of the next meeting.

In practice, the different directors manage their candidates very differently. Sometimes the meeting is conducted as a demonstration lesson; sometimes it is a discussion; sometimes it is a series of reports by candidates; sometimes a lecture by the director or one of the teachers of the school. Perhaps the best method of describing these practices will be the presentation of some of the concrete experiences of the writer in visiting a number of these conferences.

In a *Real Gymnasium*, where the director was a specialist in physics, one of the candidates conducted an exercise which may be described as a demonstration lesson. He stood at the laboratory desk and presented in brief outline the material which he would use in three or four lessons. The material was not presented in detail, but it was demonstrated far enough to show the method of carrying out the ex-

periments and the discussions which would be connected with these experiments. After the candidate had thus presented his material for something more than half an hour, he was called on to defend his presentation in the face of criticism from all the candidates and from the director. During this criticism period matters of personal bearing and general appearance were commented upon as well as matters of presentation. The mode of handling apparatus and demonstrating results was fully discussed. The candidates who attended this meeting were all specializing in natural science and mathematics. They had been attracted by the widely recognized ability of the director in training for such lines of teaching. The director was very vigorous in his assertions that he regarded lectures on school methods and management as of very little value. To his mind the business of the weekly conference with candidates is to train them in methods of actual classroom work. Furthermore, he regarded it as the business of the candidate to furnish the material for discussion.

A second meeting in another institution was devoted entirely to a discussion of matters of management of the students. How to prepare a report and when to hand it in; how reports should be presented to students and how difficult cases should be administered; how students should be punished for various offenses—these were the subjects of discussion. At this meeting it was very obvious that the director insisted upon rigid conformity to the rules of the school and that each instructor was expected to know these rules thoroughly and to carry on the routine exactly as it is carried on in the other classes of the school. The candidates, it will be remembered, had had some practical experience through association with the teachers in the classes which they had visited. The management of the reports for which the candidates were responsible was the subject of pointed personal comment.

A third type of conference was strictly departmental. In this case the director instead of conducting the exercise himself had called in one of the members of the faculty to meet the candidates. In this particular case the instructor was discussing the methods of teaching modern languages. At later meetings of the same group, other departments would be represented by other members of the faculty. The early part of the meeting in question was devoted to a presentation by the teacher in lecture form of the aims of language instruction and a general discussion of the mode of approach. This general presentation was followed by a discussion on the part of the candidates carried on in the form of questions and answers. The candidates contributed to the discussion by referring to their own experiences and by quoting articles and books which they had read. Especially was it noted by some of the candidates that they had

become interested in methods of teaching foreign language that differed radically from that which had been described in the major presentation. The teacher who had charge of the exercise defended his position vigorously.

A fourth mode of dealing with candidates was observed in the school where the director lectured without interruption to the candidates on the history of education. There was no effort to relate this discussion to the work of the school as the candidates had been observing it. One was reminded rather of a university exercise in which a large body of material is passed over in the lecture without any effort to give the practical applications. In this case the candidates were required to take notes and were supposed to do some outside reading, although it did not appear in the single exercise that the outside reading was tested in any way. This kind of a meeting is probably rare. The official directions explicity warn against it.

Variants on the above types of method were observed in other cases. Sometimes the candidates present reports on articles. In some cases the articles selected have a direct pedagogical flavor; in others they are purely subject-matter articles. In the latter case, the effort is sometimes made to bring out in discussions the pedagogical significance of the article; sometimes the subject is passed over without any such efforts to apply the work to the schools.

Such diversity in the practices of different schools is the natural outgrowth of the fact that each school deals only in a secondary way with the training of teachers. The chief function of the school is to teach the students, and the weekly meetings of candidates constitute a mere side issue in the life of the director. The general result is that there is no group of men in Germany who have it as their primary function to study the problem of training secondary teachers. Even the universities, with their theoretical courses in education, lack the practical stimulus of responsibility for the development of pedagogical principles for secondary schools.

Indeed, the situation is altogether remarkable. Here is a school system which more than any school system in the world requires a rigid and most elaborate training for its secondary teachers but is able to contribute little or nothing to the objective science of secondary education.

When one visits the universities of Germany, he finds the work in education very little developed. What is given is for the most part theoretical or introductory, taking the form of history of education, psychology, or philosophy. There is little respect for the few studies which are made of current educational practices and their results; and there is no social pressure in the direction of a systematic study of schools. Some of the teachers' associations, as pre-

viously noted, have attacked the problem of the scientific study of education. The Lehrerverein of Leipzig supports a laboratory for experimental investigations. In the Institut of Hamburg, Meumann conducts a laboratory for experimental pedagogy; and in two or three of the other university centers there are the beginnings of research. In the main, however, the practical training of teachers is the all-absorbing function of the professional educators. The volksschule has no relation to the universities, and the secondary schools have their own system of dealing with the problem. Nowhere is there any higher center to which all educational interests may appeal for the development of methods of investigation. The German system of training teachers turns out on examination to be a subdivided, conservative plan, complete in its administrative organization, but lacking in the motives which stimulate evolution in the direction of a systematic scientific study of its problems.

From this digression, we return to the description of the career of the teacher-in-training. After the candidates have gone through a part of the first year's training and have become somewhat familiar with the methods of instruction in the classes which they visit and through the advice which they receive in the weekly meetings, they are allowed to give instruction. At first this instruction is limited to single class exercises under the immediate supervision of the regular teacher. The candidate is expected to prepare fully for such an exercise, so that he may carry on the work of the students in accordance with the general plan adopted by the regular teacher. The regular teacher remains in the class during the instruction given by the candidate, and after the class has been dismissed the teacher gives the candidate the benefit of such criticism as he has to make. Opportunity for these criticisms is presented by the school program, which is uniformly so arranged that 45 minutes of class work are followed by 15 minutes of recess. The criticisms are in some cases very helpful, especially where the teacher is interested in developing better methods of instruction upon the part of the candidate. On the other hand, the criticisms are often very severe and sometimes even caustic. In any case, the candidate learns through the comments given him by the teacher how far he has failed to conform to the expectation of the school.

This method of training candidates tends to make the higher schools very conservative in their modes of presenting subjects. Obviously, a candidate who is teaching before the regular teacher and knows that his efforts are to be followed by 15 minutes of criticism is not likely to depart very radically from the methods he has observed in operation in the same class in earlier exercises. It is not likely, furthermore, that a candidate who has thus conformed strictly during his period of training to the practices of

the older generation of teachers will break away from these cultivated practices when he himself becomes an independent teacher of classes.

Here, as in the case of the volksschule, the method of instruction is very largely the lecture method, followed by questions. The manner of some of the teachers in their treatment of students is often very severe. This can be readily understood when it is remembered that the higher schools of Germany exercise in a very high degree the function of selecting from the student body those who are scholastically most competent. There are now in the secondary schools of Germany more students than can be accommodated in the universities and technical schools. Furthermore, the military privilege, which students acquire by completing a part of the course in these schools, is so much sought after that the school can enforce the most rigid standards of work. The general fact commented upon in connection with the volksschule, that the teacher is a permanent appointee of the State and does not need to concern himself in any way with the attitude of the patrons of the school, also helps to explain why the teachers in the higher schools feel at liberty to discipline the class with the greatest severity if the students do not satisfy them in their work. The tension observed in one of the classes of the higher schools is not paralleled by anything to be found in American schools. Students and parents alike are aware of the great importance of the judgment of the teacher. A student who has been censured by the teacher recognizes that this censure means much to his future career, and he takes it very seriously.

The candidates, who are rapidly initiated into this system of teaching and discipline, very soon feel the importance of their office, both by virtue of the example which they see set before them by the teacher and also because of the confidence which they soon acquire in the conduct of classes. It is to be remembered that the regular teacher is always present in these classes, and consequently the ordinary questions of discipline, which sometimes arise in the case of substitute teachers, very seldom arise when candidates are on trial. This is true in spite of the fact that the regular teacher often interrupts the instruction of the candidate, taking the class out of the hands of the candidate or modifying some detail of the lesson. Such interruption of the candidate does not seem to disturb the discipline of the class. This fact bears eloquent testimony to the control which the organization has over students. At the same time, when one considers the matter in its relation to the training of candidates for teaching positions, he is equally impressed with the strength of the system in enforcing conformity to the traditional type of instruction.

Several weeks before the close of the seminar year each candidate is called upon to prepare a thesis on some concrete pedagogical or didactic problem set for him by the director. This thesis constitutes part of his preparation for the teaching profession and may be the outcome of his readings or the outcome of his observation. Not uncommonly the candidate makes an elaborate study of some of the pedagogical literature related to his subject. It is to be remembered that many of these candidates have already completed the work for the degree of doctor of philosophy in the university and are for that reason trained in the methods of research and in the preparation of theses, while all have prepared elaborate theses in connection with the examinations which admitted them to the seminar year.

At the end of the seminar year the director, with the cooperation of the other teachers who have observed the work of the candidate, makes a report to the school authorities, and if the work of the candidate has been satisfactory he is now advanced to a higher grade and enters upon the trial year.

During the trial year he is required to teach six to eight hours a week without compensation. If he is especially fortunate, he may receive some compensation for substitute teaching which is needed by the school. In the main, however, he is called upon to carry a heavy burden of work without any compensation from the school. The director may also use his services for other purposes, such as the preparation of reports, the checking of lists, and other duties which need to be attended to for the purpose of administering the school. During this trial year the regular teacher is not required to attend the classes conducted by candidates. The candidate, therefore, gradually acquires independence in his conduct of the classes.

At the end of this trial year another report is made of the activities of the candidate and the judgment of the teachers in the school with respect to his success. If this report is favorable the candidate is now put on the eligible list and may be appointed to a permanent position. The length of time which it is necessary for him to wait for this permanent appointment is determined wholly by the needs of the schools. If there are no vacancies, the candidate may wait a relatively long period of time, in some of the cases as long as four or five years. On the other hand, for some years past it has been possible in most cities for candidates to receive appointment almost immediately on completion of the trial year.

Credentials secured in one State serve to admit candidates to teaching positions in other States, provided explicit arrangements to this effect exist between the States in question. This transferability of certain credentials for secondary schools is in sharp contrast with the practices in regard to elementary schools. There, as has been pointed out, credentials are for the most part not trans-

ferable.[1] This situation grows out of the fact that all of the secondary schools of the Empire have been standardized for the purpose of administering the military privilege, which is under the Central Government. This uniform standard makes it easily possible for most of the States to interchange credentials in so far as these credentials relate to the secondary schools.

The following table shows the number of secondary teachers in the German Empire and something of the conditions under which they do their work:

Higher schools in the German Empire, 1911.[1]

	Gymnasien.	Realgymnasien.	Oberrealschulen.	Progymnasien.	Prorealgymnasien.	Realschulen.	Other incomplete schools.	Vorschulen united with higher schools.	Mädchengymnasien.	Höhere Mädchenschulen.
Number of institutions	524	223	167	81	63	411	218	413	39	789
Number of teachers	9,76[illegible]	3,708	3,473	570	384	4,265	772	1,229	[2] 433 [3] 607	[2] 2,580 [3] 8,779
Number of teachers fully trained	8,671	3,153	2,857	501	295	3,228	368	14	[2] 335 [3] 146	[2] 1,594 [3] 950
Number of students	160,237	70,357	75,832	9,509	7,262	89,968	14,489	49,690	22,137	212,334
Number completing course in last year	10,300	2,907	2,452	......	......	......	......	......	242	2,051

[1] Statistiches Jahrbuch f. d. Deutsche Reich, 1913, pp. 402 et seq. [2] Men. [3] Women.

The salaries paid to secondary-school teachers are higher than those paid to elementary-school teachers. The following table presents the facts for the secondary schools of Prussia and may be compared directly with the table presented on page 73 for elementary teachers:

Salary schedule—Increments with years of experience.[1]

	Initial salary.	3 years.	6 years.	9 years.	12 years.	15 years.	21 years.
	Marks.	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*	*Marks.*
Increments	......	700	600	700	600	600	800
Total salary	2,700	3,400	4,100	4,800	5,400	6,000	7,200

[1] Monroe's Cyclopedia, vol. III, p. 71.

A rental allowance is added to this salary in the same way as in the case of elementary teachers. Teachers who have served up to their sixty-fifth year are pensioned, and all appointments are for life.

The training of women teachers for the higher girls' schools is not as elaborate as that required for the men. The following table

[1] Von Bremen, pp. 360 et seq.

presents a course administered by the seminar for teachers in higher girls' schools:

Course for women teachers for higher girls' schools.[1]

Subjects.	Academic continuation classes.				Practical year.
	III.	II.	I.	Total.	
Academic:					
Religion	3	3	3	9	1
Pedagogy	2	2	2	6	3
German	3	3	3	9	1
French	4	4	4	12	} 1
English	4	4	4	12	
History	2	2	2	6	} 1
Geography	2	1	1	4	
Mathematics	4	4	4	12	1
Natural science	2	3	3	8	1
Method and model lessons			(4)		4
Practice teaching					4-6
Research work					8
Technical:					
Drawing	2	2	1	5	
Singing	1	1	1	3	
Gymnastics	3	3	3	9	3

[1] Güldner, p. 19.

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INDEX.

Annuities, teachers. *See* Teachers' annuities.
Attendance, school. *See* School attendance.
Bell and Lancaster, monitorial system, 8–9.
Bibliography, education in Scotland, 53; official publications of English board of education, 45; publications used in report on German schools, 84.
Board of education (England), bibliography of publications, 45.
Bursars (England), definition of term, 20–21; number in training colleges for teachers, 31; occupations of fathers, 26.
Certificates, teachers. *See* Teachers' certificates.
College faculties, England, 29.
Courses of study (England), pupil-teacher centers, 24; training colleges for teachers, 31–32.
Elementary-school teachers (England), general training, 18–27; decline in number of entrants, 27.
Elementary-school teachers (Germany), methods of training, 56; university opportunities, 61.
England, training of teachers, 7–45.
Examinations, England, 16–17; Germany, 70–73, 75–76.
Germany, training of teachers, 54–84.
Grants paid for pupil teachers, England, 25–26.
Higher schools, number of teachers and students, Germany, 83.
History of education, definition, 64.
Intermediate schools, number of teachers and pupils, Germany, 63.
Junior training centers, Scotland, 49.
Kay, *Dr.*, and pupil-teacher system, 8–9.
Liverpool, training of pupil teachers, 10.
Monitorial system, England, 8–9.
National Union of Teachers, England, work, 44.
Oxford University, examinations for teachers, 17.
Pensions, teachers. *See* Teachers' pensions; Teachers' annuities.
Practice teaching, England, schools not under direct control of training colleges, 15.
Private schools, England, not under inspection, 7.
Prussia, elementary-school teachers, 57–59, 62.
Pupil teachers (England), general discussion, 8–17, 23–27; grants paid, 25–26; number in training colleges for teachers, 31; occupations of fathers, 26; salaries, 24. *See also* Student-teacher system.
Pupil teachers, Scotland, statistics, 46.
Religion and education, Germany, 59.
Salaries, pupil teachers, England, 24; teachers, Germany, 78, 83.
Saxe-Weimar, elementary-school teachers, 56.
Saxony, elementary-school teachers, 56, 58.
Scarborough, England, training of pupil teachers, 10–11.

School attendance, teachers and scholars, England, 88.
School supervision, England, 44.
School system, Germany, outline, 54–55.
Scotland, training of teachers, 46–53.
Secondary schools (England), qualifications of teachers, 40–45; student-teacher system, 11–12.
Secondary schools (Germany), training of teachers, 74–83.
Seminar, training of students, Germany, 68–70.
Student-teacher system, England, 11–12, 21–22, 31. *See also* Pupil teachers.
Students, selection for higher institutions, England, 16–17; training colleges for teachers, England, 30.
Teachers (England) certificated and uncertificated, 39; number in various grades of schools, 39; public elementary schools, 7–8; secondary schools, 7–8.
Teachers' annuities, England, 37–38.
Teachers' certificates, England, 36–37; Scotland, 51.
Teachers' organizations, England, 44–45.
Teachers' pensions, Scotland, 52.
Teachers' qualifications, secondary schools, England, 40–45.
Teachers' Registration Council, England, work, 45.
Training and certification of teachers, England, 8.
Training colleges for teachers, England, 13–17, 21–22, 28–45; Scotland, 49–50.
United States, system of education contrasted with that of Germany, 65.
University departments of education, England, 22, 28–45.
Wales, student-teacher system, 12; training colleges for teachers, 28.
Women, training for teachers, Germany, 63, 84.

BULLETIN OF THE BUREAU OF EDUCATION.

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†No. 33. Statistics of State universities and other institutions of higher education partially supported by the State, 1912.

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