Report on the Progress of Education in the Punjab during the quinquennium ending 1916-17.

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REPORT

ON THE

PROGRESS OF EDUCATION

IN THE

PUNJAB

During the quinquennium ending

1916-17.

Lahore :

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, PUNJAB;

1917.

CONTENTS.

Proceedings of His Honour the Lieutenant-Governor of the Punjab in the Home (General) Department, No. 1607, dated 21st January 1918.

READ—

The Report of the Director of Public Instruction, Punjab, for the quinquennium ending the 31st March 1917.

REMARKS.—Some of the leading features of the present report have already been referred to by the Lieutenant-Governor in his Convocation address last December. The total expenditure for the year 1916-17 is Rs. 109 lakhs as compared with 69 in 1911-12. Students of all classes number 477,000 as compared with 381,000, and the number of institutions has risen from 7,400 to 9,400. Many new buildings have been erected, both by Government and by local or communal bodies receiving building grants from Government, the number of trained teachers has almost doubled and there has been a marked improvement in the pay and prospects of teachers, so that in the lower grades, at any rate, the teaching profession is now able to hold its own in the market. This progress has been largely due to the liberal grants made by the Government of India, amounting in all to a total of just over half a crore of rupees, three-quarters of which was non-recurring.

2. On the other hand, during the last two years of the period under review, the rate of progress has been retarded by the war. Imperial grants have been reduced; the scheme for the construction of a second Government College outside Lahore has been in abeyance, several appointments sanctioned before the war have not been filled and more than one member of the staff of the Government College, Lahore, has joined the Indian Army Reserve of Officers; the Sanawar Training Class has been depleted of half its members, and the project of opening a second Training College at Jullundur has been postponed.

3. There has been a very marked difference between municipalities and district boards in regard to the encouragement of primary education. The Government of India Resolution of 21st February 1913 on Indian Educational Policy emphasized the necessity for "the widest possible extension of primary education on a voluntary basis." The Director deplores the failure of municipal committees to realize their obligations in this respect, and the Lieutenant-Governor observes that the municipalities he pillories include some of the most important in the province, such as those of Amritsar, Ludhiána and Jullundur. Mr. Richey's explanation is that municipal councillors, as a rule, mainly think of providing the education required by the well-to-do classes to which they themselves belong, and tend to ignore the claims of primary education. If this view is correct, the indictment is a serious one and the committees in question should do what they can to remove the reproach. It is refreshing to learn that the net expenditure of the district boards, apart from Imperial grants, has risen during the last five years from 8 to 13 lakhs, the greater part of which has been devoted to primary and vernacular education. The system of fixed grants per school for vernacular education has again been subjected to criticism on the ground that it makes no allowance for the growth of expenditure on schools already in existence. It should not be difficult to remedy this defect, and the Lieutenant-Governor will be interested to learn what solution has been suggested by the Committee which recently sat to consider the matter. The District Boards of Lyallpur, Jhelum and Ferozepore have been specially commended for their practical encouragement of primary schools.

4. Collegiate education has shown considerable extension during the quinquennium, the number of students having risen from 2,462 to 4,221. Expenditure on new college buildings amounted to about 6⅓ lakhs while recurring expenditure rose to 6½ lakhs, an increase of 78 per cent. It is satisfactory to record that 48 per cent. of the total expenditure was met from fees. Of the ten Arts Colleges in the province, seven are situated in Lahore, where greater facilities exist for the pursuit of higher studies, and are in close proximity to one another forming as it were an academic quarter of the town. The Director comments favourably on the mutual relations between the Colleges, and on the general behaviour of the students. It is perhaps open to question whether the capital of the province is an ideal locality for a large residential University, but in the Punjab we have made

our choice and must abide by it. The pressure on accommodation in Lahore may be alleviated in time by the construction of second grade colleges in outlying districts, like that recently opened at Gujranwala.

To what extent the graduates of the University are able to find employment is a question on which the Report does not touch. The dearth of occupations formed the subject of more than one of Dr. Ewing's Convocation addresses, and it would be interesting to know how far the country in its present stage of advancement is able to absorb the output of the University. The question is one of some economic importance, and an enquiry by the University authorities might elicit information which would be of considerable value.

The growth of College hostels is a satisfactory feature of the quinquennium. The report states that in Arts Colleges 2,399 students out of a total of 4,221 reside in premises controlled by colleges. There is nothing to show how many of these are living in branch boarding-houses, and how many in lodging-houses or private messes. The answer to these questions would give the measure of the insufficiency of hostel accommodation. But in spite of this insufficiency, it is clear that there has been a development in the corporate and social life of the colleges. The Lieutenant-Governor regards this as most important, as the aim of the colleges should be to train men to take their part in the life of the community at large, and to give them the wider culture which is necessary not only for the "rational enjoyment of leisure," but also for the adequate performance of professional work.

In the spring of 1917 efforts were made to raise a company of 227 graduates and under-graduates for active service. It is a matter for regret that not more than 56 fit recruits were forthcoming. A large proportion of these were educated members of the fighting classes, and about half came from the Khalsa College. They were formed into a Brigade Signal Section. Their training is now complete and they are shortly proceeding on active service. The Lieutenant-Governor wishes them every success and has no doubt that they will prove themselves true sons of the Punjab. But it is sad to think that owing to the feeble support they have received from their fellow-students who, it was hoped, would have shown that the martial spirit of the Province is not limited to the rural classes, the unit must almost inevitably in the course of the campaign lose its distinctive character as a university corps.

5. Although the province of secondary education is, in accordance with the policy of Government, largely left to private enterprise, about three-eighths of the total expenditure of 28 lakhs is met from public funds. In 1911-12 the total expenditure was only 16 lakhs, so that the increase in the quinquennium amounts to 75 per cent. During the same period the number of pupils actually receiving secondary education increased from 50,000 to about 68,000, while the number of secondary schools for boys has risen from 309 to 418. Many new buildings have been erected, salaries have been raised and systematic medical inspection has been introduced.

On the other hand, the desire for English education on the part of those who are able to make themselves heard tends to limit the number of vernacular middle schools, which provide the poorer classes with a cheap secondary education. The compromise which has been arrived at in the Jullundur Division (see paragraph 30 of the report) deserves the consideration of district boards in other parts of the province.

One of the dangers attending secondary education is the tendency in some schools to make their course of instruction subservient to the University curriculum, and Mr. Richey complains of the fetish of examinations. This is a question which calls for very careful consideration. His Honour has recently had his attention invited to an illuminating essay by Mr. Wyatt, Inspector of Schools, Ráwalpindi Division, on "Methods of School Inspection in England," published by the Indian Bureau of Education. The author shows how schools in England went through the same stage that we are passing through in India—the stage in which the examination in a

imited range of subjects is permitted to dominate school life. He points out the evils to which this system led and shows how the examination has now been relegated to a very different position. The whole essay should be studied by those who are interested in educational reform in the Punjab.

The medical inspection of schools and scholars in the towns has at last been fairly established, but the intelligent co-operation of parents is necessary if their children are to derive full benefit from the system. More attention is being paid to physical exercise, and the Lieutenant-Governor hopes that District Officers will continue to do all they can to assist in the matter of providing playgrounds. The Director comments on the pernicious influence of tournaments, and attention is concentrated on promising athletes to the neglect of all others. The primary object of games and physical training in schools is to raise the general standard of health, rather than the individual standard of skill. A modern writer has said with a large measure of truth : " It is a good sign in a nation when such things are done badly. It shows that all the people are doing them."

The efforts that have been made during the quinquennium to improve the quality of teaching have not been without result, and the Director mentions English, Drawing, Science and Manual Training as subjects in which the improvement has been marked.

The Report speaks briefly of the moral training that is given in schools, but the most potent influence of all is that of example, and silent disapproval may often carry more weight than eloquent exhortation. Herein lies the peculiar responsibility of the schoolmaster's profession.

The record of the secondary schools of the province in connection with the war is one of which they may well be proud and proves that the younger generation has inherited to the full the loyal and martial traditions of their forefathers. In the Ráwalpindi Division alone, nearly a thousand teachers and pupils have enlisted in the army, and some of the teachers have shown themselves most enthusiastic recuiters. A notable instance is that of the fifth master of the Government High School, Gujrát, who has already given his three sons for military service and has been instrumental in enlisting many other recruits. Considerable contributions have been made to various funds, in many cases the pupils decided to forego their prizes so that the money might be sent to the Red Cross or the Comforts Fund for troops in the field and the pupils at the Central Model School have subscribed nearly Rs. 10,000 to the war loan.

6. Reference has already been made to the expansion of primary education. At the end of 1911-12 there were 3,417 primary schools for boys and 179,410 pupils. According to the figures given by the Director there are now 4,913 such schools with an attendance of 245,628. Five years ago there was a school for every 10 villages : now there is one for every 7. Progress has, however, not been so rapid as was at one time hoped. The quinquennial programme drawn up in 1912 aimed at the establishment of 2,750 schools. The number actually established has been 1,500, but it compares favourably with the increase of 263 in the preceding quinquennium. The average attendance shows a slight decline from 52 to 50. This is only natural as schools are first established in the places where there is the greatest demand for them.

But it seems clear from what the Director says that a large proportion of the children who go to school get little or no benefit from their 'education.' The average duration of school life is less than 4 years, and more than half the total number of pupils at school are in the two lowest classes. A year or two of a child's life spent in an infant class, with children in varying stages of progress, can have no lasting effect on the mind. Not only so but, as Mr. Richey points out, it discredits education in rural areas. The remedies are increased staff and improved methods, and the Lieutenant-Governor hopes that every effort will be made to apply them. As His Honour observed in his Convocation address with reference to the Compulsory Education

Bill : " Before we force people to accept our gift, we should satisfy ourselves that the gift is one that they can turn to good account."

The large grants that have been made during the five years have enabled local bodies to carry out a much-needed reform in the enhancement of salaries, and the teaching profession has now a fair chance in the market. No certificated teacher in a board primary school now receives less than Rs. 12 and no headmaster less than Rs. 15. The result is apparent in the increasing number of students at Normal Schools. The number of Normal Schools has risen from 5 to 10, and the number of those studying in them from 452 to 912. Trained teachers are now 52 per cent. of the whole number of primary school teachers, as compared with 41 per cent. five years ago, and the total number is 9,868 as compared with 6,498.

The revision of the grant-in-aid rules has led to an increase in the number of aided primary schools from 744 to 1,335. The intention was to improve the *maktabs* and other institutions in which elementary religious instruction is given by inducing the managers to include a certain amount of general instruction. This intention has not been realized, and the increase in the number of schools receiving grants-in-aid is due in the main to the establishment of new schools which have been called into existence by the prospect of obtaining a grant on easy terms.

7. The percentage of trained teachers in secondary schools has increased from 54 to 65 during the last five years and there has been improvement also in the rates of pay.

The Central Training College, which for 10 years has been in the very capable hands of Mr. Knowlton, remains the only source of supply for teachers trained in English. There were, in 1916-17, 481 candidates for admission to the B. T. and Senior and Junior Anglo-Vernacular classes, of whom it was not possible to admit more than 149,—less than one in three of the total number. Mr. Richey gives an interesting account of the qualifications required for each class of student in the training institutions and of the various courses of study. As he points out, "the importance of the work of the normal schools, which will provide teachers for three-quarters of the boys and girls under instruction in the Province, can hardly be over-estimated." If local bodies are to take full advantage of the legislation which is now being undertaken, the demand for trained teachers will be intensified, and the Director should take steps in good time to ensure that it will be met.

Although the facilities for the training of women teachers in girls' schools are still limited, the number of women under training has risen from 48 to 225 during the quinquennium. The Kinnaird High School in Lahore is the chief centre of training for appointments in secondary schools, while the Lahore Normal School for Women, the U. P. American Mission at Siálkot and some other institutions of a similar nature serve the vernacular girls' schools of the Punjab. A large increase in Normal Schools for Women so as to provide at least one in each Division is now under contemplation.

8. The quinquennium has seen some notable additions to the buildings devoted to professional education. The new Medical College, opened by Lord Hardinge in November 1915, compares favourably with the best of similar institutions in other parts of India, and the Lahore Veterinary College, also opened by Lord Hardinge, is one of the largest and best equipped in the Empire. The number of admissions to the Medical College has doubled, and the Principal and the Inspector-General are agreed that "the only possible method of coping with the numbers is to remove the School Department to some other centre." For the 4-years' course at Lyallpur, there have been 200 applicants for admission as compared with 38 five years ago. There is room for only 35 students of the short vernacular course, but there were 101 applicants for admission.

The report contains striking evidence of the demand that exists for the product of our professional institutions :—" The demand for the class of Medical practitioners passing out from the school is increasingly great and already

the situation has become acute. The numbers passing out in the next few years will not be sufficient to meet Government demands, let alone those of the general public." "The demand for Veterinary graduates has continued to be as great as ever, and the supply is totally inadequate to meet it." "Of the 43 students, who passed out (of the Rasul School of Engineering) last year, thirty-three obtained employment in the Public Works Department, 2 in the Military Works Department and 3 in the Bahawalpur State Service." "Thirty-seven applications," writes Mr. Heath with reference to the drawing classes at the School of Art, "have been received from other provinces for trained masters, which shows that the need for this class of teacher is wide-spread." "Ex-students of this school" (the Victoria Diamond Jubilee Hindu Technical Institute) "generally get ready and lucrative employment."

The above quoted extracts from the report show the demand that there is for professional and technical education, and the prospects of employment that there are for those who have received it. It is very necessary that the institutions which supply these forms of education should grow with the growing demand for employment. That demand is the best test of their utility and the true measure of the need for expansion.

10. Public opinion in favour of the education of Indian women is steadily growing, and the report records noteworthy progress during the past 5 years. The Christian Missions, the Arya Samaj, the Khalsa Diwan, the Dev Samaj and other pioneers in the educational movement have done their best to break down ancient prejudices. The number of institutions for girls has risen, during the past five years, from 669 to 990 and the number of scholars from 33,260 to 51,496, while the number of women under training for the teaching profession has increased five-fold. In the sphere of secondary education mention must be made of the Kinnaird High School, which provides collegiate classes recognised by the Punjab University and prepares for the Junior Anglo-Vernacular Teachers' Certificate Examination, and also of the Queen Mary's College,—an institution of some five years' standing for the education of girls of high social position, which possesses a well-designed and fully equipped building and a strong staff of lady teachers. It is still difficult to enlist the co-operation of Indian ladies in the management of schools, but until they are prepared to come forward it will be necessary to retain the present committees of men.

11. The education of Europeans in the Province is conducted in 34 public schools, four of which are directly managed by Government, the total number of scholars being 2,890. The instruction is not always adapted to the needs of the time; science is rarely taught and housewifery in girls' schools is often neglected. The dearth of suitable teachers accounts for these phenomena. In the Lawrence Military Asylum at Sanawar, however, and in the Lawrence School, Ghora Gali, which was provincialised in 1913-14, the province possesses two schools which are distinguished for their general efficiency, the *esprit de corps* of their scholars and the comprehensive view of requirements and lofty sense of duty exhibited by their Principals and staffs. These institutions are in some respects modelled on public schools in Great Britain, and both enjoy a wide popularity. Each department is organised on sound, common-sense principles, and that is more than half the battle. Great credit is due to the Reverend G. D. Barne and the Reverend H. T. Wightwick, the Principals at Sanawar and Ghora Gali, and to the staffs under their control. At both places, considerable sums of money have been spent on improving the buildings during the quinquennium.

12. The chapter of the report dealing with the education of special classes is mainly devoted to the subject of the backwardness of the Muhammadan community. This fact has been mentioned in many previous reports, and the statistics of the quinquennium under review indicate that while Muhammadans, who form 55 per cent. of the population of the province, are holding their own in Primary and Vernacular Middle Schools, in other general educational institutions they have lost ground in comparison with other communities.

The figures given in paragraph 110 of the Report are difficult to reconcile with those in general table V-A., but assuming that they are correct

the percentage of increase in the number of pupils at each stage of instruction for Hindus, Muhammadans and Sikhs are as follows :—

		Muhammadans.	*Hindus.*	*Sikhs.*
Arts Colleges		56	64	61
Other „		6	37	100
Secondary Schools	Anglo-Vernacular	5	19	45
	Vernacular	36	19	48
Technical and Industrial Schools		60	112	—5
Primary Schools		36	37	36
Total ...		29	30	41

In the final examination for Vernacular Middle Schools, one-third of the successful candidates were Muhammadans, in the Matriculation Examination less than one-fourth and in Degree Examinations less than one-sixth. It is only at the Lyallpur Agricultural College, the Veterinary College and the Mayo School of Art and in Industrial schools generally that they are well represented. The causes of this comparative stagnation are too well known to need repetition, while the remedies of the past, consisting in the remission of fees and the establishment of special scholarships, have not been particularly efficacious. The suggestions now offered by the Director include the bringing of facilities for secondary education nearer to the homes of the agricultural population and the introduction of a larger Muhammadan element into the teaching and inspecting staffs in rural tracts. This, however, postulates that Muhammadan students should take to the teaching profession, especially the higher branches, in greater number than they have hitherto done, and the Lieutenant-Governor would welcome the assistance of the various Muhammadan associations towards bringing about this result. The most hopeful signs in the outlook are the steady increase in the number of Islamic institutions and the liberality which the Muslim gentry display towards the education of their co-religionists. Among the low castes and criminal tribes of the Province, Christian Missions and the Arya Samaj have done commendable service. The other communities are now beginning to realise their responsibilities in this matter, and the next 5 years should witness a great advance in the education of these classes, as their reclamation has been taken in hand on large and comprehensive lines.

13. The Text-Book Committee has continued to do useful work. The selection of books is made with great care, and one of the Committee's chief aims is to keep prices as low as possible in order to safeguard the interests of pupils.

14. For the greater portion of the quinquennium Mr. J. C. Godley, C.S.I., was Director, Mr. Crosse, Inspector of Schools, Lahore, holding charge for six weeks in 1912, and Mr. Richey, the new Director, officiating for six and-a-half months in 1915. A tribute has been paid in the review of 1915-16 to Mr. Godley's services to the cause of education in this Province. In Mr. Richey an able successor has been found, and the Lieutenant-Governor takes this opportunity of thanking him for an interesting and comprehensive report on educational progress during the past quinquennium. The officers of the Department generally are to be congratulated on the success with which their labours have been attended,—a success due very largely to their intelligence, energy, keenness and application.

Dr. Ewing retired from the Vice-Chancellorship of the University in February 1917. He had held the appointment for seven years, during which period the influence of his personality on the course of University affairs was very marked. His services to the cause of education in the Punjab were recognised by the conferment of an honorary C.I.E. in 1915.

ORDER.—Ordered that the above remarks be printed and circulated with the report; also that they be published in the *Punjab Government Gazette*, and be forwarded to the Director of Public Instruction, Punjab, for information, and also that they be submitted to the Government of India, in the Department of Education, with copies of the report.

By order of His Honour the Lieutenant-Governor, Punjab,

J. P. THOMPSON,
Chief Secretary to Government, Punjab.

2078 CS—526—22-1-18—SGPP Lahore.

Report

ON THE

Progress of Education in the Punjab

DURING THE

Quinquennium ending 1916-17.

CHAPTER I.

General Summary.

This report deals with the period from April 1st, 1912, to March 31st, 1917, and attempts to summarize the chief educational developments during that quinquennium. The period under review was one of exceptional educational progress, to which the writer, who was in the Punjab only for six months in 1915, feels that he cannot do full justice. A general comparison of the educational statistics for the years 1912 and 1917 will be found in the summary on the next page, and detailed figures for the year 1916-17 will be found in the general tables at the end of the report. Consequently, the use of statistics in the body of the report has been restricted.

2. From the summary on page 2 it will be seen that the number of educational institutions increased by nearly 2,000 during the past five years and the number of pupils attending them (the figures for private schools, which are unreliable, being omitted) by one lakh. The largest increase, as might be expected, was in the number of primary schools for boys and of the pupils attending them. The number of schools increased at an average rate of 300 a year, and would have been considerably larger but for the falling off inevitable since the commencement of the war. Moreover, a great deal, in fact the major portion of the money available for the expansion of primary education was utilized by district boards in increasing the pay of their primary school teachers. The present effect of these increases is shown in the graph at the end of the report; but the full effect will not be realized for some years as the majority of boards adopted incremental scales of pay so recently that their teachers are still on the lowest grades. However, the graph, Appendix A, shows that the number of teachers drawing Rs. 20 a month has more than doubled.

But if the largest numerical increase is in primary schools for boys the highest percentages of increase are under secondary schools for girls and Arts Colleges. The former increase is in some measure accounted for by the conversion of 22 girls' primary schools into middle schools. It is always fallacious to argue from the attendance at secondary schools as to the number of children receiving secondary education, since these institutions have primary departments attached to them which contain the bulk of their pupils. At the same time the number of girls attending schools of all kinds has increased by nearly 50 per cent., a most encouraging sign for the prospects of female education.

The increase in the number of students attending Arts Colleges is dealt with in the chapter on Collegiate Education. It has led to a serious congestion in the colleges at Lahore, the pressure on which can only be relieved by the opening of more colleges when the financial conditions prevailing during the war are relaxed.

GENERAL STATISTICS FOR BRITISH TERRITORY IN THE PUNJAB FOR 1911-12 AND 1916-17

	Number of Institutions.				Number of Scholars.				Expenditure.		
	1916-17.	1911-12.	Increase.	Decrease.	1916-17.	1911-12.	Increase.	Decrease.	1916-17.	1911-12.	Increase.
Public Institutions.									Rs.	Rs.	Rs.
For males.											
Arts Colleges — English ...	9	10	...	1	4,076	2,539	1,537	...	6,12,597	3,83,652	2,28,945
Arts Colleges — Oriental ...	1	1	...	...	145	120	25	...	33,272	25,910	7,362
Professional Colleges — Law College ...	1	1	...	...	295	211	84	...	21,090	21,309	...
Professional Colleges — Medical College .	1	1	...	...	232	156	76	...	1,28,192	1,20,702	7,490
Professional Colleges — Agricultural College	1	1	...	...	113	50	63	...	68,427	54,707	13,720
Professional Colleges — Veterinary College	1	1	...	...	204	198	6	...	1,09,921	73,404	36,517
Professional Colleges — Teaching Colleges ...	2	2	..	...	272	245	27	...	1,19,202	96,259	22,943
High Schools ...	136	101	35	...	54,135	47,662	6,473	...	20,28,539	12,66,656	7,61,883
Middle Schools	286	211	75	..	57,159	45,521	11,638	...	9,51,739	4,97,530	4,54,209
Total Secondary Schools ...	422	312	110	...	111,294	93,183	18,111	...	29,80,278	17,64,186	12,16,092
Primary Schools	4,918	3,417	1,501		245,819	179,588	66,231	...	15,82,683	8,87,087	6,95,596
Total Schools for general education	5,340	3,729	1,611	...	357,113	272,771	84,342	...	45,62,961	26,51,273	19,11,688
Institutions for special instruction	56	31	25	...	4,478	3,237	1,241	...	3,84,130	2,28,221	1,55,909
Total institutions for general education and for special instruction.	5,412	3,777	1,635	...	366,928	279,527	87,401	...	60,39,792	36,55,437	23,84,355
For females.											
Arts Colleges	1	...	1	...	15	...	15	...	7,367	...	7,367
Professional Colleges	1	2	...	1	38	30	8	...	15,464	19,654	...
High Schools	17	16	1	...	2,582	1,683	899	...	2,20,275	1,43,196	77,079
Middle Schools	58	36	22	...	8,635	4,552	4,083	...	1,79,127	1,05,126	74,001
Total Secondary Schools ...	75	52	23	...	11,217	6,235	4,982	...	3,99,402	2,48,322	1,51,080
Primary Schools	935	637	298	...	42,032	29,091	12,941	...	3,81,886	1,98,714	1,83,172
Total Schools for general education	1,010	689	321	...	53,249	35,326	17,923	...	7,81,288	4,47,036	3,34,252
Schools for special instruction ...	18	25	..	7	813	1,284	...	471	99,164	1,52,391	...
Total Schools for general education and for special instruction.	1,030	716	314	...	54,115	36,640	17,475	...	9,03,283	6,19,081	2,84,202
Total public institutions for males and females.	6,442	4,493	1,949	...	421,043	316,167	104,876	...	69,43,075	42,74,518	26,68,557
Private Institutions.											
For males	2,043	2,043	...	...	42,194	48,207	...	6,013	...	...	...
For females	872	875	...	3	13,501	16,739	...	3,238	...	...	...
Total males and females ...	2,915	2,918	...	3	55,695	64,946	...	9,251	...	...	...
Grand Total of Institutions—public and private.	9,357	7,411	1,946	...	476,738	381,113	95,625	...	...	...	...
Scholarships	...	...	...	...	...	...		...	3,43 154	2,02,387	1,40,767
Other charges	...	...	...	...	...	...	...	...	35,77,091	23,88,004	11,89,087
Grand Total of expenditure ...	...	...	...	...	...	...	...	...	1,08,63,320	68,64,909	39,98,411

Note.—The figures for 1911-12 include those for the Delhi Province.

The increase in the number of schools and scholars has been accompanied by an improvement in the quality of the instruction. The number of trained teachers has almost doubled. The teaching of such subjects as drawing and science has been completely reformed, while, for the first time, practical subjects, such as manual training for boys and cooking and laundry work for girls, have found a place in the scheme of general education and are meeting with acceptance by parents and teachers.

3. This expansion and development has been rendered possible by a largely increased supply of funds. The initiative was taken by the Government of India which contributed a darbar grant of Rs. 3,65,000, recurring, in 1912 and further grants in the two following years.

These Imperial grants have played an important part in the educational developments of the quinquennium, and the annual distribution of them has been shown in the yearly reports. Altogether these grants amounted to Rs. 51,70,400,—non-recurring, Rs. 38,78,000, and Rs. 12,92,400, recurring. The non-recurring grants were entirely expended by the year 1915-16 and the recurring grants were absorbed into the annual recurring expenditure of the Department by the end of that year. The method by which the largest grants, *i.e.*, those for primary education, were distributed to local bodies is discussed in the chapter on Controlling Agencies. The non-recurring grants were partly expended in the erection of new buildings for Government high schools. Ten of these were constructed on a modern and improved design and form a notable addition to the educational buildings of the Province. The example set by Government was followed by the managers of aided high schools and, with the help of liberal Government grants, some really fine school buildings and hostels were erected for schools under private management.

4. The large increase in the number of educational institutions entailed a strengthening of the inspecting staff. Inspectresses were appointed to each Division in 1913, but the number of female inspecting officers is insufficient to cope with the rapidly increasing number of girls' schools.

In 1914 the Secretary of State sanctioned the addition of three Inspectorships and of one Assistant Director in the Indian Educational Service. It has been possible to fill up only one of these Inspectorships, and the senior inspecting staff is so heavily worked at present that it has little time to devote to administrative duties. The Assistant Directorship is also vacant and the appointment of such an officer is urgently needed if the Director is not to confine himself to secretarial work of a routine nature.

5. There are no important changes in the educational system to record during the quinquennium; the number of classes in schools, the position of English, and the number and nature of the examinations remain unaltered.

The efforts of private individuals and bodies in the cause of education were as a rule confined to the sphere of high school education and resulted in the addition of a number of secondary institutions, some of them of a superior standard.

The activities of the Sikh community in the cause of education deserve special mention. No community shows such a percentage of increase in all branches of general education. Among other commendable features of this activity was the founding of secondary schools in rural areas hitherto beyond the reach of Anglo-vernacular education. Nor did the community neglect primary or female education.

CHAPTER II.

Controlling Agencies.

The Education Department.

6. Mr. J. C. Godley, C.S.I., was Director throughout the quinquennium, except for two periods of leave: one of some six weeks' duration in 1912, during which Mr. Crosse, Inspector of Schools, Lahore, held charge, and one of six-and-a-half months from June 15th, 1915, when I officiated for him.

An Assistant Directorship was sanctioned by the Secretary of State in 1914, but remains unfilled owing to the war. The Secretary of State also sanctioned the addition of three Inspectorships in the Indian Educational Service, one of which was filled by the transfer of Mr. Sanderson from the Sanawar Training Class to the inspecting line. Mr. G. A. Wathen filled another of these vacancies for about a year before taking charge of the Khalsa College, Amritsar.

Three Inspectors retired during the quinquennium—Khan Bahadur Maulvi Umr-ud-din of Rawalpindi, Lala Shiv Dayal, M.A., of Ambala, and Rai Sahib Lala Jugal Kishore. The place of Khan Bahadur Maulvi Umr-ud-din was taken by Khan Sahib Khalifa Imad-ud-din, while that of Lala Shiv Dayal was taken by Lala Jugal Kishore, and, on the latter's retirement, by Lala Hari Das.

Apart from the Inspectorship of European Schools, which is held by Mr. Sanderson, there should be two Inspectors in charge of each Division, one in the Indian Educational Service and one in the Provincial Educational Service. This arrangement, which was sanctioned by the Secretary of State in 1914, has not as yet been brought into effect except (towards the close of the quinquennium) in the Lahore and Jullundur Divisions; the Rawalpindi Division has one Indian Educational Service Inspector, the Ambala and Multan Divisions each one Provincial Educational Service Inspector, two Indian Educational Service Inspectorships are vacant, and the fifth Provincial Educational Service Inspector is attached to the staff of the Central Training College.

The rapid increase in the number of secondary schools has entailed much additional work on the senior inspecting staff; and there is no doubt that owing to the press of inspection work, the administrative and supervisory duties of Inspectors have suffered considerably.

The supervision and administration of vernacular education is left more and more in the hands of the District Inspector. Many officers of this class are reported to have done very good work. Among others specially noticed by Inspectors are :—Mir Fazl Muhammad of Rohtak; Lala Shiv Saran Das of Ferozepore; Lala Tohlo Ram of Kangra; Chaudhri Gyan Singh of Gurdaspur; Lala Kanhaya Lal, Bedi, of Sialkot; M. Abdul Latif of Gujrat; M. Ahmad Said of Mianwali; Lala Khazan Chand of Lyallpur, and Lala Visanda Ram of Jhang. Among Assistant District Inspectors reported for good work are M. Muhammad Hasan of Ambala; Pandit Sukh Chain Nath of Kangra; Shaikh Ghulam Hussain of Hoshiarpur; M. Abd-ur-Rahman and M. Rahim Bakhsh of Sialkot; M. Muhammad Nawaz and Lala Vaishno Das of Gurdaspur, and Bhai Gyan Singh of Amritsar.

Local Bodies—Municipalities.

7. The chief educational care of a local body is the provision of primary education. This is a truism which it would be unnecessary to repeat, if it were generally accepted by local bodies. With few exceptions, municipalities pay very little heed to education of any kind and take no interest in primary education. The fact that primary education, as a course complete in itself, comprises all the education which the vast majority of town children will acquire or indeed require, is not realised by the well-to-do classes from which municipal councillors are drawn. Primary education in towns is almost entirely provided by the lower primary departments of aided Anglo-vernacular schools. The aid is certainly given by the municipalities and some of them, *e.g.*, those in the Rawalpindi Division, are reported to spend a very reasonable proportion of their income in this way, but municipalities have no choice in the matter, for when Government relieved them of the cost of aiding secondary departments it left them the much less onerous duty of aiding the primary schools and departments. In any case the mere distribution of an annual subsidy to aided institutions, which are often grouped in one quarter of the town and which only provide a three years' course of vernacular education is a very different thing from surveying and providing for the educational needs of the urban population. No doubt the movement on foot for the introduction of compulsory education in

municipal areas will bring the realities of the present position home to Municipal Commissioners. One can but admire the enthusiasm shown in this matter of compulsion by a municipality such as Jullundur, which at present maintains no boys' school at all, except the lower primary department of the Government High School recently handed over to its reluctant charge. Of the Amritsar Municipal Committee, which has since been reported as considering the question of compulsory attendance, the Inspector writes:— "The Committee has taken no steps to provide suitable habitations for its boys' and girls' schools and even Government grants remain unutilised, while the salaries of its female teachers are miserably low." The Hoshiarpur Municipality is reported as most apathetic, while Ludhiana also maintained no boys' school till the lower primary department of the Government School was entrusted to it in 1915. In consequence of increased income from fees and grants, Montgomery and Chiniot have reduced their expenditure and the Gojra Municipal Committee has made an actual saving.

The Ambala Inspector gives a string of minor municipalities which have not properly utilised Government grants, the *worst* being Buriya Sadhaura, Bhiwani, Gohana, Beri, Hodal, Panipat, Shahabad and Kaithal.

Most of the minor municipalities in the Jullundur Division have transferred the control of their schools to district boards, an arrangement which, though satisfactory in some respects, weakens local interest in schools.

District Boards.

8. On the other hand district boards with few exceptions take a considerable interest in education; and apart from Imperial grants the net expenditure by district boards from their own funds has risen from Rs. 8,14,815 to Rs. 13,11,709.

The major portion of the new expenditure was devoted to primary and vernacular education; though a certain number of Anglo-vernacular schools were opened. The claim that Anglo-vernacular education should have on the resources of district boards is difficult to determine. On the one hand there is a crying need for a large expansion of primary education in rural areas. On the other hand unless the district board provides Anglo-vernacular schools in outlying parts, there is little likelihood of any local enterprise being forthcoming for this purpose; and the agriculturist who contributes largely to public revenues for education will continue to be handicapped in comparison with the town dweller.

The question is being considered by a committee this autumn.

Grants from Provincial revenues to Local Bodies.

9. The greatly enhanced activity of district boards during the quinquennium was due to the Imperial grants which were received in the first three years for educations, of which Rs. 12,81,719 non-recurring and Rs. 11,23,449 recurring were distributed to district boards. The method by which grants are made from public resources to local bodies for education has twice been modified during the quinquennium and a further change is now under contemplation. The systems adopted have roughly corresponded to the amounts available for distribution.

Up till the year 1912-13 there were no definite rules to govern grants, since there was very little money available for distribution and such sums as the Local Government provided were given where there seemed most need.

When the large grants from the Imperial Government were received it became necessary to adopt some more definite system. In 1912-13 it was laid down that the Local Government would bear two-thirds of the cost of the salaries of all trained teachers employed by local bodies and half of the cost of untrained teachers, and would also defray two-thirds of the grants earned by aided elementary schools. There was a proviso that no trained teacher should receive less than Rs. 15 per mensem if a headmaster or Rs. 12 per mensem if an assistant.

In April or May of each year every District Inspector prepared a list of all trained teachers employed by the board and sent it into the Education

Department who then added up the salaries and sent the board a grant for two-thirds of the total, a similar procedure being followed with regard to untrained teachers, aided schools, etc.

The effect of the introduction of this system was immediate In the first year, boards found themselves relieved of a good deal of the expenditure they had hitherto borne, and gladly embarked on revised scales of salary for board school teachers and of educational expansion by means of new Board Schools, or even more frequently by means of aided elementary schools.

It was recognised, however, that this system of proportionate distribution would be of little benefit to the poorer districts to whose finances even one-third of the cost of the existing schools was a severe burden. So to nine of the twenty-six boards the system of special doles was intermittently continued. These doles were provided from the yearly undistributed balances of the Imperial grants.

This free distribution of money lasted for three years, *i.e.*, until the Imperial grants were exhausted. In the year 1915-16 when the salary bills from the boards came to be met it was found that not only was there no balance for doles to backward districts, but that in order to meet our commitments (for district boards had been definitely promised these proportionate grants) a sum of Rs. 55,000 must be reappropriated from other heads in the Educational budget. The Imperial grants had been more than exhausted, and the Local Government, who would in future have to meet the cost of these contributions, refused to accept an unlimited liability. Clearly some revision of the system was necessary. The new system introduced in 1915 requires district boards to submit in October of each year their proposals for new expenditure in the coming year. Provision for this is made in the schedule laid before the Finance Committee of the Local Government and the total amount which is passed by that body is distributed to the boards who have submitted proposals, in accordance with the apparent urgency of their needs. These sums after distribution become automatically absorbed into the fixed annual recurring grants, which are not subject to reduction unless any board reduces the number of its schools.

The new grants are calculated on certain fixed rates, *e.g.*, Rs. 200 for each new primary school. [This is a high estimate of two-thirds of the average annual cost of such a school in the Province.]

The old system undoubtedly resulted in the immediate opening of a number of schools and in a great improvement in teachers' salaries; but the schools were opened on no fixed plan and the scales introduced are in many cases badly planned, while the variations between district and district are unfortunate and unnecessary.

It contained certain obvious defects which the new system was designed to correct, *e.g.*—

(*a*) The unlimited liability to which Government was committed. Clearly a system under which you cannot estimate within a lakh of your commitments can only exist when there is a large surplus to draw upon.

(*b*) The unequal distribution of provincial funds. The richer the board the more money it got; and the time was rapidly approaching when a few of the wealthiest boards would by continued expansion absorb all the money available. The poorer and more backward districts who needed most help got least, except in the shape of uncertain doles, which only disturbed their finances.

This is the strongest objection to any form of proportionate grants, the immediate effect of which is the encouragement of prodigality by local bodies rather than the provision of educational facilities for the children who need it.

The new system has, however, proved defective, in that it makes no allowance for the growth of expenditure on schools already in existence.

The whole question, which is one of great complexity, will be discussed by a committee this autumn.

10. The position of a few of the district boards may be quoted from Inspectors' reports. Lyallpur increased its net expenditure by over Rs. 70,000. This is one of the richest boards, yet the Inspector states that the rapid expansion has brought it to the end of its resources and it has had to fix a tentative measure for its provision for education. Amritsar on the other hand which is not a poor board has only increased its expenditure by some Rs. 4,400 and contents itself with supporting elementary schools of a cheap kind, having opened only three board schools in five years. Jhelum, not a wealthy board, now spends over 25 per cent. of its net income on education, and Ferozepore spends 27 per cent. On the other hand Muzaffargarh seems to rely on the 'backwardness' grant, and when this failed dismissed teachers and generally curtailed expenditure. This board appears to have reduced its own expenditure by Rs. 5,000. Gujranwala has increased considerably its recurring expenditure, but has left unspent over Rs. 35,000 of a special grant for buildings (amounting in all to Rs. 57,200) given in 1915-16. No reason is given for this action which is the more inexplicable since the grant was only made because buildings were urgently needed.

Some typical district boards.

CHAPTER III.

Collegiate Education.

11. Apart from the Aitchison (Chiefs') College there are in all seventeen colleges in the Punjab, exclusive of the three situated in the States of Patiala, Bahawalpur and Kapurthala. Of these sixteen colleges five, namely the Law, Medical, Veterinary, Agricultural and Central Training Colleges, are dealt with in the chapter treating of professional education, while mention of the Kinnaird College for Women is made in the chapter on female education.

Number and situation of Colleges.

Of the ten Arts Colleges for men dealt with in this chapter no less than seven are situated in Lahore, the remaining three being the Gordon College at Rawalpindi, the Murray College at Sialkot, and the Khalsa College at Amritsar. Consequently 84 per cent of the students in the Punjab read in Lahore colleges, and the percentage would be even higher, if the students attending professional colleges, four of which are situated in Lahore, were reckoned in this calculation.

Residence in Lahore offers the student greater facilities for the pursuit of higher studies, and wider opportunities, outside his college life, for intellectual culture, social intercourse and participation in communal and religious public functions. Moreover migration from one college to another is easier, and is not uncommon, though that this is not confined to Lahore students is shown by the following remarks of the Principal of one of the mofussil colleges :—

"Lahore continues to exercise a spell over our local students and at least half of our own intermediate passes went to the metropolis."

Moreover the colleges in Lahore are not scattered in different quarters of the city, but are all situated in comparative proximity to each other ; the University buildings forming as it were a nucleus to this academic quarter.

The existence of so many colleges at one centre should facilitate the institution of inter-collegiate lectures, but at present this system partly owing to difficulties of time-table has made little headway. Where it has been started, namely between the Government and Forman Christian Colleges for M. A. work in English, History and Mathematics and between the Government, Oriental, and Islamia Colleges for M. A. work in Arabic, it has proved a great success.

Possibly the introduction of Honours courses with University Professors' which is under consideration by the Punjab University, may lead to a further extension of this system and a more corporate University life.

12. The number of students attending Arts Colleges rose from 2,462 in 1911-12 to 4,221 in 1916-17, an increase of seventy-two per cent. As the corresponding figure for 1906-07 was only 1,441, the number of students

Number of students.

has increased almost threefold during the last ten years. There is no doubt that, but for the limits of accommodation in existing colleges, the figure for the past year would have been still higher.

It is clear that further expansion cannot take place without an increase in the number of colleges. One new college, the Sanatan Dharam, was opened last year, and a second, the Khalsa College, Gujranwala, has been opened during the present year, but neither of these institutions is at present adapted to hold a large number of students.

Financial considerations preclude the opening of a second Government College during the war; but the Local Government has promised to consider such a project as soon as normal times return.

Hostels.

13. Meanwhile it is very satisfactory to note that while the number of students increased so largely during the past quinquennium, the proportion of students residing in hostels or boarding-houses attached to colleges is still 57 per cent. as compared with 65 per cent. in 1911-12. Of the 4,221 students attending Arts Colleges no less than 2,399 are resident in premises controlled by the college authorities. There are in fact no more satisfactory features of collegiate education in the Punjab than the marked preference shown by the student population for residence in hostels, and the determined effort made by the managers of colleges to encourage this feeling and to provide suitable accommodation for their students under their own immediate supervision.

During the quinquennium under review the Forman Christian College erected the Ewing Hostel at a cost of Rs. 1,35,000, about half of which was met by a Government grant. This is a fine structure accommodating 75 students. Extensions were made to the hostels of the Khalsa College, Amritsar, the Dyal Singh College and the Islamia College. Projects are now well matured for the erection of new hostels for the Government College and the Islamia College; while the Young Men's Christian Association proposes to build a hostel unconnected with any special college to house a hundred students of the University.

As a temporary measure several colleges, including the Government College, have been obliged to hire private houses to meet the demand for hostel accommodation; and, while these buildings are of course far inferior to properly designed hostels, yet residence in them is decidedly preferable for students to life in lodging-houses or private messes. For purposes of supervision and control they are treated as branches of the regular hostels.

The conditions of student life in Lahore were investigated by a committee appointed by the University, which reported unfavourably on the supervision and sanitation of some of the branch boarding-houses. The Syndicate laid down regulations to secure the proper care of such students as do not reside with their parents, and appointed a board of visitors to inspect hostels and boarding-houses and report defects to college authorities. The efforts of this body have been productive of numerous improvements.

The average cost to a student for board and lodging in a hostel varies from Rs. 8-8-0 in the Murray College to Rs. 15-8-0 in the Government College. Even in the private colleges in Lahore the rates vary from Rs. 10-8-0 to Rs. 27. Since the high rates prevalent in some colleges do not seem to detract from their popularity, it is a question for the managers of the more cheaply run institutions to consider whether they would not be better advised to introduce higher rates and to utilise the additional income thus derived for the improvement of hostel conditions.

An interesting feature of hostel life at the Khalsa College, Amritsar, deserves special mention. This is a Students' Co-operative Society which enables members to purchase not only books and school equipment at little over

wholesale rates but also milk and other food. I quote an example of its activities from a recent report on the institution by the Assistant Registrar of Co-operative Societies in the Punjab :—

"Gujars have contracted to supply not less than six maunds of milk daily at 8 to 8½ seers to the rupee. The milk is sold to the College and School hostels at 7½ seers. The present market rate is said to be 6½ seers. The latter is almost certainly for adulterated milk. There is thus gain both in quantity and quality.

"A shed close to the college has been rented where the milking is done in the presence of a master, a hostel superintendent and four or five boys. All boys take it in turn (according to a roster) for a day at a time.

"The milk is made over at the shed in the quantities required to the representative of each hostel or mess concerned. The superintendent who is present keeps a record of the amounts supplied. From this the librarian who is responsible for the dairy makes up the general account."

Social life.

14. Although the Khalsa College Co-operative Society is unique of its kind in the Punjab, yet societies for other purposes,—literary, debating, scientific, athletic,—are to be found in all colleges. Indeed apart from the well-established institutions of this kind new societies, often short-lived, make their appearance every year. College societies play an important part in student life in the Punjab. General reading has not the attraction for the Indian student that it has for the English youth, and it is the function of college societies to widen the interests of the students and to extend their information on subjects other than those which are obligatory for examination purposes.

This purpose is also served by the College magazine. Such magazines are now published in seven colleges. The quality of the students' contributions is reported to show a marked improvement both in power of literary expression and in originality of thought.

A valuable development of the College society is the social service movement among students. As examples of this movement I instance the League of Service of the Forman Christian College ; and the 'One-anna Fund' of the Dyal Singh College, the members of which contribute an anna a month to form a fund for the award of scholarships for industrial education to poorer students. Mention must here be made of the War News Association of the Government College. This association was founded by Mr. Garrett in 1915 primarily for the translation and dissemination of literature relating to the war. This work is done by the students themselves, who tour during the long vacation, and who have been instrumental in enlisting a considerable number of recruits for the army. When it is stated that the whole of their touring expenses are borne by the members, the genuine patriotic character of the work will be realized.

Athletics have grown steadily in popularity and, in spite of the fact that the provision of adequate playing-grounds has not kept pace with the great increase in the number of students, a larger proportion of students now take part in college games. There is also a marked improvement in the quality of the players. The Government College which used to be pre-eminent in all athletic tournaments can no longer boast such a marked supremacy, though it can always be proud of having shown the way to other colleges.

Apart from the encouragement of games, increasing attention has been paid to the physical condition of college students.

Medical inspection.

Most of the colleges have now arranged for the systematic medical examination of their students. The D. A-V. College which has an enrolment of over one thousand students (as compared with 660 in 1911-12) retains the services of an Assistant Surgeon who visits the hostel daily. The Government College is inspected by a medical officer, employed specially by Government to

attend the students and pupils reading in the Government educational institutions in Lahore. The Principal reports :—

" The medical register has been extended to all four undergraduate years so that we now possess a complete medical history of the students." Myopia is, unfortunately, too common and attempts are being made to remedy this by insistence on eye-testing and the use of proper glasses.

Daily physical exercises on the Müller system were introduced by Mr. Wathen at the hostel of the Government College, and form a noticeable feature of life at the Khalsa College, Amritsar, of which he is now the Principal.

Staff.

The credit for the successful developments in the social life of students, mention of which has been made above, is in no small measure due to the members of the college staffs, an increasing number of whom now take an active part in College games. Indeed, the activities of a member of the teaching staff are by no means confined to the delivery of a stipulated number of lectures.

The tutorial system which appears to have made little headway in some other parts of India is firmly established in Punjab colleges. In some, for example, the Forman Christian College, it is highly organized. The duties of a tutor are of the widest description; he is supposed to take an individual interest in the members of his tutorial group, and to act as a mentor to them in all that concerns their welfare—studies, health, exercise and daily occupations. Group meetings are usually held once a week for discussions, readings, recitations, etc. Trips to places of interest in the neighbourhood are occasionally arranged.

Not all the members of a college staff are in charge of tutorial groups, but there are few who are not engaged in various college activities outside the work of the lecture-room. The criticism which is sometimes passed on professors of Indian colleges that they contribute little in the way of original work and show little enthusiasm for research, does scant justice to the Punjab professor. It ignores the fact that his life is very different from that of a don at an English University. For him is not the otiose dignity of the senior common room. Though, possibly, too old to take an active interest in the College games, he will assuredly find occupation either as the president of a College Society, the superintendent of a hostel, the editor of the College magazine, in managing the College Library, or as tutor of a group of students (and such tutorship, as shown above, implies much wider responsibility than it does in England). Outside of his college work, he will probably be an examiner for the University, and a member of one of its Faculties or Boards of Studies, while his leisure time may be occupied in the management of a local high school, and in the membership of one or more of the numerous committees, text-book, public library, etc., which abound in Lahore. It is at least arguable whether a life spent in such useful activities, many of which will bring him into close personal relationship with his students, is not more valuable in a society where higher education is a new and rapidly expanding phenomenon than a life devoted to research.

These remarks should not be taken to mean that research has no place in Punjab colleges. On the contrary, advanced students are encouraged to engage in original work, while the researches of Professors Shiv Ram Kashyap and Ruchi Ram Sahni, to mention only two names, have obtained recognition outside of India.

The increase in the number of students of colleges has entailed a corresponding strengthening of their staffs and a special recurring grant of Rs. 30,000 was made to the Islamia College for this purpose by the Government of India, while the services of three members of the Indian Educational Service have been lent to the Khalsa College, Amritsar.

That a further strengthening of the staffs is an urgent necessity may be deduced from the following table showing the proportion of students to teachers in different provinces and different classes of institutions :—

Number of students per teacher in Arts Colleges.

Province.	Government.	Aided.	Unaided.	Total.
Madras	16·0	20·4	15·9	19·3
Bombay	17·9	30·3	...	25·6
Bengal	18·4	24·3	37·4	26·6
United Provinces	19·2	20·6	22·2	20·7
Punjab	20·0	22·8	32·7	25·5

An increase in the proportion of the teaching staff is all the more necessary, in view of the growing popularity of science, a subject which involves practical work by small groups of students under the supervision of a professor or demonstrator.

Work.

15. Of the teaching work of the colleges it is sufficient to state that, in spite of the growth in the number of students, the percentage of passes at the University examinations has shown no falling off. Of the 2,704 candidates appearing from Arts Colleges at the various University examinations in 1916-17, 1,407, or 52 per cent., passed, as compared with 542 passes out of 1,389 candidates in 1911-12, or a pass percentage of 39. Four hundred and seventeen candidates out of 750, who appeared, passed the Oriental College title examinations, a pass percentage of 55·6, as compared with one of 50 in 1911-12.

The tendency to the adoption of science, which was the occasion for remark in the last quinquennial report, has been even more marked during the past quinquennium. The popularity of biology, largely, no doubt, due to the successful work of Colonel Stephenson at the Government College, is especially noticeable. An interesting experiment is the opening by the Forman Christian College of classes in industrial chemistry.

Buildings.

16. It is natural, therefore, that building work, apart from the hostel construction, of which mention has previously been made, was chiefly in the direction, of providing additional accommodation for science. Such extensions were completed at the D. A.-V. and Forman Christian Colleges, while two new laboratories, for physics and biology, respectively, were erected for the Government College. These two laboratories are remarkable, not only for the excellence of their design, but also for the completeness and modern character of their equipment. In this respect they would challenge comparison with any similar institution in India. The Dyal Singh, Forman Christian, and Khalsa Colleges have initiated plans for the construction of additional science blocks.

Building operations have, however, been largely curtailed by the war.

Expenditure.

17. Altogether expenditure on new college buildings during the quinquennium amounted to Rs. 6,30,057.

The recurring expenditure on colleges rose by 78 per cent. to Rs. 6,53,236, of which about one-third (Rs. 2,27,518) is met from Provincial revenues. A large proportion, namely 48 per cent., of the total expenditure is met from fees. The expenditure from private sources, endowments, etc., shows a very small increase during the quinquennium, but an actual decrease of 10 per cent. in proportion to the expenditure now met from public funds and fees.

The average cost of the education of a student in an Arts College ha increased from Rs. 148-14-2 in 1911-12 to Rs. 154-3-4 in 1916-17. The increase is chiefly due to the higher salaries now paid to professors and lecturers.

The Rs. 2,95,234 spent from Provincial revenues is made up of grants to aided colleges, which have been considerably enhanced during the past five years, and of the cost of maintaining the Government College, which amounted to Rs. 1,65,288 in 1916-17 as compared with Rs. 1,31,137 in 1911-12. Against this enhanced cost must be set the income from fees which has risen from Rs. 33,430 to Rs. 67,716.

Government College.

18. The rise in the enrolment from 397 to 604 is sufficient evidence of the popularity of this institution; and numerous applications for admission are refused every year. The enrolment has since risen to over 650, and the Principal suggests that this number should be fixed as a maximum.

The staff has been strengthened by the addition of a second professorship of English in the Indian Educational Service, and of professorships of Arabic, Persian, and Chemistry; while the post of professor of Philosophy was abolished in favour of second professorship of Zoology in the Indian Educational Service The last-named post has hitherto remained vacant, owing to the difficulties of recruitment during the war. There have been numerous changes of staff during the quinquennium, and the College has suffered the loss of two professors, Mr. J. E. Gately and Mr. R. Gordon George, who were permitted to join the Indian Army Reserve of Officers, and of Mr. B. H. Wilsdon, who was transferred as chemist to the Agricultural College, Lyallpur.

In spite of these changes the work of the College has never reached a higher level than at the close of the quinquennium. During the year 1916-17 seven candidates obtained first-class honours in the M. Sc. examination, and the percentage of passes in all University examinations rose to the unprecedented figures of 72. The chief need of the College at present is an additional hostel. A site for this has been purchased and plans and estimates for its construction are under preparation.

Lieutenant-Colonel Stephenson, I.M.S., took over charge of the institution from Mr. Robson, the retiring Principal, in September 1912, and to his efficient management and to the zealous work of the senior professor, Mr. Hemmy, is largely due the credit for the great success which the College has achieved during the past quinquennium.

General.

19. I cannot conclude the remarks on collegiate education without noting, as a matter for great satisfaction, the friendly relations that exist between the various colleges in Lahore. This is, indeed, in marked contrast with the state of feeling, which too often exists between rival high schools situated in one centre, where difficulties and disagreements are apt to arise about the transfer of students and similar inter-school relations.

Little mention is made by Principals in their reports of the internal discipline of colleges, from which one can only conclude that it has been generally satisfactory, since it is the breach, not the observance, of law that excites comment. There can be few centres in which the existence of a body of four thousand students causes so little disturbance to the life of the community at large as in Lahore.

The Punjab University.

Effect of increased numbers.

20. The large increase in the number of college students to which reference has been made in the preceding paragraphs has had its effects on the work of the University. Chief among these are :—

(*a*) Classes, especially in English, are now admittedly too large.

(*b*) College staffs have in many cases been strengthened by adding young graduates as teachers of junior classes so that large masses of students are in the hands of staffs, which, as regards influence and personality, are not much stronger than they were when the colleges were half the size.

(*c*) In order to avoid an absolutely intolerable swamping of the colleges without excluding younger students with greater claims, the colleges have declined to readmit students who have failed twice or who have failed badly in an examination. In order to meet the demand that such students should have another chance and to strengthen the hands of the colleges in refusing to readmit them, the conditions under which *ex*-students are admitted as private candidates have been relaxed.

(*d*) The large numbers of candidates for the intermediate and B. A. examinations especially in English make it increasingly difficult to conduct these examinations on any but mechanical lines.

The remedy for most of these evils would appear to be the opening of more second grade colleges teaching only up to the Intermediate Standard in outside stations. The tendency for second grade colleges to develop into inefficient first-grade colleges, which is sometimes urged as an objection to such institutions, has been shown by experience not to be a serious danger in the Punjab. Students after passing the Intermediate examination at the existing outlying colleges show a marked preference for coming to Lahore to complete their college courses, and the Lahore colleges, being relieved by the diffusion of their first and second year students over the Province, would be in a position to afford better accommodation for B. A and M. A. classes.

Moreover such a step would be cheaper in the long run than the present attempt to house all the students who seek admission in Lahore, where land is more costly than in outstations.

In spite of the great increase in work entailed on the Vice-Chancellor, Registrar and senior professors by the new influx of students, the University has shown great activity during the quinquennium in revising its regulations, reorganising the institutions under its immediate control, and generally improving its position.

Buildings.

21. With the aid of a non-recurring grant of four lakhs from the Government of India the Convent site immediately behind the University Hall was purchased. In the buildings existing on this site the Oriental College and Law College with its hostel are situated, and the Principal of the Law College is housed. The Oriental and Law Colleges are directly controlled by the University. Schemes for the construction of proper buildings for these have been postponed till the close of the war, as also for the construction of a residence for the Registrar.

Other buildings which have been completed are the University Library, and the Observatory, while a number of minor improvements have been effected in the older buildings, some of the more unsightly of which have been demolished.

Library.

22. The University Library, now satisfactorily housed, was also completely overhauled in 1915-16 by a library expert Mr. Asa D. Dickinson, who was brought from America for the purpose. Mr. Dickinson did his work most thoroughly, reclassifying, labelling, accessioning, etc., all the volumes (about 30,000) and leaving notes for guidance in compiling the dictionary catalogue which is now nearly complete. Mr. Dickinson also held a course of lectures on modern methods of Library Science for librarians and others intending to take up such work, practical training being given at the same time in the University Library. The effect has been to set quite a new standard of library work in colleges.

In 1912 the Oriental section received a valuable addition in the shape of the ' Azad ' collection presented by Agha Muhammad Ibrahim, Munsif of Montgomery. This collection contains many rare books and manuscripts in Arabic and Persian.

The Registrar of the University, Mr. A. C. Woolner, was, except for the period when Mr. Dickinson was in charge, Honorary Librarian of the University.

Oriental College.

23. Mr. Woolner is also Principal of the Oriental College, which, as stated above, is directly controlled by the University. The courses in the Oriental College and the titles awarded, *e.g.*, Shastri, Maulvi Fazil, etc., are presumably not unlike those given in other Oriental colleges, but a distinctive feature of the Punjab Oriental College is the encouragement given to students to study in both the Arts and Oriental Faculties. College students in the Arts Faculty are admitted freely to the Oriental Titles examinations. Only a small number avail themselves of this opportunity, but any student who possesses a knowledge of a classical oriental language considerably greater than the requirements of the ordinary arts examination, can in this way obtain an Oriental qualification. If a student passes the M. A. in Sanskrit or, Arabic and also the Shastri or Maulvi Fazil examination, respectively, he obtains the degree of Master of Oriental Learning. A Master of Arts in any subject can take the M. O. L. courses without passing the lower examinations in this Faculty

Provision is also made for passing from the Oriental Faculty into the Arts Faculty. A student who has passed any of the Oriental Titles examinations is admitted to the Matriculation examination in English only, and if he is successful he can take the English only of the Intermediate and B. A. examinations successively. When such a student has passed the highest Oriental examination in Sanskrit, Arabic, or Persian and has passed the B. A. test in English, he is admitted to the degree of Bachelor of Arts. If he then can pass the M. A. in his classical language, he secures the same titles as the Arts student who after taking his M. A. goes over to the Oriental side, *e.g.*, in the case of Sanskrit—M. A., M. O. L. and Shastri.

Several of these provisions have not been long in force, and as yet few students have taken advantage of them ; but they appear to be excellently devised both (*a*) to attract to the study of classics students of more than ordinary ability and with a natural taste for such studies, but with too much worldy ambition to be content with an Oriental Title alone. (For the possession of even the title of Shastri or Maulvi Fazil does not qualify its holder for anything more than an oriental teachership in a High school, the average value of which is only Rs. 30 per mensem) ; (*b*) to permit an Oriental title-holder, who is not, as many of them are, a classicist or grammarian pure and simple, to escape from the *cul-de-sac* of the classical mastership into the wider field open to the F. A. or B. A. Of course only a student of more than average capacity will be able to obtain a degree in this way, starting English at a late age with little or no general knowledge of the modern world to help him.

University Teaching.

24. Of the Law College, which is also under the direct management of the University, mention will be made in Chapter VII. This and the Oriental College are of old standing, but two important developments of University teaching have been initiated during the quinquennium. The first is the institution of two special lectureships for the cold weather of each year. "A beginning was made in 1913-14 when the University obtained the services of Professor Arthur Smithells of the University of Leeds for Chemistry, and Professor Ramsay Muir of the University of Liverpool for History. These Special Lecturers give advanced lectures to senior students two or three times a week. The lecturers are also expected to make themselves acquainted with the teachers of their subjects in Lahore, and in some cases they have been asked to visit the mofassil Colleges also. Each special lecturer has presided over a conference of teachers of his subject at which recommendations have been formulated for the consideration of the University. The special lecturers have also delivered a small number of more popular lectures to larger audiences. At their departure each has presented a report to the University.

Owing to the outbreak of the war difficulties were experienced in finding suitable lecturers who were willing to come out to India. The following subjects however, have been represented :— Physics, Economics, Mathematics and Oriental History (Professor Margoliouth of Oxford). It is believed that in the case of each subject the visit of the special lecturer has provided a useful stimulus. In

some cases the lectures delivered, or demonstrations given, have been on matters of general interest and lecturers have received pressing invitations to lecture in the outlying Colleges. The conferences of teachers have led to certain improvements in the courses of study. In other cases the reforms advocated have been of a more radical character, and could not be adopted by the University without further consideration. It is thought, however, that after the initial stimulus has been given in a particular subject, the further development of that subject would require more continuous work for not less than three or five years " (Registrar's Report).

Other special lectures have been delivered by various well-known authorities, such as Professors J. C. Bose and P. K. Roy of Calcutta, and J. K. Leonard of Bristol.

The second is an arrangement made with the Government College, Lahore, by which a University class in B. Sc. Biology has been instituted. Lieutenant-Colonel J. Stephenson, D.Sc., being designated University Professor of Biology and Mr. Shiv Ram Kashyap, M. Sc., Lecturer in Botany. Students of any Lahore College can attend this class and pay fees to the University which makes a grant towards Laboratory expenses.

Regulations.

25. A number of changes in the regulations of the University were introduced, to some of which reference has already been made. In the courses of studies the most far-reaching change is that Mathematics is no longer a compulsory subject for the Intermediate Arts. Before the close of the quinquennium regulations had been drafted for a faculty and a degree in Agriculture.

Calendar.

26. The University calendar was again changed. The terms and dates for examinations fixed in 1910-11 were found not to work well in practice. The Matriculation is now held in March so that first-year classes can be formed in the middle of May. The Intermediate and Degree examinations begin in the middle of April. Third year classes are enrolled in the second half of June. They receive instructions for work during the vacation, but in most colleges regular lectures to degree classes begin in the autumn.

Sports.

27. The University Sports Tournament is gradually assuming large proportions as the number of colleges and students increases. The matches are as a rule played in a sportsmanlike manner, and when trouble arises it is generally due to the excessive partisanship of the spectators.

Vice-Chancellor.

28. For the smooth and yet efficient working of the University machine the chief credit must be assigned to the Reverend Dr. J. C. R. Ewing, C.I.E., who held the office of Vice-Chancellor for seven years, and only relinquished it in February of the present year when he proceeded on long leave. His services to the cause of education in the Punjab were recognised by the award of a C.I.E. in 1915. He was succeeded in the Vice-Chancellorship by the Hon'ble Mr. H. J. Maynard, C.S.I.

CHAPTER IV.

Secondary Education (Boys).

Number of institutions.

29. There were at the close of the quinquennium under review 413 secondary schools for boys in the Punjab as compared with 309 at its beginning.

Of these 131 were high schools, 131 Anglo-vernacular middle schools and 151 vernacular middle schools as compared with 96, 89, and 118, respectively, at the close of the last quinquennium. It will thus be seen that Anglo-vernacular institutions have increased by 77 while vernacular secondary schools have increased by only 33.

The increase in the former type of institution is chiefly due to private enterprise which, in matters educational, is almost entirely directed to the extension of Anglo-vernacular instruction.

Anglo-vernacular schools.

30. The reason for this is simple. The funds necessary for opening and equipping a privately-managed school can only be found by the

educated, that is English-speaking, section of the community; while, when it has once been started, the liberal grant-in-aid rules and the present rate of fees ensure an income for an Anglo-vernacular school which leaves but little of the recurring cost to be met from private sources. It is unfortunate that educational considerations do not always carry sufficient weight with the founders of such institutions. The influence of sectarian rivalry has been frequently mentioned in previous reports. There is little gained by a community which maintains two ill-equipped and ill-staffed schools when its educational needs could be met by one efficient institution.

The Inspector of the Jullundur Division, where the evil of inefficient Anglo-vernacular schools is most acute, gives, as a second reason, the increasing number of unemployed graduates, undergraduates and matriculates. He proceeds however:—"During the last eighteen months or so as the result of repeated advice, a stricter application of rules and the withdrawal of recognition in two cases, matters have improved a great deal, and some of the recognised schools are now fast becoming fairly efficient institutions.

"A step forward has also recently been taken in the amalgamation of two rival Anglo-vernacular schools where only one was needed, and I am hopeful of an extension of this eminently wise arrangement."

The Lahore Division is fortunately free from this evil, and the Inspector reports that no more 'pirate' schools exist: while the few private schools have come or are coming into line with other schools and obtaining recognition.

In spite of the increase of 41 per cent. in the number of Anglo-vernacular schools Inspectors generally complain of overcrowding in these institutions, the Rawalpindi and Jullundur Inspectors particularly emphasising this point. There is, therefore, plenty of scope for further effort on the part of private individuals, if actuated with a real desire for spreading Anglo-vernacular education, and if zeal is not allowed to outrun discretion.

Vernacular middle schools.

31. As a remedy for the present overcrowding both the Rawalpindi and Jullundur Inspectors suggest the opening of more Anglo-vernacular middle schools by district boards. But the resources of district boards are limited, and their first educational duty is the expansion and improvement of primary education. It is true that they have received large grants from imperial and provincial revenues during the quinquennium, but these have been generally utilised for the improvement of teachers' salaries and the opening of new primary schools, both objects of the first importance. Local bodies have consequently had little money to spend on secondary education, and such little was as a rule (and, I think, quite correctly) spent on the opening of vernacular middle schools. The value of schools of this class as a recruiting ground for teachers for primary schools has long been recognised; but the importance of this function has perhaps obscured the other great possibilities possessed by this type of institution. Being in effect rural secondary schools it is possible that, without any such radical alteration of their curricula as would disassociate them from the general system of education and preclude their students from proceeding to a High School and College, they might be utilised as the chief vehicle for the diffusion of agricultural education, the necessity for which is now generally recognised. Middle vernacular education is cheap and that it is popular is evinced by the numbers attending vernacular middle schools even when they are in proximity to Anglo-vernacular schools. There is, however, a tendency due to the representations of the well-to-do and therefore articulate section of parents, who naturally desire an English education near their doors, to convert these institutions into Anglo-vernacular middle schools; and it is not always easy for a local body to resist the importunities of the influential parents in the interests of the inarticulate majority to whom the cheap vernacular middle school is a real boon.

A solution of the problem of providing additional facilities for English education for those who can afford it and thus reducing the overcrowding in town schools, while at the same time not depriving the poorer classes of the only secondary education they can afford or indeed require, may be found in the general adoption of an experiment which has proved successful in the Jullundur

Division. Here the Board has attached to certain vernacular middle schools English classes to which pupils are admitted on paying the ordinary fees levied in an Anglo-vernacular middle school.

There are certain administrative difficulties in the way of the general adoption of this system, but these are not insuperable, and it might be well for district boards to consider this alternative before deciding to convert a vernacular into an entirely Anglo-vernacular school.

Number of pupils.

32. The number of boys attending secondary schools rose from 92,273 in 1911-12 to 110,348 at the close of 1916-17.

These figures must not, however, be taken to represent the number of boys receiving secondary education, since primary departments are attached to all middle schools vernacular, or Anglo-vernacular, and to all but a few high schools.

Secondary education may be said to commence from the upper primary department in Anglo-vernacular schools, when the study of English is commenced, and from the middle department in vernacular middle schools. The total number of pupils in the middle and high departments of secondary schools of all kinds is 46 639, and if we add to this the 21,336 boys in the upper primary departments of Anglo-vernacular schools, we arrive at total of 67,975 boys at the secondary stage of education as compared with 50,235 in 1911-12. Of these 8,155 are reading in vernacular middle schools and the remainder (59,820) are learning English.

Expenditure.

33. The total direct expenditure on secondary education rose from Rs. 16,44,181 to Rs. 28,23,739. About one-half of the cost is met from the fee income, about one-eighth (Rs. 3,20,338) from private sources and the remaining three-eighths (Rs. 10,85,577) are met from public funds. Of the expenditure from public funds, that from municipal funds has undergone the least change; and this is natural, since secondary education in all large towns is provided by Government or aided high schools, the aid being given direct from Provincial revenues.

The largest percentage of increase in expenditure is nominally shown by district boards, who spent over three-and-a-half lakhs as compared with under one-and-a-half lakhs five years ago. But this expenditure includes the contributions made to district board finances from Imperial and Provincial funds, no inconsiderable items. These contributions being given chiefly for vernacular education, we find that the expenditure on vernacular middle schools has more than doubled, the increased expenditure being, no doubt, largely due to the improvement in the rates and salaries paid to teachers in these schools.

The proportion of the cost of the secondary education of their sons actually borne by parents in the shape of fees has decreased from 55 to 50 per cent. partly owing to the enhanced grants given under the revised grant-in-aid rules, partly owing to greater individual liberality in the shape of subscriptions and endowments.

It may at first seem illogical that in a country where there is such a pressing demand for funds for elementary education public revenues should bear three eighths of the cost of secondary education. But it is, I believe, justifiable. Secondary education to be of any value entails an expenditure, which is beyond the means of the average middle class Indian parent. Without the State aid, which guarantees a certain standard of efficiency, instruction in privately-managed schools would rapidly deteriorate. The economic and social value of boy who has received a *good* secondary education is great while a bad system of secondary education leads to unemployment and discontent.

Course of study.

34. The system by which English education begins in the primary departments of Anglo-vernacular schools operates very harshly in the case of pupils who do not live in the neighbourhood of Anglo-vernacular schools, *i.e.*, the vast majority of the rural population. They are obliged, after completing the vernacular primary course of five classes, to spend a year in a special class attached to an Anglo-vernacular school studying the English which their

more fortunate school fellows have acquired in the primary department. They thus waste a whole year of school life and incidentally often find themselves too old at the completion of the middle course to compete for high school scholarships. Some revision in the system to obviate this breach in the educational ladder seems eminently desirable.

The corresponding break at the end of the middle course, when boys from vernacular middle schools have to spend two years in a senior special class studying English only, before proceeding to the high department might be eliminated by the introduction of the English side in vernacular middle schools as suggested in paragraph 31 above.

Apart from the presence of English in the scheme of studies of Anglo-vernacular middle schools, their curricula do not differ widely from those of vernacular middle schools ; and the courses have since been further assimilated by the introduction of the vernacular medium in subjects other than English in the middle departments of Anglo-vernacular schools. This change however took place after the close of the quinquennium under review. At its commencement a revised curriculum for Anglo-vernacular schools came into force, the most important features of which are a curtailment in the number of school hours, latitude in the choice of text-books, the definite prescription of the direct method in English teaching, the introduction of drawing as a compulsory subject, and the amalgamation of science with geography as a single subject in the middle department. These changes were facilitated by the appointment of two special Inspectors, Mr. J. Y. Buchanan for drawing and manual training and Lala Ratan Lal for science. The revised curriculum seems to have met with general approval and it is noteworthy that after five years' working the educational conference which met in Lahore this year suggested only a few minor changes in it, apart from the change of medium to which reference has been made above. Criticism is often made of the number of subjects in the school curriculum as tending to overwork the boys. But it is not variety but monotony that produces brain fag. Two consecutive hours devoted to one subject are much more likely to result in lethargy and lack of interest than three periods of forty minutes devoted to three separate subjects.

Mr. Crosse, the Inspector of she Lahore Division, points out that the reduction in the number of school hours does not necessarily mean a relief for either pupils or teachers. He says :—

" The new curriculum with its shorter hours of work has been much appreciated, but whether the reduction has been an unmixed blessing is very doubtful, as it has tended to overburden boys with unduly heavy home tasks which have to be checked continually."

The evils of home tasks were vividly portrayed by Mr. Wathen, then Inspector of Schools, Jullundur, in a note attached to the 1914-15 report.

It is doubtful if many headmasters realise that a time-table is as essential for home tasks as for work done in school. Unless such a time-table is enforced, it is possible for the teacher of each subject which a boy takes during the day to set him a lengthy home task, in complete ignorance of the amount of home work set him by his other masters. More attention might be directed to this important part of school work.

Instruction.

35. Inspectors concur in thinking that there has been a general improvement in the methods of teaching, more especially in the teaching of English. The direct method of language teaching is now better understood, and with understanding has come appreciation, so that headmasters, who had viewed its introduction with distrust not many years ago, spoke enthusiastically in its favour at the recent educational conference in Lahore.

The Inspectors of Drawing and Science held classes for teachers at various centres and their efforts to introduce modern and practical methods in the teaching of these subjects have been very successful.

A manual training centre was also opened by Mr. Buchanan in Lahore in 1915. The idea of manual training is new to our secondary schools, but evidences are not wanting that the subject may be widely introduced. The progress achieved in these non-literary subjects is all to the good.

"On the other hand," to quote Sardar Sahib Bhai Hari Singh, Inspector of Multan, "the pass-percentage fetish and the University Examiner's demand for brief answers in set forms continue to hold their sway over the teacher and the taught. No wonder then that the professional compilers of 'notes,' 'glossaries,' 'epitomes' and 'keys' are plying a brisk trade. The headmasters assure me that they discourage the use of these artificial and baneful aids. But so long as the oft-denounced 'cram' and 'grind' are found to pay, no outward checks can keep the easy victims from the tempting morsel."

Examinations.

36. There can be no remedy for these evils so long as the system exists by which not only at the close of the school course, but even at the close of each school-year, the attainments of a boy are judged solely on the results of written examinations, no account being taken of the evidences of industry and ability which he has shown throughout the year.

On the subject of the internal or house and promotion examinations Mr. Wyatt, the Rawalpindi Inspector, writes:—"The influence which good questions may exercise over the methods of teaching is very little realised, and few if any of the headmasters moderate the question papers with this end in view. Often the papers are badly printed and misspelt and the marking is hasty and uneven in standard."

A movement for the reform of the purely external examination at the end of the course was initiated during the quinquennium, in the shape of a proposal to institute a Joint Matriculation and School Final Board whose duty it should be to adapt the examination to the needs of the schools and scholars. The proposal met with considerable opposition and is still under discussion.

"The opposition to the scheme appeared chiefly to be due to the idea that its adoption would (*a*) result in a gradual but inevitable loss of University control of the examination, and (*b*) open the way to certain innovations with which the award of a school final certificate was thought to be associated, and which were regarded with some distrust, *e.g.*, the assigning of value to school records in lieu of, or in addition to, a public examination, for the award of a certificate." (Appendix to Syndicate Proceedings of October 13th, 1916.)

It is to be hoped that the coming quinquennium will see the introduction of this much needed reform.

Meanwhile the tendency of the general public to judge a school solely by the results which it obtains at the Matriculation examination seems to be steadily increasing.

"If the school does exceptionally well in the Matriculation examination," says one Inspector, "there is at once a rush of boys to that school and for some time in the streets and in the homes of the people it is the chief topic of the day."

Headmasters.

37. Small wonder is it then that the energies of the headmasters are chiefly devoted to the preparation of this class; and that Inspectors without exception comment on the lack of supervision exercised by them over the work of the junior classes.

The Inspector of the Rawalpindi Division says:—

"Far too often I have found the headmaster, though capable of better things, content to do his daily round of so-called supervision without any deliberate or systematic aim. His control is neither definite nor thorough. There is no regular check of each teacher's teaching (except such as the internal examination affords), no evidence of guidance as to methods, no attempt to stamp any particular character upon the work in any subject or on the school as a whole or to bring the teaching in any particular subject into harmony and continuity in successive classes. Syllabuses have been perfunctorily prepared and are seldom the result of real thought or adapted to the opportunities and needs of the locality. Records kept of the work by headmasters or assistants, if kept at all, have been formal and uninformative: and care over small matters—the blackness of the blackboard, the use of charts danging in the class rooms, the keeping of ventilators open, the seating of hupils with regard to sight or size—has been generally absent."

This is a strong indictment; but as the Inspector himself admits, the fault lies not so much with the teachers as with the system. So long as the success of a school depends chiefly on the examination results obtained in its highest class, there can be little incentive to ambition on the part of the junior masters, the majority of whose pupils, as can be seen from table X appended to this report, do not even reach the High department.

Teaching staff.

38. That there is a marked improvement in the quality of the work in all departments may be ascribed partly to the efforts of the inspecting staff, partly to the pressure of the grant-in-aid rules, which demand a certain minimum of efficiency as a qualification for grant-in-aid, and partly to the increased efficiency of the teaching staff.

The percentage of trained teachers has increased very largely.

The following figures for High and Middle schools are taken from general table IX in which further details can be found:—

	Middle Schools.		High Schools.	
	1911-12.	1916-17.	1911-12.	1916-17.
Trained teachers	1,184	2,154	1,122	1,652
Untrained teachers ...	932	1,040	985	1,018

From the above table it will be seen that the percentage of trained teachers in secondary schools has increased from 54 to 65.

The increase in the number of trained teachers is of course due to the increase in the number of students who undergo training, to which reference is made in Chapter VI. This increase in turn is due to the growing popularity of the teaching profession. For this there may be given two main reasons. First, that to which reference has already been made in paragraph 30 of this chapter, namely the larger output of graduates and undergraduates from colleges; the second reason is the increased emoluments of the teaching profession. The statement below may be of interest—

Salaries of teachers in High schools.

	Number of teachers in			
	Government Schools.		*Aided High Schools.*	
	Vernacular and Oriental.	Anglo-vernacular.	Vernacular and Oriental.	Anglo-vernacular.
Drawing under Rs. 20 per mensem	...		233	5
Drawing over Rs. 20 and under Rs. 40.	219	17	491	77
Drawing over Rs. 40 and under Rs. 60.	92	135	88	165
Drawing over Rs. 60 and under Rs. 100.	19	127	3	197
Drawing over Rs. 100 ...	1	60	...	162
Total number of teachers	331	339	815	606

N. B.—While all aided High schools have lower primary departments, several Government schools do not; hence the large number of low paid vernacular teachers in the former class of school.

The pay of teachers of oriental languages, a very deserving section of the teaching profession, is still low.

39. The improvement in the rates of pay given to teachers in aided high schools is partly due to an alteration in the grant-in-aid rules by which staff grants, *i.e.*, grants towards the salaries of trained teachers, are now assessed at one-third instead of one-fifth of their salaries. These rules are on the whole working well, though some redistribution in the rates of grants between the different departments may be desirable. Grant-in-aid rules.

Mr. Wyatt, the Rawalpindi Inspector, suggests that the assessment of grants triennially instead of annually in the case of well-established institutions might save Inspectors' unnecessary labour, and allow them greater freedom in conducting their inspections, while at the same time assuring the schools of a certain fixity of income. There appears to me much to be said for this proposal.

40. The migration of teachers from school to school is still too common; but this evil will be largely remedied by the general establishment of provident funds. There has been a rapid increase in the number of such funds during the quinquennium; indeed Mr. Crosse reports that of 107 secondary schools in the Lahore Division only 17 schools have not established provident funds for their staffs. The question of issuing model rules for the guidance of aided schools in this matter, as also that of providing special grants towards their maintenance from Provincial revenues, is now under consideration. Provident Funds.

41. It is to be feared that Government schools have not set a very good example in the matter of stability of staff: the promotion of any teacher to a higher grade generally involving his transfer to another school. It is not very easy to see how this difficulty can be overcome. In other respects the Government high schools may fairly claim to have fulfilled their object by setting a high standard of secondary school education at each district headquarters for privately-managed institutions to follow. Among other particularly successful institutions may be mentioned the Central Model School, Lahore, and the Government Schools at Amritsar and Hoshiarpur. Government schools.

42. The re-housing of Government schools has been one of the features of the quinquennium. Buildings.

Fine new school buildings, according to a modern type plan, have been erected at Jullundur, Gujrat, Campbellpur, Gujranwala, Gurdaspur, Sialkot, Lyallpur, Dera Ghazi Khan, Montgomery and Hoshiarpur while projects for new buildings for the Government High Schools at Ambala, Ferozepore and Multan have been initiated and will shortly be carried out.

The claim put forward in the annual report for 1913-14 that "the Punjab will shortly be equipped with a set of Government high school buildings which should challenge comparison with those of any other Province" is justified by the advance already made, though the rate of progress has necessarily been retarded since the commencement of the war.

The influence of these building operations for Government high schools has spread to the aided high schools in their vicinity. Although these schools too have been adversely affected by recent events, and subscriptions to other than war objects have inevitably been curtailed, yet a number of fine school buildings have been erected for aided schools during the quinquennium. It is sufficient to instance the D. A.-V. and Islamia Schools at Ambala and Rawalpindi, and the Khalsa School at Ludhiana.

43. Building operations have not been confined to the provision of class room accommodation. New hostels have been erected for the Government High Schools at Hissar, Gujranwala, Gurdaspur, Hoshiarpur, Dharmsala, Dera Ghazi Khan and Lyallpur, while among other aided institutions which have followed suit may be mentioned the Arya Samaj Schools of Hoshiarpur, Jullundur and Ludhiana, the Dev Samaj School at Moga and the Khalsa School at Ludhiana. Hostels.

Accommodation is still generally insufficient in view of the growing demand, and this is particularly true of board middle schools which are fed by the primary schools in the vicinity.

The establishment of denominational hostels at certain centres deserves mention; such are those maintained by the Ahirs and Bhargawas of Rewari, the Rajputs of Ambala and the Sikhs of Rupar. Half a dozen hostels of this class are supported by different communities in the Lyallpur District.

The new hostel buildings are both commodious and hygienic and, as Mr. Crosse observes, "hostel life in most of the schools has become quite comfortable. Large and airy dormitories are well equipped with requisite furniture; a copious supply of water for drinking and bathing is available for all. Dining rooms, reading rooms and play-grounds have been attached to these institutions and senior masters, as superintendents, look after the comfort, health, character and study of the boarders. Free medical attendance is usually available when required."

Mr. Wyatt of Rawalpindi also speaks in favourable terms of the conduct of the large urban hostels, but paints a less attractive picture of the hostels attached to board middle schools, where there is often little attempt to follow the elaborate time-tables affixed to the portals. Unfortunately the number of specially designed hostels is still comparatively small and the majority of boarders are accommodated in hired houses. Of the condition of these boarding-houses the medical inspectors draw a gloomy picture, emphasing especially the over-crowding, poor lighting and insufficient feeding. In the best hostels the unsatisfactory features are the lack of variety of in-door occupation and the excessive study, especially as examinations approach, allowed by the superintendents.

In other respects these officials are reported to do their work well; and the increased allowances now offered in Government schools for superintendence attract senior masters to undertake this duty.

Medical inspection.

44. The health of boarders is generally better than that of day scholars; but efforts have been made during the quinquennium to supervise the health of all scholars attending secondary schools. A resolution was passed at the Punjab Sanitary Conference held in August 1913 to the effect that the Provincial Medical Department should be utilised as far as possible for the inspection of schools and scholars. Accordingly in 1915 six assistant surgeons were appointed as medical inspectors of schools, one to each division, and one in special charge of the Government institutions (colleges and schools) in Lahore. The medical inspector visits once a year every Government, board and aided Anglo-vernacular secondary school in his division and conducts a physical examination of each pupil reading in the secondary department. The results of the inspections of the school premises are recorded in a register kept for the purpose, while medical history cards are kept for each boy inspected. When the boy leaves school for good his card is filed in the Inspector's office and it is hoped that valuable statistical results may be obtained from these records. In any case in which a serious defect or ailment is detected the parent is notified and advised to take his child to the local dispensary for treatment For it has been decided that it is no part of the medical inspector's duty to doctor the boys; indeed it would be impossible for him to do so in the time at his disposal. Unfortunately the parents, being often ignorant villagers, pay little attention to the medical officer's advice. More good might be done if the headmasters used their influence in support of the medical inspector: but it is generally reported that headmasters do not realise their responsibility for the health of their pupils. From more than one division it is reported that medical history cards were locked up on the departure of the medical inspector and not referred to until his next visit.

Overstudy, lack of exercise and underfeeding are reported by all medical inspectors to be the chief causes of the poor standard of health among school boys. From 30 to 50 per cent. of the pupils examined were found to suffer from defective eyesight. The subject of health in schools is of such importance that I append the report of B. Mula Singh, late Medical Inspector, Ambala Division. (Appendix B) Unfortunately this officer, with others, has been recalled to military duty, and there is little likelihood of their places being filled during the continuance of the war.

Physical education.

45. The lack of physical exercise to which the medical inspectors refer is partly due to the difficulty of providing adequate play-grounds for the new schools and scholars, especially in the neighbourhood of towns, where land is costly. But it is also largely due to the tradition which dies hard, that the chief function of school games is to turn out successful tournament teams. The fallacy is indeed akin to that which dominates the school work. However, several Inspectors report that attempts are being made to organise games for junior pupils. Unless this can be done, there is little value in school games. Inspectors also report an improvement in the spirit in which games are played; and if there is occasional unfairness or ill-feeling, as often as not it is the teachers or managers that are to blame.

An arrangement was entered into with the Young Men's Christian Association by which the services of Mr. J. S. Robson were secured as physical adviser. Mr. Robson held a course for drill instructors in Lahore last winter and also visited a number of schools. He has now drafted a new scheme of physical exercises based on scientific principles, which has been introduced in the schools where instructors are capable of putting it into effect.

Moral training.

46. Of the moral training which pupils receive in school it is difficult to speak with certainty. "In some of the best schools," Mr. Wyatt reports, "more or less definite attempts are made to influence the pupil's character. The private saying of prayers, the encouragement of mutual help (as in times of illness), special addresses or sermons, the award of prizes for good conduct, and deliberate appeals to the parents are amongst measures adopted here and there."

One of the most common forms of indiscipline is the bringing of reckless and unfounded charges by pupils, not always without the knowledge of other members of the staff, against any master who has had occasion to report or punish them. Anonymous and pseudonymous letters addressed to those in authority are a favourite form of attack. This evil habit among pupils can only arise from a lack of proper respect for their teachers, who on the other hand complain that parents do not help them to maintain their authority, and indeed show little interest in their sons' life at school except when the question of annual promotion arises.

The schools and the war.

47. It would be impossible to close this chapter without a reference to the splendid response made by the teachers and pupils of the Punjab secondary schools to appeals made to them on behalf of the war. To the Imperial Relief Fund and the Punjab Aeroplane Fund contributions poured in from teachers, from schools and even from separate classes. Teachers have invested largely in the war loan, and though this was obviously impossible for school boys, a suggestion by Mr. Tydeman of the Central Model School that parents might by monthly payments buy postal certificates for their sons resulted in an immediate and unexpected response. The whole of the staff at once announced their intention of co-operating and over 500 students applied for one or more cash certificates. Monthly instalments are still being received from 373 boys and the total result of the subscription from the school so far is Rs. 6,820; and it is expected that the final amount will not be less than Rs. 10,000.

Apart from pecuniary contributions, the secondary schools have furnished their quota to the fighting forces of the Crown. In the Rawalpindi Division alone the number of teachers and pupils of secondary schools who have enlisted is nearly one thousand.

CHAPTER V.

Primary Education—(Boys).

Number of schools and scholars.

48. The total number of primary schools for boys in the Province at the close of the year 1916-17 was 4,913 with an attendance of 245,628 scholars.

In the last year of the preceding quinquennium a five-year scheme for the expansion of primary education, based on estimates received from

the different districts, had been submitted to the Government of India. It provided for an increase of about 550 primary schools annually. A revised programme was submitted in 1914 in which an increase of 1,500 schools during the next three years was proposed. The estimates sent in from districts were, as stated in the report for 1911-12, coloured by the pre-possessions of the authorities concerned; and the actual expansion has not followed the programmes submitted.

The number of schools opened annually during the quinquennium is as follows :—

1912-13	273
1913-14	468
1914-15	394
1915-16	206
1916-17	159

amounting to an increase of 1,500 schools in all involving an increase of 66,163 pupils. The falling off in the number of new schools in the last two years is due to the gradual exhaustion of the Imperial grants for primary education. During the preceding quinquennium, when there were no Imperial grants, there was an increase of only 263 schools and 37,934 pupils. It will thus be seen that while six times as many schools were opened during the last quinqennium, the increase in the number of pupils was only double that of the preceding period. It is not easy to account for this phenomenon; but one reason for it may be the very large number of new aided elementary schools included in the last figures, amounting to 590 out of 1,500. Schools of this class are not so well attended as board schools; and, when opened in proximity to a board school, draw on the same pupils, and do not add much to the school-going population. The net result of one public school per 6·7 towns and villages against one per 9·8 towns and villages in 1911-12 is satisfactory.

The rate of expansion in the various districts has been very uneven and has depended partly on the financial conditions of district boards, partly on the interest taken in education by the local authorities. The figures for the following districts may be contrasted :—

Lyallpur 164 new schools, Jhang 34, Shahpur 129, Jhelum 25, Sialkot 84, Amritsar 27, Kangra 80, Ludhiana 23

Board and aided elementary schools.

49. Not only has the rate of expansion varied, but the methods have also varied.

Some boards, notably Gujrat, Jhelum and Kangra, have relied chiefly on aided schools, while in other districts, *e.g.*, Shahpur and Rohtak, the advance has been mainly by means of board schools. There can be no question that the latter class of institution is not only more efficient but actually more popular with the rural population. A board school is usually better housed, better staffed, and much better equipped than an aided elementary school. The teacher is under the direct control of the local board and can be transferred if he proves unsuitable or unacceptable to the neighbourhood. Whereas the teacher of an aided school is not transferable, and so long as he maintains a sufficiently high standard of instruction to deserve a grant, is independent of authority. But the aided elementary school is much cheaper than the board school, involving as it does no expenditure on buildings and equipment; so that the temptation has been strong for boards anxious to extend primary education in their districts to rely chiefly on this class of school for the expansion and to sacrifice the quality of education to the quantity. A circular on the subject was issued after the close of the quinquennium and it will be discussed at a committee on district board finance, which will meet in October of this year.

The increase in the number of elementary schools, either aided or seeking aid, is in no small measure due to the revision of the grant-in-aid rules, permitting of much larger grants being offered to such institutions. This change came about at the close of the last quinquennium, so that, while in

that period there was only an increase of 17 aided schools and of 5,945 in the number of pupils attending them, during the past five years they have increased by 590 with an increase of 23,184 in the attendance. These figures are significant of the increasing demand for education in rural areas.

Effect of grant-in-aid rules.

50. The enhanced grants for elementary schools were offered in order to tempt maktabs, mullah schools and other institutions of a religious character to add some instruction in secular subjects to their curricula and thus to come into the educational system. The change, however, has failed in its object. Very few of the new aided elementary schools were originally of a religious character; and the maktabs and Quran schools continue on their old lines. But the higher grants have tempted youths with a smattering of education, too often 'primary passes' who have lost their taste for agriculture, to open venture schools in hopes of recognition and grant.

The Inspector of the Rawalpindi Division, where no less than 62 per cent. of the recognised primary schools are of the aided elementary class, writes :—"Teachers of this type are not always a healthy influence and the award of grant to these so-called 'indigenous' schools has been too indiscriminate, sometimes in disregard of the requirements of different localities or of what the district board could afford. On the other hand, especially in districts, where they have been guided and encouraged, teachers in some of these schools teach as efficiently as board school teachers, and it has been possible to assimilate their curriculum to that of board schools and to admit pupils from them to Middle departments."

The grants to elementary schools are calculated primarily on the average attendance of pupils, and it is a regrettable but undeniable fact that the registers of such schools are frequently unreliable. On a recent visit to Karnal I was told by the District Inspector of one school of this kind, which, owing to a change of programme, he had visited two days before he was expected, only to find no teacher and no pupils. On enquiry from the villagers he learnt that the teacher lived some miles away and only turned up at the school once a week, marked the registers and went away. This is, it may be hoped, an extreme instance, but it is at least doubtful if many of the reputed pupils of aided elementary schools are receiving any regular education.

It would also be an interesting if somewhat disheartening calculation to estimate how many of the 66,000 new pupils in primary schools belong to the category of 'volatile' infants as Mr. Wyatt calls them, *i.e.*, small children who are sent intermittently to school to be out of harm's way, and whose parents never intend to make scholars of them at all. The question is dealt with in a later paragraph. Meanwhile it is to be feared that all the money that has been spent in aiding elementry schools during the quinquennium has not been spent to the best advantage.

Expenditure.

51. The total direct expenditure on primary schools rose from Rs. 8,76,375 to Rs. 15,67,402 or by 78·8 per cent. Expenditure from Provincial revenues rose by 2½ thousands or 19·2 per cent., while that from private sources by 59 per cent. to about Rs. 90,000. The chief increase, however, was in the expenditure by local bodies, owing to the contributions made to them from the Imperial grants.

The system under which these grants were distributed to local bodies is described in Chapter II.

Teachers' salaries.

52. They have been utilised partly in the opening of new schools, but chiefly in the improvement of teachers' salaries. This was a much needed measure of reform. Under the schemes now adopted by all district boards no certificated teacher receives less than Rs. 12 if an assistant in a board school or Rs. 15 if a headmaster. The great majority of boards have introduced an incremental scale of pay, running up to either Rs. 25 or Rs. 30 per mensem for a headmaster. Provident Funds have also been generally established.

A large number of headmasters, in fact about one-sixth of the total number of elementary teachers, are in receipt of allowances varying from Rs. 2 to Rs 10 per mensem as branch postmasters. A few draw allowances of Re. 1 or Rs. 2 per mensem for the charge of cattle-pounds.

The post of headmaster of a board primary school, drawing, if allowances are included, some Rs. 20 a month, living in the neighbourhood of his native village, and except for some four or five inspection visits a year from educational, postal and other authorities, suffering from no excessive supervision, is by no means an unenviable one for a village lad.

Qualifications of teachers.

53. It is not therefore a matter for surprise that although the number of Normal schools has increased from five to ten, there has been no dearth of applicants for admission. An exception is the Rawalpindi Division, where the difficulties of recruitment have been partly due to the insufficient number of vernacular middle schools, from which candidates for Normal schools are drawn. Of those boys who pass the vernacular middle examination every year, about one-third proceed to High schools, and about one-third take other vernacular posts, (*e.g.*, patwarships) or return to their hereditary avocations, leaving only one-third available for the teaching profession. With the increase in the number of primary schools, the need for a proportionate increase in the number of vernacular middle schools must not be overlooked.

There were altogether 9,868 teachers employed in primary schools of all kinds. Of these no less than 5,150 were trained and certificated. The corresponding figures for 1911-12 are 6,498 and 2,730. To meet the large demand for assistant teachers, training classes for primary passed youths were opened at a number of centres, of which further mention is made in Chapter VI. Apart from the value of the training given, which varies considerably in accordance with the efficiency of the masters employed, the effect of these classes is to turn out a large number of youths who have definitely adopted the teaching profession.

When one reads that in board schools in the Multan Division 926 teachers out of 1,192 are trained (as compared with 475 out of 873 in 1911-12), and that in the Mianwali District the proportion of certificated teachers is 85 per cent., it must be admitted that great strides have been made in the direction of staffing the board primary schools with properly qualified teachers. In the aided elementary schools the proportion of trained teachers is naturally much lower; in the Jullundur Division for example it is only 25 per cent.

Instruction.

54. As a result of the increase in the proportion of trained teachers it is reasonable to expect that the quality of the instruction in primary schools should have improved. That this is the case is generally admitted and is indeed proved by the fact that, although 1,500 new schools have been opened, the majority of whose pupils must have joined the infant class, yet the proportion of pupils in the upper primary classes has increased from 17 to 20 per cent. On the other hand if some improvement is admitted, it is no less true that the quality of instruction in primary schools leaves much to be desired. Practical subjects, such as nature study, mensuration and land records, are badly taught, while there is little intelligence shown in the teaching of Geography and Urdu composition. Many teachers are themselves ignorant of the system of native accounts which they are expected to teach; and Mr. Wright, the Jullundur Inspector, doubts the value of this subject of the curriculum. As he points out, " a much simpler method is now used in the Co-operative Credit Banks which are being opened every year."

High proportion of pupils in Infant Class.

55. But, leaving aside detailed criticism of the teaching, there must be something wrong with a system under which nearly 161,000 children are found in the infant class (see General Table X) while the aggregate attendance in the two lowest school classes, 228,649 (this figure includes girls) is considerably greater than half of the total attendance at educational institutions of all kinds, schools and colleges, in the Province. This phenomenon, it may be added, is not merely an incident due to the rapid growth of education, as very similar proportions will be found to have existed for the last ten years.

It is due, I believe, to three principal causes :—

(*a*) The presence in the infant class of what Mr. Wyatt calls ' volatile and stagnant infants.' Of the former class of children I have already spoken. It will always be with us, till that period, at present sufficiently remote, when a measure of compulsory education reaches rural areas. It is not, however, confined to rural areas as Mr. Wyatt reports that in the lower primary departments of high schools it is common to find irregular attendance treated as the normal state of affairs.

The existence of the stagnant class who, after two or more years' intermittent education in the infant class, leave school without reaching the dignity of the second lower primary standard, is a blot on our educational system. It is due to :—

(*b*) The impossible task which is expected of the master in charge of a single-teacher school. (It should be premised that the majority of primary schools in the Province are of this character, and the proportion will rise rapidly as the number of rural schools increases. The largest villages of the Province have already been provided with schools, and the primary schools of the future must be started in smaller centres of population.)

There are five classes in an ordinary primary school, for lower primary schools are unpopular and rare (see paragraph 56) and there are nominally five working hours in the school day. Presumably, therefore, if the five classes are in charge of a single master he should devote one hour a day to each class. But the number and variety of subjects taken by the upper primary classes, the greater interest these subjects have for the teacher, the importance attached to the attainments of the senior pupils by inspecting officers, all these influences combined lead the teacher to devote a larger proportion of his time to the senior classes. Even when, in spite of departmental regulations, the school hours are prolonged to six or seven during the day, it is rare that more than an hour of the teacher's time is devoted to the infant class.

(*c*) But this is not all. Were the children of the infant class taken by the master, even for an hour a day in one section or two sections for class teaching, some daily progress might result. But admissions are made to the infant class at all periods of the school-year so that children are to be found in this class at all the initial stages of instruction. Mr. Wyatt, the Rawalpindi Inspector, is attempting to restrict the admission of pupils into the infant class to one period of the school year; and it is hoped that his efforts may prove successful so far as town schools are concerned; but there is little likelihood of such an innovation being accepted by parents in rural areas. This restriction, indeed, has not yet been found practicable in England.

In an ordinary village school containing some forty boys under one master, the infant class will consist of about twenty children (the proportion is often larger), and for purposes of instruction they may be divided into five or six groups according to the stage which they have reached; though in schools under old-fashioned teachers they are often taken individually. If the total amount of time devoted by the teacher to the class daily is one hour, it is clear that the time devoted to each child in the class during the day is not more than ten minutes. Now, while the children of the upper classes, who can read and write, are able to study books, do exercises, and in some measure to educate themselves, the children of the infant class are wholly dependent on the teacher for any learning they may acquire in school. They consequently spend most of the day reading and re-reading or writing and re-writing (sometimes under the supervision of a ' monitor ') the few letters which the master may have pointed out to them at his last visit to the class. Their chief duty, at an age when nature would expect them to be exercising their limbs and their voices, is to sit as still as possible and not to disturb the lessons of the senior classes. Is it a matter for wonder that habits of apathy and mental inertia are engendered? And that boys whose early education has begun on these lines should show a lack of keenness and originality when they reach the stage when such qualities are expected in their work?

I have dwelt at some length on this question because it appears to me of the first importance at the present time, when the need for a wide diffusion of primary education is generally recognized, and when even projects of compulsion are under consideration. The mere multiplication of small single-teacher schools, the great majority of whose pupils will not reach the upper primary stage, will have little effect in breaking down illiteracy. If the foundations of our educational system are not to be laid on a shifting sand of casual attendance and a stagnant morass of neglected ignorance, the teaching of the lower primary classes must be radically reformed. Towards this reform I suggest three steps:—

(*a*) Insistence on the provision of two teachers for any five-class school: a single-teacher school should not attempt instruction above the fourth primary standard. Even four classes are more than one teacher can easily handle; but experience has shown that a good trained teacher following a set time-table can keep four classes occupied, while it is quite impossible for any man single-handed to manage five. To provide two teachers for every primary school would not only be very costly, but, if the following measure is carried out, should be unnecessary.

(*b*) Improvement in the methods of teaching. For example, (*i*) for the individual system of teaching in the infant class the class or section system should be substituted; (*ii*) the primary teacher should be taught how to manage three or four classes at once; and (*iii*) methods of teaching individual subjects should be improved; in the initial stages of teaching reading, for instance, a method is still followed which was abolished forty-five years ago by law in Prussia and which has long been obsolete in other countries.

Improvement in the methods of teaching involves reconstruction of the work of the normal schools in order to bring them more into touch with the practical needs of the elementary school teacher. The question is dealt with in Chapter VI.

(*c*) Greater attention to the lower primary classes on the part of inspecting officers. Without this, little good will result from the previous suggestion. Not only must the teacher learn how to handle his classes, but inspecting officers must see that he carries out his instructions. At present, the inspection of primary schools is far from satisfactory. Attention is mainly devoted to the few boys who have reached the top classes.

The senior inspecting staff is too busy inspecting secondary or Anglo-vernacular schools to devote sufficient attention to primary education. Until the Divisional Inspector can find time to take a personal interest in primary schools, it is unlikely that his assistants will realize the importance of this branch of education. It is an unfortunate circumstance that the great majority of the subordinate inspecting staff, to whom falls the duty of inspecting rural schools, does not belong to the rural classes; a point which was discussed at the recent conference at Simla on agricultural education.

Agriculturists and education.

56. There is another aspect of this question to which insufficient attention is paid, *i.e.*, the effect of improved teaching on the popularity of rural schools.

For the indifference of the agriculturist to education three reasons are generally assigned:—(*a*) His conservatism, *i.e.*, his inability to see the advantages of education for a boy destined to become a farmer; (*b*) his disinclination to spare the services of his children from field work; (*c*) the unsuitability of the primary school curriculum.

(*a*) Of the validity of the first reason there can be no question. A similar prejudice is found in every rural society in the world. There are, however, strong evidences that it is losing its hold, not the least of which is the growing demand for new schools in rural areas. It still constitutes, and always will constitute, the chief obstacle to educational expansion among agriculturists.

To this conservative class of parent must be assigned the man who sends his son to school in the hope that he may obtain Government employment. He sees in education only an outlet from the work of the farm. He is thus described by Mr. Wright, Inspector of the Jullundur Division :—" In a family the father arranges that one or two of his sons shall go to school and shall be given facilities to continue their education up to almost any standard, but that his other sons shall continue the ancestral employment without even the modicum of education given in elementary schools. He has not yet realised the need of education for his own work, and very often the boys attending school are better clothed and better fed than the other sons of the family, who are employed in the fields. And not seldom is it found that boys attending the school are not required to take any real part in their father's agricultural operations. "

(*b*) The importance of the second reason has to my mind been greatly over-estimated. Children are admitted to school at the age of five, and the economic value of a boy under seven years of age even to the poorest cultivator must be infinitesimal. Indeed, one can see from the number of casual pupils in the infant class that parents are in many cases only too glad to be relieved of the charge of their small children during the day.

Attempts have been made by the introduction of half-day time-tables to permit of school boys being utilised on farm work during part of the school day. These have met with little or no success. The Ambala Inspector reports that in the Simla and Ambala Districts the experiment was given up as impracticable ; that in Hissar after a year's trial in 1913-14 it was abandoned, but is again being tried, hitherto without success. " In Karnal and Gurgaon Districts it is reported to be working fairly well."

It is obvious that if scant attention is paid to new comers during a five-hour school day, the amount of time that a teacher will devote to them during a half-day will be negligible. And, if a cultivator so far overcomes his conservatism as to send his boy to school at all, he wants him to learn *something*. I deal with this point latter.

(*c*) It is doubtful if any alteration in the subjects of study in primary schools would have any noticeable effect on school attendance. The agriculturist who sends his boy to school regularly, does so that he may receive education, by which he understands reading, writing and arithmetic. If Government in its wisdom insists that geography and nature study should also be taught he accepts these subjects as part of the school routine. Indeed, the boy cultivator is quite prepared to learn under the heading of nature study that a horse is used for riding, that sugar is sweet (especially if the teacher fresh from the inductive methods of the normal school requires him to taste it before giving a judgment) and to consider the acquisition of similar facts, with which he is perfectly familiar, a part of education.

This is not to say that it might not be desirable in the best interests of education to bring the work of a rural school more closely into touch with its surroundings. This might be done by making the arithmetic work deal with problems which would be met with in the life of an agriculturist, by making the nature study local and provincial, and by the inclusion in the earlier reading-books of lessons dealing with rural subjects. This principle should not, however, be carried too far, for one of the chief functions of a school should be to widen the mental horizon of the pupils.

Any such changes will not materially affect the attendance at rural primary schools. Indeed, any radical differentiation between the curricula of rural and town schools will only affect the attendance at the former adversely. The special zamindari schools which used to be maintained in rural areas failed completely to attract the agriculturist who resented his sons being deprived of the chances open to town pupils. For similar reasons lower primary schools are unpopular and soon add upper primary classes.

The real cause, apart from the natural conservatism of the cultivator, for the unpopularity of education in rural areas is, I am firmly convinced, the inefficiency of the schools. The reasons for this inefficiency I have already given in paragraph 55.

Any agriculturist, who has sufficiently advanced ideas to send his son to school for education, has sufficient intelligence to be dissatisfied with a system which condemns the boy to sit idle in school for hours. When after a year's attendance he finds that the boy has not finished learning the alphabet, it is not surprising that he withdraws him from school. It is the rule and not the exception that a boy should take two years to obtain promotion to the second primary class. General Table X shows 23,349 children in the first class between the ages of 5 and 6, but only 2,872 in the second class between 6 and 7 years of age.

The following figures supplied by Mr. Wyatt for the Rawalpindi Division are instructive—

	Average age.
Infant class	7·7
2nd and 3rd classes	10·6
4th and 5th classes	12·5

The average age is, no doubt, raised by the late admission of a certain number of Muhammadan boys who have previously attended Muktabs or Masjids for religious instruction. But making all due allowances the average age is much too high.

Lest any one should deduce from the above remarks that primary education in the Punjab is in a bad way, it is only just to add that it does not compare at all unfavourably with that in other Provinces. The number of trained teachers, and certainly their attainments, are as high as in any other Province. The rates of salary for elementary teachers are higher than elsewhere in India. The schools are well equipped and considerable progress has been made during the quinquennium in providing them with proper buildings.

Buildings.

57. In this matter the Multan Division with 182 new primary school buildings to its credit stands first, Jullundur following with 120 new buildings. The Lyallpur District alone constructed 129 new school houses, and there was also considerable activity in the Ferozepore District. Yet the need for suitable school buildings throughout the Province is still very great. As was observed in the Annual Report for 1913-14: "An indefinite amount could be spent on building school-houses." The following typical figures for board schools held in rented or borrowed buildings are supplied by Mr. Crosse for the Lahore Division. Lahore 46 out of 117, Amritsar 26 out of 111, Sialkot 71 out of 182, Gujranwala 64 out of 148. "Most of these private houses are ill-ventilated, badly lit and inadequate in size. Most of the aided schools are still held in masjids, shivalas, dharmsalas or even in the open air on the roadside."

Great divergence of opinion is still found as to the proper form of building for a village primary school. Few would be found to justify the expenditure of a large sum on a primary school building. On the other hand the advocates of cheap kuchcha school-houses overlook the fact that such buildings in a short time double their initial cost in repairs, which form no inconsiderable tax on the annual resources of District Boards. The open shelter or shady tree, whose cheapness forms its chief attraction, seems peculiarly unsuitable to a climate where duststorms are not infrequent and the variations in temperature are so extreme as in the Punjab. It is sometimes supported on the score of health, but where open air schools are conducted the clothing of the children is adapted to the weather. "In American

' roof-garden ' schools, which are open all the year round " to quote from a medical report, " lessons are carried on when the temperature of the ' class-room ' is considerably below zero, but in that case the children are provided with furs, and proper provision is made for adequate feeding." Although the cold is not so extreme in the Punjab, it is sufficiently intense and neither furs nor feeding can be expected from a district board.

The solution seems to lie in the provision of decent but not too expensive school-houses for all well established board schools. Roughly speaking, from twenty to twenty-five rupees per boy in average attendance may be taken as a basis for an estimate in normal times. A well built school-house is in itself an educative influence, and certainly adds considerably to the prestige of the school and the teacher. It is difficult for a teacher to take a proper pride in a school conducted in a mud tenement.

Duration of school life.

58. Professor G. S. Chowla of the Government College, Lahore, has made some very interesting calculations as to the average duration of school life in the Punjab. He used the method of calculation adopted by the Government of India in its last quinquennial report, and also those methods suggested by Professor Littlehailes of Madras. For none of these methods did he find the data complete and there was consequently some variation in the results. But there seemed little doubt that the correct figure was between 3·5 years and 4 years, which corresponds with the Government of India's calculation for the whole of India. The importance therefore of making school work as efficient as possible in the first four classes is evident.

CHAPTER VI.

The Training of Teachers.

Number and kinds of institutions.

59. The chief institution for the training of teachers for boys' schools in the Punjab is the Central Training College. Until the quinquennium under review it was the only institution that provided training for secondary teachers. A few training classes for junior English teachers have been opened to supplement its work, but it still remains the only source of supply for English-trained teachers for the senior classes of High schools and for the higher grade of vernacular teachers.

Teachers for primary schools are trained at normal schools which have increased in number during the quinquennium from five to ten, while training classes for students of an inferior standard have been opened at a number of centres to supply local and immediate needs.

Women teachers for girls' secondary schools are trained in the Kinnaird High School for Girls, though a few attend the men's classes at the Central Training College. Teachers for primary girls' schools are trained at the Normal School for Women at Lahore, the work of which has been supplemented by the opening of a certain number of local training classes in 1916.

For European schools women teachers are trained at St. Bede's College Simla, while men are trained at the Government Training Class, Sanawar.

It will thus be seen that the Punjab has a well-organized system for the professional training of its teachers. The head and centre of this system (if European institutions are excluded) is the Central Training College. The Principal of the College is also Inspector of Normal Schools; and the instructors of the various normal schools and training classes have themselves received their professional training at this College. But if the system is good it is capable of very considerable expansion, and such expansion is now becoming a matter of urgent necessity. This question is dealt with in a later paragraph.

Number of students.

60. The number of students undergoing training at the close of the year 1916-17 is as follows, the figures being compared with those for 1911-12 :—

—		1911-12.	1916-17.
	MEN.		
High grade English	Bachelor of Teaching	34	45
	Senior Anglo-vernacular	27	43
Lower grade English	Junior Anglo-vernacular	88	110
	Local-trained	...	20
Higher grade Vernacular	Senior Vernacular	81	82
Lower grade Vernacular	Junior Vernacular	415	776
	Local-trained	37	94
	WOMEN.		
High grade English	Bachelor of Teaching	...	...
	Senior Anglo-vernacular	...	1
Lower grade English	Junior Anglo-vernacular	2	10
	Local-trained	...	...
Higher grade Vernacular	Senior Vernacular	6	22
	Local-trained	16	2
Lower grade Vernacular	Junior Vernacular	15	58
	Local-trained	9	132
	EUROPEANS.		
Women		30	38
Men		15	13

It may be of interest to note the qualifications required for each class of student, and the nature of the various courses of study.

B. T. students.

61. Candidates for the B. T. course must possess an Arts degree of the Punjab University. So great has been the demand for admission into this class during the last few years, that the nucleus of the class is now formed of M. A.'s and of students who have taken a high place in the Degree examination, together with graduates who have already proved their worth as teachers.

There were 194 applications for admission to the B. T. class in 1916-17. Of the 48 students selected two were M. Sc.'s, three M. A.'s, one B. Sc., five B.A.'s with Honours, one who had passed the B. A. in the first division, sixteen in the second division, and twenty in the third division, all of whom had served as teachers and were recommended for admission by Inspectors.

The increased popularity of the class is due largely, no doubt, to the increase in the annual output of graduates, but it is also due to the enhanced rate of salaries now paid to B. T. teachers, and to the reduction of the duration of the course to one year.

A B. T. in Government service ordinarily commences on the grade of Rs. 75—90 per mensem in the Subordinate Educational Service. In private employ he obtains as much as Rs. 100 to Rs. 150 per mensem. Almost without exception the students have already obtained posts before they leave the College.

Mr. Knowlton, the Principal of the Central Training College, regrets the reduction in the duration of the course. There can be no doubt that

during a one year's course, which includes a great deal of theoretical study, sufficient time cannot be found for actual practice in teaching.

The curriculum itself is prescribed by the Punjab University and is excellent in character. It includes (*a*) the psychological, logical, and ethical bases of education, (*b*) the principles of school management, (*c*) the theory and practice of teaching, and (*d*) the special methods to be followed in teaching *one* of the three following branches of study :—(*i*) Mathematics, (*ii*) Science, and (*iii*) History and Geography.

In view of the large number of candidates who now seek admission to the class, and the very responsible positions which graduates in teaching will often occupy, as headmasters of schools and training institutions or in the inspecting line, the question of again extending the course from one to two years deserves the consideration of the University.

Senior Anglo-vernacular.

62. Candidates for admission to the Senior Anglo-vernacular class must be either graduates or have read up to the standard of a degree in an Arts College, or have passed both the Intermediate and J. A.-V. Certificate examinations, the latter in the first division. There were 159 applications for admission to this class last year. Of the 45 candidates admitted 18 were graduates who failed to obtain admission to the B. T. class, five were students who after passing the Intermediate had also passed the Junior Anglo-vernacular certificate in the first division, one was a lady who had passed the Intermediate and twenty-one had appeared unsuccessfully at the B. A. examination.

The course is of one year's duration and is similar to that prescribed for the Teacher's Diploma of the Birmingham University.

The students of the Senior Anglo-vernacular class are divided into two sections. Those taking the advanced course are specially trained to work as science masters in high schools; those taking the ordinary course also study general science in order that they may teach other subjects more intelligently.

Successful students are appointed to the Rs. 55 -70 per mensem grade if they join the Government Educational Service, and can obtain posts of Rs. 80 to Rs. 100 in aided institutions. The senior teachers in high schools, and headmasters of Anglo-vernacular middle schools are generally of this class.

Junior Anglo-vernacular.

63. The Junior Anglo-vernacular class is open to Matriculates of the Punjab University. There were one hundred and twenty-eight applications for admission to this class in 1916-17 of whom fifty-six were admitted, thirteen of them having already passed the Intermediate examination.

The course is of two years' duration. In this class "an effort is made, while providing a course of professional studies, to carry forward at the same time the general education of the student. The courses of reading in English and Mathematics correspond broadly with those prescribed for the Intermediate examination in arts of the Punjab University, while the course in geography is almost identical with that laid down for the Intermediate examination of the Calcutta University. The course of reading in school-management and methods of teaching is that prescribed for English Training Colleges."

The successful students are on entering the Education Department assigned to the grade of Rs. 35—50 per mensem in the Subordinate Educational Service and in aided institutions they can draw from Rs. 40 to Rs. 60 per mensem. Most of the work in the middle departments of Anglo-vernacular schools is entrusted to teachers of this class.

Their work in laying the foundations of English teaching is very important. On the whole it is satisfactorily performed. The recent alteration by which all subjects, save English, in middle departments are to be taught through the medium of the vernacular, will entail a similar change in the

curriculum of this class. It is also essential that the students should be more thoroughly grounded in the direct method of teaching English than for reasons hereafter mentioned has hitherto been possible.

A Junior Anglo-vernacular class was opened last year in connection with the Islamia College, Lahore, with the especial object of providing a supply of such teachers for the rapidly increasing number of Islamia Secondary schools. It is too early to say whether the experiment will be successful, but with the opening of a second Training College at Jullundur, the need for such classes should disappear.

Four other classes for the training of Matriculates were opened towards the close of the quinquennium attached to the Government High Schools at Rawalpindi, Jullundur and Rohtak, and the Mission School, Ludhiana. One hundred and fifty students have passed successfully through these institutions. Mr. Knowlton is dubious as to the value of the training given in these classes, and any further development of them does not seem worth encouraging. But until extended facilities are provided for the training of junior English Masters, they do something towards meeting an immediate need.

Senior Vernacular students.

64. For admission to the Senior Vernacular class the qualifications demanded are a pass in the first division of the Junior Vernacular Certificate examination, or at the Matriculation examination. The latter qualification has quite rightly fallen into abeyance, and in the year 1916-17 eighty-five of the former type of candidates were admitted to the Central Training College for training.

The course is of one year's duration. When it is realised that the students of this class have already undergone one year's training at a Normal school, and passed out of it in the first division, and have then taught so satisfactorily in a primary school as to obtain a special recommendation from the Inspector for admission to the Senior Vernacular class, it will not be a matter of surprise that after the conclusion of this course they are much sought after, and are in fact some of the most successful of our teachers.

The curriculum includes all the subjects ordinarily taught in vernacular middle schools, including science and drawing. These teachers are also largely employed in the middle departments of Anglo-vernacular schools as teachers of Urdu, Persian and Science.

They draw Rs. 20—30 per mensem on joining a Government school and somewhat more in aided institutions. There is a large demand for teachers of this type, and with the opening of more vernacular middle schools the demand will certainly exceed the supply from the Central Training College. It would seem desirable to open other Senior Vernacular classes in connection with a limited number of Normal schools.

Junior Vernacular students.

65. A candidate for admission to a Normal School, *i.e.*, for the Junior Vernacular course, must have passed the Vernacular Middle examination.

With the rise in the salaries paid to the teachers of primary schools, to which reference is made in Chapter V, the applications for admission to Normal schools have naturally increased in number. Only in the Rawalpindi Division has there been any difficulty in finding recruits, and there it has been chiefly owing to the comparatively small number of middle vernacular schools.

The course of training in a normal school is of one year's duration. The curriculum has been simplified of recent years and the elementary psychology omitted.

"The professional training", to quote Mr. Knowlton, "includes class lectures, specimen lectures by the members of the staff, visits to the practising and other schools to observe the class masters at work, criticism lessons by the students, and continuous daily work for a week at a time in the practising school under the supervision and guidance of class masters."

The curriculum however requires still further simplification in order to adapt it to the actual needs of the teachers when they leave school. The majority of the *ex*-students at present, still more so in the future, will be required to teach two or more classes at a time in a village primary school, where the limited accommodation and equipment and the daily pressure of work will give them no time for the preparation and delivery of set lessons such as are usually practised in a normal school.

In the one year's course of training it cannot be hoped to turn a vernacular middle passed youth into an educationist; the aim should be to make of him a craftsman with the ability to impart the knowledge, which he already possesses when he entered the normal school, in the most intelligent way and with the greatest economy of time, trouble and appliances, to the pupils under his charge. Greater stress will have to be laid on the methods of teaching the lower primary classes since they will contain the vast majority of pupils under his charge. There is a distinct tendency, due in a large measure to the type of instructors employed, to make the teaching too academic, and to add teaching in subjects for which he will have no practical use in a primary school.

The importance of the work of the normal schools which will provide teachers for three quarters of the boys and girls under instruction in the Province can hardly be over-estimated. Any improvement in the methods of teaching in primary schools will ultimately be reflected in the intelligence shown by the pupils in all higher grades of education.

In order to supplement the work of the normal schools training classes were opened attached to vernacular middle schools at a number of centres in the province during the quinquennium. Mention was made of these classes in the last quinquennial report. Their existence can only be justified by the insufficient output of the normal schools. The work in them varies in quality in accordance with the skill of the masters in charge.

Meanwhile, as Mr. Knowlton points out, they have been attended by some hundreds of primary passed youths who might otherwise have proceeded to middle vernacular schools. They at least create a class of permanent assistant teachers for primary schools.

Training of women teachers.

66. The facilities for the training of women as teachers in girls' schools are much more limited. This is due, not so much to the comparatively small demand for women teachers, as to the very limited number who are prepared to come for training.

Apart from the few students who have attended the Senior Anglo-vernacular class of the Central Training College, the training of English teachers is undertaken by the Kinnaird College. There were ten students in 1916-17. The course is of two years' length and is very similar to that for the Junior Anglo-vernacular certificate.

An account is given in the chapter on female education of the work of the training institutions for girls' primary schools.

Training of European teachers.

67. No educational institution has sufferred so much from the war in this Province as the Sanawar Training Class. There were 20 students in residence when the war commenced, but the master-in-charge (Mr. Firth) and ten of the students volunteered for service and proceeded with a maxim detachment to East Africa. There were consequently only eleven students during 1916-17. Of these one was from the Punjab, three from the United Provinces, two from Bihar and Orissa, two from the Central Provinces and three from Madras. It would thus appear that the Punjab Government is supplying an Indian rather than a provincial need by the maintenance of this class. The small number of applicants for admission from the Punjab is due to the few attractions which the teaching profession has for Anglo-Indians in this Province, owing to the small salaries offered.

No arrangements were made for the work of Mr. Firth, and the Principal, Mr. Barne, has had to share with the second master-in-charge all the work of the class; an unsatisfactory arrangement, which has only proved successful owing to the zeal and efficiency shown by Mr. Prince, the second master. A house for the master-in-charge was erected at the close of the quinquennium, and it is hoped shortly to erect a new block of buildings to accommodate the class.

There are no changes to note with regard to St. Bede's College, Simla, which continues to do good work. It would be desirable for the students to have regular games in order that they might be capable of organising them for their pupils when they become teachers.

Central Training College.

68. The Central Training College has had a very successful quinquennium under the able and experienced guidance of the Principal, Mr. H. T. Knowlton. The hostel life is well organised, and the senior members of the staff, set an example by Mr. J. E. Parkinson, the Vice-Principal, take an active personal interest in the life of the students outside the class room. But a staff which includes only two members of the Indian Educational Service and one of the Provincial Service is quite inadequate for a training institution of the first importance; and it is proposed to utilise a portion of the recent Imperial grant for the training of teachers in strengthening the college staff.

Future development.

69. A project for the opening of a second Training College at Jullundur was postponed owing to the outbreak of the war. It is hoped to make a start, in so far as the buildings are concerned, with the recent Imperial grant. The number of applicants who are refused admission to the Central Training College shows that such an institution would meet with immediate success.

The number of normal schools throughout the Province is also quite inadequate for present needs, much more so to cope with any rapid expansion of elementary education. Some of the existing normal schools may be capable of enlargement to admit of more students.

The need for normal schools for women has been referred to.

The principle that a teacher to be efficient needs training has been firmly established in this Province, and any expansion of education is followed by a demand for trained teachers. Fortunately there is no dearth of candidates for training and all that is now required is to provide the facilities, as funds become available.

CHAPTER VII.

Professional, Technical and Special Education.

Number and kinds of institutions.

70 With the exception of the Central Training College, which is dealt with in the chapter on the Training of Teachers, the professional colleges in the Punjab are not under the control of the Education Department. In view of the fact that their work is educational some notes on these institutions supplied by the Principals are ordinarily incorporated in this report.

The Collegiate institutions are the Law, Medical and Veterinary Colleges at Lahore and the Agricultural College, Lyallpur. Next in importance are the Mayo School of Art, Lahore, the Government School of Engineering, Rasul, and the Women's Christian Medical College at Ludhiana. Other important institutions are the Victoria Diamond Jubilee Hindu Technical Institute and the Railway Technical School, Lahore.

There are also some thirty 'industrial' schools, some middle and some primary, scattered over the Punjab.

Since any attempt to amalgamate the treatment of these various institutions in one chapter is impossible, each institution or class of institution, will be dealt with separately.

Professional Colleges and Schools.

Law College.

71. The Law College is under the management of the Punjab University. The management of it has recently been devolved by the Syndicate on a committee consisting of the Vice-Chancellor, Dean of the Law Faculty, and three elected members of that Faculty. The staff has been further strengthened, and two branch hostels opened; but still more hostel accommodation is required since no less than 285 students from the College appeared at the examinations of 1917, of whom 181 (including 65 LL. B.'s) were successful. A football and hockey ground was prepared, also tennis and badminton courts; but the conditions of the institution can never really be assimilated to those of an Arts College while the staff consists largely of part-time lecturers.

Medical College.

72. The Medical College is under the Medical Department who supply the following particulars as to its progress during the quinquennium.

The new College building was completed during 1915 and was opened by Lord Hardinge in November of that year. With the completion of the new College all teaching requirements have been met for the present and for many years to come, and the Lahore Medical College now compares favourably with the best of similar institutions in other parts of India. The new King Edward Medical College comprises:—

(*a*) The Patiala main block, with administrative offices, large examination hall and library, lecture theatres, etc.

(*b*) The Bahawalpur Pathology-Physiology block, with pathology department on the ground floor and the department of physiology on the first floor, each a complete unit in itself.

(*c*) The Faridkot Anatomical block, a unit complete in itself for the efficient teaching of anatomy.

(*d*) The Kapurthala Materia Medica block, which also forms a complete unit for the teaching of materia medica.

(*e*) A Cold-storage block, with associated separate pathological and medico-legal *post-mortem* theatres.

The erection of the students' hostel has been held over for the present as the question of the separation of the school from the college is under the consideration of Government.

The number of students in the college has risen from 156 to 232, the annual number of admissions having increased from 36 in 1911-12 to 72 in 1916-17.

The Principal points out, and the Inspector-General of Civil Hospitals agrees with him, that the only possible method of coping with the numbers seeking admission is to remove the school department entirely to some other centre. In the year 1916-17, in order to admit into the school the 90 new military medical pupils required by the Army Department, the number of ordinary pupils had to be cut down, no admission being given to candidates from Native States or Municipalities.

"The demand", says the Inspector-General, "for the class of medical practitioner passing out from the school is increasingly great and already the situation has become acute. The numbers passing out in the next few years will not, I am afraid, be sufficient to meet Government demands, let alone those of the general public."

The actual numbers in the school show a decrease from 322 in 1911-12 to 293 last year But this decrease is due to the expulsion of 90 military students in 1915 for going on strike in February of that year and refusing to return to their studies within the prescribed time. A similar, but less serious, episode occurred in 1914. Apart from these two incidents the conduct of the students in both the college and school has been good.

Veterinary College.

73. The new buildings of the Veterinary College were opened by Lord Hardinge in 1915. They are probably the best buildings for an institution of this kind in India. The construction of the new hostel buildings has, in-

evitably been postponed for financial reasons. Meanwhile, the accommodation in the old Press buildings, though unsatisfactory, has been improved.

During the past five years 320 students have graduated and been awarded the Diploma. The demand for veterinary graduates has continued to be as great as ever and the supply is totally inadequate to meet it.

An advanced course for Punjabi civilian students was introduced in 1915. It is a four-years' course, the old three-years' course being continued for the training of candidates from the army, provinces other than the Punjab, and Native States.

Eighty-five students were admitted last year and the class of candidates was above the average. Of the new students 36 were from the Indian Army and Imperial Service Troops, 12 from other provinces, 5 from Native States, and 32 from the Punjab.

Agricultural College, Lyallpur.

74. The Lyallpur Agricultural College which opened in 1909 had, at the outset, a chequered career and a crisis was reached in 1913 when no applications were received for admission. The course was then revised and made one of four years' duration, divided into two parts of two years each. "This course", says the Principal, "has been in force since 1914 and has met with some measure of success. The first part consists of simple practical instruction in agriculture and elementary courses in scientific subjects and the second part gives a systematic course in sciences applied to agriculture. At the end of the first part a leaving certificate is granted to successful students on the result of an examination, which qualifies for admission into the subordinate ranks of the Agricultural Department and for such posts as estate managers, etc. The second part leads to the Diploma of Licentiate in Agriculture."

As the result of a resolution of the Agricultural Conference held at Pusa in February 1916 it was decided to apply for the affiliation of the College to the Punjab University. A four-year course leading to a degree of B. Sc. (Agriculture) has been drawn up, and affiliation has been granted since the close of the period under review. Provision has been made for the issue of a certificate to successful students after the first two years of the course. The result of the new departure is awaited with interest, but the fact that there have been 200 applications for admission to the course this year as compared with 38 in 1911-12, is decidedly hopeful.

The results achieved towards the close of the quinquennium are also very encouraging.

A vernacular course of seven months' duration was started in 1912. Free tuition was provided, but the cost to the students, who are all the sons of zamindars, of their maintenance charges was found to act as a deterrent. Government has, therefore, given assistance so that the out-of-pocket expenses to students shall not exceed Rs. 5, and district boards have given scholarships for this course of about Rs. 50 per annum each. It is not possible at Lyallpur to provide training for more than 30 to 35 vernacular students. All the places are filled and, indeed, there were 101 applicants for admission last year. The opening of similar classes at other centres is advocated by the Principal.

It is hoped to develop the educational utility of the college by opening a class for the training of teachers in agriculture.

Government School of Engineering, Rasul.

75. At the Government School of Engineering, Rasul, the number of students remained practically stationary during the period under review. Of the 50 candidates selected for admission at the last examination, fifteen are agriculturists, which marks an improvement on previous years, though the proportion is still low. The standard of the admission test is much the same as that of matriculation. However, the Principal states that there have been no cases of students attempting to shirk any part of their workshop course as has sometimes happened in the past, and the disinclination to do manual labour appears to be steadily disappearing. This is a hopeful sign, and the Principal's opinion is borne out by the experience in high

schools, where the introduction of manual training seems to be generally welcomed. "To further encourage students to work with their hands a piece of land was set apart as a kitchen garden and a plot was allotted to each dormitory. No outside assistance from malis was allowed and all the gardening operations were carried out by students. This proved a useful and profitable recreation, a good crop of vegetables being raised which, otherwise, would have been difficult to obtain."

Of the 43 students who passed out last year thirty-three obtained employment in the Public Works Department, two in the Military Works Department, and three in the Bahawalpur State Service.

Women's Christian Medical College, Ludhiana.

76. The Women's Christian Medical College, Ludhiana, with which is now incorporated the Punjab Medical School for Women, enlarged its scope during the quinquennium, and had 138 pupils at the beginning of this year. Of these 11 were studying for the certificate of L. P. M. S. The institution has a strong staff of lady doctors.

Industrial Education.

Mayo School of Art.

77. The last five years have been a period of great progress and development for the Mayo School of Art. For example, "The whole system of teaching drawing has been brought into line with Western methods as they are now, which, curiously enough, are much more in sympathy with Eastern traditions than the old South Kensington system of mechanical copying of meaningless forms and decorative pattern charts which had become rooted in the country for 40 years without change". The School of Art is spreading the newer methods by means of a training course for drawing teachers. This class has grown from 16 in 1912 to 76 in 1917, notwithstanding the fact that the standard of admission has been raised to the Anglo-vernacular middle pass, with a special class for Matriculates, who are being trained as drawing masters in high schools. It is satisfactory to note that the training of drawing mistresses has commenced, three having begun training and one having completed it. The course is of five years' duration, so the first batch of teachers is only just ready for employment. In the meantime, thirty-seven applications have been received from other provinces for trained masters, which shows that the need for this class of teacher is widespread. The draftsman department has been closed as a class of this character has been opened at Rasul. Proposals to convert the department into one for architects' assistants have been postponed owing to the war.

The remarks of Mr. Heath, the Principal, on the industrial department must be quoted *in extenso* :—"In the teaching of industrial arts the change has been at least as marked. In the last quinquennial period 1907-12 it may be noted that the students on the roll fell steadily from 301 to 230. This may be accounted for, I think, by the fact that, during this period and previously, the commercial conditions, *viz.*, the cost of labour and material, and the influence of Western habits had caused a marked change of taste, both Indian and European, while the training given in the School of Art had remained the same. For instance, during the last decade the demand for mural paintings and decorations, for carved architectural features in the home, and for elaborate pinjra and carved and inlaid furniture, in all of which arts the School had achieved a high reputation, has gradually died away while the demand for good cabinet work and joinery, metal work, and fibrous plaster decorations has steadily increased. On the principle that it is better to have a live art than a dead tradition and that it is the duty of a School of Art to influence and direct the change in public taste, and not to try and stop it, the courses of training in the School of Art were changed to meet the new conditions, the most suitable machinery has been introduced, new workshops built, the working day raised from six to eight hours, the pay of all the teachers increased to a fairly satisfactory minimum, and the contingent grant of the school raised from Rs. 1,700 to Rs. 6,000 to cover the cost of these improvements."

The work of some of the departments, *e.g.*, that of photography, has been recently handicapped by the cost of material during the war but. in

other respects, a high standard is maintained, especially in the department of advanced cabinet-making and joinery.

The chief need of the institution is a good hostel, the construction of which will be commenced during the current year.

In conclusion, the Principal states :—"I feel justified in saying that the work of the School of Art is better than it has ever been, and that the reputation of the School is higher and has a wider field, and that the Government may feel that the money so generously expended has been well invested and brings in a fair return in well-trained drawing masters, more skilful craftsmen, and in a wider influence upon industrial arts in the Province."

The credit for this satisfactory state of things is entirely due to the technical skill and energy of Mr. L. Heath himself, who joined the institution at the beginning of the quinquennium, and to the loyal co-operation of his staff.

Victoria Diamond Jubilee Hindu Technical Institute.

78. The Victoria Diamond Jubilee Hindu Technical Institute is an aided institution with an enrolment of 61 students. "The special feature of this institution is that it educates a number of Hindus of the high caste from all over the Province."

It is in the nature of a polytechnic containing classes for mechanical engineering, electrical engineering, motor machinery, &c. "*Ex*-students of this school generally get ready and lucrative employment. Some are working in the Government Mechanical Transport Department with the rank of Naik. Thirty students have been assisting in the manufacture of munitions in return for a bare living wage, and one without any remuneration at all."

Over Rs. 46,000 have been spent on a new building and Rs. 2,000 on new machinery during the quinquennium, but a further extension of the buildings and more complete equipment are still urgently needed.

Railway Technical School.

79. The Railway Technical School, Lahore, is a Government institution with a somewhat misleading designation, only a small percentage of the boys proceeding to the Railway Workshops, a considerable number going on to the Mayo School of Art. The attendance has fallen from 461 to 395, but this is owing to the recruitment of artisans for war work. Equipment has improved, more accommodation has been provided, and sheds for machinery have been constructed. The staff has been strengthened by the appointment of a machine instructor, an engine driver, a tin and coppersmith and a moulder. The work done, both on the general and technical sides, has been very satisfactory.

Industrial schools.

80. Scattered over the province are a number of industrial schools maintained by district boards and municipalities. The function of these schools has been variously interpreted: the Education Department which laid down the curriculum for them intended them to be schools for the general education of the sons of artisans, manual work in carpentry, tailoring &c. being added to the primary curriculum in order to assure artisans that the schools are not intended to withdraw the children from their hereditary avocations; the local authorities who maintain these schools regard them as trade schools providing technical instruction in certain handicrafts to the children of artisans and non-artisans: while the fact that no fees are required from the scholars has led many parents, not always in poor circumstances, to regard them as a means for obtaining primary education free for their children. The instructors have often been themselves of poor attainments, and it is doubtful if the practical work conducted in them has been of much use. In one school, for example (Kalabagh), where sixty one boys were learning tailoring only four were found to be the sons of tailors.

In 1915 a Standing Committee on Industrial and Technical Education was formed, and this body has formulated definite proposals for the reform of these institutions and the establishment of higher or Middle Industrial Schools of a genuine character at various centres throughout the Province.

The proposals are now under the consideration of Government and, meanwhile, any description of the existing schools seems unnecessary.

The inspection of the primary 'industrial' schools has been handed over by the Principal of the Mayo School of Art to Mr. Buchanan, the newly appointed Inspector of Manual Training.

Some industrial schools for girls are maintained by Missions, the most important being that recently opened at Clarkabad, with an average attendance of 174 pupils, who learn *kashida*, flour-grinding, *nala* and *newar*-making, sewing and spinning.

Reformatory School, Delhi.

81. The Punjab Reformatory School though situated at Delhi continues to be under the control of the Director of Public Instruction, Punjab. The question of the removal of the school has been postponed till after the war; meanwhile, no original buildings are being erected. There was a marked falling off in the number of admissions in 1916-17, and the number of boys in residence was 112 against 138 in March 1912. No explanation can be offered for this as, unfortunately, the number of juveniles admitted to jails in 1915 was the highest since 1903.

The standard of general education is that prescribed for elementary schools. Promising boys are encouraged to proceed further with their studies. The industries taught are blacksmith's work, carpentry, tailoring, weaving, cane and bamboo work, shoe-making and gardening. The work in each department is tested annually by the Principal of the Mayo School of Art. There is a steady demand for the products of these industries and each shop returns a profit. The blacksmith's shop is engaged on work for the Red Cross Society.

"Cordial relations", says the Superintendent, "exist between the boys and their teachers and instructors, and the latter supervise the boys' games and often take part in them. Music and singing are practised and dramatic performances have become an established feature and are largely attended by children from schools in Delhi. The school enjoys an annual holiday in camp in the cold weather and this is much appreciated. While in camp the daily routine is suspended and the boys are allowed to do very much as they please. Parties of boys are permitted to ramble unaccompanied by officials, and there has been no instance of betrayal of trust."

That such a state of things can exist in a Reformatory School is a sufficient testimony to the work of the Superintendent, Mr. Farmer.

Commercial education.

82. The Government Commercial School at Amritsar has not proved altogether successful and was attached at the close of the quinquennium to the Government High School at that place, where it is hoped it will enjoy a new lease of life. A certain number of commercial schools of doubtful quality have sprung up in Lahore. Good work is done by the commercial classes run by the Young Men's Christian Association at Lahore with the aid of Government grants. The whole question of the development of commercial and clerical education is at present under the consideration of Government.

General.

83. The position of technical and industrial education in the Province is well summarised by Mr. Godley in his last quinquennial report. It is, as he points out, not the work of technical education to create industries but to improve them. There is, undoubtedly, room for a great deal of expansion, but technical education is, especially at its initial stages, very costly; and any considerable extension cannot be expected till the conclusion of the war.

CHAPTER VIII.

Education of Indian Women.

Number of schools and scholars.

84. Towards the close of the period under report a good deal of attention was devoted in India to the question of female education. In the Punjab, Miss Douglas, Inspectress of Schools, Rawalpindi Division, was placed on

special duty to conduct an enquiry into the subject at different centres in the Province. More detailed mention of this enquiry will be made later; and it is only referred to here because of the opinion which Miss Douglas found to be prevalent that no great progress could be expected while female education was conducted on the present lines.

That there is insufficient justification for this opinion can be gathered from the statistics of educational progress during the last five years.

The number of institutions for girls has increased from 669 to 990, *i.e.*, by nearly 50 per cent. and the number of scholars from 33,820 to 51,496. The number of public secondary schools has risen from 34 to 57 and of scholars attending them from 4,765 to 9,502, or by nearly 100 per cent. There are now eight high schools and 49 middle schools for girls in the Province. The proportion of girls who continue their studies beyond the lower primary stage is still very low.

The following statistics for 1916-17, by divisions, may be of interest:—

	Schools.	*Scholars.*
Ambala	135	4,516
Jullundur	199	8,725
Lahore	295	19,070
Rawalpindi	210	10,175
Multan	151	9,010
Total ...	990	51,496

The secondary schools for girls are almost all situated in the Lahore and Jullundur Divisions which accounts in some measure for the larger attendance of scholars in those divisions: but there seems no sufficient reason why the attendance at the Ambala schools should be only half as large as at the almost equal number of institutions in Multan.

It must be remembered that the average attendance in comparison with the number of institutions will always be lower at girls' schools than boys' schools for two reasons—(*i*) the much shorter duration of school-life in the case of girls, who leave school at marriage, often at an early age, whereas boys marry later and continue their studies after marriage, and (*ii*) the greater irregularity with which girls attend school, parents often keeping them at home for trivial reasons, whereas fees and fines act as a deterrent to irregular attendance in the case of boys. The figures as a whole indicate a decided increase in the popularity of girls' schools. Ten years ago there were 561 schools with 21,769 scholars in attendance, so that while the number of institutions has not doubled the number of scholars in attendance has increased during ten years by nearly 150 per cent.

Attitude of the people towards female education.

85. For this increase in popularity two main reasons may be assigned—first, the growing recognition of the value of female education among the educated population of the Punjab, and second, the improved efficiency of the schools. On the changed attitude of the Indian public an interesting note by Miss Bose, Superintendent of the Victoria Girls' School, is appended. (Appendix C).

Miss Stratford, Chief Inspectress of Schools, writes:—

"Indian public opinion has slowly changed from its former attitude of positive dislike to the education of women and is now much more favourable as regards every community. The Arya Samaj, Sanatan Dharam, and Khalsa societies are making great efforts to bring education within the reach of the masses and the Anjuman-i-Islamia is also gradually establishing its own schools, though it is only recently that this necessity has been at all realized. Professional men now wish to marry their sons to educated girls who can be in a real sense companions and helpmates; therefore, education is beginning to be valued by parents as improving the marriage prospects of their daughters."

Miss Douglas in her interesting and exhaustive enquiry into this subject found a considerable body of educated, but not very well-informed, public opinion in favour of a determined effort for the expansion of female education.

The suggestions made for popularizing girls' schools usually took the form of recommendations for the improvement of the curriculum and for the increased employment of Indian ladies on the school committees and in the inspecting staff.

As regards the first suggestion the recommendations were often based on ignorance of the existing curriculum; which in primary schools consists of the three 'Rs,' together with needlework and the rudiments of geography, all that an ordinary elementary schoolmistress is likely to be able to teach. It would be merely pretentious to add optional subjects for which no competent instructors could possibly be found; and experience in boys' primary schools shows that the simpler and less varied the subjects of the curriculum the better they are taught. The middle school course, however, includes besides needlework simple domestic economy, physiology, and hygiene, while provision is made for a variety of optional subjects, such as cooking and laundry work. Mention is made in a subsequent paragraph of the quality of the instruction.

Of the desirability of enlisting the aid of Indian ladies in the cause of female education there can be no question; but Miss Douglas in her enquiry found that few of them showed sufficient interest even to meet her when asked to discuss the question, while Miss Stratford writes: "There was a general consensus of opinion that Indian ladies should be the leaders in movements for the expansion of girls' education but, unfortunately, in schools maintained by private bodies this aim is not realized and it is noticeable that ladies at present take no part in the management. There is usually a committee of men who lay down the lines on which the school is to be worked, who make financial arrangements, and who depute one or two of the members to act as manager and secretary and to supervise the teaching. The presence of men in the school makes the mistresses ill at ease and unable to do their best work as they are not able to speak freely before them. The transference of the management to the hands of Indian ladies is, therefore, essential. There are many of the wives of the members of school committees who, though they are not highly educated, yet could supervise the internal arrangements of the schools and advise as to the bringing up of the girls and as to the teaching of household management and cooking while their husbands still controlled expenditure, curricula, etc."

Meanwhile, the Department has done its best to increase the popularity of girls' schools by increasing their efficiency; not without a large measure of success.

86. This increased efficiency is due partly to the work of the inspecting staff and partly to the larger number of trained teachers employed. Inspecting staff.

In the year 1913 inspectresses were appointed to each division and the Department was fortunate in securing the services of lady graduates for these posts. Miss Stratford, as Chief Inspectress, remained in charge of the Lahore Division while at the same time exercising a general supervision over the work of the other inspectresses, and touring at intervals in different parts of the Province. On more than one occasion she has also taken charge of a second division in addition to Lahore owing to the absence of the inspectress. In addition to the divisional inspectresses there are two Indian inspectresses, both graduates in Arts and in Teaching, who are at present attached to the Lahore Division but who visit other divisions when required to do so.

There can be no question that the increased efficiency of the girls' schools in the Province and the consequent increasing popularity of female education is in a large measure due to the sympathetic and zealous work of Miss Stratford and the staff of inspectresses.

From the statement in the first paragraph of this chapter it will be seen that the number of schools in each division is already too large for a single inspecting officer to visit. A certain number of girls' schools have to be inspected by the district inspectors. This is not a satisfactory arrangement, and the appointment of a subordinate inspecting agency for girls' schools is becoming a matter of urgency. Indeed, several local bodies have not waited for Government to move in the matter; and district inspectresses are now

employed by the Boards of Gujranwala, Lyallpur, Rohtak, Ludhiana, and Gujrat, while Lady Superintendents for town schools have been appointed by the Municipal Committees of Lahore, Amritsar, Sialkot, Rawalpindi, and Jullundur.

There is, however, as yet a great difficulty in finding qualified ladies for such posts.

The exact duties of inspectresses and their relations to local bodies and to the ordinary divisional Inspecting staff have not hitherto been defined. It is for example, possible for an inspectress to visit a district in a month when the schools are usually open, only to find them closed for the vacation by orders of the district inspector acting on behalf of the board.

At the present moment the staff is reduced owing to the deputation of Miss Marshall, Inspectress of the Multan Division, to the North-West Frontier Province, and the transfer of Mrs. Gilbertson's services to the Delhi Province; leaving only three European and two Indian inspectresses. Miss Must, Headmistress of the Normal School for Women, is, however, acting in one of the vacancies.

Teaching staff.

87. The second cause for the increased efficiency of girls' schools is the increased number of trained teachers. In 1912 it was impossible to find enough candidates for the Normal School for Women at Lahore. It is now impossible to admit all the candidates who apply for admission. Too much importance can hardly be attached to the quality of the teaching staff as a factor in popularizing female education. 'In education,' says Mr. Fisher, 'almost everything depends upon the personal element.' If this is true under a system of compulsory education, it is still more true in this country where an incompetent teacher means not only inefficient teaching but an empty school.

It is, therefore, satisfactory to find that the number of trained teachers in girls' schools has increased during the quinquennium from 138 to 305.

Salaries.

88. Unfortunately, the rates of salary offered to women teachers, even when trained, are usually very poor. This is especially the case in lower primary departments, the need for highly qualified teachers in which is not recognized. 'Local and private bodies,' says Miss Stratford, 'take full advantage of the fact that a girl, particularly a Muhammadan, will rather work on a starvation wage in her own town or village than go out to an isolated school on a large salary.' Amritsar Municipality, for example, pays a local senior vernacular teacher Rs. 8 per mensem, the rate for a male teacher with similar qualifications being Rs. 20 to 30 per mensem. The question of providing proper protection for girls who take up work away from home is a serious one, and the insufficient provision made at present is a great obstacle to the progress of district schools.

Training of girls' teachers.

89. The only Government institution for training teachers for vernacular girls' schools is the Lahore Normal School for Women. This institution has two courses, one of two years' duration for girls who have passed the upper primary standard and who on successfully completing the course obtain a junior vernacular teacher's certificate, and one for students who have passed the middle standard examination of two years' duration leading to the senior vernacular certificate. Girls who join the junior vernacular class often study privately, pass the middle standard examination, and return for a third year's training for the senior vernacular certificate.

The school was moved in 1914 into a much larger house and extra appointments were made to the staff. The building is not, however, all that could be desired. The Church of England Missions opened a special hostel in connection with the institution during 1916-17 under a mission superintendent.

The Victoria Girls' School is used as a practising school, and has an excellent kindergarten under a European headmistress, where, to quote Miss Stratford "the students are able to realize what can be done with good order and discipline and to see the value of sense training and educational handwork in arousing the children's interest and making them capable and self-reliant.

The work done by the Normal school is good and the senior class especially turns out capable, keen and hardworking mistresses who take a real interest in their profession and in the children under their charge."

In addition to the Government Normal School training classes are also maintained by several aided institutions. The U. P. American Mission, Sialkot, has very good senior and junior vernacular classes and has for many years supplied mistresses for all the schools maintained by that Mission in different places. Classes are also maintained by theAmritsar Church Missionary Society, the Ambala American Presbyterian Mission, and the Sikh Kanya Maha Vidyala, Ferozepore.

In 1916 several municipalities and district boards opened training classes for the teachers of their girls' schools, which have made a most promising start. The teachers appeared for the certificate examination for the first time this year and did very satisfactorily. Considering the difficulties with which these classes had to contend great credit is due to the inspectresses and the mistresses in charge.

There seems no doubt that Government Normal Schools for Women are needed at centres outside Lahore.

Instruction

90. The improvement in the quality of the teaching staff has produced a distinct improvement in the teaching of such subjects as needle work and domestic economy. The inclusion of the former as a compulsory subject in the middle standard examination has, no doubt, had much to do with this improvement. Mrs. Ingram, the Inspectress of Jullundur, writes: "The tendency to produce little, but horrible woolwork cushion covers is gradually being checked, also the inclination to let machinery entirely take the place of handwork and on the whole the work is improving, though lack of materials and good teachers is the great drawback in any but central schools."

Of domestic economy Miss Stratford writes: "The subject is well taken up in boarding schools, cooking, cleaning, and housekeeping being taught practically. In day schools it is difficult to spare the time and space necessary for household work, but many of the aided and board schools arrange for cooking classes once a week. In the Victoria Government School, Lahore, cooking of the daily food, of preserves, etc., and of invalid dishes is regularly taught, and laundry work has been begun. The girls learn the processes of washing and boiling clothes, starching, ironing and goffering, and dyeing of dopattahs. They are able to wash and get up their own clothes to make them look delightfully fresh and neat."

Drawing has hitherto been much neglected in girls' schools, but the Normal School students take a keen interest in the subject and will be able to introduce it gradually into the girls' schools of the Province.

"Physical exercise," Miss Douglas writes, "is still a thing of the future. In the great majority of girls' schools the lack of space prevents the taking of any real exercise and, where playground and equipment have been provided, it languishes for lack of any organization of games. Teachers are very apathetic about it, parents are dubious as to the propriety of it. The elder girls always seem ashamed to be seen playing a game. The Indian child deals mostly in sedentary games accompanied by singing and, even if given a ball to play with, she will sit on the floor and be content to pat it with her hand. Singing is taught in the Arya and Khalsa Schools but no teacher has the slightest idea of voice production so aims only at a volume of sound."

During the quinquennium Mrs. Tydeman wrote a book on drill and physical exercises for girls, which, being in the vernacular and fully illustrated, will prove of great use to mistresses.

Buildings.

91. The lack of space to which Miss Douglas refers will always be a serious question with regard to girls' schools. Parents object to sending their girls outside town limits to school, and accommodation inside town walls is naturally restricted and expensive. Moreover, municipalities have not

always fulfilled their responsibilities in this matter. Amritsar, for example, received a grant from Government for a new municipal girls' school in 1913, which is still unspent. This Municipality with an attendance of over 1,500 girls at 26 schools has made no effort to house them properly. The Ludhiana Municipality, on the other hand, has shown considerable interest. In a few cases, on the erection of new buildings for boys' schools, as at Gujranwala, the old buildings have been converted into very passable schools for girls.

Boarding schools.

92. But, as stated above, the best quality of teaching is found in boarding schools. The largest of these are the Sikh Kanya Maha Vidyala at Ferozepore with 205 pupils, the Kanya Maha Vidyala at Jullundur with 167, and the American Mission Boarding schools at Sialkot (with 170 girls), Pasrur (129), and Sangla Hill (132). These Mission schools are for village Christians and the cottage plan is adopted. The plan merits description. Miss Stratford writes of it: "The girls are divided into families of twelve. The elder girls take out stores for a week and manage on them, cook, mend, wash, and look after the younger children who, in their turn, help with the lighter work, cleaning, and tidying, fetching water, and kneading the atta. It is found that, though rather more expensive owing to the extra firing, etc., these arrangements are more satisfactory; the elder girls become experienced house mothers and develop a sense of responsibility. The individuality of the little children is not crushed and the whole system gives valuable scope for character training and lightens the work of superintendence. In Sangla Hill where the building consists of semi-detached cottage homes, with an open air sleeping room, enclosed courtyard, kitchen and a verandah for a play room, the girls are particularly comfortable."

The C. M. S. School, Amritsar, and the Islamia Orphanage are also well-managed boarding schools.

The majority of aided schools possess good buildings or suitable rented rooms, for example the American Avalon High School, Pathankot, and the Alexandra High School, Amritsar. In fact schools under private management are generally much better off in this matter than Board schools. The latter, when they have buildings of their own, have frequently outgrown them.

District Board Schools.

93. In 1912 local bodies were asked to take up the matter of girls' school buildings and help was offered from Provincial revenues towards their construction. A certain number of good schools were erected during the next two years, but activity has ceased since the beginning of the war.

Most of the district boards are very backward in this matter. In the Jullundur District not a single school has a building of its own. In Jhelum and Attock writes the Inspectress "many schools have no roofed accommodation at all, the classes having to sit in open courtyards exposed to glare and to wind and rain where there is no privacy and where they suffer from pests of flies and mosquitoes." The Ambala Inspectress says: "The board schools are generally held in rented houses which are mostly incommodious and unsuitable. In some places where schools have been erected very little thought has been given to the selection of sites and the schools are situated in quarters where the people are not very willing to send their girls."

Victoria Girls' School.

94. Of day schools the Victoria School, Lahore, has a very fine building, and a nice garden has been laid out on an adjacent piece of waste land owing to the generosity of Lala Narsingh Das of the Punjab Bank.

The Victoria School was taken over by Government in 1914, and is now a highly efficient institution under the superintendentship of Miss Bose, and the headmistress-ship of Miss Hart, a qualified Kindergarten mistress, a note by whom will be found as an appendix D to this report.

The school teaches up to the Matriculation standard of the Punjab University, and is the only Government High School in the Province, if Queen Mary's College, which is of a special character, be excepted.

Secondary education.

95. There is a distinct demand for English education in towns and the number of pupils who reach the high stage has more than doubled during the quinquennium. The teaching of the subject is usually on old-fashioned lines owing to the dearth of qualified English teachers. For vernacular subjects however secondary schools generally manage to obtain a certain proportion of trained teachers, and the quality of teaching has very much improved, though too much stress is still laid on pure memory work.

The curriculum is of an elastic nature, including a number of optional practical subjects, and allowing for alternative schemes of study subject to the approval of the Department. In this matter secondary schools for girls are distinctly in advance of those for boys. A detailed account of some of the principal secondary schools was given in the last quinquennial report for 1907—12.

Collegiate education.

96. The only collegiate classes for girls recognised by the Punjab University at present are those attached to the Kinnaird High School. It is proposed to remove these classes to a separate building and thus to constitute regular College. Owing to the war plans incurring large expenditure have had to be postponed. The College also prepares for the Junior Anglo-vernacular Teachers' Certificate examination. A few girls read in Christian colleges such as the Forman Christian College, Lahore, and the Gordon College, Rawalpindi. Two candidates were successful in the B.A. examination this year, 8 in the F. A. and 34 at Matriculation. A small but increasing number of girls attend the S. A.-V. and B. T. classes of the Central Training College.

Queen Mary's College.

97. Queen Mary's College also prepares students privately for the F. A. examination. This institution, which is intended for the education of girls of good family, is described in the last quinquennial report. There have been several changes in the staff, Miss Edgley, the Principal, having been succeeded by Miss Crick, who in turn was succeeded by Miss Z. Walford, the present Principal, in 1916. The building was completed during the quinquennium, is beautifully designed, and excellently equipped. The staff is a strong one, and the College, which has been fortunate enough to retain the honorary services of Miss Western, is doing most successful work. Attached to it but in a separate building is a preparatory school for small boys, who are intending to proceed to the Aitchison College. This institution is of some three years' standing and has made a promising start.

General.

98. From the preceding report it will be seen that the time is rapidly approaching when female education can no longer be treated as an interesting off-shoot of the general educational system. Discarded boys' schools, out-of-date equipment and superannuated board-school masters will no longer suffice for the needs of girls' schools. Already the want of a stronger inspecting agency and of more normal schools is widely felt. The purdah system in the case of Muhammadans and early marriage in the case of Hindus are serious obstacles in the way of efficient organisation but so long as Inspectresses, Christian Missions, the Arya Samaj, the Khalsa Diwan, the Dev Samaj and other pioneers in the educational movement continue to regard difficulties not as excuses for inertia but as incentives to exertion even these obstacles will not prove insuperable. Given funds, the possibilities for organisation and development appear as great as in the early days of boys' education in this Province.

CHAPTER IX.

Education of Europeans.

Number of schools and scholars.

99. The number of public schools in the Province at the close of the quinquennium was 34, an increase of one over the figures for 1911-12 and the number of scholars attending them increased by 351 to 2,890. Of these fourteen were high schools, thirteen middle schools and seven primary schools.

Of these again eight are exclusively for boys and seventeen for girls. The remaining nine are mostly small station schools in which the proportion of either sex fluctuates annually. In the case of 'girls' schools' however a certain number of small boys are usually admitted to the junior classes.

The policy advocated in the last quinquennial report of confining secondary education to the hill boarding-schools and of providing primary schools only in plains stations, other than Lahore, has not proved feasible in actual practice, much though it is desirable from an educational point of view. Parents with large families cannot afford to send their older children to boarding-schools, and it is difficult to avoid the growth of small middle departments.

When it is stated that of the 2,890 children in school, over twelve hundred are in attendance at the six largest institutions, and that eighteen hundred are in the primary stage, it will be seen that the twenty-one remaining secondary departments cater for only some five hundred pupils. When it is further stated that there are three classes in the middle department and two in the high, it will be realised that the number of pupils in each secondary class in a school is usually very small. In fact the Lawrence School, Ghora Gali, is the only boys' school in which the two classes of the High department are not combined under one teacher. In most schools such combinations of classes are found both in the High and Middle departments. This system is not only uneconomic, but is of course prejudicial to the quality of the teaching, which is generally of a higher standard in the larger boarding schools. The multiplication of small secondary schools has been in a measure due to denominational rivalry, a feature of education of all kinds and in all countries.

Management.

100. Of the thirty-four public schools four are directly managed by Government, *i.e*, the girls' and boys' schools at Sanawar and Ghora Gali, one (the Bishop Cotton School) indirectly, while the remaining twenty-nine are aided institutions under private management, fourteen of the Church of England, ten of the Roman Catholic Church, and five of the railway authorities.

In furtherance of the policy of concentration the Lahore Orphanages were amalgamated with the Cathedral Boys' and Girls' High Schools in 1912.

There has been no other change in the management or of any school during the quinquennium, except for the provincialisation of the Lawrence School, Ghora Gali, in the year 1913-14. This event, which will be dealt with in a later paragraph, may be said to be the only outstanding feature in the history of European education, during an otherwise uneventful quinquennium.

Expenditure.

101. But if the quinquennium has been uneventful it has not therefore been unprogressive. Expenditure on European Education has in creased by nearly two-and-a-half lakhs from Rs. 8,14,640 to Rs. 10,77,303.

The major portion of this increase has been borne by Imperial and Provincial revenues (Rs. 81,465 and Rs. 1,26,222) though fees have increased by over half a lakh.

The increase in expenditure from public revenues has been mainly due to the revision in 1912 of the method of assessing staff grants (*i.e.*, grants towards the salaries of certificated teachers) which are now assessed at half in place of one-third of the amounts of the salaries. Subsistence allowances of Rs. 10 per mensem were also sanctioned for unsalaried teachers; and a provident fund for teachers was established of which fuller mention will be made.

On the whole the financial position of the aided schools is sound. In two cases a falling off in income had been due to the war. This is noticeably the case with the Bishop Cotton School, where the loss of members of the European staff and the impossibility of replacing them during war time, has reacted on the popularity of the school with a consequent serious diminution in fee income.

Arrears of fees also play a serious part in its financial position; and a similar problem, though in a much less acute degree, is found in many European schools.

Buildings.

102. Apart from maintenance grants sums amounting in all to Rs. 1,71,982 were given to aided schools for building purposes. With the help of these sums sixteen or seventeen school buildings have been rebuilt, enlarged or otherwise improved. Electric light has been provided to the schools in Simla and Lahore, and fans also in the latter place.

Accommodation for science, handwork and domestic economy is badly needed in a number of schools.

These are also the subjects for which equipment is most needed. In other respects the schools are very passably equipped and a good deal of money has been spent on furniture and appliances during the last five years.

Boarding arrangements.

103. There still remains much to be done to make the boarding arrangements more modern. Many of the school-buildings were originally designed as dwelling-houses, and of those which were specially built for schools, very few are of recent date. The arrangements for washing for example are often very primitive; and it is disappointing to find that even in so new a building as the Boys' School, Ghora Gali, which was only completed this year, little thought was expended on the bath rooms and lavatories. Proper arrangements for hot water are practically unknown, and the general practice of a weekly or bi-weekly bath cannot be said to lead to the formation of healthy habits for children who will spend most of their lives in the plains of India.

Among other details which seem generally wanting are proper storage rooms for boxes and furniture and covered ways connecting kitchens with dining rooms. The latter seem obvious necessities in hill climates during monsoon weather when large quantities of hot food have to be brought across for meals; yet they are not features of the most recently constructed buildings. Another necessity in a wet climate is laundry drying rooms, but these are not found in any school.

Instruction.

104. There is a good deal of unreality in teaching domestic economy, *e.g.*, cooking and washing, to children who are brought up in school to rely on Indian servants for all practical housework. And it is not surprising to find that this subject is generally taught as a book subject with no practical value, exceptions being the Auckland House School, and Mayo Orphanage at Simla. The Lawrence Military Asylum, of which special mention is made later, is also an exception to the above remarks.

In fact the general education given in European Schools is not of a modern type; and bears little relation either to the homes from which the children come or to the lives which they are likely to lead. To quote from Mr. Sanderson's report: "Only one boys' school in the province teaches science and it is ill-equipped. Two boys' schools or perhaps three may be said to do fair work in manual instruction. The main syllabus is the same for boys and girls. Consequently in girls' schools the tendency is to give attention to subjects such as mathematics, which are of little use to girls; while domestic economy, needlework, physiology and hygiene are generally speaking very badly taught I am afraid often so badly as to be useless from a practical point of view. The study of Urdu is still unpopular and Indian History is poorly taught."

A system of education in which science is completely neglected is hardly suitable for the twentieth century; while a good knowledge of Indian History and ability to read and write Urdu fluently would appear to be of the first importance to children who will presumably make their homes in this country.

The neglect of science and housewifery is due to the dearth of teachers qualified to teach these subjects. The former defect will be remedied by the reorganisation of the Government Training Class, Sanawar, to which a reference is made in Chapter VI. The second can be remedied by the introduction of practical training in domestic economy at St. Bede's College (see Chapter VI). The students of this institution also need practice in the organisation of games.

At present games seem to be entirely neglected in most girls' schools. There is of course a great difficulty in providing playgrounds in hill stations, but this difficulty should not prove insuperable if the managers or teachers showed more interest in the matter.

In many respects the quality of the teaching has considerably improved. This is particularly the case with regard to the teaching of English; the improvement being probably attributable to the new syllabus which was drawn up in 1914 and to the increased attention given to general reading, though such reading might be still more encouraged.

In arithmetic the examiners report that the work of certain boys' schools is very good and that harder papers could easily be set but for the fact that a wholesale failure of girls would follow. This, incidentally, adds another argument for some differentiation between the curricula of boys' and girls' schools.

The examiner in geography reports a distinct improvement in that subject.

Teachers.

105. The improvement in the teaching is chiefly due to the improvement in the quality of the staff. The number of teachers has increased by only 9 from 200 to 209, but the number of trained teachers has increased from 100 to 127. The figures would have been better, but that the war has claimed a number of good masters, whose places have been largely filled by women. In one or two boys' schools mistresses are employed for reasons of economy. This is undesirable, as they cannot take the place of young men outside the class room.

A teachers' provident fund was established in 1913. Teachers contribute 6¼ per cent. of their salary, the school adds 3⅛ per cent. and Government adds a like sum. The fund is open only to teachers of aided schools and has proved very popular. Already two-thirds of the teachers eligible have joined the fund.

Examinations.

106. A centre for the Cambridge local examinations was constituted in Simla in 1913 and a second in Lahore in 1915. In 1916 the number of European candidates for these examinations was—Cambridge Senior 26, Cambridge Junior 31, Cambridge Preliminary 20, of whom 11, 18 and 10, respectively, were successful.

The immediate effect of he introduction of these examinations has been in some cases a deterioration of school work, since schools were not organised or staffed to deal with two different sets of examinations.

The examinations are certainly not specifically suitable for European Schools in India. One obvious defect, for example, is the inevitable omission of all reference to Indian coinage, weights and measures. At the same time there is a need for an examination for European Schools which will carry a wider significance than the purely departmental examinations of the Punjab. The connection of many of the children who attend the Punjab hill schools with the Province is slight; and the fact that an all-India Code for European Schools was compiled by the Government of India shows that the Indian rather than provincial character of European education is recognised.

A centre for the London Chamber of Commerce examinations was established at Lahore under the control of the Inspector of European Schools in 1913; but the great majority of the candidates were not Europeans.

The past five years have been marked by exceptional developments in the Government schools at Sanawar and Ghora Gali; and some more detailed mention of these is desirable. These two great institutions, says the Inspector, are educational in the broadest sense of the term; hard work, self-help and patriotism form no small part of the ideals that guide their influence.

Lawrence Military Asylum, Sanawar.

107. The Rev. A. H. Hildesley retired from the Principalship of Lawrence Military Asylum, Sanawar, in 1912 and was succeeded by the Rev. G. D. Barne. Mr. Hildesley had been Principal for twenty-eight years and the impress of his character on the work of the school will be indelible. Of some features of his

work Mr. Barne writes : "One of the most valuable characteristics which Sanawar possesses is due largely to Mr. Hildesley—the characteristic of self-help and a sturdy independence, the absence of which is noticeable in many European Schools in India. True to the ideal of the founder, my predecessor had impressed in no uncertain way on the Sanawar boys and girls who passed through his hands, that far from being derogatory to character, work, often of a kind assumed to be menial in India, was something uplifting and worthy and a thing altogether to be proud of. The Sanawar handed over to me was Sanawar proud of the fact that it lived its life and carried on its work with the smallest Indian establishment possible ; that boys and girls alike carried out their own domestic work in the kitchen or the dining-room or the dormitory.

" Another characteristic firmly established when I came was the extraordinary loyalty to and pride in their school shown by Sanawar boys and girls. To everyone of them Sanawar was the first school in India. There is a connection and a tradition which takes Sanawar back to its foundation in what may be rightly called the heroic days of Indian history, as far as British administration is concerned. Mr. Hildesley had done much to foster this love for past glories and to establish and maintain that legitimate sense of pride, in the best meaning of the word, which is the characteristic of every great school."

At the same time there was much to be done when Mr. Barne took over the Principalship, to bring the institution abreast of the times ; and the institution was fortunate in finding in its new Principal a man who possessed not only a broad and comprehensive view of the improvements needed, but the zeal and driving force necessary to bring them into effect. It would be impossible in the limits of this chapter to enumerate all that Mr. Barne has done for Sanawar, but some of the principal developments are given below.

A great deal of building work has been completed, amongst which may be mentioned—(*a*) an increase of accommodation for the teaching staff, and new lines for the servants and coolies ; (*b*) a considerable enlargement of the hospital, including nurses' quarters, a new infectious ward, and two new single wards ; (*c*) improvements in the dormitories, including clerestory windows, flooring, and better washing arrangements for the girls ; (*d*) a new girls' playground. Much remains to be done in the matter of construction, when funds are available at the end of the war.

A great deal of new equipment has been bought both for the schools and the boarding houses, and improvements in the bedding and the clothing of the children have been made.

The salaries of the staff have been completely revised, including those of the Indian employés.

The games of the boys have been completely reorganised and new zest infused into them. The house-system has been introduced for this purpose with great success.

Girls' games have been organised for the first time and are well established in popularity.

The public school system of prefects has been introduced both in the boys' and (with modifications) in the girls' departments. This is a new but most successful experiment.

Greater power has been delegated to the Headmaster, Mr. Gaskell, and Headmistress, Miss Parker who have rendered long and exceptional services to the institution.

The improved arrangements at the hospital have made it possible to give four or five girls every year an elementary training in sick nursing. Girls are sent every year to hospitals in India to complete their training, and five have even been sent home to the Marylebone Infirmary. Two or three girls

have passed out and gone into the Army Nursing Service. To conclude in the words of Mr. Sanderson : "The boys' school staff has been seriously weakened by the claims of the army, but the efficiency maintained with a depleted staff is evidence of enthusiasm and ability at the head of affairs. The girls' school and preparatory department rank with the best in the Punjab and impress me very favourably whenever I visit them. I see no danger of Sanawar children becoming declassés, life in the Asylum is sufficiently Spartan and all the wards do their share of menial work. In no other school do I find the same sense of the vast importance of the war and of responsibility to the Empire."

The control of the Lawrence Military Asylum is at present divided indefinitely between the Army Department of the Government of India and the Local Government of the Punjab. This anomalous arrangement is most unsatisfactory and the question of revising it has been referred to the Government of India.

Lawrence School, Ghora Gali.

108. The development of the Lawrence School, Ghora Gali, during recent years has been remarkable. Some mention of this is made in the last quinquennial review as it did in fact commence with the arrival of the present Principal, the Rev. H. T. Wightwick, in 1910; but the majority of the improvements, including its provincialisation in 1914 (it was formerly run by a committee of management), took place in the quinquennium under review. It will therefore not be out of place to quote Mr. Sanderson's general contrast of its former and present conditions.

"When Mr. Wightwick took over charge two years before the close of the previous quinquennium, the school was almost bankrupt, the buildings were in a bad state of repair, the staff was poor, organisation was at a very low level. Equipment was bad and bedding and clothing in a disgraceful state; some of the girls were wanting in underclothing to the verge of indecency. The Inspector of European Schools thought that the best thing to do would be to close the school.

"In 1915-16 the boys' school was the best taught school in the Punjab, the girls' school was improving considerably and the preparatory department was doing well. "The organisation was excellent, the children were well fed and clothed, and, as far as I could judge, happy and very proud of their school."

There are now 354 pupils in the school as compared with 205 five years ago and 77 when Mr. Wightwick took over charge.

The fee income of the school has increased during the past five years from Rs. 26,451 to Rs. 72,915.

The new boys' school containing classrooms on the ground floor and boarding accommodation on the upper floor was completed and occupied in February of this year. It is an imposing building 300 feet long, accommodating 204 boys. The old boys' school was handed over to the girls and the girls' school converted into a separate junior department for small boys and girls. A new playground was opened in 1912 and a house for the Principal completed in 1914.

Altogether four-and-a-half lakhs were spent on the buildings; but a good deal more will be required before the accommodation, especially in the hospital and the girls' and junior departments, is really satisfactory.

The credit for the remarkable popularity of this school is due almost entirely to Mr. Wightwick; but mention must also be made of the good work of the Headmaster of the Boys' School, Mr. E. Walker, an *ex*-student of the Sanawar Training class.

Inspection.

109. Mr. Sanderson, who was previously in charge of this class, took over the post of Inspector of European Schools two years ago; and he has thrown himself into the work of introducing new ideas and more reality into the teaching with characteristic energy.

CHAPTER X.

Education of Special Classes.

(i) *Muhammadan Education.*

110. The total male population of the Punjab was at the last census just under eleven millions: of these some six millions were Muhammadans. The percentages of the total male population who are attending school are as follows:—

Hindus 4·4, Sikhs 4·3, Muhammadans 2·4 as compared with 3·6, 3 and 1·8 in the year 1911-12.

The actual numbers in each type of institution are shown in the following table:—

	Muhammadans.		Hindus.		Sikhs.	
	1911-12.	1916-17.	1911-12.	1916-17.	1911-12.	1916-17.
Arts Colleges	569	888	1,690	2,775	317	512
Other Colleges	303	320	422	578	94	189
Secondary Schools { Anglo-vernacular ...	24,725	25,916	36,062	42,946	8,233	11,931
Secondary Schools { Vernacular ...	8,054	10,966	11,441	13,614	2,543	3,690
Technical and Industrial Schools ...	1,048	1,619	412	872	282	268
Primary Schools	77,047	105,135	75,050	102,554	24,661	34,171
Total ...	111,746	144,844	125,077	163,339	36,130	50,761

From the point of view of Muhammadan education these figures are depressing. They show that when compared with other communities so far from having gained ground during the quinquennium the Muhammadans have lost it.

The Hindus and Sikhs together attending primary schools exceed the Muhammadans by 31,590. The excess five years ago was 22,664.

Muhammadans now constitute 42·9 per cent. of the total attendance at primary schools, Hindus and Sikhs 55·8 per cent. If, however, private schools are added, the statistics of which are unreliable, the percentage of Muhammadans rises to 45·3.

In secondary schools the case is still worse. Excluding the figures for vernacular schools the percentage of increase since 1911-12 has been Muhammadans 4·8 per cent., Hindus 19 per cent., Sikhs 44·9 per cent.

Finally the figures for Arts Colleges show that while Muhammadans attending these institutions have increased by 56 per cent., Hindus and Sikhs have increased by 63·7 per cent.

In the Medical College the number of Muhammadan students has remained stationary, but the proportion when compared with the number of students belonging to other communities has declined from 14·7 per cent. to 9·5 per cent. This is the more to be regretted since, as remarked in the review on last year's report, "the paucity of Muhammadans in the Medical Department is very marked and Government has recently had practical difficulty in finding Muhammadan Assistant Surgeons for posts on the frontier of the empire which can be more suitably filled by Muhammadans than by members of other communities." In the Law College also the proportion has gone down from 25·6 per cent. to 13·5.

On the other hand the Muhammadan element has almost trebled in the Agricultural College, Lyallpur, and Muhammadans form the bulk of the

students in the Veterinary College, the Mayo School of Art, and the various Industrial Schools in the Province; while in training institutions and the School of Engineering, Rasul, they form about one-third of the total of the three communities.

Examinations.

111. If we turn to examination results as a criterion of the stages of instruction reached by Muhammadans, we find that in the year 1917—

Out of	43	candidates	passing	the	M.A.	Examination	7 were Muhammadans.
„ „	14	„	„	„	M.Sc.	„	8 „ „
„ „	524	„	„	„	B.A.	„	85 „ „
„ „	31	„	„	„	B.Sc.	„	2 „ „
„ „	69	„	„	„	B.L.	„	9 „ „
„ „	16	„	„	„	M.B.	„	1 was Muhammadan.
„ „	40	„	„	„	B.T.	„	13 were Muhammadans.

So that out of 737 candidates taking degree examinations only 120 were Muhammadans.

The proportion is higher when school examinations are considered but is still very low. Of 3,526 boys who passed Matriculation last year only 849 were Muhammadans. Even of the 2,109 successful candidates at the final examination for vernacular middle schools, which, being situated entirely in rural areas, one would expect to be chiefly attended by Muhammadans, only 723 or about one-third belonged to this community.

Reasons for the educational backwardness of Muhammadans.

112. (*a*) So far as primary education is concerned the reasons for the comparative backwardness of Muhammadans are not difficult to discover.

Apart from the old time prejudice of Muhammadans against secular education, being in the main agriculturists, they suffer from the natural conservativeness of their class. Moreover the rural population has fewer facilities for education than the town population; this is especially the case in the western parts of the Punjab where villages are small and scattered.

The following figures for the Rawalpindi Division, where Muhammadans form 87·2 of the total population, are instructive:—

Primary School attendance.

Percentage of Muhammadans in school to Muhammadan school-going population ...										7·7.
„	„	Hindus	„	„	„	Hindu	„	„	„	... 32.
„	„	Sikhs	„	„	„	Sikh	„	„	„	... 21.

(*b*) The usual reason given for the small percentage of Muhammadans attending secondary schools is poverty. This is undoubtedly one of the chief reasons: for it must be remembered that apart from the actual fees and cost of school books, the country parent has usually no secondary school in the vicinity of his home and has to send his son as a boarder to the nearest town.

A second fact which is not noticed in Inspector's reports, but which has a very important bearing on the question, is the handicap from which the country-dweller suffers as compared with the town-dweller in the matter of English education, a point to which I have referred in the chapter on secondary education. The average age of a country pupil at his completion of the primary school course appears to be about 12½. If he is then sent to an Anglo vernacular school, he has to spend a year in the junior special class learning English before he can embark on the ordinary five-year course of the secondary department leading to Matriculation. There is no hope therefore of his being able to appear at the Matriculation examination at the age of 16 or 17 as so many town boys do.

The poverty of the agriculturist is consequently further taxed by having (1) to send his boy to a boarding school for his higher education, (2) to keep him at school longer than he would were he a town-dweller.

Certain steps have been taken to equalise matters, namely (*i*) the remission of fees in vernacular primary schools to agriculturists, (*ii*) the institution of special scholarships for Muhammadans, (*iii*) the provision of a considerable number of free and half-free studentships to poor pupils in Anglo-vernacular schools. None of these steps, however, which have been in existence for a number of years, have effected any appreciable rise in the proportion of Muhammadans attending secondary schools.

There appear to be three measures which would have more effect than these scholarships and fee concessions :—

(*i*) The bringing of facilities for secondary education nearer to the homes of the agricultural population. At present it is usual for the founders of privately managed High schools to multiply institutions in district headquarters and large towns. The same number of institutions if more widely scattered over the province would serve the needs of a much larger section of the population. There are obvious advantages to the managers and staffs in having their schools at headquarters, but a more far-sighted liberality would subordinate these considerations to the interests of the district as a whole.

District Boards cannot afford to maintain a large number of Anglo-vernacular schools, but the provision of additional vernacular middle schools to which as in the Jullundur Division English classes are attached, might do much towards equalising the chances of the rural and the town boy.

(*ii*) Some reorganisation of the educational system which would obviate the necessity for the wasted year of school life in the junior special class.

(*iii*) To overcome the conservative prejudices of the Muhammadan population no step but the increase of the Muhammadan element in the teaching and inspecting staff in rural districts suggests itself. When one finds that in the Multan Division, which is chiefly populated by Muhammadans, out of 1,403 teachers working in Government and Board schools barely half are Muhammadans, one can see that in this direction there is a good deal of leeway to be made up. The dearth of Muhammadans in inspecting posts is due to the dearth of qualified applicants from this community and the figures given in paragraph 111 of this chapter for examinations are not encouraging signs for the immediate future. The department has made constant efforts in the past to increase the representation of this community, but against the counter-attractions offered by other branches of Government service the success achieved hitherto has not been remarkable.

(*c*) In view of the small proportion of Muhammadans who pass the Matriculation examination, and their comparatively greater age before they complete their school studies, no particular explanation is needed of the small percentage of Muhammadans who take a collegiate course.

113. There is one factor in Muhammadan secondary education which gives cause for hope ; and that is the steady increase in the number of Islamic institutions. The liberality of the Muhammadan gentry in subscribing towards the education of their community has been noteworthy ; and the increasing number of Islamia High schools throughout the Province may do much to popularise secondary education among the more conservative members of the community. Islamic institutions.

Chief among these communal institutions is the Islamia College, Lahore. Towards this institution the Government of India gave in 1913 a special recurring grant of Rs. 30,000 a year for three years, which has since been renewed. With the aid of this grant the staff has been reorganised, and under the management of a capable European Principal, the institution has made great strides during the last few years. It now numbers over five hundred students, and additional hostel accommodation is being provided.

The number of aided Islamia High Schools in the Multan Division alone increased from one to five and of Islamia hostels from one to seven. Of the Islamia High Schools in the Lahore Division the Inspector writes :—" The

Islamia High School, No. 1, Lahore, well-managed and well taught, is one of the best schools in the division, although some of its classes are still overcrowded. No. 2 has been provided with a new building outside the Bhati Gate during the quinquennium. The Amritsar school is well-managed and well taught though its staff requires to be strengthened. The Sialkot Islamia, raised to the High standard during the quinquennium, is being provided with a good building, which is approaching completion, and is fairly well equipped; the staff needs strengthening. The Gujranwala Islamia, also raised to the High standard during the period under report, has now got an enlarged building; equipment and staff still require improvement."

I should like to suggest to the Muslim community that the provision of scholarships to enable poor but able Muhammadan boys who reside in country districts to attend Anglo-vernacular schools offers an unlimited field for private generosity.

(ii) Jains.

114. Out of 152,646 non-Brahman Hindus in public institutions, there were 1,648 Jain pupils, *viz.*, 33 in Colleges, 698 in Secondary, 896 in Primary and 21 in Special Schools.

(iii) Education of the Upper Classes.

115. The Aitchison College, Lahore, has had a very successful five years. The number of students has reached 115 and latterly the demand for admission has exceeded the accommodation available both in the boarding-houses and in the classrooms.

Large additions to and improvements in the buildings have been effected, representing a total expenditure of Rs. 1,01,000 to which old boys, parents and ruling chiefs made a substantial contribution. The staff has been further strengthened. The Principal reports :—

"Considerable advance has been made in the teaching of Science Geography and Mathematics. The Inspectors deputed to visit the institution record, 'we were most favourably impressed by the atmosphere of the place.'"

As many as 17 old boys (including the Hon'ble Captain Sir Malik Umar Hayat Khan, K.C.I.E., M.V.O., Lieutenant Malik Mumtaz Khan and Lieutenant Muhammad Akbar Khan) are or have been on active service at the various theatres of war. A system of regular monthly subscriptions to war funds has been initiated.

Certain leading gentlemen in the Province have set on foot the project of a better-class secondary school in the hills on the lines of the Hastings House, Calcutta. The scheme has not yet been fully developed and in any event the difficulties in the way of recruiting a suitable staff at the present time make its inception before the close of the war improbable.

(iv) Education of Low Castes and Criminal Tribes.

116. The movement for the education of low caste children is apparently gaining strength chiefly through the exertions of Christian Missions and the Arya Samaj. A beginning has also been made by some of the local bodies. The prejudices of the higher castes against association with low castes, though not yet extinct, appear to be dying out. The Ambala Division reports 30 special schools attended by 703 pupils of which 14 schools are maintained by Christian Missions and 9 by the Arya Samaj. Municipal Committees in the Rohtak District have opened 3 schools. In the Jullundur Division local bodies in the Ferozepore District opened four schools, but they have not proved a success. The Lahore Inspector reports 13 schools attended by 292 pupils—137 'purified' Arya Meghs and 106 low-caste Christian converts. The Multan Inspector notes: "More than a dozen Mission elementary schools in the Lyallpur and Montgomery Districts are chiefly attended by children of low-caste Christian converts." In the Rawalpindi Division one low-caste school attended by 27 Megh boys has been opened since 1911-12. The result of the efforts made for the reclamation of criminal tribes through education may be summarised—94 Minas, a criminal tribe in the Gurgaon District, receive instruction, special grant for their education from Provincial Revenues has been

continued. The Ludhiana District Board has opened two schools at Kiri and Badalwala for the Harnis, a criminal tribe. These are attended by 77 children. Mr. Crosse reports "Four special schools have been started by the Sialkot District Board for the education of criminal tribes, one of which is managed by the Salvation Army. Ninety-one pupils of these tribes are under instruction."

CHAPTER XI.

MISCELLANEOUS.

The Punjab Text-book Committee.

117. A full description of the constitution and activities of the Text-book Committee is given in the quinquennial report of 1907-12.

No alteration in the constitution has taken place during the last five years. The office of Secretary has been taken over by Mr. E. Tydeman of the Central Model School, and there have naturally been a certain number of alterations in the personnel of the General Committee and the different sub-committees. The Text-book Committee is composed at present of seven Europeans, eight Hindus, six Muhammadans, and three Sikhs under the Presidency of the Director of Public Instruction. Among the members are one Judge of the Chief Court and one member of the Punjab Legislative Council.

Membership of the Punjab Text-book Committee is by no means a sinecure and it is a matter for no small congratulation that so many men of high standing and of many engagements find time to attend its meetings and to take a part in its labours. It is due no doubt to the character and quality of its members that complaints against the decisions of the Text-book Committee are very rare, and the Education Department finds itself in the enviable position of being able to trust to its verdict in the matter of text-books.

Since the question of the prescription of text-books has been the cause of some discussion in other provinces it may not be out of place to describe shortly the procedure taken with regard to a book forwarded to the Punjab Education Department by the publishers for approval.

The book is received by the Reporter on Books, an officer of the Provincial Educational Service, usually selected for literary attainments. By him it is put up to the Director, who, unless the book is clearly useless for Punjab schools (*e.g.*, a Greek Grammar), forwards it to the Secretary of the Text-book Committee for criticism. By him it is sent to one or more (usually two, sometimes four) reviewers for report. These reviewers vary from Professors of Colleges, Inspectors or Inspectresses of Schools, to Headmasters of High Schools. They are as a rule not members of the Text-book Committee. The reports received from the reviewers, together with a copy of the book, are laid before the next meeting of the sub-committee which deals with this particular type of publication. There are eight such sub-committees (for Urdu, History and Geography, Arabic and Persian, etc.). The sub-committee then formulates its recommendations as to the use, if any, that can be made of the work, *e.g.*, as a library-book or alternative text-book. The recommendation of the sub-committee, together with a copy of the work in question, is then submitted to the next General Meeting of the Text-book Committee which records its final verdict on the work. This verdict is transmitted to the Director of Public Instruction, who, if the work is recommended for adoption, includes it in his next book circular.

It may be confidently asserted that there is very little chance for a work of any merit receiving unfair treatment under this system.

If a work is adjudged to be of exceptional interest copies of it are purchased by the Text-book Committee for distribution to schools.

One of the chief aims of the committee is to safeguard the interests of pupils and the purchase price of every book is carefully compared with the market rates for similar publications; and authors are frequently informed that approval of their works is conditional on the reduction of the price to one estimated as reasonable.

Meetings of the sub-committees are held at frequent intervals and of the general committee at least once a month during the cold weather, so that the work is always up to date.

The whole of this work including that of the reviewers is done gratuitously and the Department is under a great obligation to the gentlemen who so kindly undertake it.

Students' Advisory Committee.

118 The Secretary of the Students' Advisory Committee, K. Dalip Singh' reports that the war in Europe has undoubtedly been an obstacle in the way of students desiring to proceed to England but that the number of enquiries has increased, and reached 608 in the last year, of whom 105 were interviewed. A large number of enquiries were in connection with the Cambridge Local examinations. From the number of candidates who appeared at these examinations last year it may be inferred that a mistaken idea was prevalent that this examination was an easier substitute for matriculation. Very few candidates were successful.

Educational Conferences.

119. Two Educational Conferences were held during the quinquennium. The first which met in April 1912 was attended by 38 gentlemen. This conference recommended the shortening of hours in rural primary schools, a measure which has since been brought into effect. It also considered the rates of pay of primary school teachers, which, with the assistance of the Imperial grants, have subsequently been considerably enhanced. The conference recommended the appointment of medical inspectors of schools, a step which was taken by Government in 1915. It also made several recommendations with regard to the Educational Code, the superintendence of hostels, and the teaching of science in schools, the majority of which have been adopted by the department.

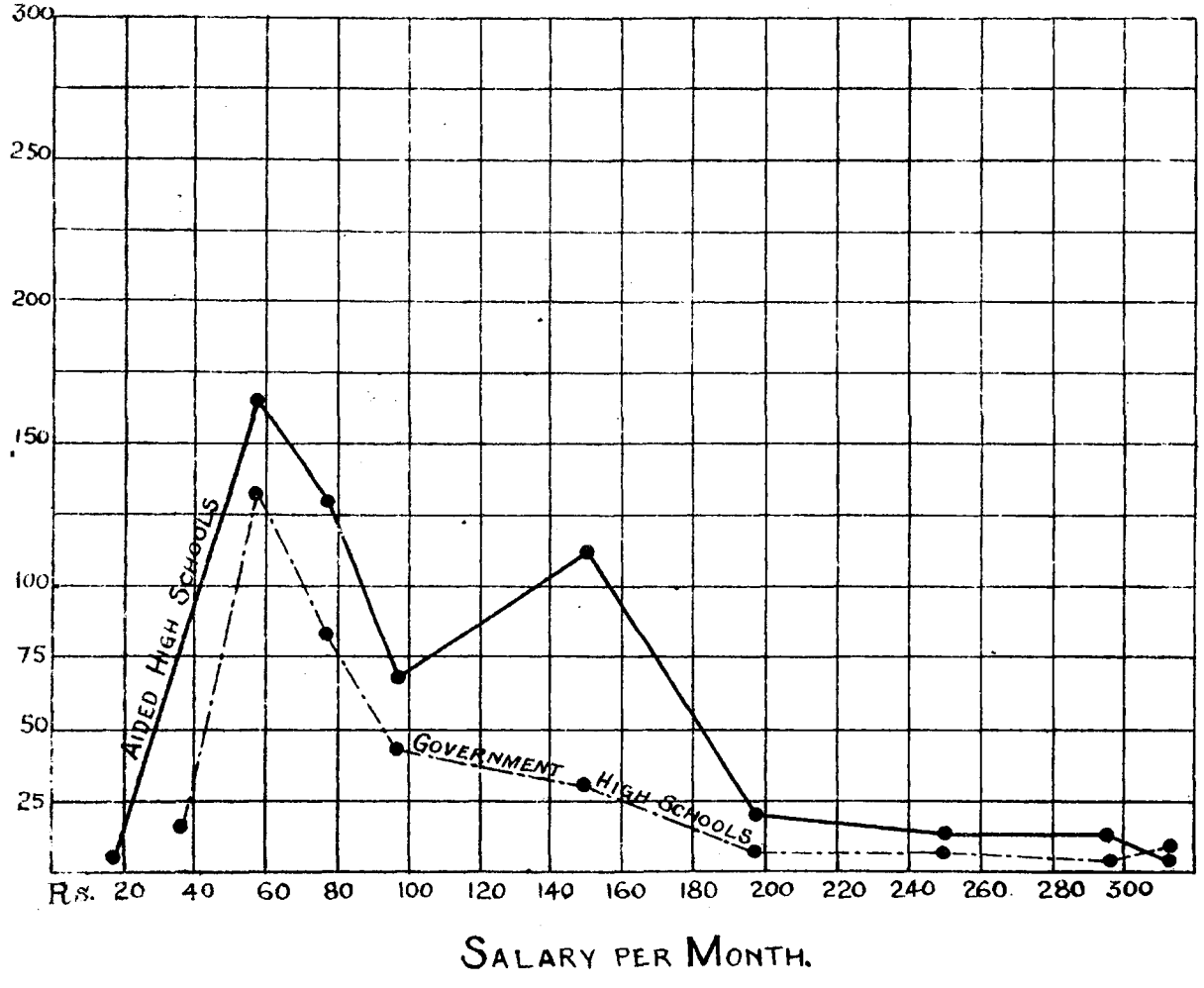
A second conference on the Education of Girls was held in 1913. The result of this conference was the modification of the curriculum for girls' schools on the lines described in this report on the chapter on female education.

J. A. RICHEY,

Director of Public Instruction Punjab.

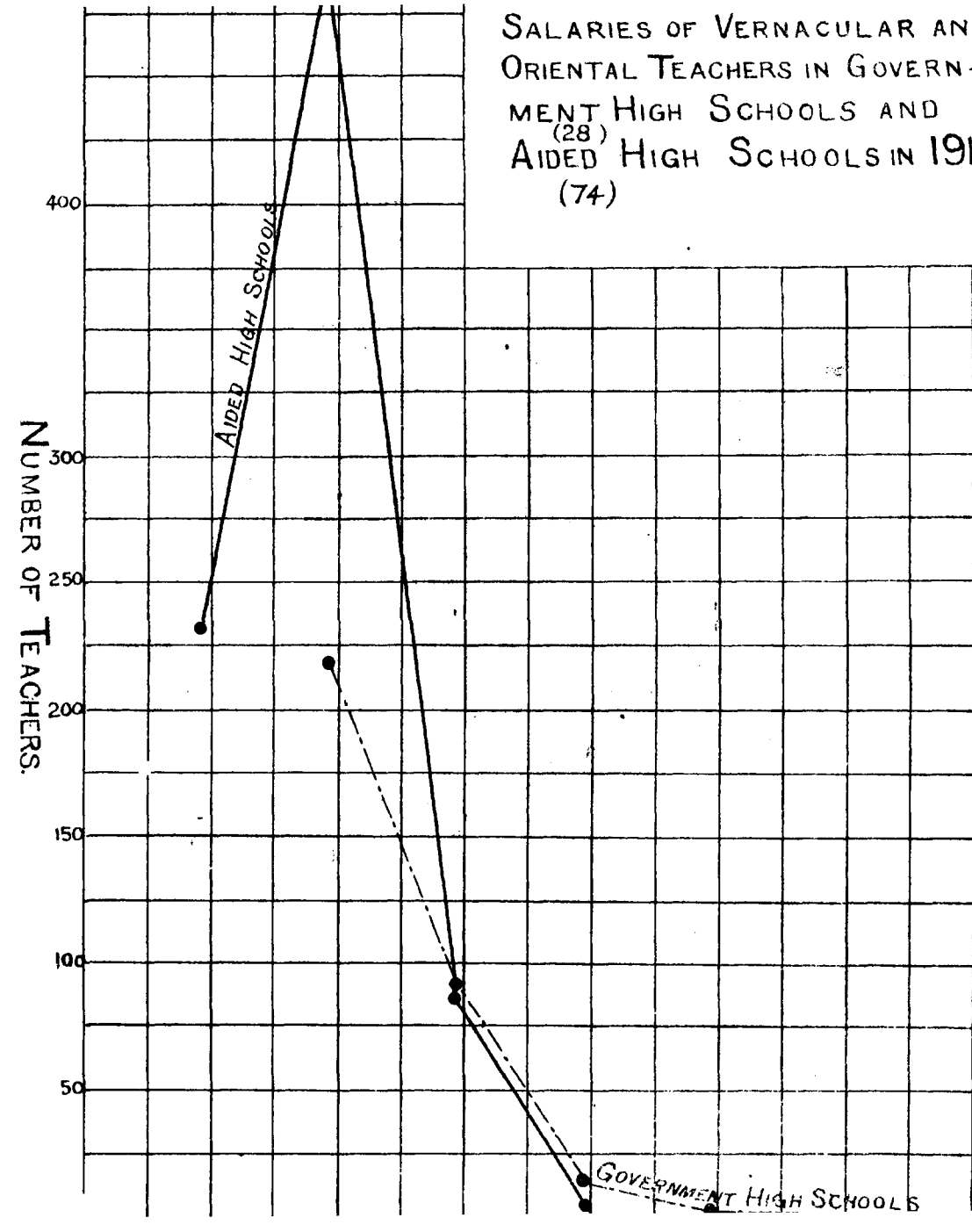
Salaries of Anglo-Vernacular Teachers in Government & Aided High Schools in 1917.

(28) (74)



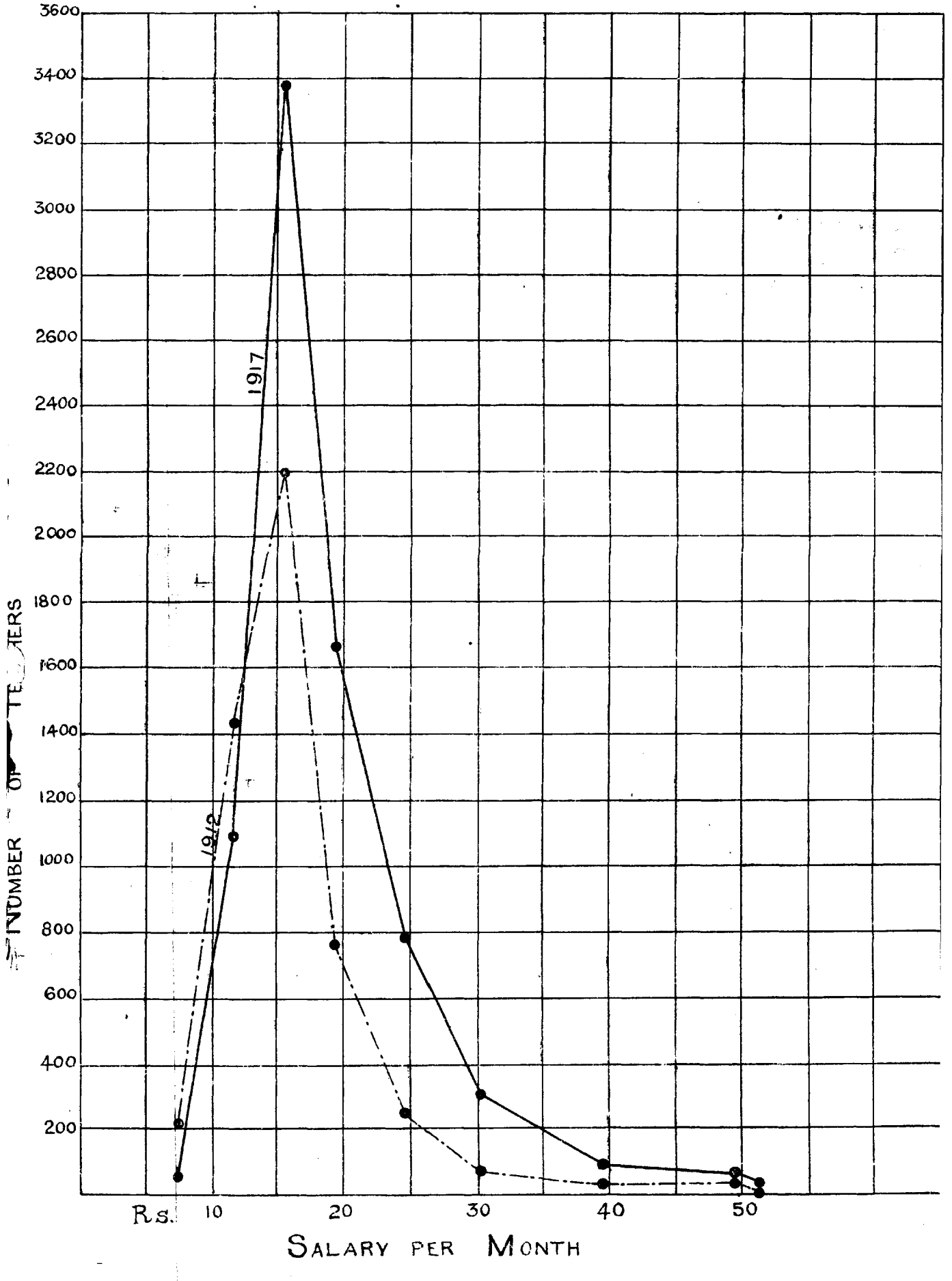
Salaries of Vernacular and Oriental Teachers in Government High Schools and Aided High Schools in 191

(28) (74)



Appendix A (III)

Salaries of Teachers in District Board Vernacular Middle & Primary Schools in 1912 and 1917.



APPENDIX B.

ANNUAL REPORT ON MEDICAL INSPECTION OF SCHOOLS, AMBALA DIVISION, 1916-17, BY MOOLA SINGH, M.B., B.S., MEDICAL INSPECTOR OF SCHOOLS.

The schools inspected during the year.—During this year recognised secondary schools of the districts of Karnal, Simla and Gurgaon (except Rewari) were inspected twice. The schools of Rohtak Hissar and Ambala (with exception of Kharar Mission High and Municipal Board Middle Kalka which were inspected twice) districts were inspected once only.

Number of students examined.—In all 5,124 students were examined during the year.

Need of a permanent assistant.—During my second inspections I found out that good many of the chest, weight and height measurements are apparently wrong. For instance a medical history card of a student showed him to be 5 feet 8 inches in height during first inspection but on second inspection he was found to be 5 feet 7 inches. Evidently the first observation was wrong. The same holds good of chest and weight measurements. The reason for such mistakes is that the Medical Inspector not only has to work with a new assistant in each school, but generally in high schools he gets new assistant daily or perhaps two or three assistants turn by turn in a day. He (Medical Inspector) is therefore unnecessarily worried in training the new assistants for his work from day to day and these assistants cannot or do not work properly, because they are not responsible for what they do.

Care of medical history cards.—Although the Headmasters are expected to look up the medical history cards after inspection of Medical Inspector and exert their influence in persuading the students to act up to remarks made on their cards, but it is very seldom that one is found to do so. On the contrary the medical history cards are carefully locked up and they see the light again when the Medical Inspector goes for inspection or perhaps when some leaving certificate is to be issued and a medical history card is attached therewith.

It is clearly written on these cards that the Headmasters should note any disease from which a student suffers during the time intervening two medical inspections, but with one exception of the Headmaster, Municipal Board, Gohana, none did so.

Cleanliness of the children.—Clothing of the children was far from being satisfactory in Ambala Division as regards cleanliness. I admit that it is mainly due to poverty of the people, as pleaded, but I have found even the boys of very rich parents in very dirty dresses, and I may say that although poor students cannot wear expensive clothes, they can certainly afford to wash their clothes once a week at least, and thus keep them free from dirt. Banyans (بنیان) in majority of cases are very dirty and they being next to skin prove injurious to health by closing the pores of sweat glands. I have found that even in case of those students who wore clean coat, waistcoat and shirts, banyans were dirty. Students often do not take regular baths and in majority of cases they take weekly baths and some do not take bath for months during winter season. Every reasonable man can think that argument of poverty cannot be put forward in this case and it shows sheer laziness of the students and lack of interest in them of teachers in charge.

Latrines and playgrounds.—According to my last year's report latrines and playgrounds are far from what they ought to be and I regret to say that the situation has not improved during year under review.

Latrines with few exceptions are dirty, offensive smelling and not washed for days together. It is very seldom that any disinfectant or deodrant is used, if ever.

Playgrounds, as remarked last year, are often uneven and dusty, and some schools have got no playgrounds at all. It is injurious for the lungs to play upon a dusty ground and thus more harm is done than good. In my opinion every teaching institution should possess as good a playground as possible, because physical training is as important as mental training. It is due to the lack of exercise mainly that the health of the student is degenerating day by day. If grassy grounds cannot be secured water must be sprinkled on the ground immediately before play starts.

Drill and recess periods.—In my opinion wherever possible there should be two recess periods as suggested last year and I am pleased to say that some of the schools of the Ambala Division have adopted this measure.

During winter season the drill periods in almost all the schools used to begin from 10 A.M. and this custom was injurious for the students, who had to take exercise immediately after taking meals and in comparatively cooler part of the day. A circular was sent round in the division to the effect that drill periods should begin from 12 o'clock and I am glad to say that in all the schools inspected after the issue of this circular I found that time-tables were altered as desired.

Seating arrangements.—Often students were not made to sit on proper desks; some tall students were found sitting on low desks whereas younger students using comparatively high desks for them. In the former case they were liable to contract chest disease by stooping over their books whilst in the latter case they could suffer from some diseases in legs, because

their feet could not reach the ground and hence circulation of blood was obstructed in "popliteal" arteries (*i.e.*, behind the knees).

In some cases students found sitting with their faces towards light falling from the right hand side instead of the left.

In all these cases proper arrangements were suggested and in almost all cases carried out before second inspection.

Boarding-houses.—Although there is a little overcrowding in some of the main boarding-houses, the so-called branch boarding-houses are always overcrowded, dirty, ill-ventilated and lighted and often located in an insanitary surroundings. For example I may take the branch boarding-house of Municipal Board Middle School, Panipat. It was the worst boarding-house ever seen, the building is old, crumbling, ill-ventilated with no proper arrangements for lighting. I remarked during my first inspection that the branch boarding-house in question be shifted to some other building, but no notice was taken of it.

Food supply in boarding-houses.—Food supply is almost everywhere below average and in some places only pulses are cooked and no vegetables. Here again question of poverty comes in, but the quality of the food can be improved a good deal if the superintendents take some interest, and food can be cooked well at least, which is rarely seen. The use of red pepper should be restricted as far as possible. A conference of the Headmasters of the Division in the presence of the Medical Inspector and Educational Inspector of the Division might consider so vital a question because health depends more on quality and quantity of food taken than on anything else.

Bathrooms in the boarding-houses.—It is nowhere perhaps in the whole division that any proper bathroom is seen constructed in the boarding-houses. For this reason students have to expose themselves unnecessarily to cold while taking bath in winter season or in rough weather. I therefore recommend strongly that every boarding-house should have a bathroom.

Diseases seen in students.—Eye diseases are very commonly seen and play an important part and amongst these eye diseases "Ametiopis" (defective eye-sight) takes the first place. This is no doubt due to the fact that students have to put so much strain on eyes every day, but much can be done to escape the disease or to prevent the increase of the defect produced, by taking care of eye-sight. The teachers should see that the students are not in the habit of leaning over their books or keeping the books too near their eyes. The light should fall from the left hand side. While reading at the night time the lamp should be placed behind and thus no light will fall directly on the eyes.

"Trachoma" (Grandulations of eyelids) comes next in frequency amongst eye diseases and students should be warned of the fact that it is a contagious disease and a man with healthy eyes can contract the disease by wiping his face with a towel or handkerchief used by a person suffering from "Trachoma."

Inorganic diseases of heart, constipation and digestive disorders are common enough and they are due to lack of exercise. In case of resident students constipation and digestive disorders are also caused by improper food in addition to the factor already mentioned (*i.e.*, lack of exercise).

In the schools of Simla District diseases of throat are very common indeed. Goitre (enlarged Thyroid gland) is equally common in that district as seen in the statement of diseases.

In spite of the repeated notes made in medical inspection registers the teachers do not take care to exclude from the classes, the students, suffering from "Scabies." In any case such students, even if allowed in the class room, should not sit with other students but on a stool away from them.

Question of Tuberculosis in schools is very important indeed as a student suffering from phthisis can easily infect others in the same room.

If detected early the patient may be saved but it is very difficult for the Medical Inspector to detect and diagnose with certainty cases of commencing phthisis, without proper apparatuses as at present and in such a short time as he has at his disposal. Such cases can only be diagnosed by local medical officer with the help of the teachers in charge. In advanced cases, of course, the patients themselves leave the school.

Treatment adopted by the sick students.—Of course I have been informing the parents of the diseased students about the diseases from which they suffered and the treatment to be adopted. I am sorry to say, however, that the parents of the students from villages do not attach any value to such informations sent. But the parents of the students residing in towns act according to the advices given by the Medical Inspector in most cases.

Taking all the cases together I may say roughly about 25 per cent. of the sick students underwent the proper treatment suggested and were either cured or relieved of the diseases they were suffering from. But if we take the students with "defective eyesight"

(Ametropia) separately we find that only 10 per cent. of them corrected their sight by putting on spectacles. This is mainly due to the poverty of the students and to some extent to the fact that eye-sight cannot be tested properly everywhere to get the required number of glasses to be used. The students from villages should be persuaded by the Headmasters to attend the local Civil dispensaries (where they are treated free of charge) even if their parents do not care for the Medical Inspector's report.

APPENDIX C.

NOTE ON THE PROGRESS OF FEMALE EDUCATION IN LAHORE, DURING THE LAST 30 YEARS, BY MISS M. BOSE.

IT is not an easy task to write a paper on the progress of Female education in the Punjab, for to do justice to the matter, one should have personal experience and first-hand knowledge of the subject under discussion.

My work has been confined to Lahore only, and in particular to my own school. I will, therefore, endeavour in this brief sketch to write an account of the Victoria School—its condition when I took charge of it 30 years ago—the changes that have taken place during this period, and some of the results that have been achieved. The story of this one school, will, I think, be illustrative in a general manner, of the spread of Female education in this Province. It cannot be said that the Punjab has been making great and rapid strides in this matter, but it is certain that all through this long period there has been a slow and steady progress, sometimes so gradual that it has hardly been perceptible. Within the last ten years, however, the people seem to have suddenly waked up to their needs and responsibilities, and a wonderful change has taken place. In past days when we thought of the thickly populated cities and towns of the good sized villages in the Punjab, and then read of schools existing only by the hundred and of pupils only by the thousand, we felt greatly discouraged, for what had been accomplished seemed like a mere drop in the ocean, and we asked ourselves as to whether anything had really been done for our women and girls. But now when we look back upon the past, and see how from small beginnings, large and flourishing schools have been established, when we think of those days when girls had to be bribed to come to school, and are now willing to pay fees, of the time when every thing in the way of books and stationery had to be supplied to them, and now when they have to pay for everything; we realize that a new era has begun, and we have every reason to look forward to a bright and hopeful future.

We will now take a glance at the Victoria School as it was when I came to it in the beginning of 1887. It was then called "The Central Female Normal School" and was with its nine branches under the supervision and management of the Sikhsha Sabha which Society, later on, was merged into the Punjab Association. Its aim was to provide teachers and fit students for the medical school.

On taking charge of the school, I found a number of old and elderly women, who were receiving good stipends and were hoping to become teachers after finishing the school course. They had had very little education, the majority only being able to read and write indifferently, on account of their being of advanced ages they could not learn much, to make teachers of them seemed a hopeless task. Most of them attended school merely for the sake of the stipends, and when these came to an end, they left without having accomplished anything. Besides these old and dull women, there were numbers of tiny children who were sent to school in order to be out of the way of the mothers, and to be kept out of mischief. They were bright and intelligent, but never learned anything, for first when they seemed to be making a good beginning, they were taken away from school to help their mothers at home (at that time hardly any children of the higher classes ever came to school).

1. The old pensioners and stipendiaries have gone. We still admit married women and widows, the former are generally sent by their husbands many of whom do not want a drudge or slave in the home, but a well educated and intelligent companion. We have had several married girls whose husbands have gone to England to study for various professions, and who have desired that during their absence the young wives should be sent to school to be prepared to become true helpmates to them on their return to their own country.

Young widows come to school to get a general education, so that after passing the Primary or the Middle Standard, they may be able to join the Normal School and become teachers eventually.

2. No stipends are given, they may earn scholarships by taking good marks in their examinations.

3. The numbers of little ones have increased considerably, in the old days even the tiny mites received an anna or two annas on finishing their primers, this kind of payment was usual in every class. Besides receiving small sums of money, all the children were supplied with everything, *e.g.*, takhtis, slates, books, stationery, needlework materials, etc., etc.

Now they have to provide themselves with all they need, fees are charged in every class, and those who take up English, pay a special fee of Rs. 2 per mensem irrespective of the class in which they are reading.

4. The children continue to stay in school for a much longer period. In the old days as soon as a girl had got up to the 3rd or 4th Standard, her parents thought she was too big to come to school, and that she had received a sufficient amount of education in that she could read a fairly easy book, and write a simple letter, so she was withdrawn from school.

Now we have large Upper Primary classes, and the first Middle is always a big class, after that the numbers begin to fall off. But in a few years time there will be a great change and we shall be able to keep many of our big girls much longer in school.

5. In former times the attendance was very poor, we had no hold on the children and could not compel them to come to school. We could not fine them nor punish them, and were only too thankful to get them to come at all. The parents let them do just as they pleased, they came when they liked and they stayed away when they liked, and as for punctuality, that was unknown to them.

Now not only the older children, but even the little ones are present at the first roll-call ; they are learning to bring chits from their parents when they want leave ; they are also beginning to understand that staying away from school means losing a lesson and marks given for home work, and they pay fines for unpunctuality and absence without leave without a demur realizing that they are in fault.

6. The parents in those times expected that everything should be done for their children. Doolies were provided free of cost to the Muhammadan girls and *bulanewalis* sent round to fetch all the others.

Now the girls who use the doolies pay for them, many come in their own carriages and with their own servants.

Appendix D.

NOTE BY MISS M. E. HART ON KINDERGARTEN METHODS IN GIRLS' SCHOOLS.

In January 1914, when I visited the largest female education centres in the Punjab, I was impressed with the very elementary experimental stage this education was then in from one point of view. The teachers were quite oblivious to the fact that primary education could include anything beyond (1) the process of memorizing the first, second and third Readers for girls' schools, and (2) by perseverance a certain proportion could be taught long division with fairly accurate results. The infant classes were for the most part in the hands of quite incapable old women, who knew nothing themselves, and who had no interest in their work beyond keeping up the number for their superior officers.

In a few isolated cases when Mission ladies had schools, English education had been more or less introduced, but so far no combined effort has been made to study environment and no endeavour has been made to develop child nature.

Education is a "process of drawing out the mental powers of a child," therefore, if the main aim of the teachers is to give the child something foreign to its environment and very nature, they are not educating but artificially laying a veneer of knowledge upon the child's memory.

Having these observations in mind I undertook to see what could be done with the ordinary teacher of to-day by experimenting in the Victoria Girls' School. The classes I took charge of were Infants—I, II, and III, Muhammadan and Hindu.

The teachers put under my charge were 3 fully trained teachers, and 6 teachers of long standing experience of teaching in these classes, but with no qualification and very little knowledge. I tackled the lowest class first and found that everything I introduced was promptly put into a set form and memorised. To avoid this I introduced chiefly handwork of a very simple nature, such as clay modelling, sand modelling, brick building and a collection of articles suitable for sense-training. Everything introduced was cheap and easily obtained.

The whole scheme is incomplete, and in a very elementary stage, especially in the Hindu class, as child development necessitates child knowledge, and it requires a thoughtful enthusiastic teacher to develop everything as she goes along. The Muhammadan teacher has made a great deal more of the ideas given to her.

In the upper 1st phonetic reading has been introduced, which in the hands of good teachers has had excellent results. Both Muhammadan and Hindu teachers in this class became interested, and the result is that that the code requirements for this class have been taught with enthusiasm and interest, and both teacher and taught have developed.

In classes II and III the same procedure has been adopted, interest in the children has been the first thing taught, and from that it has been possible to make the lessons full of interest.

The whole curriculum of the Lower Primary department is the one in the Code of Indian Girls' Schools.

All we have done is (1) to make each child feel it is known and cared for; (2) to make every lesson of interest to the child; (3) to make each child feel responsible for its own progress.

The teacher now realises that a well prepared lesson is a joy to give, and that if she does her work well, she can insist on the children doing theirs well, not otherwise.

Lack of co-operation is the chief fault that I have found, teachers are rivals not colleagues, there is no ideal to work for only self praise, and the greatest need for the woman teacher is a splendid training college, where woman can learn to sink herself for the good of a great ideal, where natural regard for personality will teach her to co-operate with her colleagues for a common good and thus will she learn co-operation, first as a student later as a teacher. The College would do well to be so large and so well staffed that during the vacation of the different schools the teachers can come back and refresh themselves and mix with the students so combine.

The Indian woman is essentially a home bird, therefore when work outside the home is expected of her this should be understood and arranged for; every care should be given that she should realise for herself these matters, and this can only be done if she receives mental, moral and physical training for her work.

APPENDIX E.

TEACHING OF SCIENCE IN THE PUNJAB SCHOOLS, BY LALA RATAN LAL, M. A.

ONE important feature of the educational progress in this province, during the past few years, has been the striking popularity of Science as a subject of study. Leaving aside the higher scientific education, imparted in colleges, with which this note does not pretend to deal, the interest displayed by the public, in the elementary science work of the school stage, has not been less remarkable. This will be evident from the fact, that the number of the students appearing in the Science Faculty Matriculation examination, *i.e*, taking up Physical Science as a compulsory subject in lieu of a classical language, has risen from 72 in 1908 and 342 in 1912 to 1,299 in 1917 or has increased four times during the quinquennium; while the total number of candidates, taking up science both in arts and science faculties, has almost doubled during the last ten years and the number of those successful in this subject has risen from 382 in 1908 to 1,920 in 1917.

Another and perhaps a more convincing evidence of the fact that science has caught a hold on popular imagination may be found in the readiness with which funds have been forthcoming to meet the rapidly growing demands of science teaching on modern approved lines. The quinquennium under report has been unique as regards the improvement of educational buildings, and in this connection the requirements of science have received prominent attention. One of the first things to be done, on my appointment to look after the science teaching, was to furnish the Headmasters and Managers of Schools, with all the details of equipment and apparatus needed. Typical plans of science rooms with fittings and fixtures were drawn up and circulated, and the officers of the Public Works Department were interviewed, wherever necessary. Thanks to the liberal grants from the Government and the ready response of the public almost all the important High Schools have now got well equipped and furnished science rooms. From among the Government institutions only six or seven are cramped for want of adequate accommodation, and that too, because the building operations had to be suspended owing to the war. A typical science block consists of a lecture room and a laboratory, fitted with demonstration and practising tables, sinks, shelves, balance brackets, fume-cupboards, etc. In many cases water pipes have been laid on and some of the larger high schools possess gas plants as well.

As regards the stock of apparatus, special attention had to be paid to the selection of the apparatus of the right type, and the tendency to purchase expensive ready-made apparatus, intended more for show than for use, was checked, thus combining efficiency with economy. Care has been taken to maintain a sense of proportion and not to encourage any expenditure not justified by the number of students reading the subject. It is estimated that about half a lac of public money has been saved in this way. There are, no doubt, still some institutions at which the state of equipment leaves much to be desired, but as pointed out above, this is mostly due to the financial stringency caused by the war.

It cannot be forgotten, however, that neither magnificent laboratories, nor the amount of money spent on apparatus, can serve as a criterion of the soundness of the training imparted. These outward signs are at best an index of the earnestness which animates those concerned, to do their best in the cause of science. Various other steps have therefore been taken to put the teaching of science on a sound footing and to bring it in a line with modern approved methods, as well as with the present day needs of the country. In this connection the visit of Professor Arthur Smithells, F. R. S., of Leeds, to the province, proved a great boon. The learned Professor who had made a careful study of the problem of science work in the English schools evinced an equally deep interest in the Punjab schools. In the midst of his multifarious engagements he managed to find time to hold a course of practical lectures, extending over a fortnight for the benefit of science teachers. The

keynote of these inspiring and instructive lectures was the awakening of a spirit of enquiry and investigation. Professor Smithells further favoured the department with his valuable advice and urged the necessity of reform along the lines that had been chalked out.

The process of recasting the system of scientific training, at all the different stages of the school course, had naturally to commence from the bottom. An important step taken in that direction is the complete overhauling of the scheme of nature study and science work for the Primary and Middle departments.

As regards the Primary classes it was found that, though the old scheme of object lessons was based on sound principles, in actual practice, the " teaching " of these lessons had degenerated into memorising of miscellaneous information of a useless type and had failed to achieve the desired end. It did not foster a spirit of enquiry or create an interest in one's natural surroundings, much less did it develop the faculty of observation or scientific reasoning, with the result that, " not one man in a hundred knew that a caterpillar developes into a butterfly, or that in the Punjab the sun never comes exactly overhead at noon. " In the Middle department the old method of teaching physics to the exclusion of the other branches of science and its treatment as a subject by itself, had led to a multiplicity of subjects and needless repetition for which there was no longer any justification. In the western countries " the science of daily life " taught in an experimental and practical manner has become the watchword of scientific work at the earlier stages. Education divorced from the interests and occupations of the people must always remain mechanical. Moreover the modern method of teaching Geography, based as it is on observation and experiment, leads to the fulfilment of the same objects as the teaching of science, both forming a higher stage of nature study. The most important feature of the new scheme therefore is that " science " disappears from the course as a separate subject and becomes, as it were, a handmaid of rational geography.

According to this scheme the work of the Lower Primary classes consists of general observation of the child's own natural surroundings, including animate and inanimate objects, trees, crops, soil, water, clouds, wind, the sun, the moon, local handicrafts, trade, etc., all this forming a foundation for the formal geography of the Upper Primary. At that stage the subject has developed to a continuous study of the life history of one or two plants and insects, while the practical geography (which is after all another name for the study of inanimate nature) includes the observation of the apparent positions and motions of the sun and stars, the phases of the moon, the atmospheric phenomena, and a knowledge of the elementary laws of motion derived from games and toys—Manual occupations or drawing go hand in hand with Nature Study at this stage.

In the Middle department the scheme of the first two classes includes observational and experimental work leading to a thorough grasp of the laws of physical science which form a basis of geography. The scheme for the third middle class consists mainly of the lessons on the chemistry of sanitation and hygiene and plant food.

This scheme is being gradually introduced throughout the province. There was the difficulty, that most of the teachers and sometimes even the supervising officers did not thoroughly grasp the aims and methods of working the new scheme. Courses of lectures were, therefore, held at different important centres to explain the method to those concerned. A teachers' handbook on Nature Study has been prepared, and the schemes of the Normal schools and the Training College have been revised to a certain extent. There is still a great need for teachers' handbooks specially those dealing with common plants and insects.

The science teaching in the High department stands on a somewhat different footing from that of the Middle. The High classes are preparatory to the Matriculation examination of the University and the syllabus and courses of study are prescribed by that body. Naturally the work in schools is mostly controlled by the type of questions set, and the standard of marking adapted.

The uniform standard of physical science, for both the Arts and Science Faculties, which had been sanctioned previously, was enforced during the quinquennium. This was an important step and has proved beneficial in giving the boys a greater freedom in the choice of subjects and has led to economy by reducing a duplicity of lecturing. The syllabus then framed was found to contain certain anomalies which were removed when brought to the notice of the University. Another recent improvement is a more rational allotment of the different branches of Physical Science to the two written papers. It is universally admitted, however, that in spite of these improvements the syllabus is anything but ideal. Frequent revision of the syllabus leads to a serious dislocation of work and therefore the next step can only be taken when the work of the Middle department has been thoroughly consolidated.

With the unification of the Arts and Science Faculty courses, the University also recognised the necessity of attaching proper importance to practical work, and a syllabus of experiments, which every candidate was expected to perform, was drawn up. It was however not possible to enforce a high standard on this side until the schools have been properly equipped. That difficulty has now been overcome, to a large extent, and thus a considerable amount of laboratory work is done by pupils themselves It cannot be denied that while a few schools are doing really good work, speaking generally, the work is mechanical and consists of a rather unintelligent repetition of experiments usually asked at the University

examination, but it has to be remembered that this spade work was necessary before the foundation of a real training in methods of investigation could be laid. The time is coming when a distinct step will have to be taken in that direction. A problem for solution at that time will be to devise some better method of practical examination, because it is evident that a system of simultaneous examination of three thousand candidates, carried on by a large number of examiners, spread all over the province, during one or two days, can never form a genuine test of a training in scientific method.

It will not be out of place here to say something about the two other scientific subjects, Hygiene and Agriculture, which are destined to play a most important part in the future, and the growing popularity of which is a happy sign of the times. During the quinquennium the number of candidates taking up Physiology and Hygiene, in the Matriculation examination, has risen from 16 in 1912 to 434 in 1917, while the corresponding figures for agriculture are 4 and 464 respectively. The subjects are no doubt in their infancy and have yet to be developed and their present popularity is generally attributed to the ease with which the candidates can secure a pass, as compared with Drawing, in which the percentage of passes is very low; but it is certain that both these subjects will grow to be really useful and will then be taken up for their intrinsic value. They are receiving prominent attention at the hands of the University and the syllabus of Physiology and Hygiene has been recently revised. There is a feeling that due importance is not attached to Hygiene as an applied Science and formal Physiology receives more attention than is necessary at the school stage.

The want of a book of the proper standard, dealing with personal and domestic Hygiene, having reference to the daily life and habits of the Punjab people, is very keenly felt, and still more urgent is the need of a book on Punjab agriculture. The books prescribed at present for this subject are admittedly unsuitable for the Punjab, dealing as they do with foreign conditions. The natural result is a book knowledge which is of no practical use to the agriculturist.

It is, however, believed that the Professors of the Punjab Agricultural College, Lyallpur, are doing their best to remove this serious disability. The practical work in agriculture will also eventually develop and will naturally include, some field work done by individual candidates, as an essential item. The establishment of a special faculty of agriculture is sure to give fresh impetus to this subject.

It will be evident from what has been said above, that though much yet remains to be done, a real step forward has been taken.

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