



EDUCATION IN 1928

BEING THE REPORT OF
THE BOARD OF EDUCATION AND THE
STATISTICS OF PUBLIC EDUCATION
FOR ENGLAND AND WALES

*Presented by the President of the Board of Education
to Parliament by Command of His Majesty*

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PART I.

THE REPORT

OF THE

Board of Education

FOR

1928

[All the Chapters of this Report, except Chapter X, refer to England and Wales ; not to England only, as was the case in certain Chapters in previous Reports.

Where separate reference is made to England or Wales, the County of Monmouthshire is to be understood as being excluded from England and included with Wales.]

removal from the lists. We are glad again to acknowledge the co-operation of the voluntary bodies, not only in dealing with defective premises, in regard to which they have shown great energy, but also in meeting the general problems presented by the reorganisation of the schools.

5. In secondary education the year under review has been one of continued expansion. The number of schools recognised by the Board, the number of pupils, the number of free places, the number of entrants and the number of successful candidates in the approved examinations, and the amount of advanced work, all show a marked increase. Plans for approximately 10,000 new secondary school places have been approved during the year—a figure which promises a continuance of the advance in secondary education recorded in this Report.

6. In the field of technical and further education, the year 1928 has been notable for the inception of a programme of inquiries specially directed to education for commerce and industry. These inquiries take the form, on the one hand, of regional inquiries, such as the Board have already undertaken in Yorkshire and which they have now undertaken in the Midlands, into the general organisation of education for commerce and industry in the main industrial areas, and, on the other hand, of inquiries into education for particular branches of industry and commerce. Their object is to focus the requirements of industry and the various types of training designed to meet these requirements. The special subjects which have been selected for the first inquiries on these lines are Education for Salesmanship, and Education for the Engineering Group of Industries. The success of this programme will depend almost entirely upon the amount of co-operation which the Board are able to secure from the representatives of commerce and industry. Advisory Committees for these two inquiries have therefore been set up under the chairmanship of Mr. F. W. Goodenough, C.B.E., and Sir Dugald Clerk, K.B.E., respectively, consisting of representatives of the industries concerned. It is our hope that these inquiries will result in bringing education into closer relation with the needs of commerce and industry, and in ensuring a more definite contribution from the schools to the economic welfare of the country.

7. The Board's estimates for the year 1928-29 amounted to £41,215,828, showing a reduction of the net burden on the Exchequer of £616,192 over the adjusted figure for 1927-28. This reduction was due to the contributions by local education authorities in respect of teachers' pensions, which under the Act of 1925 became payable for the first time in this year. These contributions are treated by the Board for purposes of grant as though they were expenditure on teachers' salaries. For the third year in succession the cost of the Board's administration and inspection showed a decline. The ratio

of the Board's expenditure on administration and inspection to their total expenditure was lower in 1928 than in any previous recorded year in the history of the Department.

8. During the year under review the Committee on Education and Industry, under the chairmanship of Mr. D. O. Malcolm, presented their second report on the public system of education in England and Wales in relation to the requirements of trade and industry. In July the Board's Consultative Committee published the results of their inquiry into the selection and provision of books for public elementary schools. The recommendations of the Committee are summarised in Chapter I. on pages 18 and 19. The Committee have now begun work on the second reference given to them in 1926, viz., "To inquire and report as to the courses of study suitable for children (other than children in infants' departments) up to the age of eleven in elementary schools, with special reference to the needs of children in rural areas." This reference to the Committee marks the first attempt hitherto made to detach the middle group of children attending the elementary schools, and to discover and meet their educational requirements. The Departmental Committee on Examinations for Part-time Students, under the chairmanship of the Duchess of Atholl, D.B.E., M.P., completed their inquiry during the year and published their report on the arrangements for the examination of students attending part-time schools. The Committee on Universities and Training Colleges, over which Mr. R. G. Mayor presided, presented their report to the conference of representatives of universities, training colleges, local education authorities and other bodies interested in training colleges, in April, 1928. An account of the work of this Committee and of the chief recommendations contained in their report is given in Chapter VII. The Committee appointed to consider the desirability of providing courses of training specially suitable for teachers interested in country life and occupations, under the chairmanship of Mr. J. Q. Lamb, M.P., presented their report in November.

9. The continuance during the year of the severe depression which has afflicted certain industries, and in particular the coal-mining industry in South Wales, Durham and Northumberland, has created difficulties in some areas in regard to boots and clothing, and has made it necessary to give close attention to the standard of nutrition of children attending school. A brief account of the special measures which have been taken to meet the situation in these areas will be found in Chapter IX. In regard to boots and clothing the needs of the children attending school have been dealt with as far as practicable by voluntary funds. As regards feeding, we have had the position in the distressed areas under careful and constant review. Frequent visits have been paid to the areas most seriously affected, and observations have been made, both by the Board's medical staff and by Your Majesty's Inspectors, of the

condition of the children in the schools. Towards the end of the year steps were taken to enable the local education authorities concerned to extend their arrangements for the provision of school meals and supplementary feeding by means of grants from the Lord Mayor's Fund. The task of maintaining the health of the children during the prolonged period of depression is one which demands constant and unremitting attention, but the efforts which have been made to combat malnutrition and to preserve the physique of the school children have, on the whole, been remarkably successful.

10. This review of the year would not be complete without a reference to the opening of the eastern block of the new buildings of the Science Museum by Your Majesty on March 20th. We are glad to report that the provision of the new buildings and the more effective display of the collections which has now become possible, have resulted in an increased number of visitors to the Museum.

CHAPTER I.

ELEMENTARY SCHOOLS.

11. During the period under review no change was made in the Code of Regulations for Public Elementary Schools, but several important pronouncements on policy were issued.

1. School-leaving Age.

12. In January, 1928, the Board issued (Circular 1395) to local education authorities a copy of a statement which the President had made in reply to a deputation from the Association of Education Committees, who had urged that, in accordance with the recommendation contained in the report of the Consultative Committee on the Education of the Adolescent, the age of compulsory school attendance should be raised to 15 in 1933. A copy was also enclosed of a memorandum by the Government Actuary on the future numbers of children in public elementary schools, to which reference was made in the President's statement. In his statement the President pointed out that the proposal to raise the school age amounted to one that Parliament should force all parents to keep their children at school for a year longer than at present, irrespective of whether the authorities were in a position to provide proper education for all the children affected. It was at schools, departments or classes organised on the lines recommended by the Consultative Committee and at no others that they recommended that children should be forced to attend until the age of 15. On the 31st March, 1927, the number of children aged 11-14+ in public elementary schools totalled 1,915,000. So far as the Board could judge, not more than about 10 per cent. of these were in departments limited to children over 11. It might be anticipated that in 1933 the total number of children over 11 under the existing law would be between 2,050,000 and 2,100,000, an increase of 135,000 to 185,000 over the number on the 31st March, 1927. If the school leaving age were raised in 1933 the number of children to be dealt with might be expected to be not less than 2,450,000 aged 11-15+ and in 1934 not less than 2,546,000. In other words, if the school age were raised in 1933 plans for reorganisation would have to provide by 1934 for over 600,000 more senior children than were in the schools in March, 1927. Figures as to years after 1933 were more speculative, but it seemed not unreasonable to expect that from 1938 onwards the number of children between 11 and 15+ would remain about 2,200,000, i.e. within measurable distance of the number for which provision would probably have to be made in 1933 without raising the school leaving age.

13. The mere announcement of a decision to raise the school age in a particular future year would not provide any definite guidance

to individual authorities as to the basis on which they should draw up their plans of reorganisation; the problems of each area would need investigation in the light of individual circumstances. The first step was to decide upon a national basis. Before doing so certain questions needed consideration. In the first place, it had to be considered whether local authorities should be required to provide new accommodation, or specially to set apart existing accommodation, for the number of children in the four age groups 11-15+ who might be expected to be in the schools in 1934, though it could be estimated, would become vacant after 1937. If, on the other hand, authorities were only expected to provide by 1933 for the number of children to be expected in the schools in that year under the existing law, which number would probably not be very different from the number between 11 and 15+ after 1937, how should the abnormal numbers of children between 14 and 15 be dealt with in the peak years? It might be suggested that use might be made of accommodation rendered vacant by the fall in the number of junior children, but it was a question how far any such margin of accommodation would be more than sufficient to make up for the abandonment of "black listed" premises and to ensure the elimination of classes over 50. Further, it was a question whether Parliament could require voluntary bodies, who were at present incurring great expense in remedying "black list" premises and providing new schools in new housing areas, to undertake in addition the reorganisation of senior instruction. There was also the whole problem of rural areas. It might be suggested that these problems could be satisfactorily dealt with in six years if the Board would encourage a higher rate of public expenditure on building and on teaching staff, but the expenditure on new buildings already authorised by the Board probably represented as rapid a rate of progress in building as could reasonably be expected, and, broadly speaking, authorities had been able to provide within their approved establishments for all the increases in teaching staff which existing accommodation allowed them usefully to employ. No doubt the effect had still to be seen of the large amount of building then in progress; on the other hand, a very large proportion indeed of this new building was on new housing estates; in other words, in many areas the primary concern was to keep pace with unprecedented movements of population, fitting the new schools into reorganisation plans as could best be managed.

14. In forwarding these statements the Board suggested that authorities would be confronted with a very serious problem in carrying out their existing statutory duties as regards the supply of adequate and suitable accommodation for the older children who might be expected to be in attendance at elementary schools in 1933, apart from any amendment of the present law, and they promised a further communication to authorities on the subject.

2. Re-organisation.

15. The further communication thus promised was issued in May, 1928 (Circular 1397). In it the Board stated that the study of the recommendations of the Consultative Committee on the Education of the Adolescent in the light of the report of the Government Actuary tended to confirm the soundness of the main lines of development which authorities had already laid down for themselves in their current three-year programmes.

These main lines of development were defined as follows:—

- (a) A reorganisation of the schools designed to secure for all pupils a break at 11+, and a fresh start at that age on a definitely new stage in education;
- (b) The reduction of all classes for senior pupils to a maximum of 40 on the roll;
- (c) The reduction of all classes for juniors and infants to a maximum of 50 on the roll;
- (d) The replacement, reconstruction or repair of all defective school premises on the "black list."

16. It was emphasised that the elimination of large classes and the treatment of "black list" schools could not in fact be separated from the establishment of the break at 11, and that it would be in the highest degree uneconomical and short-sighted to attempt to deal with these three questions otherwise than as parts of a single problem. It was to the solution of this problem that the programmes which authorities would be asked to prepare for the years 1930-33 would have to be mainly devoted. Meanwhile it was apparent that the prospects of meeting the situation which must arise in 1933 would depend upon the amount of work included in the current programmes which could be put through in the next two years. It was again emphasised that the number of older children, who under the existing law would be in attendance in 1933, might exceed by as much as 185,000, the number on the 31st March, 1927, and that in addition provision had to be made to meet the growing tendency towards a longer voluntary school life.

It will be convenient to consider separately the problems raised by the Circular.

17. As regards reorganisation, it was emphasised that the education to be offered from the age of 11 should be a definitely new stage with a more or less definite break comparable to the break between the preparatory and the public school. The curriculum should make a distinct departure from the elementary stage. The accommodation should provide for classes of not more than 40, and should be suitable for the purpose of giving a full four-years' course, and should, where practicable, be in separate premises. In view of the misapprehension that sometimes existed, it was pointed out that the education which

the Senior, Central or Modern School was to provide was emphatically not to be regarded as a "finishing" stage, or, as it was sometimes called, a "blind alley." On the contrary, the whole purpose of developing a complete system of schools of the new type was to throw open to pupils in those schools opportunities which could not be open to pupils in the ordinary standards of the elementary school. One of the main functions of schools of the new type would be to lead up to courses of further education in the Technical and Commercial Institutions, a function which had not been, and could not be, adequately discharged by the existing type of secondary school. Enclosed with the Circular was a pamphlet dealing in detail with the problems involved.

18. This pamphlet (entitled "The New Prospect in Education") was designed to assist the many local authorities who are actively engaged in formulating schemes of reorganisation, by a detailed statement of the grounds for reorganisation and of the problems involved, and also by giving accounts of schemes of reorganisation that had already been carried out in certain areas. The following were the principal points made in the pamphlet:—

- (a) The problem set by the Hadow Report was that of the adaptation of the existing elementary school system, so that all the older children, not a selected few, might receive an education suited to their age and special needs, so organised as to allow for classification and differentiation between pupils of different types of capacity and different aptitudes.
- (b) The normal unit of organisation would be in future not the single school but the group.
- (c) The needs of children of different capacities had to be met in different ways. Only if children were collected in fairly large groups would it be possible to provide alternative courses.
- (d) Transfer should be at the age of 11+. If it were made later the child would not have long enough in the Senior School to derive real benefit; if younger, he might not have mastered the essential elements. Children over 11 might be expected to go a longer distance to school than younger children. Eleven was a convenient age for transfer to secondary schools.
- (e) Age was a better guide in determining transfer than scholastic attainments, for it was not true that a child who had failed to reach the school standard normal to his age could, therefore, best be taught with younger children. Retarded children often gained most by a change. Children of more than average attainments were not necessarily suited, either physically or mentally, for association with older children.

- (f) It was important that children should be transferred from the Junior to the Senior School at the age, and at the period of the year, at which children were admitted to Secondary and Central Schools.
- (g) Transfer wherever possible should be not merely to a different type of teaching but to a separate school. Obvious advantages could be derived from an organisation under which one school, under one Head Teacher, had the single objective of providing for its pupils the best possible three or four-years' course without the distraction of guiding younger children over an essentially difficult stage of their educational career. In the separate Senior School there were far greater opportunities for the development of a strong corporate life and a tradition more closely allied to actual life. It was easier to provide good organised games and to form school societies and old scholars' clubs.
- (h) The function of the Junior School should be as important as that of the Senior School. It should provide a three or four-years' course, with a clear objective designed to prepare for a further stage in education all children before any selection was made.
- (i) In Circular 1350 (see the Report of the Board for 1924–25, page 85) some preference was expressed for departments covering all ages from 5 to 11. In the light of further experience the Board considered that the balance of advantage would usually lie with an organisation providing separate departments for infants and juniors, so long as children were transferred regularly and systematically on an age basis, and soon enough to allow them all to complete a course of at least three years in the Junior School.
- (j) A scheme of reorganisation, if it were to be successful in practice, must not only provide better facilities but must also be based on the co-operation of children, teachers, parents and managers. Successful reorganisations of voluntary schools had as a rule been the result, not of pressure from authorities, but of whole-hearted co-operation by managers and Diocesan Committees.
- (k) Selective Central Schools had an important place to fill by providing for those children who stood out as possessing specially high capacity. The general experience was that difficulties followed if much more than 25 per cent. of the children were selected at 11 for admission to Secondary and Central Schools together. On the one hand it was found that some of the children selected acted as a drag on the work of the whole school: on the other hand, the schools which provided for the balance of the children

were embarrassed by their low grade. A Selective Central School should be large enough to make possible some differentiation in curriculum, for which purpose at least two parallel forms for each year of the course were needed. Admission should be limited to pupils who had a reasonable intention of remaining at the school for a full four years.

- (l) Wherever possible, children should be collected in Senior Schools in numbers sufficient to provide for some degree of internal organisation (i.e. two or three parallel courses). Two hundred was probably the smallest number for which classification of parallel courses was reasonably possible. Where numbers were smaller it was generally preferable to group them as a separate section in a school containing younger children, a break being made, if at all, at the end of the infant stage. Separate Senior Schools for boys and girls were desirable, but mixed schools might be necessary where the numbers would not otherwise be sufficient to permit of reasonable organisation.
- (m) Especially in rural areas the provision of suitable transport was a vital question. Where children had to travel some distance to school proper facilities were necessary for drying boots and clothes.
- (n) Where children could not return home during the dinner hour they should at least have an opportunity of eating meals brought by them in comfortable surroundings and under proper supervision. Facilities should be available for making cocoa, heating milk, etc. Many authorities arranged for school dinners.
- (o) The premises should, if possible, include provision for practical instruction sufficient to enable a whole class to receive instruction at the same time, and the teachers should be regular members of the school staff. The school should also have one or more classrooms of more than the usual size, which might serve the purposes of an art room or a science room, or for needlework and the lighter forms of handicraft, or as the school library. In the first instance, these rooms should be fairly lightly equipped, additions being made as it became more clear in what directions the school would develop most strongly.

19. Though the importance of a fresh start at 11 for all pupils, and not only for a selected minority, has been increasingly recognised for some time past, it has only been since the issue of the report of the Consultative Committee early in 1927 that the majority of authorities have begun to give the matter active consideration. It would be unreasonable to expect this new principle, involving as it does such a fundamental departure from previous conceptions of

educational organisation, to be immediately understood and accepted by all parties interested, including not only members of local education authorities and their officials, but managers, teachers and parents. Moreover, even when the principle of a fresh start at 11 has been accepted, the problems involved in its application are intricate and often depend for a solution on the building of new schools, or at any rate the adaptation of existing ones. During the period under review progress has been at least as rapid as could reasonably be expected. The principles underlying the recommendations of the Consultative Committee are now very generally accepted as sound, and, while probably in hardly any area is reorganisation as yet absolutely complete, in almost every area some plans for the commencement of reorganisation are at any rate being definitely formulated. As is shown by the examples given in the "New Prospect in Education," voluntary as well as council schools are being reorganised. As a rule these reorganisations are directed to secure a better distribution of children between a group of schools belonging to the same denomination; but in certain cases, where the provision of separate voluntary Senior Schools was not practicable for one reason or another, the managers have co-operated to secure a redistribution of children between council and voluntary schools. The numbers of children available are not generally sufficient to justify the provision of voluntary Central Schools, but one or two such schools are being established.

20. As has been explained in previous Reports, it is not possible to make any statistical estimate of the progress achieved. An endeavour was, however, made for the first time in Table 11 of last year's Report (Part II) to give figures of the number of senior departments, admission to which was substantially limited to children over 11, and similar figures for the year ended 31st March, 1928, are now given in Table 12 for schools maintained by local education authorities. During the twelve months ended 31st March, 1928, there was a net increase of 69 in the number of departments classified as senior, while the number of children in these departments increased by 11,069. A certain number of departments, mostly those organised on the old lines, were included in or excluded from the category owing to changes in their age range, but there can be no doubt that the increase just quoted presents a genuine advance. As indicated in last year's Report, these figures take no account of the departments, such as many in rural areas, which, in addition to providing organised courses of instruction for pupils over 11, also provide for children under that age. There is, however, no doubt that in rural areas considerable progress is being made with the concentration of the older children in groups sufficiently large to permit of a substantial measure of classification and greatly improved facilities for practical instruction. Evidence of the increased activity during the period is afforded by the fact that no less than 742 departments were affected by reorganisation schemes during the year ended 31st March, 1928,

as compared with 550 in the previous year. In 168 cases (57 urban and 111 rural) the department was "decapitated," and arrangements made for the transfer of the older pupils.

3. Practical Instruction.

21. It is now generally recognised that practical instruction should form a regular part of the curriculum for all schools for older scholars, that if practical instruction is to be effectively linked up with other subjects of the curriculum, the requisite accommodation should be provided on the school premises, and that the teacher in charge should be a regular member of the school staff. In formulating schemes of reorganisation every endeavour is being made to apply these principles. Table 18 gives fuller particulars of the provision made than have hitherto been available. Figures are now given showing the number of departments which provide facilities for different kinds of practical instruction, and the extent to which this provision is on the school premises or at a separate centre. As will be seen from the last column of the table, practically every department classified as Senior now possesses some facilities, and the only group of departments amongst which there is still a serious absence of facilities is that classified as Mixed. A large proportion of these are small rural schools in connexion with which the provision of facilities presents special difficulties. In not all cases, of course, are the facilities entirely adequate and suitable, but substantial progress is being made.

4. School Attendance.

22. During the period under review no authority submitted for the approval of the Board a bye-law designed to extend to 15 the age of compulsory school attendance, but in January, 1928, the Board under Sections 46 (4) (c) and 48 (4) of the Education Act approved a bye-law made by Cambridgeshire under which six was substituted for five as the age for the commencement of compulsory school attendance. It was provided that the bye-law should remain in force only so long as the regulations of the local authority provided that the public elementary schools in their area should be open to children of not less than five years of age, and it is understood that the admission of children under 5 will continue.

23. While the total number of children on the books of public elementary schools maintained by local authorities was substantially the same on the 31st March, 1928, as in the two preceding years, wide variations occurred in particular age groups. The figures in Table 6 show that the fall in the birth-rate which followed the peak period 1919-20 is beginning to affect the number of infants in the schools. While the number of children aged five to eight on the 31st March, 1927, showed an increase over the previous year of about 186,000, the number on the 31st March, 1928, showed a fall

of about 34,000. The resulting reduction in the pressure on the accommodation of schools in some areas has been taken advantage of to secure improved conditions of teaching for the remaining pupils by a reduction in the size of classes or otherwise; while in other areas it has allowed of the admission of more children under five. This no doubt largely accounts for the fact that the number of children under five shows an increase of about 1,400, as compared with a drop of 18,500 in the previous year. Among juniors (8-11) there was an increase of nearly 100,000, as against a decrease of a corresponding amount in the previous year.

24. In the case of children over 11 the number on the 31st March, 1928, showed a decrease of nearly 90,000, which followed a decrease of about 60,000 in the previous year, and these decreases must be expected to continue until the effect of the high birth-rate immediately after the War begins to be felt. As shown in Table 12, the number of children in voluntary attendance on the 31st March, 1928, was 54,227, which compares with 51,107 in the previous year, an increase of about 6 per cent. The number of these who were over 15 was 13,890, as against 13,170 in the previous year. It is worthy of note that, while the departments classified as Senior contained only about 10 per cent. of the pupils over 11, they contained about 45 per cent. of the children in voluntary attendance, and they account for the whole of the increase in voluntary school attendance over 15. It is, therefore, legitimate to anticipate that, as the establishment of Senior and Central Schools proceeds, voluntary attendance will increase more rapidly than at present.

25. The number of pupils who left public elementary schools maintained by local education authorities in order to proceed to secondary schools or other places of higher education increased from 89,016 to 91,506. The number of pupils who left after a period of voluntary attendance increased from 64,116 to 70,545.

5. School Supply and Improvement of Premises.

26. During 1926-27 development in many parts of the country was impeded by the coal stoppage and other economic difficulties, but, as was foreshadowed in last year's Report, during the period under review local authorities showed great activity in the provision of new schools and the improvement of existing ones. During the 12 months ended 31st March, 1928, the Board approved under Section 18 of the Education Act the provision of 106 new council schools as compared with 81 during the preceding year. They similarly approved the enlargement of 51 existing council schools as compared with 34. The capital expenditure for the provision and improvement of elementary school premises approved by the Board amounted to about 15 per cent. more than the amount

approved in the previous year : 103 new council schools were opened, as against 40 closed. The need for new accommodation resulting from the unprecedented movement of population to new housing estates continued to make a heavy call on the energies and resources of local authorities, and roughly half the new expenditure continues to be applied to the meeting of the urgent needs of these new estates.

27. Voluntary bodies have also shown increased activity during the period. The number of new voluntary schools approved under Section 18 increased from 13 to 23 and the number of enlargements similarly approved from 18 to 30. Though no figures as to expenditure are available, it is clear that schemes involving a substantial increase of expenditure from voluntary sources were initiated during the period. The number of plans for new schools approved by the Board increased from 9 to 16, while the number of schemes for replacement, enlargement or improvement of existing premises amounted to the substantial figure of 474, as compared with 337 in the preceding year : 14 new voluntary schools were opened, while 71 were closed and 37 others were transferred to the local authority. While the new schools are mostly designed to meet the needs of new housing estates, the energies of voluntary bodies have been primarily directed to the improvement of existing premises and in particular of the premises of schools on the "black list."

28. As indicated above, the Board, in Circular 1397, named the elimination of schools from the "black list" as one of the essential matters to which attention ought to continue to be paid. The following table shows the progress made up to the 31st December, 1928 :—

| | Council Schools. | | | | Voluntary Schools. | | | | Total. | | | |
|--|------------------|-----|-----|--------|--------------------|-------|-----|--------|--------|-------|-----|--------|
| | A. | B. | C. | Total. | A. | B. | C. | Total. | A. | B. | C. | Total. |
| I.—Original Totals .. | 219 | 345 | 150 | 714 | 460 | 1,421 | 232 | 2,113 | 679 | 1,766 | 382 | 2,827 |
| II.—Removed from List : | | | | | | | | | | | | |
| (a) Closed or replaced .. | 56 | 11 | — | 67 | 77 | 27 | 4 | 108 | 133 | 38 | 4 | 175 |
| (b) Defects removed .. | 11 | 56 | 19 | 86 | 39 | 294 | 42 | 375 | 50 | 350 | 61 | 461 |
| (c) Total | 67 | 67 | 19 | 153 | 116 | 321 | 46 | 483 | 183 | 388 | 65 | 636 |
| III.—Removed from List on Dec. 31st, 1927. | 46 | 36 | 6 | 88 | 74 | 167 | 30 | 271 | 120 | 203 | 36 | 359 |

29. It will be seen that, during the calendar year 1928, 65 council schools and 212 voluntary schools, a total of 277, were removed from the list. In addition to these, plans had on the 31st December been approved which, when carried out, will result in the removal from the list of a further 349 schools (76 council, 273 voluntary).

In all, therefore, nearly 1,000 schools have been dealt with—rather more than one-third of the total. This represents a substantial measure of achievement, the more noteworthy in that, though the voluntary schools represent three-quarters of the whole number, their removal from the list has progressed at the same rate as in the case of council schools. No doubt in a certain number of cases the removal of the voluntary school from the list has been facilitated by the transfer of some of the children to other schools ; none the less the progress already made represents a big effort on the part of managers and diocesan authorities. Moreover, there is every reason to anticipate continued progress, since in the great majority of the cases still remaining to be dealt with the problems involved are being actively considered by the various parties concerned. Progress is not infrequently delayed by the fact that removal of a school from the "black list" cannot wisely be dealt with as an isolated problem, but must be considered as part of the larger problem of the future improvement of the educational facilities of the district, including the provision of Senior Schools for older children. Any such delays, though they are to be regretted, are inevitable if future development is not to be prejudiced.

6. Large Classes.

30. In Circular 1397, to which reference has already been made, the Board emphasized their view that the elimination of large classes throughout the schools must remain one of the cardinal objects of national policy, with which substantial progress could and should be made in every area in the immediate future. It was pointed out that, since the number of senior pupils was declining and would continue to decline until 1930, that year was the natural one to select as the date by which senior classes with more than 50 pupils should be finally eliminated and a substantial reduction made in the number of senior classes of over 40. The organisation of senior schools should be so planned as to ensure against the recrudescence of the evil of large classes when the number of senior pupils rose again after that year. On the other hand, since the number of pupils under 11 was likely to increase until 1930, after which year it might be expected to fall, it was recognised that it might not be practicable to secure a final elimination of large classes for younger children by that year, especially as the pressure on the junior schools ought not to be relieved by lowering the age of transfer to the senior schools. To yield to that temptation would be to prejudice the whole development of education after the age of 11 on the lines advocated by the Consultative Committee.

31. In December, 1928, the Board issued a statement (List 44) giving particulars for the area of each authority of the size of classes on the 31st March, 1928, with comparative figures for the

31st March, 1927. The summary tables attached to the statement show that during the year the number of classes of more than 50 pupils had decreased from 20,201 to 16,686, or by about one-sixth. As regards the reduction to 40 of classes for children over 11 it is satisfactory to find that amongst classes limited to children over 11 the number of classes containing more than 40 pupils fell during the year from 9,120 to 8,166, a drop of nearly one thousand. These reductions would have been even more substantial had it not been for the continued difficulties experienced in dealing with new housing areas, and it is primarily for this reason that the reduction in the number of large classes was proportionately lowest in county areas, since these are the areas which have been most affected by movements of population. Schools take longer to build than houses; moreover, until the houses are occupied, it is almost impossible to estimate with any accuracy the number of children for whom accommodation is required. Some temporary shortage of accommodation is accordingly almost unavoidable, and the reduction in the number of large classes effected during the year is very largely the outcome of the progress already made in dealing with this problem, and further reductions are to be anticipated as the large amount of further accommodation now in course of provision becomes available. The reduction is also in part to be attributed to the careful review of school organisation and staffing which has been undertaken by authorities in whose areas large classes still remain a serious problem.

7. Teaching Staff.

32. Article 11 of the Code requires each authority to maintain an approved establishment of suitable teachers for the public elementary schools in its area, and to satisfy the Board, if required, as to its distribution. In paragraph 34 of the Board's last Report the establishments approved for the year beginning 1st April, 1927, which was the first year during which the above Article became operative, were expected to amount in the aggregate to about 168,450 teachers, but this number was for various reasons increased subsequently to 169,100 teachers. It should be explained that the approved establishment is intended to include the whole of the recognised adult full-time teaching staff proposed to be employed by the authority in its public elementary schools, that is to say, not only the teachers to be employed in particular schools and in separate practical instruction centres, but also supply teachers and peripatetic teachers. The establishment is confined to Certificated Teachers, Uncertificated Teachers, Special Subject Teachers and Supplementary Teachers recognised under Schedules I and II of the Code. It is not intended to include Part-time Teachers, Teachers in Special Schools, Pupil-Teachers, Student-Teachers, Monitors and adult Teachers possessing no Code qualification, of whom a small

number may occasionally be employed in a supernumerary capacity. The number of recognised adult full-time teachers actually employed on the 31st March, 1928 (*see* Table 9 of Part II) amounted to 167,948, or 1,152 less than the total of the approved establishments. An exact correspondence on that date between the actual and approved establishments could not, of course, be looked for, and there were in fact several areas in which the number of teachers actually employed on the 31st March, 1928, was either slightly smaller or slightly greater than the approved establishment. The existence of temporary vacancies, or the temporary postponement of projected developments, usually accounted for the difference in the one case, while the usual explanation in the other was a greater increase in the number of children in attendance than had been anticipated—this was specially the case in the new housing areas. In some cases special increases of staff were sanctioned during the year for this reason.

33. For the year 1928–29 the Board refrained from requiring any further detailed estimates of their teaching staff from local education authorities, and only asked to be informed of any desired alteration in the establishment approved for the previous year, with a short statement of the reasons for it. Increases of staff were asked for in 121 cases, while reductions were desired in 34 cases. The chief reasons for increase were the necessity for meeting the needs of an increased school population, and a very general desire to meet the Board's request for a reduction in the size of classes. Decreases where they occurred were due chiefly to decreases in the school population. It is estimated that the total number of full-time teaching posts ultimately approved for 1928–29 will amount approximately to 170,700, as compared with 169,100 for 1927–28.

The Board have endeavoured to introduce the new system with the minimum of inconvenience to authorities, and they are glad to take this opportunity of acknowledging the readiness with which authorities have supplied them with the necessary staffing estimates, though in some areas where rapid development is going on it is appreciated that this must have been a matter of some difficulty. It only remains to add that the estimates for the years 1927–28 and 1928–29 had generally been so carefully prepared that it was only in a comparatively small number of cases that a revision, whether by way of increase or reduction, was called for.

34. The statistics of numbers of teachers given in Table 9 for the 31st March, 1928, have been based on the Teachers' Service Books instead of on direct returns from the Schools as in previous years. On that date there were employed 122,664 Certificated Teachers, 32,775 Uncertificated Teachers, and 8,303 Supplementary

Teachers. On the 31st March, 1927 (*see* Table 9 of Report for 1926-27) there were employed in public elementary schools 119,656 Certificated Teachers, 33,852 Uncertificated Teachers, and 8,734 Supplementary Teachers. For the reasons given in the explanatory note to Table 9 on page 207 these two sets of figures are not strictly comparable; there is, however, no doubt that during the year there was an appreciable improvement in both the number and the quality of the staff, decreases in the numbers of Uncertificated and Supplementary Teachers being more than compensated for by an increase in the number of Certificated Teachers.

35. The introduction of the Teachers' Service Book procedure has enabled the Board to include a wastage table for teachers (*see* Table 10). It is to be observed that the number of teachers who leave for causes other than superannuation considerably exceeds the number of those in respect of whom superannuation awards are made. Even after deducting the number of teachers who resume service after a break, in the case of Certificated Teachers the figures are 2,803, as compared with 2,089, and in the case of Uncertificated Teachers 2,513, as compared with 456. In the case of Uncertificated Teachers, however, about 900 each year leave in order to go to Training Colleges, and ultimately reappear as certificated new entrants. It will be noticed that the great majority of the teachers who leave for "Other Causes" are women. The principal reason is, of course, marriage, but women teachers sometimes withdraw in order to take up home duties either on the death of their mothers or for other reasons.

8. Books in Public Elementary Schools.

36. The following paragraphs give a summary of the recommendations of the Consultative Committee on Books in Public Elementary Schools:—

In a number of areas expenditure on books is seriously insufficient and, in consequence, many schools are inadequately supplied. Authorities should look afresh into the supply of books, and, where necessary, take appropriate steps to increase their total allowance for school supplies.

The most satisfactory method of regulating expenditure on books is to fix a scale of inclusive allowances for books, stationery and apparatus. Separate allowances for books are not desirable, but where expenditure on books has been low it may be desirable to specify a minimum sum per head to be spent on books only.

Authorities should provide separate requisition forms for books. They should revise their methods of keeping accounts so that books are shown as a separate item of expenditure. The revision of the present official form of accounts should be considered with the same object.

Whatever arrangements may be made for obtaining periodic supplies of books from public libraries, every school should be provided with a permanent nucleus of books related to the curriculum, chosen and arranged for their appeal to children of different ages. Books of reference for teachers and pupils should be included. In Modern Schools class libraries may be desirable. There should be adequate accommodation for the school library, and it should be kept at as high a level of efficiency as possible.

While the education authorities should be financially responsible for the school library, there should be close co-operation with library authorities and public libraries, both urban and county. In urban areas special provision for children in public libraries is commended. Older pupils should have any facilities provided explained to them. In county areas scholars should be enabled and encouraged to obtain on loan suitable books, including books for general reading.

Where a special teachers' library is not provided by the authority, the public library should contain an educational section.

The books used in elementary schools should be excellent in quality as well as adequate in numbers. In view of the new outlook in education for children over eleven, there is a need for more books, including books of reference suited to their needs.

Every pupil should be allowed, at least in school, to retain possession of all books which he is constantly using. Older scholars might take books home. Provision should be made for the pupil to keep his books.

Primary responsibility for the selection of books rests on the teacher. The Training College should keep this responsibility steadily in view throughout the course. General instruction should be given on management of school libraries.

Authorities, either singly or in co-operation, should establish "Book Rooms" where they have not already done so. Book-List Committees should similarly be established to draw up short annotated lists of books.

The Board should convene a central Advisory Committee, including representatives of Book-List Committees, to deal with general questions relating to the supply, quality and content of books.

9. Schools recognised under Section 25 of the Education Act.

37. Under this Section the Board have power to give grants to a Marine School, or to any school which is part of or is held in the premises of any institution in which children are boarded, even though the school is not maintained by a local education authority. Provisions for the payment of grant to such schools are contained in Article 25 of the Code. In the past, statistics of these schools have been incorporated with the statistics for ordinary elementary schools. In the present volume this practice has been discontinued; the main tables are now confined to public elementary schools maintained by local education authorities, and separate statistics are given for schools recognised under Section 25 (*see* Tables 19-23). The number of these schools recognised by the Board on the 31st March was 46, containing about 6,600 pupils. Seven of them are connected with the Church of England and twelve with a Roman Catholic body.

10. Certified Efficient Schools, Poor Law Schools, and Canal Boat Children.

38. The number of certified efficient schools on the list for inspection on the 31st March, 1928, was 21, one school having been removed from the list during the year. On the same date the number of schools maintained by Boards of Guardians, or combinations of Boards of Guardians, including the Metropolitan Asylums Board, was as follows:—

| | |
|---|----|
| Poor Law Schools (i.e., schools maintained by Guardians of Poor Law Unions) | 40 |
| District Schools (i.e., schools maintained by the Managers of School Districts comprising more than one Poor Law Union) | 5 |
| Schools of the Metropolitan Asylums Board | 11 |
| All the above schools are situated in England. | |

39. Of the 68 local education authorities in England making returns in whose areas there are canals, 24 reported the presence of children on boats during the year 1927. The number of children found on board was 1,734. Two local education authorities in Wales made returns during 1927, but neither reported the presence of canal boat children in boats registered or found in their area. Legal proceedings were taken by two local education authorities, and in two cases fines of 4s. and 10s. respectively were imposed.

CHAPTER II.

SECONDARY SCHOOLS.

1. School Supply and Number of Pupils.

40. The number of secondary schools in England and Wales recognised for grant by the Board continues to increase and in 1927-28 reached a total of 1,329, an increase of 10 as compared with the preceding year. Of the 1,329 schools, 680 were controlled by local authorities, 443 were endowed schools or schools of a similar type, 25 were schools of the Girls' Public Day Schools Trust, 80 were controlled by Roman Catholic Orders or Communities, and 101 were Welsh Intermediate Schools.

41. The number of pupils in grant-earning schools in October, 1927, was 384,642 (204,233 boys and 180,409 girls), as compared with 377,369 in October, 1926. As in the previous year, this increase was only partly attributable to the recognition of new schools; there was an increase of 5,974 in the numbers in schools previously recognised for grant. According to the latest returns available, there was a further increase in October, 1928, to 393,181 in 1,338 schools. The number of pupils admitted during 1927-28 was 89,253, as compared with 88,946 in 1926-27.

42. The number of secondary schools recognised by the Board as efficient, but not as eligible for grant, increased from 326 in 1926-27 to 346 in 1927-28. In October, 1928, these schools contained 62,899 pupils (32,355 boys and 30,544 girls). The number of preparatory schools recognised as efficient also increased, from 108 in 1926-27 to 111 in 1927-28. According to the latest returns available (1st October, 1928) the total number of pupils in secondary schools recognised as efficient, whether grant-aided or not, was 456,080, while the number in recognised preparatory schools was 9,335. The preparatory school figures relate only to preparatory schools conducted as independent units; a considerable number of children of preparatory school age are educated in the preparatory departments of secondary schools and are included in the secondary school figures. As has been explained in previous reports, the figures do not include a large number of preparatory and secondary schools which are not grant-aided and have not applied to the Board for recognition as efficient, so that they must not be taken as giving a complete picture of the amount of secondary and preparatory school provision in the country.

2. Free Places.

43. With the exception of four schools which were on the grant list before 1907 and received grant at a rate lower than the normal, all the 1,329 schools in receipt of grant complied with the Board's

requirements as to the provision of free places for children formerly in attendance at public elementary schools. 1,173 were required to offer free places to the extent of 25 per cent. of the number of admissions in the previous year, and in many of these schools the number of free places offered was considerably in excess of 25 per cent., while certain of the schools were entirely free. In the year under review there were 152 schools in which the normal requirement was reduced to 10, 12½, 15 or 20 per cent. The total number of free places on the 1st October, 1927, was 150,107, an increase of 7,437 over the figure of the previous year, while the percentage of free-place pupils to the total number of pupils in the schools was 39·0 as compared with 37·8 in the previous year. According to the latest returns available there was a further increase in October, 1928, to 157,134, representing 40 per cent. of the total number of pupils at that date.

3. Ages of Pupils and length of School Life.

44. Of the 393,181 pupils in attendance at grant-earning secondary schools on the 1st October, 1928, 314,272, or nearly 80 per cent., were between the ages of 11 and 16, reckoning ages as on the previous 31st July. The number of children under 10 in the schools, after falling for several years, shows an unexpected increase of 2,498, from 20,779 to 23,277. In view of the need for reserving the bulk of the available accommodation for pupils over 10 years of age who are able to enter upon the main school course, any tendency to an increase in the number of younger pupils taught in preparatory departments will require to be kept under careful observation. It should be noted, however, that the number of these children is only 5·9 per cent. of the total number of pupils in the schools. The number of pupils over 16 again shows a small increase, from 38,304 to 38,397, but the proportion of such pupils is still less than 10 per cent. of the whole.

45. It is not possible to compare the average school life with the figures given in our last Report, as a change has been made in the basis of calculation. In view of the fact that the majority of the pupils enter secondary schools at the beginning of the main school course, while others enter a preparatory department at a much earlier age, it has always been recognised that the figures based upon the complete school life of all pupils would be of little value for statistical purposes, and the Board's practice for many years has been to exclude for this purpose all school life below the age of 12.

In recent years, however, it has become increasingly recognised that the age of 11 is the most suitable age for entering the main school course, and the number of pupils entering at 11 has steadily

increased, while the number entering at 12 has decreased. Consequently the Board have decided, in calculating the average school life, to include the whole of the period during which a pupil has attended the secondary school after his or her eleventh birthday, and the figures for 1927-28 have been calculated on this basis. It will of course be understood that, as the majority of the pupils enter the schools at various dates between the ages of 11 and 12, this change does not add a complete year to the average school life, and that consequently the new figures cannot be compared with those prepared on the former basis. It is clear, however, that under the existing conditions they give a more accurate picture of the average period of attendance in the main course of secondary schools, excluding the periods spent in some cases in the preparatory departments of those schools.

46. In one respect the figures, both for average school life and average leaving age, give a rather less favourable impression than is justified by the facts, as it is necessary to base them on the actual school life over 11 and the actual leaving age at each school, without taking into account the possibility of continuous attendance at two or more secondary schools. For example, if a pupil enters a secondary school at 11, moves to another school at 14, and remains there till 17, his secondary school life is 6 years and his real leaving age 17, but in view of the difficulty of following up individual cases of transfer it is necessary for statistical purposes to regard such a pupil as having attended a secondary school for two separate periods of 3 years, and as having left school at the age of 14 and again at the age of 17.

The figures for 1927-28 on the new basis show that in the case of both boys and girls the average school life after the age of 11 was 4 years 1 month, and that the average leaving age of pupils who left after reaching the age of 11 was 16 years 1 month.

4. Staffing and Size of Classes.

47. On the 31st March, 1928, there were 20,102 full-time teachers employed in grant-earning secondary schools; of these 49·7 per cent. were men and 50·3 per cent. women. The proportion of graduates employed has increased in the case of men to 81·7 per cent. as compared with 79·1 per cent. on the 31st March, 1927, and in the case of women to 63·9 per cent. as compared with 61·5 per cent. on the 31st March, 1927. The number of classes over the normal limit of 30 increased slightly from 3,519 on the 1st October, 1926, to 3,590 on the 1st October, 1927, and 112 of these contained more than 35 pupils as compared with 94 in the previous year. According to the latest returns there were 3,608 classes with over 30 pupils on the 1st October, 1928, and of these 101 contained over 35 pupils.

5. Advanced Courses.

48. The number of recognised advanced courses has increased by six, from 482 in 1926-27 to 488 in 1927-28. These courses were held in 343 grant-earning schools and in 3 schools not recognised for grant. Of the 488 courses 233 were in Science and Mathematics, 190 in Modern Studies and 39 in Classics. Advanced courses in all these three groups of subjects were recognised in 14 boys' schools and 2 girls' schools. There was also a substantial amount of advanced work in certain schools in which no application was made to the Board for the formal approval of advanced courses.

6. Pupils proceeding from Secondary Schools to Universities.

49. Of 69,303 pupils who left grant-earning secondary schools in 1927-28 after reaching the age of 14, 2,186 boys and 1,384 girls are known to have proceeded to universities, 64.1 per cent. of whom were ex-public elementary school pupils. For the previous year, 1926-27, the corresponding figures were 2,057 boys and 1,312 girls out of 67,490.

7. Abolition of Duplication of Grant.

50. As the result of the changes announced in Circulars 1259 and 1381, only 235 of the 671 schools not provided by local authorities for higher education continue to receive direct grant from the Board. The remaining 436 schools, comprising 18 Roman Catholic schools, 23 schools provided by Borough Councils or Urban District Councils, 100 schools conducted under the Welsh Intermediate Act and 295 Foundation and other schools, have relinquished direct grant amounting in the aggregate to some £680,000.

Although Circular 1381 made no provision for schools to relinquish direct grant after the 1st August, 1927, the Board have allowed several schools to do so from a later date in view of changes in their financial position. In such cases the Board have decided, for the future, to apply the provisions of paragraph 3 of the Circular to any aid which may be given to the school by the local authority during the financial year during which the grant is relinquished. Thus, if the school ceases to receive direct grant as from the 1st August, 1929 and the local authority aid the school in the financial year 1929-30, the Board will be prepared to take into consideration for grant to the authority so much of that aid as exceeds the amount of the direct grant paid to the school during the financial year.

8. Miscellaneous.

51. *Observation Visits.*—In the year 1927-28 arrangements were made for 13 teachers serving in grant-earning secondary schools to visit other schools for the purpose of observing methods of teaching. As stated in recent Reports, we should welcome an extension of this system for enabling promising but inexperienced teachers to gain experience of improved methods of teaching.

52. *Full Inspections.*—In 1928, 170 schools were fully inspected by the Board, 41 for the first time. These figures compare with 166 and 55 during 1927.

9. Schemes under the Charitable Trusts Acts and Endowed Schools Acts for Secondary Schools and for Exhibitions.

53. During the period under review, 32 schemes were established. Of these 19 were for secondary schools, including 3 occasioned by the necessity for increasing the maximum tuition or boarding fees allowed under the existing schemes, in order to provide for the increase in the cost of maintenance and of boarding. The remaining 13 schemes were in respect of exhibitions tenable at secondary schools or at other institutions of higher education.

10. Secondary School Examinations Council.

54. The following report has been made by the Council for the year 1927-28 :—

During the year 1927-28 the Council held four meetings and its Standing Committee also met on four separate occasions.

Miss L. A. Lowe, Miss E. S. Lees, Mr. P. Abbott and Professor B. M. Connal retired from membership of the Council and were succeeded by Miss B. M. Sparks, Miss M. L. Newman, Mr. A. C. Horth and Professor C. W. Valentine.

The report of the Council for the year 1926-27 mentioned that two important questions had arisen and were under consideration by the Council, viz. :—

- (i) whether the Higher Certificate Examinations as at present arranged are suitable for all types of pupils who remain at school until 18 years of age, and
- (ii) whether any change should be made in the requirements for a pass in the School Certificate Examination.

These matters have engaged the earnest consideration of the Council throughout the year.

As regards the Higher Certificate Examination, experience shows that in recent years there has been some lowering in the average quality of candidates entered, and this confirms the opinion

of the Investigators of the Examinations held in 1926 that for a considerable number of candidates a less ambitious course of study would have been more suitable. The Council still have under consideration the steps which it is desirable to take in order to meet this difficulty.

As regards the School Certificate Examination, the proposals of the Head Mistresses' Association—that subjects in Group IV should be accorded the same recognition as is given to subjects in Groups I, II and III, and that a pass in Group I together with a pass in two of the remaining Groups should constitute a pass in the examination—have been fully discussed with representatives of the various teachers' associations. In view of the fact that the proposals involve a fundamental change in the character of the First Examination, the Council, in accordance with the terms of their constitution, consulted the Board of Education, who requested that consideration might be given to the desirability of allowing two subjects in Group IV to count towards the five subjects in which a pass is required, on the understanding that the requirement of a pass in each of Groups I, II and III be retained. In view of the fact that French appeared to present special difficulties to many candidates, the Board also suggested the desirability of an investigation being held into the conditions demanded in the various examinations for a pass in that subject, and, so far as possible, into the causes of failure in the examinations as a whole.

The Council decided that :—(a) as an experiment, two subjects from Group IV should be allowed to count in the examinations held in 1929 and 1930 towards the five subjects required for a pass in the examination, the present requirement of a pass in each of Groups I, II and III being retained. In the meantime the Council will explore the question further, with a view to deciding what subjects in Group IV shall be allowed permanently to count towards the award of a Certificate and what their content should be ; (b) an investigation should be held as suggested by the Board.

The report of the Council for the year 1926-27 included certain statistics relating to First and Second Examinations. Similar statistics in respect of the examinations held in mid-summer 1928 are given below.

First Examination.

The number of candidates entered for the examination was 56,218, of whom 38,469, or 68·4 per cent., obtained certificates.

The following table shows the number of entries (including candidates not entered for the full examination) and the number of passes in the principal subjects of the examination :—

| Subject. | No. of Entries. | Percentage of Entrants offering the Subject. | Percentage of Passes with Credit. |
|-------------------------------------|-----------------|--|-----------------------------------|
| | | % | % |
| English | 56,574 | 100·0 | 60·9 |
| History | 49,377 | 87·8 | 48·3 |
| Geography | 36,989 | 65·8 | 46·6 |
| Religious Knowledge | 15,272 | 27·2 | 42·6 |
| Latin | 23,558 | 41·9 | 44·8 |
| Greek | 2,163 | 3·8 | 62·5 |
| French | 54,273 | 96·5 | 50·3 |
| German | 3,837 | 6·8 | 50·7 |
| Welsh | 2,368 | 4·2 | 69·1 |
| Mathematics | 52,662 | 93·7 | 51·2 |
| Higher Mathematics | 4,322 | 7·7 | 43·4 |
| Botany | 14,610 | 26·0 | 45·8 |
| Chemistry | 21,937 | 39·0 | 47·8 |
| Physics | 13,625 | 24·2 | 51·8 |
| Elementary or Experimental Science. | 3,058 | 5·4 | 45·8 |
| General Science | 1,268 | 2·3 | 44·6 |
| Mechanics | 2,053 | 3·7 | 43·4 |
| Heat, Light and Sound | 3,164 | 5·6 | 51·0 |
| Electricity and Magnetism | 1,884 | 3·4 | 55·4 |
| Art | 22,213 | 39·5 | 54·0 |

In addition, 480 (353) candidates offered Economics, 719 (406) Spanish, 57 (45) Italian, 1 (1) Dutch, 43 (24) Russian, 210 (143) Applied Science, 360 (205) Biology, 28 (20) Zoology, 45 (37) Geology, 147 (80) Agricultural Science, and 592 (302) Music. The figures in brackets denote the number of passes in the subject.

Second Examination.

The number of candidates entered for the examination was 8,670, of whom 6,067, or 70·0 per cent., obtained certificates.

The following table shows the number of entries and the number of certificates awarded in each of the groups :—

| Group. | (a) No. of Entries. | (b) No. of Certificates awarded. | Percentage of (b) to (a). | Percentage of (a) to Total No. of Candidates |
|---------------------------------|------------------------|-------------------------------------|---------------------------|--|
| | | | % | % |
| Classical | 836 | 578 | 69·1 | 9·6 |
| Modern Studies | 4,299 | 3,144 | 73·1 | 49·6 |
| Mathematics | 473 | 297 | 62·8 | 5·5 |
| Science and Mathematics | 2,986 | 1,987 | 66·5 | 34·4 |

(see note *)

* The remaining 0·9 per cent. took Group E in the examination held by London University, in which Geography is the principal subject.

The following table shows the number of entries and the number of passes in individual subjects:—

| Subject. | No. of Entries. | Percentage of Entrants offering the Subject. | No. obtaining a Pass. | Percentage obtaining a Pass. |
|---------------------------|-----------------|--|-----------------------|------------------------------|
| | | % | | % |
| Latin | 1,948 | 22.5 | 1,416 | 72.7 |
| Greek | 847 | 9.8 | 606 | 71.6 |
| Ancient History | 837 | 9.7 | 615 | 73.5 |
| French | 3,567 | 41.1 | 2,673 | 74.9 |
| German | 303 | 3.5 | 261 | 86.1 |
| Italian | 1 | — | 1 | 100.0 |
| Russian | 5 | — | 5 | 100.0 |
| Spanish | 63 | 0.7 | 62 | 98.4 |
| Welsh | 98 | 1.1 | 73 | 74.5 |
| English | 3,356 | 38.7 | 2,685 | 80.0 |
| History | 3,067 | 35.4 | 2,444 | 79.7 |
| Mathematics | 3,549 | 40.9 | 2,531 | 71.3 |
| Physics | 2,456 | 28.3 | 1,805 | 73.5 |
| Chemistry | 2,347 | 27.1 | 1,731 | 73.8 |
| Physics with Chemistry .. | 89 | 1.0 | 62 | 69.7 |
| Botany | 455 | 5.2 | 333 | 73.2 |
| Zoology | 175 | 2.0 | 141 | 80.6 |
| Biology | 95 | 1.1 | 63 | 66.3 |
| Geography | 544 | 6.3 | 432 | 79.4 |
| Economics.. .. . | 97 | 1.1 | 79 | 81.4 |
| Geology | 10 | — | 10 | 100.0 |

CHAPTER III.

CONTINUATION, TECHNICAL AND COMMERCIAL SCHOOLS.

1. General.

55. The growth in the aggregate attendance which was noticed in our last Report has continued, as will be seen from the following table of statistics, which gives the numbers of full-time and part-time students in the various types of schools and courses recognised under the Regulations for Further Education. These figures refer to England and Wales.

| Type of School or Course. | Full-time Students. | | Part-time Students. | |
|-----------------------------|---------------------|----------|---------------------|----------|
| | 1926-27. | 1927-28. | 1926-27. | 1927-28. |
| Senior College Courses .. | 4,436 | 5,003 | 1,234 | 1,352 |
| Technical Day Classes .. | 1,293 | 1,175 | 15,777 | 18,703 |
| Junior Technical Schools .. | 18,704 | 19,541 | — | — |
| Junior Housewifery Schools | 787 | 798 | — | — |
| Day Continuation Schools.. | — | — | 23,884 | 22,483 |
| Evening Courses in Colleges | — | — | 162,999 | 171,370 |
| Evening Institutes | — | — | 564,651 | 599,921 |
| Courses for Teachers .. | — | — | 41,264 | 40,950 |
| Totals | 25,220 | 26,517 | 809,809 | 854,779 |

The increase in the aggregate number of students is :—Full-time, 5.1 per cent. ; part-time, 5.6 per cent.

56. Evening Institutes and Evening Courses in Colleges form the largest, most widely distributed, and, since the attendance is mainly of wage earners during leisure time, the most characteristic part of the provision of continuation and technical education. The aggregate growth of evening attendance is the net result of increases in a considerable number of areas which more than compensate for the falling off in a few, including some of those affected by serious industrial depression. There are some indications that the attendance of school leavers at the evening institutes specially provided for them may have reached a maximum in several areas, and where expansion at this stage is recorded it appears to be attributable to special causes, such as the appointment of headmasters or mistresses who have brought fresh energy to the work, the introduction of more attractive curricula, or the renewed circularising of day schools and parents. Among students over 16, however, the demand for evening instruction is in general well sustained. In counties and county boroughs alike more women seem to be particularly interested in the opportunities given to them, especially for instruction in domestic

and other handicrafts. The number of women students over 21 in all kinds of evening classes under the Regulations for Further Education increased from about 140,000 in 1926-27 to more than 156,000 in 1927-28. The increase in the number of men students of a like age, though not inconsiderable, was absolutely and proportionately smaller, viz., from nearly 98,000 to nearly 103,000. Improvements recently made in accommodation and equipment in departments of some technical schools, or the extension of the curriculum to occupations not previously dealt with, have been followed by increased attendance, and the development of new industrial undertakings is given in a few instances as the explanation of a considerable expansion in the local technical school work.

In London the increase in enrolment is specially noticeable in the institutes of newer types, such as the Literary Institutes, the Men's Institutes and the Junior Men's Institutes, while there is also a steady increase in the enrolments in the Polytechnics. The attendances in the Junior Technical and Junior Commercial Institutes, designed for school leavers, show no decided expansion.

2. Improvement of Accommodation, etc.

57. In the following paragraphs we give a summary account of the principal projects which have been approved during the year 1928 with a view to the improvement of the facilities provided in continuation, commercial and technical schools in England.

58. *Northern and North Eastern Divisions.*—Structural alterations and improvements in lighting have been effected at the Villiers Street Junior Technical School at Sunderland. At Rutherford College, Newcastle-on-Tyne, additional equipment has been provided at a cost of £1,000. The Heaton Junior Technical School has now removed to the new quarters to which reference was made in the last Report, and the Atkinson Road Junior Technical Schools have improved accommodation. In York the former public library building has been adapted for the purpose of a Technical School and School of Commerce at a cost of approximately £5,000.

Plans for the erection of a Mining Instruction Centre at West Stanley, Durham, have been approved. The cost, estimated at £5,670, will be met by the Miners' Welfare Committee. The condition of the mining industry has checked proposed developments in Northumberland and Cumberland. At Middlesbrough progress has been made with the erection of the new Constantine Technical College, of which the principal has already been appointed. In Leeds improvements have been effected in the accommodation in the buildings set apart for the boot trades and bakery departments of the Technical College. At Keighley the erection of a building to provide additional accommodation for the textile department has been undertaken at a cost of £3,500, and additional rooms are also

being provided in the Art School at Keighley. At Selby premises have been purchased and adapted as an Art and Technical School for £4,550. At Whitwood, in the West Riding, a Mining and Technical Institute is being established at a cost of some £30,000 (first instalment of a scheme involving an expenditure of £77,500), of which £13,000 will be met from grants from the Miners' Welfare Committee. At Batley a warehouse adjoining the college has been adapted for use for college classes and societies, at an expenditure of £761. At Doncaster substantial additions to the equipment of the Technical College have been made. Plans have been approved for the new Technical College and Art School at Rotherham, which are estimated to cost £60,350, of which £6,250 will be met from grants from the Miners' Welfare Committee. At Bradford an extension of the Technical College is in contemplation, involving an expenditure of approximately £45,000.

59. *North Western Division.*—In Manchester the adaptation of the premises formerly occupied by the Day Training College for use by the High School of Commerce is being undertaken at a cost of £6,500; while at Newton Heath provision of additional premises for a new Junior Technical School preparing for the Rubber Trades has been made at a cost of £2,940. Awards have been made for plans for the extension of the College of Technology to which reference was made in our last Report. The expenditure upon the complete scheme may amount to over £350,000. At Liverpool a site has been purchased for the proposed new School of Commerce for £4,314, and plans for the building are being prepared. At Bootle new premises have been secured for the Art School. At Bolton additional equipment has been installed in the engineering workshops and the science laboratory at a cost of £1,150. At Blackburn more commodious premises have been allotted to the engineering department and the equipment has been rearranged with advantage to the conditions of instruction. At Preston a considerable extension scheme, involving an expenditure of approximately £47,000, is being carried out in connection with the Harris Institute, which has now come under the control of the local education authority. At Stockport a site has been acquired for the purpose of improving the facilities for higher education at a cost of £2,750. As a temporary measure four classrooms have been added, at a cost of £1,000, to meet the urgent requirements for increased accommodation.

60. *West Central Division.*—At the Shropshire Technical School for Girls, Radbrook, an extension of the premises is being undertaken at a total cost of £4,650, of which £2,700 will be met by the Walker Trustees and £1,500 by sale of Stock. Considerable improvements have been made to the equipment of the Shrewsbury Technical College. At Wolverhampton a further site has been acquired at a cost of £2,273 for future extensions of the Technical College. Minor improvements have been planned at the Birmingham Central

Technical College with a view to alleviating conditions, pending consideration of the need of a large scheme for re-housing both the Central Technical College and the College of Commerce. Extensions for engineering classes are being undertaken at the Cheltenham Technical School at a cost of approximately £2,000, and the expenditure of a further £1,000 will be required for furniture and equipment. The erection of the new Mining College at Cannock referred to in the last Report is being carried through at an estimated cost of £22,560, towards which the Miners' Welfare Committee contribute £18,000. The Engineering Advisory Committee at the Rugby Technical College has given expert advice during the past year in the planning of the extensions now in progress involving an expenditure of over £6,000.

61. *Eastern and East Central Divisions.*—At Worksop the erection of a new Technical School is being undertaken at a cost of £16,250, of which £9,800 will be met by grant from the Miners' Welfare Committee. For the provision of furniture, equipment and apparatus at the new Technical College at Mansfield an expenditure of £10,339 is involved, of which £2,500 will be defrayed by the Miners' Welfare Committee. The building for the additional accommodation at the Cambridge Technical Institute is now practically completed, and an amount of £2,000 has been spent on furniture and equipment. An extension of site for the Technical College at Derby at a cost of £2,781 has been approved. Extensions have been taken in hand at the High Wycombe Technical Institute involving an expenditure of approximately £8,000. When completed, this institute will form an important centre for instruction in the furniture and constructive trades.

62. *Metropolitan Division.*—In London important extensions are being undertaken. In the case of the Regent Street Polytechnic a grant of £27,500 has been made by the London County Council towards the new buildings, which are to cost some £170,000. Progress has been made with the erection of the North Western Polytechnic at an estimated cost of £119,000, of which the London County Council are contributing £50,000. The principal of this institution has already been appointed. Additions and alterations at the London County Council Beaufoy Institute, Lambeth, will involve an expenditure of £10,350, with an additional expenditure of some £3,000 for equipment. Adaptations of additional premises acquired for the City of London College and alterations of the existing buildings have been completed at a cost of £9,500, with an addition of £1,115 for equipment. The remodelling of the Borough Polytechnic, Southwark, has been begun, involving an expenditure of some £77,000. Alterations are being carried out at the Woolwich Polytechnic at a cost of £2,250. Additions have been made at the Leathersellers' College, Bermondsey. The London County Council Trade School for Girls at Hammersmith is being enlarged at a cost

of £5,635. Premises adjacent to the School of Photo-Engraving, Bolt Court, have been acquired for the extension of the school. For the purposes of the City Literary Institute, premises in the Drury Lane district no longer required for an industrial school have been adapted at an expenditure of £4,343, and disused school premises in Turin Street, Bethnal Green, have been adapted at a cost of £7,465, so as to serve as a permanent home for a men's institute and for the East London Day Continuation School. Preliminary plans for the erection of a new Polytechnic in South East London at Lewisham, at a cost of some £125,000, have been prepared by the London County Council.

In Middlesex extensions to the Ponder's End Technical Institute involve an expenditure of £3,140. The new Technical School at Southall referred to in last year's Report has been opened, and new Technical Schools at Acton and Ealing are now completed.

63. *South Eastern and South Western Divisions.*—In Kent the principal development has been the completion of the purchase of the Fort Pitt site at Chatham for £8,480 for the provision of a new Technical College to meet the needs of the Medway District. At Wimbledon a house has been purchased for the extension of the Technical Institute.

Alterations and extensions of a school building at Derby Road, Eastleigh, are being carried out by the Hampshire County Council, at a cost of £4,370, so as to provide accommodation for science and engineering. At Southampton adaptations of premises formerly used as a secondary school are being carried out, at a cost of £2,500, for the purposes of the Art School and for domestic science and handicraft instruction.

3. Establishment of new Full-time Schools in England.

64 In Lancashire new Junior Technical Schools have been established at Leigh and Stretford. These schools are intended to provide two-year courses for boys in preparation for industries connected with engineering and building. A third school on similar lines is also being established at Worsley.

At Bolton a school of this type has been opened in the Technical School, at which the students are to receive special preparation for the engineering, building and textile industries.

At Manchester (Newton Heath) a Junior Technical School course has been organised for young employees in the rubber industry. It is contemplated that the two years' full-time course at the Junior Technical School will be followed by two years' part-time attendance at the same school, and that afterwards the students will attend at the College of Technology for a further two years of part-time study.

At Doncaster a Junior Technical School has been opened at the Technical College which is intended to give a two years' preparation to boys preparing for commercial occupations. At Wakefield also a course of this type has been started.

At Keighley a new Junior Art Department has been recognised.

In London a Trade School for girls has been opened in Clapham. Courses are provided in dressmaking, millinery and tea-room cookery. A new Junior Commercial School for boys and girls was opened at the Wandsworth Technical Institute.

At Southall in Middlesex a Junior Technical School has been established for boys who intend to enter constructional trades.

At Bath a Junior Technical School with both industrial and commercial sides has been opened in the Municipal Technical School.

At Leicester the Junior Technical School and the Junior Art Department previously organised within the College of Technology and the College of Art have been merged in a new school known as the "Gateway" School. The admission age for entrance has been lowered from 13 to 11 years. For the first two years the education will be of a general character, but particular attention will be given to practical science, art and handicraft. At 13+ the curriculum will be based on the industrial occupations or artistic handicrafts which the pupils may desire to enter: general education will be continued, but the instruction will be more specialised than during the first two years. The school is housed in the buildings previously occupied by the Junior Wyggeston Girls' School, and the more specialised instruction will be given in appropriate rooms of the Colleges of Art and Technology.

4. Part-time Day Classes for Apprentices, etc.

65. Considerable progress has been made in recent years in the organisation of day courses for young workers who are released by their employers during normal working hours to attend technical as distinct from continuation instruction. Arrangements of this kind are made by agreement between the several authorities and individual employers or groups of employers, and there is naturally wide diversity in such matters as duration of courses, weekly hours of day-time instruction, mode of selection of apprentices, associated evening instruction, subjects of study, etc.

The Board have published recently a Report on Day Classes for Engineering Apprentices, which shows that the number of engineering students who received part-time instruction during normal working hours was 4,314 in England and Wales during the session 1926-27. This number does not include students who

are released by engineering employers to attend Day Continuation Schools, or those who attend "Works' Schools" conducted by employers. Some day classes for engineering apprentices were conducted many years ago, but the recent spread of such arrangements indicates that among engineering employers recognition of the advantages of technical education for workers of the apprentice type is much more common than it was.

Part-time day courses for building apprentices were, on the other hand, unknown before the War. They are now held in nearly 50 towns in England and Wales. The instruction is provided generally in connection with a local apprenticeship scheme, but in some cases it has been arranged to meet the needs of individual employers or firms. The most complete arrangements for day classes for building apprentices in this country are at Manchester and Liverpool, with enrolments of 384 and 267 students in attendance, the number of employing firms represented being 116 and 73 respectively. For England and Wales as a whole, there were some 2,330 building apprentices receiving instruction in part-time day courses. These were mainly in towns of the northern counties. Further information on the subject is given in the published Report on Part-time Day Classes for Building Apprentices (Educational Pamphlet No. 62).

66. The following particulars (which are not exhaustive and do not include courses held in Art Schools, to which reference is made on page 48) show that in certain other industries and occupations the advantages of part-time day study are being recognised. The figures in brackets are the numbers of individual students attending at the centres named:—

Furniture Trades.—High Wycombe (88).

Pharmacy.—Portsmouth (50), Burnley (65), Manchester (77), Leicester (83), Birmingham (183), and Bradford (53).

Chemistry.—Liverpool (69), and Huddersfield (42).

Gas.—Plymouth (21), Westminster (37), Shrewsbury (12), Cardiff (24), Newport (15) and Bradford (1).

Mining.—Burnley (3), St. Helens (18), Wigan (54), Nottingham (8), South Staffs. (24), Stoke-on-Trent (9) and South Wales and Monmouthshire School of Mines (168).

Metallurgy.—Crewe (14) and Sheffield (8).

Pottery.—Stoke-on-Trent (26).

Textiles.—Colne (3), Nelson (10), Burnley (16), Leicester (44), Nottingham (39), Trowbridge (10), Keighley (40), Shipley (2), Bradford (96), Halifax (6) and Huddersfield (42).

Boot and Shoe Manufacture.—Leicester (20), Norwich (7), and Northampton (22).

Leather Trades.—Bermondsey (25).

Printing.—Aylesbury (103), Manchester (112), and London School of Printing (1,235).

Retail Trades :—

(a) *Meat Trades.*—Leicester (39), Holborn (317), Leeds (30), and Cardiff (9).

(b) *Bakery and Confectionery.*—Huddersfield (30), Leeds (17), and Cardiff (12).

(c) *Shop and Store Workers.*—Swindon (15), and Cardiff (16).

Others :—

(a) *Opticians.*—Liverpool (9).

(b) *Vehicle Building.*—Liverpool (17).

(c) *Rubber Trades.*—Northern Polytechnic, Islington (11).

(d) *Music Trades.*—Northern Polytechnic, Islington (89).

5. Recent Developments in Part-time Instruction.

67. In Leeds an educational scheme for all apprentices and youths employed by the various departments of the Corporation has been adopted. The City Council have made it a condition of service that all youths under 18 years of age in the Corporation's service should attend educational classes during working hours, and in addition evening classes during the winter. The number of hours of attendance required is seven weekly, viz., three hours at day classes and four hours at evening classes. No fees are charged to the students. The subjects studied by the several groups and the times of attendance are arranged in conjunction with the heads of the employing departments, and reports on all youths attending under the scheme are submitted to the General Purposes Committee of the Council. Arrangements are also made for the attendance of youths between the ages of 18 and 21. Another interesting departure in Leeds has been the institution of courses of instruction for employees engaged in machine work of the wholesale clothing trade, and for men responsible for the adjustment and repair of the machines employed. These courses have been established in the clothing trades departments of the Technical College, at which a complete series of typical machines used by the wholesale clothing factories in the city has been installed.

68. At Doncaster the manager of the London and North Eastern Railway Plant Works and his assistants strongly encourage employees to attend day engineering classes, and through their efforts a new course for boiler-makers has been instituted, and a summer course of lectures on the "Heat treatment of steel."

69. At Bradford various fresh types of classes have been established. At one of the senior institutes of the city an advanced course has been started in preparation for the final examination of the Institute of Certified Grocers. A special grocery laboratory has been equipped, and materials for the course have been given by the Bradford Co-operative Society and the local Retail Grocers' Association. Among other new developments at Bradford is a new type of course, for boys who are not attracted to the normal preparatory technical course, described as a "Handy-man's Course," at which handicraft is the main subject of instruction. Attention has been directed to the question of providing forms of instruction likely to attract those who do not join the ordinary evening classes, and two new junior institutes of the non-vocational type have been opened. Experiments of this kind have also been reported by Your Majesty's Inspectors at Warrington, Blackburn, Manchester, Tottenham and elsewhere.

70. Experiments in other directions are worthy of notice. At Oldham a two-year course for the Associateship of the Textile Institute was started. The conditions of admission required candidates to pass an examination in the general technology of textile fibres, and to submit evidence of scientific knowledge and general education. The class meets three evenings weekly, one evening being devoted to technology of textile fibres, one to science and one to industrial history. The number of students has been limited to 18, although twice that number could have been obtained. At the Bristol Merchant Venturers' College improved schemes of instruction have been drawn up, in connection with the trade associations concerned, for bakers, builders and acetylene workers. Arrangements are also being made for the Merchant Venturers' College to take over the work of the Bath and West of England College of Pharmacy. At Coventry, as the result of a request from the Armstrong-Whitworth Aircraft Company, a class in aerodynamics was formed, and a course in this subject has also been arranged at Southampton for aircraft employees. Classes for bakers are also established at Coventry, for which the Coventry Co-operative Society have agreed to allow the use of their model bakehouse. At Brighton the Southern Railway Company are co-operating with the work of the Technical College. In addition to releasing apprentices for day attendance, paying their fees and arranging for transport, if necessary, the Company pay them full wages. At Kingston (Surrey) employees of the Company attend a new course that has been started in railway signalling and telegraphy, with cognate electrical science. An interesting development is reported at Camborne, where arrangements were made to establish a Day Continuation School for engineering apprentices. One firm alone promised to send 100 apprentices in batches of 20 for one day's attendance weekly, and to contribute towards the cost of the scheme. The apprentices will attend for a five-year course between the ages of 16 and 21.

71. As an example of the growing interest that is being taken in the educational facilities for retail trades, reference should be made to the steady increase in the number of students attending meat trade classes. Classes are being conducted at 25 centres, and the total number of students in 1928 was 1,727: 91 students took the examinations for the diploma awarded by the National Federation of Meat Traders' Associations, and 58 diplomas were awarded. The Federation is considering the problem of arranging facilities for the instruction of those engaged in rural areas. Similar activity is noted in the schemes put forward for bakers by the National Association of Master Bakers, Confectioners and Caterers, and in flour milling by the National Joint Industrial Council for the Flour Milling Industry.

6. Further Education in Yorkshire.

72. In our last Report we referred to the publication of a report on further education in the whole geographical county of Yorkshire, including the three county divisions, which are separate areas for higher education, and the 12 county boroughs. Upon consideration of this report, which dealt with questions of organisation and administration, and the scope for co-operation as between the several authorities for higher education, important steps have been taken to make specific arrangements for co-operation in various directions, and for facilitating the formation of effective relations between educational authorities and industrial and commercial interests. As the arrangements provisionally adopted at the initiation of the movement seem likely to undergo some modification, we think it unnecessary at this stage to explain them. We are confident, however, that the successful development of closer relations of co-operation between authorities, whatever particular machinery may be locally preferred for the purpose, will assist the Board as well as the authorities, without prejudice to our separate responsibilities. On these grounds we have authorised certain of Your Majesty's Inspectors, who are qualified by extensive local knowledge and experience, to respond to invitations to collaborate in the working of the new arrangements.

7. Examinations for Part-time Students.

73. In July the Departmental Committee, of which the Parliamentary Secretary was Chairman, on Examinations for Part-time Students, made their report. In reviewing the existing conditions the Committee note the main classification of examining bodies, viz. (a) bodies concerned with educational administration, (b) general external examining bodies and (c) bodies interested in particular professions or particular branches of retail trade, and point out that, in view of the wide range of vocational subjects in which examinations are held, and of the fact that much of the teaching is

undertaken by part-time instructors who are not specially skilled in the arts of teaching and examining, neither simplicity nor uniformity of system is to be expected. Their general conclusions deal with such matters as the ends served by examinations, the proper place of examinations in this branch of our educational provision, and the steps which might be taken towards securing that successes in examinations may receive in industrial and commercial circles such credit as may fairly be expected. The more strictly pedagogical aspects of examination processes are discussed, and the Committee examine in particular the problem of devising arrangements which, while not being open to the criticisms which can be brought against examinations which are purely internal, or, on the other hand, against examinations which are purely external, shall combine some of the best features of both.

74. The principal recommendations of the Committee are concerned with examining bodies and the relations between them. The extension of the regional system, depending on the co-operation of the local education authorities for a suitably connected region of manageable size, is recommended. It is recognised, however, that, even if this system were extended to cover the whole country, there would be a place for the City and Guilds of London Institute as a general examining body in technology, and for one general examining body in commercial subjects, both working in harmony with the regional bodies. So far as part-time schools are engaged in preparing candidates for the membership examinations of professional bodies, the Committee indicate a need for closer co-operation between these bodies, educational authorities and teachers.

The Committee recommend the extension of the scope of the National Certificate system (for details see section 8 of this Chapter) to other suitable branches of technology. In particular, the careful exploration of the possibility of instituting a National Certificate in building is suggested.

Examinations in commercial subjects are dealt with in a separate group of recommendations, the most important of which concern the establishment of a single general external examining body, and the setting up of a general council commanding the confidence of the business world, for the purpose of ratifying senior and advanced awards in general commercial studies given by the several examining bodies concerned with this type of instruction.

We think it necessary to allow time for the consideration of these recommendations by the various bodies which are principally affected by them, before we address our own observations upon the subject to the local education authorities. So far only one of the associations of education authorities has expressed any views. In the circumstances we have as yet only dealt with certain minor recommendations of the Committee.

8. National Certificates, etc.

75. Since the last Report there has been no further extension of the system of National Certificates. At present the system is in operation for the subjects of mechanical engineering, electrical engineering, chemistry and naval architecture. Further, the Board endorse certificates in gas engineering and gas supply issued by the Institution of Gas Engineers. These certificates, however, are not designated National Certificates.

The following figures are for schools in England and Wales:—

| | Part-time Courses. | | | | Full-time Courses. | | | |
|---------------------------------------|--------------------|------------|------------------|------------|--------------------|----------|------------------|----------|
| | Ordinary. | | Higher. | | Ordinary. | | Higher. | |
| | Candi- dates. | Passed. | Candi- dates. | Passed. | Candi- dates. | Passed. | Candi- dates. | Passed. |
| Mechanical Engineering { 1927 1928 | 1150 1237 | 593 686 | 340 397 | 239 257 | 42 59 | 29 39 | 36 38 | 31 29 |
| Electrical Engineering { 1927 1928 | 565 612 | 335 361 | 205 172 | 145 149 | 10 12 | 4 8 | 3 6 | 1 6 |
| Chemistry.. { 1927 1928 | 157 143 | 82 79 | 60 37 | 50 24 | — — | — — | — — | — — |
| Naval Architecture { 1927 1928 | 22 7 | 13 5 | — 2 | — 2 | — — | — — | — — | — — |
| Gas Engineering { 1927 1928 | 35 33 | 26 19 | 15 29 | 10 22 | — — | — — | — — | — — |
| Gas Supply { 1927 1928 | 23 31 | 15 20 | 9 10 | 6 4 | — — | — — | — — | — — |

9. Board's Courses for Teachers.

76. During 1928 arrangements were made for the holding of courses on the same lines as in previous years for teachers in Technical Schools, Art Schools, Junior Technical Schools and Evening Institutes. Courses of this type meet a very distinct need and are much appreciated by those teachers who are selected to attend. The subjects and programmes of the courses cover a wide range, but each course makes provision for lectures, tutorial work and private study.

The list of courses held in 1928 is as follows:—

Short Full-time Courses.

| | | |
|---------------------------------|-------|------------------------|
| Engineering Science | | Oxford. |
| Electrical Engineering | | " |
| Building subjects:— | | London. |
| (a) Building Science. | | |
| (b) Building Quantities, etc. | | |
| (c) Painting and Decorating. | | |
| (d) Plumbing. | | |
| Textile subjects | | " |
| Commercial subjects | | Cambridge. |
| Methods of Teaching Dressmaking | .. | London (Regent Street) |
| Methods of Teaching Needlework | .. | " " |
| Gas Engineering and Gas Supply | .. | " |
| Cookery and Simple Dietetics | | " |

Week-end Courses.

| | |
|--|-----------------------------|
| Teaching of Engineering Subjects to Elementary Students. | Loughborough. |
| The Organisation and Curriculum of, and Teaching in, Junior Technical Schools. | St. Anne's-on-Sea. |
| The Teaching of English in Evening Institutes. | Ilkley, Yorkshire. |
| English in Evening Institutes | Penscot, Somerset. |
| Building subjects | Swanwick, Derbyshire. |
| Work in Evening Institutes for Boys | .. Hope, Derbyshire. |
| The Problems of Rural Evening Institutes | Ilkley, Yorkshire. |

Part-time Courses.

| | |
|--|----------------------|
| Mathematics in Continuation Schools | .. Chesterfield. |
| The Teaching of Mathematics in Evening Institutes. | Newcastle-upon-Tyne. |
| The Teaching of Mathematics in Evening Institutes. | Barnsley. |
| Methods of Teaching Dressmaking | .. Burton-on-Trent. |
| English for Girls in Junior Domestic Courses | Stoke-on-Trent. |
| Commercial Instruction in Evening Institutes. | Wolverhampton. |
| Everyday Aspects of Physical Principles.. | Wolverhampton. |
| The Teaching of Commercial Subjects in Junior Evening Courses. | London. |
| The Teaching of English Subjects in Junior Technical Schools. | London. |

10. Inspections and Reports.

77. A number of reports have been prepared by Your Majesty's Inspectors during the year under review upon individual schools and institutions. In the case of London these reports deal with the Paddington Technical Institute; the Lambeth, Norwood Technical Evening Institute; Morley College; the National Society's Training College of Domestic Subjects at Hampstead; and Evening Institutes at Fairclough Street, Stepney, and Fair Street, Rotherhithe.

Other schools and institutions which have been individually reported on are the following :—

Acton and Chiswick Polytechnic Institute.

Bolton Municipal Technical College (Junior day school of Commerce).

Brighton Municipal Technical College.

Dewsbury Municipal Technical College (Full-time day schools)

Hertford, Goldings, William Baker Technical School.

Oldbury Technical Evening Institute.

Stafford County Technical College.

Wednesbury County Technical College.

and the Evening Institutes at East Retford, Stamford, Tonbridge, Weston-super-Mare, Winsford and Worksop.

A survey was made during the year of the facilities provided for the further education of young persons in the Evening Institute systems of a number of areas. These areas were Barnsley, Birkenhead, Epsom, Exeter, Gateshead, Halifax, Runcorn and the East Riding of Yorkshire. A report was also issued on the Day Continuation School provision in Manchester.

78. Other reports of interest dealing with provision for various types of instruction were prepared by Your Majesty's Inspectors in the period under review, viz., on engineering instruction in Bradford, on the provision of instruction for persons employed in coal-mining in the Bristol and Somerset coalfield, and also in the Derby coalfield. A report on the Junior Technical Schools for boys in London surveys the whole field of this type of education in the metropolis. Another report dealt with provision of instruction in domestic subjects for women and girls in the county of Nottingham.

A number of reports of a more general character have been published during the year in the Board's series of Educational Pamphlets. These reports deal comprehensively with particular branches or subjects of technical education. The special subjects which have

come under review during the year have been—Building Science, Building Apprentices, the Rail Carriage and Wagon Building Industry, Electrical Machine Designing, the Plumbers' Trade and Training, Engineering Apprentices, Full-time classes for Bakers and Confectioners, and Stoneworking in quarries.

A full survey of the existing arrangements for co-operation between industry, commerce and the professions, and the technical system of England and Wales was included in the pamphlet published under the title of "Education for Industry and Commerce" (Educational Pamphlet No. 64), to which more detailed reference is made below.

11. Education for Industry and Commerce.

79. In recent years the practical importance of education for industry and commerce has come to be generally recognised in this country. Employers and workers alike are aware of the value of the contribution which the schools can make to industrial and commercial efficiency; local education authorities and the teaching profession are asking that the requirements on the business side may be stated with precision and authority, so that educational provision may be examined and, if need be, developed with a clear knowledge of what is needed.

80. A strong impetus has been given to this movement by the work of three Committees. The volume of the Committee on Industry and Trade, entitled "Factors in Industrial and Commercial Efficiency," contained memoranda dealing with the existing provision of technical and commercial education, and with some of the problems involved. It also contained, in the introduction, a clear indication of the Committee's view that fuller co-operation between the schools and industry is required. Much the same view was taken by the Committee on Education and Industry (England and Wales) who, in the second part of their report, attempted to analyse the weaknesses in the relations between trade and industry and the schools, and suggested certain ways of securing closer contact, in regard to which they considered that the Board should take the initiative. Finally, an unofficial Committee, under the chairmanship of the late Lord Emmott, inquired into the "relationships of technical education to other forms of education, and to industry and commerce." This Committee consisted of representatives of educational associations, both of administrators and of teachers, of industrial bodies, including the Federation of British Industries and the General Federation of Trade Unions, and of professional institutions. Its report, published in 1927, consisted of a review of the position from the industrial and the educational standpoints, and submitted that the facts justified "its appeal for taking stock of the present condition of technical education, of its relationship to general education and, above all, of the obstacles to closer co-operation with industry."

81. In April, 1928, the President of the Board met representatives of the last-named Committee, and outlined his views on the nature of the problem. This statement was subsequently expanded and developed in his preface to the Board's pamphlet on Education for Industry and Commerce*, in which, after surveying the subject as a whole, he laid down the lines of a programme of inquiries into technical and commercial education. These inquiries were to be of two kinds, one dealing with the general organisation of such education in the more important industrial regions, the other with education for particular branches of industry and commerce for the country as a whole.

An inquiry of the first type had already been conducted in the county of Yorkshire, and the interest which the report aroused in business circles pointed clearly to continuing this method of attacking the subject. The second district which has been selected is the Midland metal working region, of which Birmingham is the centre. The investigations here have been completed and it is hoped that a report will be ready at a fairly early date. In the case of this and other regional inquiries, we propose, as a first step, to set out the facts and certain questions suggested by the facts, so that they may be considered by local education authorities and the schools on the one hand, and employers and workers' organisations and trade bodies on the other. We hope that this will lead, as the next step, to conferences between the various parties concerned, and finally to agreed arrangements for co-operation in dealing with the problems of technical and commercial education in the area.

Both the Committee on Industry and Trade and the Committee on Education and Industry held that local co-operation, though essential, was not sufficient and must be supplemented by some kind of central action. This opinion is reflected in the character of the second type of inquiry which is being undertaken. To begin with, inquiries have been initiated on the commercial side into education for salesmanship, using that term in its widest sense, and on the industrial side into education for the engineering industry. It is hoped that the first inquiry will throw light on the whole question of what can be done in the field of higher education to increase the efficiency of the commercial personnel of the country. The second inquiry will, we think, show how far the provision of engineering education, which is now of long standing, has been adapted to meet the growing differentiation and complexity of the industry.

82. We felt that, as suggested in the report of the Committee on Education and Industry, the ordinary procedure of the Departmental Committee, which hears witnesses and eventually submits a formal report and recommendations, would not be appropriate here. At the same time, it was essential to secure the co-operation of representatives of industry and commerce and, accordingly, the President

* Education for Industry and Commerce (with a Preface by Lord Eustace Percy). H.M. Stationery Office; paper covers, 6d. net; cloth, 1s. 6d. net.

appointed two Committees, of which the majority of the members are persons prominently associated with industrial or commercial undertakings or with business associations. The chairman of the Salesmanship Committee is Mr. F. W. Goodenough, C.B.E., and the chairman of the Engineering Committee Sir Dugald Clerk, K.B.E.

The terms of reference of the Salesmanship Committee are :—

“To consider the problem of education for salesmanship, and to make any recommendations for action that, following such consideration, may appear desirable for the promotion, by means of education, of greater efficiency in the marketing of British goods and services, at home and overseas.”

and of the Engineering Committee :—

“To advise the Board of Education as to the scope and methods of the Board's inquiry into technical education for the engineering industry, and to review the material furnished to the Board in the course of the investigation.”

83. These Committees have now laid down the lines of procedure and investigations have actually begun. In the first place, in both inquiries, an attempt is being made to learn the opinions of individual undertakings and of trade bodies. This is being done partly by means of personal interviews between specially selected officers of the Board and representatives of several hundred firms, and partly by written memoranda from associations and other sources of information at home and overseas. In this way, the Committees hope to obtain a reasonably full statement of the views and requirements of business interests, a step which is, in their opinion, a necessary antecedent to examining the possibilities of development in the systems of commercial and technical education. We are glad to learn that the Committees have received warm support and valuable practical assistance from a large number of important industrial and commercial organisations.

84. The procedure which the Committees will adopt in regard to the drafting and submission of reports has purposely been left unsettled for the present, and it may be that they will find it best to issue a series of reports or memoranda dealing with various aspects of their subject matter rather than a single definitive report. However that may be, it is clear that, as the requirements from the business side take a concrete form, it will be necessary to call into consultation educational administrators and the teaching profession. If, however, arrangements for consultation and co-operation on a national scale are to be made, it is obviously most convenient that they should be appropriate, not merely to the inquiries described above, but also to future inquiries and, indeed, to the consideration of questions of vocational education in whatever way they may arise. Certain preliminary steps have already been taken, but the subject is intricate and it is not easy to devise machinery which will function

rapidly and smoothly. The whole matter will be most carefully considered, and we hope to be able to record definite progress in our next Report.

85. In many directions the Board already have intimate relations with industrial and commercial bodies, and some of Your Majesty's Inspectors are well acquainted with the conditions obtaining in various kinds of occupations. Moreover, local education authorities often work in close co-operation with individual employers and trade organisations. Co-operation between schools and the world of employment is, indeed, closer than is generally realised. Nevertheless, we think that the programme which we have here outlined involves a much more thorough and more systematic treatment of the whole subject, and opens up a prospect of education becoming a more powerful factor in the industrial and commercial prosperity of the country. It must, however, be remembered that at present the programme, and still more the methods by which it is to be carried out, are largely experimental; that the field to be covered is, to a considerable extent, unknown to the Board; and that new problems will have to be faced. That being so, mistakes may be made before experience has been gained, but we believe that such mistakes are unlikely to have any very serious consequences, because of the general sympathy with the end to which the inquiries are directed, namely, the development of a system of technical and commercial education based on well-defined principles, but flexible enough to suit the needs of different localities and the changing conditions in the several industries and branches of commerce.

CHAPTER IV.

ROYAL COLLEGE OF ART, ART SCHOOLS, ART EXAMINATIONS AND ART SCHOLARSHIPS.

1. Royal College of Art.

86. The Royal College of Art provides an advanced training in the practice of Drawing and Painting, Engraving, Sculpture, Architecture, Design for Decorative Arts and Industries, and certain handicrafts. The College comprises five Schools, devoted to work in the subjects stated, each under the immediate control of a Professor, the general aims and policy being directed by the Principal.

87. *The College in 1927-28.*—Mr. F. C. Richards, R.E., A.R.C.A., resigned from the post of Lecturer in the Principles of Teaching, and Mr. E. Dudley Heath was appointed in his stead.

Mr. Robert Austin, A.R.E., A.R.C.A., took the place of Mr. J. Nixon, A.R.E., A.R.C.A.

During the session 326 students attended the College for full-time courses, an increase of 27 as compared with the previous session, and of 39 as compared with the session 1925-26. Of these 279 took Diploma Courses, distributed among the Schools as 4 in Architecture, 166 in Design, 80 in Painting, 12 in Engraving, and 17 in Sculpture. Students in other Schools attend for instruction in Architecture, especially in their first year of study, and individual students from other Schools study in the School of Engraving.

The College was also attended by 47 full-time students who had obtained the Diploma. Of these, 3 specialised in Architecture, 8 in Design, 10 in Painting, 1 in Engraving, and 2 in Sculpture; while 23 took the course for intending teachers of art.

During the session the numbers of students who received instruction in the Engraving and Craft Classes were:—

| | College Students. | | External Students (part-time). | |
|-----------------------------|----------------------|----|-----------------------------------|----|
| Etching and Engraving .. | 35 | .. | .. | 32 |
| Decorative Painting .. | 18 | .. | .. | 4 |
| Embroidery | 36 | .. | .. | — |
| Metal Work | 18 | .. | .. | 1 |
| Pottery | 26 | .. | .. | 10 |
| Stained Glass.. .. | 16 | .. | .. | — |
| Stone and Marble Carving .. | 19 | .. | .. | 5 |
| Woodcarving | 10 | .. | .. | — |
| Writing | 110 | .. | .. | 2 |

88. At Convocation Day on the 19th July, 1928, the Duchess of Atholl, D.B.E., M.P., presented Diplomas of Associateship of the College to 87 students who had successfully passed the prescribed tests, 2 in Architecture, 52 in Design, 25 in Painting, 3 in Engraving and 5 in Sculpture. For particular crafts-processes taught in the Engraving School 32 Certificates were awarded. The 23 students who took the course for intending teachers of art were adjudged, after a written test, to have completed the course satisfactorily.

89. It is difficult to get exact information as to the occupations ultimately followed by those who have studied at the College. Of the 97 who left in July, 1928, 8 are now working as painters of pictures or decoration, 8 as sculptors, 4 as etchers, 2 as architectural draughtsmen, 8 as illustrators, 5 as industrial designers, and 3 as craftworkers; 17 are teaching full-time and 10 part-time in art schools and 3 in secondary schools; 6 are studying abroad, including 3 Rome Scholarship holders and 2 elsewhere in England; 4 have returned to homes abroad. The remaining 17 have given no information, or report no definite occupation, but are doubtless carrying on handicrafts and other activities studied at the College.

90. In the competitions conducted by the British School at Rome the Scholarships in Painting, Sculpture, and Engraving were awarded to Alan E. Sorrell, A.R.C.A., C. Brown, A.R.C.A., and E. S. Jones, A.R.C.A., all of them students at the College.

2. Art Schools.

91. The number of students at Art Schools has increased to some small extent, as will be seen from the following comparative tables for England and Wales:—

| | | <i>Full-time.</i> | | <i>Part-time.</i> | |
|---------------|----|-------------------|----------|-------------------|---------|
| | | 1926-27. | 1927-28. | 1926-27. | 1927-8. |
| Seniors | .. | 4,900 | 4,912 | 46,592 | 48,205 |
| Juniors | .. | 1,784 | 1,909 | | |

The full-time junior departments which are organised in connection with some of the schools are doing valuable work within their own province, and are attracting boys and girls who intend to enter artistic trades at about 16 years of age. In these departments the general education of the pupils is continued, but about two-thirds of their time is given to artistic and technical training. New full-time departments of this type have been organised at Keighley (Yorkshire) and Ealing (Middlesex) to take the place of less definitely organised arrangements for younger students. The department at Rochester has been re-organised in connection with the new Medway Art School.

92. There is a fair development of part-time day instruction for employed students in certain of the Art Schools. In the report on Part-time Day Courses for Building Apprentices (Educational Pamphlet No. 62) which is referred to on page 35, particulars are given of the courses of this type which are held in Art Schools. The more important instances of part-time day attendance on the part of students in other occupations are as follows:—

Architecture.—Darlington (12), Burnley (13), Manchester (24), Leicester (23), Stoke-on-Trent (10), Leeds (33).

Furniture Trades.—Leicester (13), Birmingham (36).

Pottery.—Stoke-on-Trent (11), Worcester (20).

Textiles.—Carlisle (9), Leek (12), Manchester (4).

Printing.—Leicester (42), L.C.C. Camberwell School of Arts and Crafts (165), London Central School of Arts and Crafts (75), Birmingham (101), Bradford (89), Manchester (5).

Retail Trades.—

(a) *Bakery and Confectionery*—Barrow-in-Furness (47).

(b) *Shopkeepers*—Bingley (14).

Silversmiths.—London Central School of Arts and Crafts (24).

Stone Carvers.—Manchester (2).

93. New day classes in Painting and Decorating have been established in connection with the Art Schools at Salford and Kingston-upon-Hull. At the last-named a house was lent without charge for use by apprentices, so as to provide a means of receiving practical instruction. During the month occupied in the decoration of the interior the house was open to the public for inspection.

A new department of Architecture has been started at the Plymouth Municipal Art School.

In August an International Art Congress was held at Prague, at which one of Your Majesty's Inspectors attended on behalf of the Board. The work of the Art Schools of this country was well set out and representative in its scope.

At several Art Schools, such as Hornsey and Coventry, local exhibitions of students' works have been held during the year, and in some instances the design and execution of work of a public character have been entrusted to the teachers and students, as, for instance, in connection with pageants held at Taunton and Brighton.

Last summer the Board arranged, in the premises of the Royal College of Art, the third of their Short Courses for Teachers in Art Schools. The arrangements were on similar lines to those described in previous Reports, and we are satisfied that a very useful purpose is served by these courses.

3. Examinations and Awards in Art.

94. Particulars of the examinations in art held in 1928 are given in a separate document under the title of "Examinations in Art, Lists of Successful Candidates, Awards, Examiners' Reports and Examination Papers, 1928."* The numbers of candidates examined and of those who passed are shown in Table 67 in Part II.

95. On consideration of the work of those candidates who were competitors for scholarships, etc., provided by the Board (or, in the case of the Princess of Wales' Scholarships, from trust funds administered by the Board), the following awards were offered:—

| Subject of Examination. | Tenable at the College. | | | Tenable at Local Art Schools. | |
|-------------------------|-------------------------|------------------------|--------------------|-------------------------------|----------------------------------|
| | Royal Exhibitions. | National Scholarships. | Free Studentships. | Local Scholarships. | Princess of Wales' Scholarships. |
| Drawing | — | — | 4 | 6 | — |
| Painting | 3 | — | 5 | 3 | — |
| Modelling | — | — | 1 | — | — |
| Pictorial Design .. | 1 | — | 4 | 4 | 1 |
| Industrial Design .. | 4 | 3 | 8 | 5 | 1 |

The numbers of these awards which were taken up by the successful candidates are shown in Table 75 in Part II.

96. Thirty-nine candidates entered for the Examination in the Principles of Teaching and School Management under Rules 109, and 28 were successful in passing. Of these candidates 27 became qualified by that success for the grant of the Board's Teaching Certificate for Teachers in Art Schools, having previously satisfied the other requirements for that certificate in respect of technical artistic attainments, general education, and pedagogic training. The teaching certificate was obtained also by 9 students who attended the approved course at the London Day Training College, and were examined in the principles of teaching by the University of London. Including the 23 students who satisfactorily completed the post-diploma course for intending teachers at the Royal College of Art and were examined by the College, 60 persons were added in the year to the list of art teachers holding the qualification granted by the Board.

* Published by H.M. Stationery Office, 1928, price 1s. 6d. net.

CHAPTER V.

ADULT EDUCATION, THE ADULT EDUCATION COMMITTEE AND PUBLIC LIBRARIES.

1. Adult Education.

97. *Courses.*—During the period under review there has been an expansion in the total number of grant-aided courses under the Adult Education Regulations, due to increases in the number of Three-year Tutorial, One-year and Terminal Courses.

Adult Education Classes in England and Wales.

| Type of Course. | 1924-25. | 1925-26. | 1926-27. | 1927-28 |
|----------------------------------|----------|----------|----------|---------|
| University Extra-Mural Courses:— | | | | |
| Advanced Tutorial .. | 9 | 16 | 8 | 7 |
| Three-year Tutorial .. | 412 | 509 | 543 | 586 |
| University Extension .. | 56 | 125 | 158 | 148 |
| Preparatory Tutorial .. | 73 | 74 | 91 | 82 |
| Under other Bodies:— | | | | |
| One-year | 186 | 213 | 226 | 264 |
| Terminal | 262 | 323 | 344 | 414 |

Table 73 given in Part II, page 181, indicates the bodies which are responsible for organising the various types of courses recognised in 1927-28.

98. In July and August, 1928, residential summer schools for adult students were held at Durham (for a week); at Arley Castle, Worcestershire, Bristol, Chester, Oundle and Harlech (for a fortnight); at Cambridge (three weeks); at Lane End, Bucks., and Harlech (four weeks); at Great Ayton, Yorks., Oxford and Bangor (six weeks); and at Reading (eight weeks).

99. *Inspections and Reports.*—During the period under review Your Majesty's Inspectors have inspected and reported upon Fircroft College. This report was made for the information of the Board and of the governing body concerned, and has not been published. We have noted with interest the publication by the Carnegie United Kingdom Trustees of a report of a Joint Committee appointed by the British Institute of Adult Education and the Tutors' Association, based on the result of an inquiry into the problems of the supply and training of tutors. The Board understand that the recommendations made in this report are receiving the consideration of the various Supervisory Bodies concerned in the provision of courses for adults under the Adult Education Regulations.