Selected Official Publications on The Theory and Practice of Education.

PSYCHOLOGICAL TESTS OF EDUCABLE CAPACITY, and their possible use in the public System of Education.

1924. Demy 800. pp. xii. + 248. 2s. (2s. 2j. 4.) "A readable and illuminating report on an abstract subject."-MARCONSTRE GUARDEL.

REPORT OF THE IMPERIAL EDUCATION CONFERENCE. Held in London, June 25 to July 6, 1923. 1924. Royal 8vo. pp. 291. 5s. 6d. (5, 9]d.)

TEACHING OF ENGLISH IN ENGLAND. Report of the Committee on the Position of English in the Educational System of England. 1921: Cr. Sol. op. 393. Is. 6d. (18, 9d.) Cloth 2s. 6d. (2s. 194d.)

Here is a bias-bord with nothing in it of official composity dealing with a learned subject without a brass of pedantry. In the del experies is an information, the, and so once idealistic and wrathen."

SOME SUGGESTIONS FOR THE TEACHING OF ENGLISH IN SECONDARY SCHOOLS IN ENGLAND.

Royal 8vo. pp. 60. Still Boards. Is. (1s. 2d.) Paper 6d. (7d.)

"A mine of saluable engrations."-Scottise Brucational. Journal.

NATURAL SCIENCE. Report of the Committee on Position of Natural Science in the Educational System of Great Britain. 1918. Cr. 800. pp. viii.+272. 1s. 6d. (1s. 8]d.)

ARITHMETIC. Report on the Teaching of Arithmetic in Liementary Schools.

1925. Royal 8vo. pp. 32. 3d. (4d.)

All prices are net and those in parentheses include postage.

HIS MAJESTY'S STATIONERY OFFICE,

LONDON, EDINBURGH, MANCHESTER, CARDIFF, BELFAST.



BOARD OF EDUCATION

Report of the Consultative Committee

on The Education of the Adolescent

LONDON : PRINTED AND PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE To be purchased directly from H.M. STATIONERY OFFICE at the following addresses: Adastral House, Kingsway, London, W.C.2 ; rao, George Street, Edinburgh; York Street, Manchester; t. St. Andrew's Crescent, Cardiff; is, Donegall Square West, Belfast; or through any Bookselier.

1926.

Price 25. net Paper or 35. net Cloth.

27-0170

Selected Official Publications on The Theory and Practice of Education.

PSYCHOLOGICAL TESTS OF EDUCABLE CAPACITY, and their possible use in the public System of Education.

1924. Demy 800. pp. xii. + 248. 2s. (2s. 21d.) "A readable and illuminating report on an abtivute subject."-MANCHUSTER GUARDIAN.

REPORT OF THE IMPERIAL EDUCATION CONFERENCE. Held in London, June 25 to July 6, 1923. 1924. Royal Svo. pp. 291. 5s. 6d. (54 94d.)

TEACHING OF ENGLISH IN ENGLAND. Report of the Committee on the Position of English in the Educational System of England. 1921. Cr. 800, pp. 393. 1s. 6d. (is. 9d.) Cloth 2s. 6d. (2s. 194d.)

How is a blue-book with notring in it of official composity, dealing with a learned subject without a traces of pedantry. In the bal several is and markets, with the solution is and iractical."

SOME SUGGESTIONS FOR THE TEACHING OF ENGLISH IN SECONDARY SCHOOLS IN ENGLAND.

Royal 8vo. pp. 60. Still Boards. Is. (1s. 2d.) Paper 62. (7d.)

"A mine of valuable inggestions."-Scottisk EDUCATIONAL JOURNAL

NATURAL SCIENCE. Report of the Committee on Position of Natural Science in the Educational System of Great Britain. 1918. Cr. 8vo. pp. viii.+272. 1s. 6d. (1s. 8¹/₂d.)

ARITHMETIC. Report on the Teaching of Arithmetic in Liementary Schools. 1925. Royal 8vo. pp. 32. 3d. (4d.)

All prices are net and those in parentheses include postage.

HIS MAJESTY'S STATIONERY OFFICE, LONDON, EDINBURGH, MANCHESTER, CARDIFF, BELEAST.



BOARD OF EDUCATION

Report of the Consultative Committee

on The Education of the Adolescent

LONDON : PRINTED AND PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE To be purchased directly from H.M. STATIONERY OFFICE at the following addresses : Adastral House, Kingeway, London, W.C.2; 120, George Street, Edinburgh; York Street, Manchester; 1, St. Andrew's Crescent, Cardiff; LS, Donegail Square West, Belfast; or through any Bookseller,

1926.

Price 2s. net Paper or 3s. net Cloth.

27-0170

PREFATORY NOTE.

This Report deals with a reference which has occupic attention of the Committee since May, 1924. The probleme which the Committee were asked to address themselves is one of wide scope which raises issues affecting not only the educational system, but also the general social and industrial organisation of the country, and it will be obvious that, if the Board had postponed the issue of the Report until they had been able to give it the full consideration which its contents require, it presentation to the public would have been considerably delayed The Board have therefore arranged for its immediate publication.

In doing so they must not, of course, be taken as committing themselves to acceptance of the conclusions and recommendations of the Committee or of the views given by their officers in evidence. At the same time, the Board believe that the Committee's lucid and comprehensive treatment of a difficult subject will be of real value to all who are interested in the public system of education and the practical problems of its organisation and administration, and in commending the Report to the careful consideration of the public they desire to acknowledge their indebtedness to the Committee and to the distinguished professor who, though not a member of the Committee, assisted them in the drafting of the Report.

15th December, 1926.

TABLE OF CONTENTS.

									PAGE
Names o	f the	Consul	tative	Comm	ittee		• •	• •	iv
Terms of	f Refe	rence		* =	* 4	••	••		iv
Analysis	of Re	port		• •				**	v
Preface	.,	•	••		••	••	••		xvii
Introduc	tion	••	• •	• •	• •	••	••		xix
The Con	ımitte	e's Re	port	• •		••	• •		1
Suggesti	ons or	the t	eachin	g of tl	he seve	ral sub	jects o	f the	
Curric	ulum	in Mod	lern So	chools	and Se	nio <mark>r</mark> Cl	asses	••	188
Appendi	ces :	•							
Anner	div T	T ist	h of W	litness	es and	Tist c	f Orga	nica-	
tion	isun a	Dares	ane sul		t Mom	oranda	Stati	etice	
uuu	is and	Data	nia wi		f tha C	onmit	, Slati tao	ວແເວ,	010
		Dala T Ma	lor un	c usc u E aux			uc c malatur	* *	A10
Apper	101X I	1.—NO		Equc	ational		nciatur	е	202
Appei	ndix	111.—	Statist	.1CS, 1	uustra	ung (napter	۰ <u>۱۱</u> ,	
Par	tII	••	••		* *	••	••	• •	281
Apper	ndix I	V.—No	otes on	the P	rovisio	n for P	ost-Pri	mary	
Edu	ucatio	n in :	some	States	and	Provin	ices of	the	
Bri	tish D	ominic	ns and	l in va	rious E	lumpea	n Cou	ntries	288
4 000	div J	/Sh	ort Ii	st of	Public	ations	hearing	7 00	
nddu 172	1 Time		Deim		i uonia		in aland	i and	
<u>ru</u>	1-11111	FUSE	- r i mus	ny Ec	Incatio		ngiano	and a	010
• Wa	les	* •	4.8	* =	* *	• •	••	• • •	313
Index	••	••	• •		• •		••	••	323

Nole.

The estimated gross cost of the preparation of the appended Report (including the expenses of the Witnesses and Members of the Committee) is $\pounds 1,977$ 4s 2d., of which $\pounds 456$ 19s. 8d. represents the gross cost of printing and publishing this Report.

(\$3579) 1/37 (26847) WL 610/6 2590 4/27 Harrow G.31.

iii

.

8 4

NAMES OF THE MEMBERS OF THE CONSULTATIVE COMMITTEE.

SIR W. H. HADOW, C.B.E. (Chairman). MR. P. W. H. ABBOTT. MR. S. O. ANDREW. DR. ERNEST BARKER. MISS E. R. CONWAY, C.B.E. REV. DR. D. H. S. CRANAGE. THE RT. HON. LORD GORELL, C.B.E., M.C. MISS LYNDA GRIER. MR. IVOR H. GWYNNE, J.P. Miss Freda Hawtrey. SIR PERCY R. JACKSON. DR. A. MANSBRIDGE. MR. A. J. MUNDELLA. MISS E. M. TANNER. MR. R. H. TAWNEY. MR. S. TAYLOR. MR. W. W. VAUGHAN, M.V.O. MR. W. C. WATKINS, J.P. MR. W. H. WEBBE, C.B.E. MR. J. A. WHITE, M.B.E.

MR. R. F. YOUNG (Secretary).

The late Dr. J. G. Adami, C.B.E., was also a member of the Consultative Committee.

TERMS OF REFERENCE.

(i) To consider and report upon the organisation, objective and curriculum of courses of study suitable for children who will remain in full-time attendance at schools, other than Secondary Schools, up to the age of 15, regard being had on the one hand to the requirements of a good general education and the desirability of providing a reasonable variety of curriculum, so far as is practicable, for children of varying tastes and abilities, and on the other to the probable occupations of the pupils in commerce, industry and agriculture.

(ii) Incidentally thereto, to advise as to the arrangements which should be made (a) for testing the attainments of the pupils at the end of their course; (b) for facilitating in suitable cases the transfer of individual pupils to Secondary Schools at an age above the normal age of admission.

ANALYSIS OF THE CONSULTATIVE COMMITTEE'S REPORT.

CHAPTER I.—SKETCH OF THE DEVELOPMENT OF FULL-TIME POST-PRIMARY EDUCATION IN ENGLAND AND WALES FROM 1800 TO 1918.

PART I.— The beginnings of higher primary education from 1800 to the issue of the Revised Code in 1863.

SECTIO	N	PAGE
1.	The condition of primary education at the beginning of the 19th century; Peel's Factory Act, 1802	1
2.	The activities of the British and Foreign School Society and of the National Society	2
3.	Curricula in the monitorial schools established under the influence of Bell and Lancaster. The influence on them of the curricula in use in the schools of industry	3
4.	Efforts of Bentham and Place to promote higher primary education	5
5.	Steps taken by the British and Foreign School Society and the National Society to develop post-primary education	5
6.	The curriculum for older children at the National School, King's Somborne, Hants	6
7.	The development of post-primary instruction in some of the Wesleyan Schools	7
8.	Views of some inspectors of the Education Department on the advantages of centrally situated schools for older children	7
9.	Steps taken by Sir James Kay-Shuttleworth to develop practical instruction in the primary schools	8
10:	Reasons for the comparative failure of his efforts in this direction	9
11.	References to the education of older pupils in the Report of the Newcastle Commission, 1861	10
	PART II.—From the issue of the Revised Code of 1862 to the passing of the Elementary Education Act, 1870.	
12.	The Revised Code of 1862	11
13.	Mr. Corry's minute of 20th February, 1867	11
14.	The higher primary instruction for older children provided (a) in centrally situated schools on some large estates, and (b) in schools maintained by great industrial concerns	12
15.	The Report of the Schools Inquiry Commission, 1868; "Third Grade Schools"	12
16.	Suggestions about the grading of schools in special Reports by the Rev. James Fraser and Mr. Matthew Arnold	13

CHAPTER I.-continued.

PART III.—The Elementary Education Act, 1870, and the development of "Higher Grade" Schools up to 1900.

SECTION		PAGE
17.	The School Boards established by the Elementary Educa-	
	tion Act, 1870	14
18.	The work done by older pupils in some of the "high grade"	
	voluntary schools in the early seventies	15
19.	The development of the curriculum for public elementary	
	schools from 18/0 onwards; obligatory, "class," and	16
00	The Harris Continues in the the Theorem	10
20.	Education Act 1876 the gradual increase in the number	
	of pupils remaining at school up to and beyond the age	
	of 13	16
21.	The establishment of "Higher Grade" Schools by some of	
	the School Boards	17
22.	The development of science teaching in "Higher Grade"	
	Schools under the Regulations of the Science and Art	
	Department	18
23.	The influence of the Reports of the Royal Commission on	
	Technical Instruction (1882-84) on the development of	
	Act 1989	10
94	The Welch Intermediate Education Lat 1990 Defermence	17
4 4.	to "Higher Grade" Schools in the Report of the Cross	
	Commission, 1888	20
25.	Opinions expressed in the Majority and Minority Reports of	
	the Cross Commission regarding "Higher Grade"	
	Schools	22
26.	The extension of the curriculum of Elementary Schools	
	from about 1890. "Senior Standard "Schools	22,
27.	References to "Higher Grade "Schools in the Report of the	
	Royal Commission on Secondary Education, 1895	23
28,	1000 the Education Act, 1899; the Cockerton Kuing,	.95
		-40
	• .	
•	PART IV.—From the Cockerton Ruling, 1900, to the passing of	
•	ine Laucation Act, 1918.	
29.	The Board's Minute of 6th April, 1900, regarding Higher	
	Elementary Schools	26
30.	The development of Secondary Schools after 1902 and their	
	influence on the growth of Higher Elementary Schools	27
31.	Section 22 of the Education Act, 1902	27
32.	The Board's reasons for modifying its original Regulations for Higher Elementary Schools, issued in 1900	27
33.	The revised Regulations for Higher Elementary Schools in	
	the Code for 1905	28
34.	The Report of the Consultative Committee upon Higher	
	Elementary Schools, 1906	29

CHAPTER I,-continued.

	ATUR VIE FAMILIANS	
BECTION	,	PAGE
35 ,	Reasons for the slow growth of Higher Elementary Schools up to 1917. The Central Schools instituted by the London County Council Education Committee in 1911, and by the Manchester Education Committee in 1912	31
36.	Day Trade Schools for Junior pupils. The Board's Regula- tions for Junior Technical Schools, 1913	32
37.	The provisions in the Education Act of 1918 regarding "courses of advanced instruction" for the older or more intelligent children in Public Elementary Schools. The withdrawal of the Regulations for Higher Elementary Schools in 1918	33
38.	The persistent tendency of the national system of elementary education to throw up experiments in higher primary education	• 94

CHAPTER II.—THE FACTS OF THE PRESENT SITUATION.

(i) The nature of the problem.

•

.

39 .	The position created by Section 2 (1) (a) of the Education Act, 1918, is the consummation of a long historical development. The problem of post-primary education	36
40.	This problem is not peculiar to England and Wales, but has arisen in other countries	37
41.	e.g. in various parts of the United States of America, in France, Austria and Prussia	37
42.	Scotland affords the most instructive instance for our purpose	38
43.	The changes introduced by the Scottish Education Depart- ment in 1902	38
44 .	Further changes introduced after the passing of the Education (Scotland) Act, 1918	39
45.	The growing interest in post-primary education in England and Wales	4 0
46.	Frequent references to the problem in various official Reports before 1918	41
47.	The raising of the age of exemption in 1919 to the end of the term in which the fourteenth birthday is reached and the final abolition of partial exemption in 1921 have been followed by an increase in the number of children remaining at acheol beyond the age of exemption	42
48.	The views of Local Education Authorities on the complaint that many of the older pupils in Elementary Schools are "marking time"	42
49.	General agreement among witnesses as to the importance of developing facilities for post-primary education	43
50.	A statement of the main problems connected with full-time post-primary education	45

CHAPTER II.—continued.

٠

SECTION		PAGE
	(ii) A Statistical Summary.	
51	A static survey of the number of children between the ages of 11 and 16 who were receiving full-time post- primary education of some kind in 1922-23	46
52.	A dynamic survey of the statistics	46
53.	The diversity of the provision for post-primary education in different areas	47
54.	The significance of courses of advanced instruction as forming a very important part of the general scheme of post-primary education	49
55.	An analysis of statistics recently collected by the Board in respect of courses of advanced instruction in England	40
56.	The statistics point to an increase in the number of pupils remaining beyond the age of 14	49
57.	The available data indicate that the provision of improved facilities for post-primary education results in an increase of the number of pupils remaining beyond the age of 14	. 50
58.	Summary of the main statistical facts bearing on the dimensions of the problem	51
59.	The need for variety in any adequate system of post- primary education	52
	(iii) Steps taken by Local Education Authorities to deal with the problem of post-primary education.	
60.	Steps taken by Local Education Authorities to provide "courses of advanced instruction" since 1st August, 1919, (i) by organising such courses within existing	50
61.	(ii) By providing Central Schools of different types for older	04 50-
62.	The great variety in the types of provision in the areas of	53°
63	different Authonices	04 cc
63. 64.	The methods of admitting pupils to these courses	•00
65	Education in the area and on mancial considerations, etc.	22
00.	buildings	56
66.	A few specific examples illustrating the types of provision for courses of advanced instruction made by various	56
67	Type I — Carnaryonshire	59
68.	Type II	59
69.	Type III.—Rutland	59
70.	Type IV.—London	60
71.	Type IV.—Bradford, C.B.	60
72.	Type V.—Leicester, C.B.	61
73.	Type VI.—Durham County	61
	*	

CHAPTER II,-continued.

SECTION		PAGE
74.	Type VII.—Hornsey Borough (an Authority for Elementary Education only)	62
75.	Type VIII.—Dorsetshire	62
76.	Type VIIILeeds, C.B.	63
77.	Type IX.—Lancashire	63
78.	Type IX.—Yorkshire, West Riding	64
	Note on Junior Technical Schools, Junior Commercial Schools and full-time Junior Classes in Art Schools.	
79,	The aim and province of Junior Technical Schools	64
80.	The two classes of Junior Technical Schools :	
	(1) Trade Schools	65
	(2) Those concerned with industries connected with engineering in which machinery is largely used and in which the scientific principles underlying the construction and use of machinery are of great	00
	importance	00
61.	bacussion of the suggestion made by some of our Witesses that pupils should be admitted to Junior Technical School at the arm of 11 L instant of the tot 12 L	60
00	Discussion of the suggestion of some mitnement that a	00
Q£,	modern language should be included in the curriculum of lunior Technical Schools	67
83.	Junior Commercial Schools and Classes (now called Junior Technical Schools)	68
84.	Full-time Iunior Art Departments in Art Schools	69
85.	A large number of the Junior Technical Schools and Junior Art Departments are carried on in the premises of Polytechnics, Technical Colleges, and Art Schools	69
	CHAPTER III.—THE LINES OF ADVANCE.	
86.	Further progress should be made on the basis of the experience obtained up to date	70
	(i) The regrading of education.	
87.	The Committee's first conclusion on the subject of regrading. The views of witnesses on which the conclusion is largely based	70
88.	This conclusion is in accordance with the results of recent psychological research, and with the existing practice of legislators and administrators. The need for a fresh classification of the successive stages of education before and after the are of 11 +	74
89,	The Committee's second conclusion in regard to regrading. The views of various witnesses on the point	77
	(ii) The types of Post-Primary School required.	
90.	The Committee's conclusion on this question. Considera- tions on which this conclusion is based	79

CHAPTER III.---continued.

	CHAPTER IIIContinued.	4 C
SECTION		PAGE
91.	The Committee's reasons for advocating the development of post-primary schools of a character somewhat different from that of existing Secondary Schools :	
	(a) The necessity of planning a curriculum suitable for pupils who will leave school not later than the age of 15	82
92.	(b) The desirability of providing for pupils between the ages of 11 + and 15 + a curriculum which has a less academic character and gives a larger place to various forms of practical work than is customary in Secondary Schools of the existing type	83
93.	The Committee's conclusion on the general character of the curriculum for post-primary schools, other than Secondary Schools of the existing type. The grounds on which this conclusion is based	84
94.	A description of the characteristics which will differentiate the newer types of post-primary school from existing Secondary Schools	86
95.	The arrangements for post-primary education will vary in different areas	58
96.	The Committee's conclusion on the desirability of trans- ferring pupils at the age of 11 + from the primary school to a different school, or failing that, to a different type of education from that given to pupils under the age of 11 +	89
97.	The Committee's conclusion on the desirability of providing arrangements for transferring children, in cases where it is desirable, from Secondary Schools to Central Schools and vice versa. The Committee's reasons for making this recommendation	93
	(iii) Questions of classification and nomenclature.	•
98.	The present nomenclature is rather misleading. The desirability of introducing a nomenclature which corresponds more closely to existing arrangements	93
99 .	The Committee's conclusion on the subject of nomenclature. Considerations on which this conclusion is based	• : 95
100.	The Committee's reasons for advocating the use of the terms " primary " and " secondary " education	97
101.	The Committee's grounds for suggesting the use of the expressions "Grammar School," "Modern School," and "Senior Classes "	99
CHAP	TER IV.—CURRICULA FOR MODERN SCHO AND SENIOR CLASSES.	DOLS
102.	The general aim of the curriculum as a whole	101
103.	The suggestions made below aim at developing the tendency, which already exists, to plan special curricula for the older	
	children in Public Elementary Schools	102

-

•

CHAPTER IV.—continued.

٠

SECTION	PAGE
105. Points of difference between the work of older pupils that of children under the age of 11	and 103
108. Three requirements to be kept in mind in planning curri- for Modern Schools and Senior Classes	cula 104
107. Inportance of planning the curriculum as a whole and ensuring that the various subjects and the branche each several subject are taught in relation to one ano	i of s of ther 104
109. Inportance of arousing the pupil's interest in the var subjects and of presenting the successive parts of e subject so as to serve the general unfolding of the wh	ious each ole 105
111. The desirability of bringing the curriculum into rela with the local environment	tion 107
112. The new Modern Schools and Senior Classes should become inferior Grammar Schools or offer merely a va continuation of primary education	not ugue 108
113. The place of practical work in the curriculum	108
114. The general character of the teaching should take according the pupil's natural and social environment	109
115. The educational significance of giving pupils in the years of school life a certain amount of work bearin some way upon their probable occupations	last g in 109
116. The desirability of generating from the school stu interests that will continue through after life and enl the opportunities for a fuller enjoyment of leisure	dies arge 110

CHAPTER V.—THE PLACE OF A "BIAS" IN THE CURRI-CULUM OF MODERN SCHOOLS AND SENIOR CLASSES.

117.	The existing practice with regard to bias in the London Central Schools	112
118:	The existing practice in this matter in Central Schools in other areas throughout England and Wales	113
119.	Central Schools which do not give any very marked bias to the curriculum in the later years of the course	114
120.	The views of employers on the subject of a vocational bias	115
121.	The views of head teachers of Central Schools	117
122,	Many schools provide a realistic curriculum which brings the pupils into close association with the local environ- ment without necessarily also giving a definite bias to the curriculum in the last years of the course	118
12 3.	The views of witnesses on the necessity for caution before giving a very definite bias to the curriculum in the later years of the course .	119
124.	The general education of the pupils should not be sacrificed to the bias, and adequate provision should be made for such pupils as desire to pursue a more general course of	
	study	119

-

CHAPTER V.—continued.

SECTIO	N	PAGE
125.	The Committee's attitude on the question of vocational	
	education in its bearing on a bias in the curriculum of	
	Modern Schools and Senior Classes	120
126.	The Committee's conclusion on the subject of bias	121

CHAPTER VI.—THE STAFFING AND EQUIPMENT OF MODERN SCHOOLS AND SENIOR CLASSES.

(i) Staffing.

127.	The views of witnesses on the employment of young graduates from the Training Departments of Universities in Central Schools	122
128.	The new post-primary schools will generate their own conditions, create their own special types of curricula, and gradually form their own teachers	122
129.	The employment of part-time teachers and visiting teachers in existing Central Schools	123
130.	The views of witnesses regarding the supply of properly qualified teachers of certain subjects	123
131.	Arrangements for the appointment of the staff of Modern Schools. The head teacher should be consulted in making appointments on the assistant staff	194
132.	The importance of selecting persons with suitable qualifi- cations and experience as head teachers of Modern	101
	Schools	124
133.	The qualifications and experience of the assistant staff of Modern Schools	126
134.	The existing sources from which teachers for these Schools might be drawn. Four main categories—(a) the trained Certificated teacher from the Training College; (b) the graduate who has taken a four years' course in the Training Department of a University, or the graduate	•••
	. Who after taking the ordinary three years' course for a legree has spent a fourth year in the Training Department of a University. (a) the graduate who without	
	being trained in the formal sense, possesses special experience which might serve in lieu of training; (d) the	•
	specialist teacher trained in the subject which he teaches	126
135.	Categories (a) and (b)	126
136.	Category (c)	127
137.	Category (d)	128
138.	The desirability of providing suitable facilities for the training of teachers for Modern Schools, both in the Training Colleges and by means of special courses	128
139.	The significance and value of vacation courses and the desirability of developing them further	. 129
140.	General conclusion in regard to teachers in Modern Schools and Senior Classes	130

-

•,

CHAPTER VI.-continued.

SECTION	۲ ۲ <u>-</u> ۲ ۲ ۲ ۲	PAGE
	(ii) The Equipment of Modern Schools.	
141.	The equipment of existing Central Schools in the matter of laboratories and rooms for practical work	131
142.	The Committee's conclusion regarding the equipment of	
	Modern Schools	131
СНАР	TER VII THE ADMISSION OF CHILDREN	TO
M	ODERN SCHOOLS AND SENIOR CLASSES.	
143,	The educational and administrative considerations in favour of transferring children to a different type of education at the age of 11 + have been summarised in Chapter III. The present practice of various Authorities in regard to the admission of pupils to selective Central Schools and Classes	132
144.	Pupils are frequently admitted to selective Central Schools on the result of the Examination for Free Places in Secondary Schools for which most Authorities allow children to be presented at the age of 11+, though some Authorities place the upper age limit at 12	132
145,	The Free Place Examination in English and Arithmetic, The use of an oral examination as an adjunct to the	104
	written test	133
146.	The preliminary "weeding-out" examination in English and Arithmetic, which in many areas is held in the local Elementary Schools. The difficulty of standardising the marking in this preliminary examination	133
147.	The second examination or Free Place Examination proper	135
148.	The various arrangements adopted by different Authorities	135
149.	The oral examination	136
150.	The practice of making a percentage allowance for each month below the maximum age of entry	136
151.	The use of individual psychological tests of intelligence in association with the oral examination	137
152.	The merits of existing arrangements for admitting pupils to aelective Central Schools, by means of the Free Place Examination	137
153,	The use of school records and of reports and recommenda- tions by the head-teachers of contributory schools	137
154.	The practice of some Authorities is to transfer to the Central Schools all pupils who reach a particular standard in their local Elementary School	138
155.	Advantages of a general compulsory examination for all children qualified by age	138
156.	The importance of providing adequate facilities for the transfer of individual pupils from Modern Schools to Grammar Schools	138
157.	The Committee's conclusion regarding examinations for admission to Modern Schools and Senior Classes	139

-

CHAPTER VIII.—THE LENGTHENING OF SCHOOL LIFE.

SECTION	r	PAGE
158	The possible extension of the age of exemption in its bearing on the regrading of education	140
159.	The progress of school attendance up to 1917	140
160.	The Education Act of 1918	141
161.	Other causes which have contributed to an increase in the number of pupils remaining at school beyond the age of exemption	142
- 162.	Suggestions in official Reports that the age of exemption should be raised to 15	143
163.	The views of local administrators on the raising of the school age	143
164.	Economic and social aspects of the problem	144
165.	The educational side	145
166.	The question of maintenance allowances	146
167.	The question of additional staff and school buildings	148
168.	The Committee's recommendation	148
16 9 .	Part-time education	149

CHAPTER IX.—THE QUESTION OF A LEAVING EXAMINATION.

170.	The views of witnesses who were opposed to the establish- ment of any special leaving examination for pupils in post-primary schools	150
⁻ 17I.	The views of witnesses on the presentation of individual pupils from Central Schools and Classes for certain existing examinations	150
172.	The views of other witnesses on the possible institution of a School Leaving Certificate for pupils in Modern Schools which could be signed by the head teacher and counter- signed by the local Secretary or Director of Education	150
173.	The views of some witnesses who advocated the institution of a special Leaving Examination	151
174.	A statement of the reasons which have led the Consultative Committee to advocate the setting up of a special Leaving Examination	151
175.	None of the existing examinations for pupils of the age of 15+ appear to be suitable for the purpose	152
176.	The proposed special examination for pupils of the age of 15+ in post-primary Schools should not be established for at least three years, and should be adjusted to the needs of a broad and generous curriculum	152
177.	Individual pupils in these schools should be free to take a more academic examination if they so desire	153
178.	The Committee's recommendation that the proposed examination should be organised by a number of joint boards in different districts throughout England and	
	Wales	153

xiv

CHAPTER X .-- ADMINISTRATIVE PROBLEMS.

SECTIO	N	PAGE
179.	Proposed new nomenclature : Primary and Secondary	155
180.	Opinions of witnesses on the advisability of legislative and administrative changes in view of the new developments in education. The three main administrative difficulties—	
	(a) The tripartite division of education into elementary,	
	 (b) The difficulties created by the existence, within the areas of local authorities for higher education, of smaller local authorities having control over elementary education only within the confines of their boroughs or urban districts. 	
	(c) The existing system of "dual control "	155
	A.—The division of education into Elementary, Secondary and Technical.	
181.	The historical reasons for this tripartite division	157
182.	Recent changes in the organisation of the Board's internal staff and inspectorate	157
183.	The tripartite division is based to some extent on actual differences in the qualifications of different kinds of teachers and in their several organisations	158
184.	The forces making for unification	159
	B.— Authorities for Higher Education and Authorities for Elementary Education.	
185,	The existing law	160
186.	The distribution of authorities for elementary education only within the various county areas	160
187.	Provisions in the Education Act of 1918 designed to facilitate co-operation between the two sets of authorities	161
188.	Views of witnesses on difficulties arising from the existing	162
189.	On a broad view, the relations between the two sets of	
	authorities would appear to be tolerably friendly	163
190.	Nevertheless, the wider problem remains	163
191.	In theory, there are four main lines on which the local administration of education might be reorganised	164
192,	The Committee's recommendations on the subject	164
	C.—The existing system of "Dual Control,"	
193.	The administrative aspects of "dual control" in their bearing on post-primary education	168
194,	Views of administrators	166
195.	Views of the religious bodies and of the managers of non- provided schools	167
19 6 .	The recent pronouncement of the President of the Board of Education on "dual control"	168
	· · · · · · · · · · · · · · · · · · ·	

.

٠

CHAPTER	X.—continued.
---------	---------------

SECTION PAGE 197. Some examples of possible arrangements 169 198. The views of the Committee . 170 Note on the importance of securing the appointment, where possible, of persons with suitable qualifications as managers of Modern Schools and Senior Classes. 170 199. The Committee's suggestions regarding the selection of Managers of provided Modern Schools and Senior Classes 170 CHAPTER XI.—SUMMARY OF FINAL CONCLUSIONS AND RECOMMENDATIONS. 200. The Committee's conclusions and recommendations 172 Note by Mr. A, J. Mundella 184 Note by Mr. A, J. Mundella 184 Note by Mr. S, O. Andrew, Mr. S. Taylor, and Mr. W. H. 186 SUGGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, viz. : 189 English 190 History 193 History 193 203 Modern Foreign Language 214 220 Drawing and Applied Art 220 Drawing and Applied Art 233 Housecraft 234 Gardening 233 Modern foreign Language 233 Physical Training and Games <t< th=""><th></th><th>UHAPTEK A,—<i>continue</i>3,</th><th></th><th></th></t<>		UHAPTEK A,— <i>continue</i> 3,		
197. Some examples of possible arrangements 169 198. The views of the Committee :. 170 Note on the importance of securing the appointment, where possible, of persons with suitable qualifications as managers of Modern Schools and Senior Classes. 170 199. The Committee's suggestions regarding the selection of Managers of provided Modern Schools and Senior Classes 170 CHAPTER XI.—SUMMARY OF FINAL CONCLUSIONS AND RECOMMENDATIONS. 200. The Committee's conclusions and recommendations 172 Note by Mr. A, J. Mundella 184 Note by Mr. A, J. Mundella 184 Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W. H. Webbe 186 SUGGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, viz.:— Religious Knowledge 190 History 195 Geography 195 Geography 210 Elementary Mathematics 211 Science 220 Drawing and Applied Art 233 Meedlecraft and Handwork for girls 233 Modern Foreign Language 234 Gardening 237 Music 237	SECTIO	N		PAGE
198. The views of the Committee	197.	Some examples of possible arrangements	• •	169
Note on the importance of securing the appointment, where possible, of persons with suitable qualifications as managers of Modern Schools and Senior Classes. 199. The Committee's suggestions regarding the selection of Managers of provided Modern Schools and Senior Classes 170 CHAPTER XI.—SUMMARY OF FINAL CONCLUSIONS AND RECOMMENDATIONS. 200. The Committee's conclusions and recommendations 172 Note by Mr. A, J. Mundella 184 Note by Mr. A, J. Mundella 184 Note by Mr. S, O. Andrew, Mr. S. Taylor, and Mr. W. H. 186 Note by Mr. S, O. Andrew, Mr. S. Taylor, and Mr. W. H. 186 SUEGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, viz. : 189 Religious Knowledge 120 Modern Foreign Language 210 History 220 Drawing and Applied Art 220 Drawing and Applied Art 233 Housecraft 233 Housecraft 233 Housecraft 233	198.	The views of the Committee	\$ #	170
199. The Committee's suggestions regarding the selection of Managers of provided Modern Schools and Senior Classes 170 CHAPTER XI.—SUMMARY OF FINAL CONCLUSIONS AND RECOMMENDATIONS. 200. The Committee's conclusions and recommendations 172 Note by Mr. A, J. Mundella 172 Note by Mr. A, J. Mundella 184 Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W. H. Webbe 186 Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W. H. Webbe 186 SUGGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, viz. : Religious Knowledge 190 History 195 Geography 203 Modern Foreign Language 214 Science 220 Drawing and Applied Art 220 Drawing and Applied Art 233 Housecraft 234 Gardening 233 Housecraft 234 Gardening 237 Music 242 Corporate Activities 242		Note on the importance of securing the appointment, w possible, of persons with suitable qualifications as mana of Modern Schools and Senior Classes.	here gers	
CHAPTER XI.—SUMMARY OF FINAL CONCLUSIONS AND RECOMMENDATIONS. 200. The Committee's conclusions and recommendations 172 Note by Mr. A. J. Mundella 184 Note by Mr. S. J. Mundella 184 Note by Mr. S. Conway 186 Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W. H. Webbe 186 SUGGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, viz. : Religious Knowledge 199 History 195 Geography 203 Modern Foreign Language 210 Elementary Mathematics 214 Science 220 Drawing and Applied Art 220 Madicrafts for boys 233 Housecraft 234 Gardening 234 Boysical Training and Games 234 Physical Training and Games 244 Corporate Activities 244	199.	The Committee's suggestions regarding the selection Managers of provided Modern Schools and Senior Cla	n of [†] sses	170
200. The Committee's conclusions and recommendations 172 Note by Mr. A, J. Mundella 184 Note by Miss E. R. Conway 184 Note by Miss E. R. Conway 184 Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W. H. 186 Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W. H. 186 SUGGESTIONS ON THE TEACHING OF THE SEVERAL 186 SUGGESTIONS ON THE TEACHING OF THE SEVERAL 186 SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, viz. : Religious Knowledge 199 History 195 Geography 203 Modern Foreign Language 210 Elementary Mathematics 220 Drawing and Applied Art 230 Handicrafts for boys 233 Housecraft 234 Gardening 237 Music 237 Music 238 Physical Training and Games 246	CH	APTER XI.—SUMMARY OF FINAL CONCLU AND RECOMMENDATIONS.	SIO	NS
Note by Mr. A, J. Mundella11.1184Note by Miss E. R. Conway184Note by the Rev. Dr, D. H. S. Cranage186Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W. H. Webbe186SUGGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, vtz. :189Religious Knowledge189English190History195Geography203Modern Foreign Language214Science220Drawing and Applied Art226The various forms of practical instruction233Housecraft234Gardening237Music238Physical Training and Games242Corporate Activities242Corporate Activities246	200.	The Committee's conclusions and recommendations		172
Note by Miss E. R. Conway		Note by Mr. A. J. Mundella		184
Note by the Rev. Dr. D. H. S. Cranage186Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W. H. Webbe186SUGGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, viz. :189Religious Knowledge189English190History195Geography203Modern Foreign Language210Elementary Mathematics210Elementary Mathematics220Drawing and Applied Art230Handicrafts for boys233Housecraft233Housecraft233Housecraft237Music238Physical Training and Games242Corporate Activities446		Note by Miss E. R. Conway	••	184
Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W. H. Webbe186SUGGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, viz. :189Religious Knowledge		Note by the Rev. Dr. D. H. S. Cranage		186
Webbe		Note by Mr. S. O. Andrew, Mr. S. Taylor, and Mr. W	. H.	
SUGGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES, viz. : 189 Religious Knowledge		Webbe	• •	186
Religious Knowledge		SUBJECTS OF THE CURRICULUM IN MODE SCHOOLS AND SENIOR CLASSES, viz. :	RAL RN	
English190History195Geography203Modern Foreign Language210Elementary Mathematics214Science220Drawing and Applied Art226The various forms of practical instruction230Handicrafts for boys232NeedlecraftHousecraftMusicPhysical Training and GamesCorporate Activities		Religious Knowledge	**	189
History195Geography203Modern Foreign Language210Elementary Mathematics214Science220Drawing and Applied Art220Drawing and Applied Art220Drawing and Applied Art220Mandicrafts for boys230Handicrafts for boys232Needlecraft233Housecraft234Gardening237Music238Physical Training and Games242Corporate Activities246		English	••	190
Geography203Modern Foreign Language210Elementary Mathematics214Science220Drawing and Applied ArtThe various forms of practical instruction230Handicrafts for boys232Needlecraft and Handwork for girls233HousecraftMusic238Physical Training and Games242Corporate Activities		History	* *	195
Modern Foreign Language		Geography	* •	203
Elementary Mathematics		Modern Foreign Language	* *	210
Science <t< td=""><td></td><td>Elementary Mathematics</td><td></td><td>214</td></t<>		Elementary Mathematics		214
Drawing and Applied Art 226 The various forms of practical instruction 230 Handicrafts for boys 232 Needlecraft and Handwork for girls 233 Housecraft 234 Gardening 237 Music 238 Physical Training and Games 242 Corporate Activities 246		Science	· ••	220
The various forms of practical instruction230Handicrafts for boysNeedlecraft and Handwork for girlsHousecraftGardeningMusicPhysical Training and GamesCorporate Activities		Drawing and Applied Art		226
Handicrafts for boys		The various forms of practical instruction	••	230
Needlecraft and Handwork for girls233HousecraftGardeningMusicPhysical Training and GamesCorporate Activities		Handicrafts for boys	••	232
Housecraft		Needlecraft and Handwork for girls	••	233
Gardening 237 Music 238 Physical Training and Games 242 Corporate Activities 246		Housecraft	••	234
Music		Gardening	• •	237
Physical Training and Games		Music	••	238
Corporate Activities		Physical Training and Games	••	242
		Corporate Activities		246

XV1	

.

PREFACE.

The following question was referred to us by the Board of Education on 1 Feb., 1924:---

(i) To consider and report upon the organisation, objective and curriculum of courses of study suitable for children who will remain in full-time attendance at schools, other than Secondary Schools, up to the age of 15, regard being had on the one hand to the requirements of a good general education and the desirability of providing a reasonable variety of curriculum, so far as is practicable, for children of varying tastes and abilities, and on the other to the probable occupations of the pupils in commerce, industry and agriculture.

(ii) Incidentally thereto, to advise as to the arrangements which should be made (a) for testing the attainments of the pupils at the end of their course; (b) for facilitating in suitable cases the transfer of individual pupils to Secondary Schools at an age above the normal age of admission.

We began our consideration of this problem in May, 1924, immediately after we had completed our Report on Psychological Tests of Educable Capacity. The full Committee has sat on 46 days between May, 1924, and October, 1926, and has examined 95 witnesses (see Appendix I (A.).)

In addition, sub-committees, appointed to consider various aspects of the question, sat on 20 days. In May, 1925, the Committee appointed a Drafting Sub-Committee consisting of eight of its members, with Dr. Ernest Barker as Chairman, and with power, subject to the approval of the President, to co-opt members from outside.¹ In this way, it was fortunate enough to secure the services of Prof. T. Percy Nunn, who placed at its disposal his wide knowledge and sound judgment, and who has rendered invaluable help in the preparation of the Report. The Drafting Sub-Committee met on 17 occasions between May, 1925, and October, 1926

¹ Under clause 5 (iii) of the Order in Council of 22 July, 1920, recontituting the Consultative Committee.

xviii

We take this opportunity of thanking our witnesses for the valuable evidence which they put before us, and also all those other organisations and persons (whose names will be found in Appendix I (B.) who were good enough to furnish us with memoranda, statistics, and other data bearing on our inquiry. In particular, we desire to thank those local education authorities, employers, and head masters and head mistresses of secondary, central and junior technical schools, who were kind enough to send us detailed replies to our questionnaires.

We desire to thank our Secretary, Mr. R. F. Young, who has already borne the brunt of two previous reports, for the unremitting zeal and industry which he has given to the composition of this report. In doing so we desire to draw particular attention to the first Chapter and to some of the Appendices (especially that on Educational Nomenclature) which he has compiled at our request.

We cannot end without recording our sense of the loss which the Committee has sustained by the death of Dr. Adami. He had been a member for the last six years : he had taken a leading part in the preparation of our last Report ; and he was a member of the Sub-Committee in which the present Report was gradually drafted. He had won the affection as well as the respect of his fellow members; and he contributed generously both to their deliberations and to the shaping of their conclusions.

INTRODUCTION.

We have been profoundly interested by the question propounded in the terms of reference, which we desire to thank the Board for remitting to us, and to which we have devoted a prolonged and anxious consideration. After hearing and weighing a large amount of evidence, and after some study both of the development of the past which is recorded in our first chapter and the tendencies of the present which are examined in our second, we cannot but feel—as we unanimously do—that the times are auspicious, and the signs favourable, for a new advance in the general scope of our national system of education. There has long been a trend towards some higher form of 'elementary education'; the recent growth of central schools is at once the latest and the most arresting expression of that trend; and we believe that the time has now come at which it should move to its consummation.

There is a tide which begins to rise in the veins of youth at the age of eleven or twelve. It is called by the name of adolescence. If that tide can be taken at the flood, and a new voyage begun in the strength and along the flow of its current, we think that it will 'move on to fortune.' We therefore propose that all children should be transferred, at the age of eleven or twelve, from the junior or primary school either to schools of the type now called secondary, or to schools (whether selective or non-selective) of the type which is now called central, or to senior and separate departments of existing elementary schools. Transplanted to new ground, and set in a new environment, which should be adjusted, as far as possible, to the interests and abilities of each range and variety, we believe that they will thrive to a new height and attain a sturdier fibre. But we recognise that much depends on the nature of the new ground and the quality of the new environment. We are not authorised by our reference, nor do we desire, to explore the form of environment which goes by the name of the secondary school. We will only say that we regard the growth of secondary schools, since the Act of 1902, as one of the finest signs of our educational progress : that we recognise that it has encouraged and fostered the development of our Universities; that we believe it has liberated a fund of latent capacity in those who, by winning scholarships and free places, have profited freely by it ; and that we hope that it will continue at an even greater rate and on an even greater scale. Here, however, we are concerned with the growth-which has begun already, and which we desire greatly to accelerate-of selective and non-selective central schools, and of senior departments in elementary schools. This growth, in our view, will run side by side with, but in no sense counter to. the growth of secondary schools; and while it will differ in kind, it will not be inferior in its promise or quality. The central schools and senior departments, like the secondary schools. will give a humane and general education. It will be shorter in its duration ; it will terminate at the end of three or four years ; but it will be directed, as long as it lasts, to the general fostering of mental power. Two methods, which will differentiate them to some extent from secondary schools, will generally be followed in central schools and senior departments. One will be the method of practical instruction and manual work, on which we set high hopes, believing that there are many children who think as it were with their hands and will profit greatly by a method of instruction which follows the natural bent of their capacity. Another will be the method of giving a trend and a bias, which for want of a better word we may call by the name 'realistic,' to the general course of studies. English and a modern language, history and geography, mathematics and natural science, will all be studied in central schools and senior departments no less than in secondary schools. But the study of these subjects, we hope, will be related more closely to the living texture of industrial or commercial or rural life; and it will be designed to stimulate interest in boys and girls who are beginning to think of the coming years and a career in life, and are likely to feel the liveliest quickening of the mind when they see the bearing of their studies on that career.

Examinations, it has been said, are not the same thing as the day of judgment; and they are certainly not the Alpha and the Omega of education. But the most pleasant of parks will none the less have an entrance and an exit; and we are disposed to believe that we may safely recommend the institution both of an entrance examination, on the lines of the present examination for scholarships and free places in secondary schools, to determine the conditions of entry into selective modern schools, and of a final or leaving examination, not on the lines of the First School Examination in secondary schools, to test and to certify the achievement of pupils both of selective and of nonselective central schools and also of senior departments. We recognise that a final examination may to some extent cramp the free growth of these schools. But we feel that their pupils may be handicapped by the absence of any form of guarantee of their work; and we feel that the schools themselves may become uncertain in their aim and vacillating in their methods, if they have no suggestion of a definite standard to guide their work. And, after all, examinations are like the running of a race; and few of us really dislike races, or can avoid, in the course of our lives, the running of some race which is set before us. There is a wisdom in the saying of Plato, that 'the life without examination is a life that can hardly be lived.'

We have found, in the course of our work, that we were led to believe in the need of some changes of terminology, which are perhaps not gravely contentious or revolutionary. We desire to abolish the word 'elementary,' and to alter and extend the sense of the word 'secondary.' The word 'elementary ' has now become misleading; and elementary education, in our present system of nomenclature, which treats central schools as a part of it, is made to include much which is not elementary in any just sense of the word. We propose to substitute the term ' primary,' but to restrict the use of that term to the period of education which ends at the age of eleven or twelve. To the period of education which follows upon it we would give the name secondary; and we would make this name embrace all forms of post-primary education, whether it be given in the schools which are now called 'secondary,' or in central schools, or in senior departments of the schools now termed ' elementary.' If the term secondary is thus given a wider sense, some new term will be needed to denote the schools which have now the monopoly of the name 'secondary'; and we suggest that they should be called by the name of grammar schools. If such schools are thus re-named, we should propose that the term 'central school' (which is neither clear nor particularly apt) should simultaneously disappear, and the term 'modern school' should take its place in the future. On such a scheme there will be two main kinds of education-primary and secondary; and the latter of these two kinds will fall into two main groupsthat of the grammar school type, and that of the type of the modern school. But there is a magic in words, and a substance behind terms of art; and we recognise that a change of terminology implies, and may ultimately involve, some amount of change in the substance of educational administration. In the last of our chapters we have discussed the extent and the nature of the change which we hope to see made. We admit that we are here walking on difficult ground, and that there are fires burning beneath the thin crust on which we tread. But we felt that we must not shirk the consequences of our argument, and we realised that the educational changes which we advocated. affecting as they did the present elementary system, raised large questions of administration-the question of the relation of authorities 'for elementary education only' to authorities of a wider scope, and again the question of the position of 'voluntary' or 'non-provided' elementary schools. We recognise the gravity of these questions; we have sought to make some suggestions for their solution ; but we are well aware that their final settlement must depend on the statesmanship of active administrators and the healing touch of time.

More immediately important, in their bearing on the terms of our reference, are the suggestions we make in chapter VIII for the lengthening of school life, and again, in chapter VI for the staffing and equipment of modern schools. We recommend that, as soon as possible, an additional year should be added to the general school life, and the leaving age should be raised to fifteen. Only in that way can the modern schools and senior departments, which will then be able to plan a four years' course, exercise their full influence on their pupils; only in that way can children be guided safely through the opportunities, the excitements and the perils of adolescence; only in that way can the youth of the nation be adequately trained for a full and worthy citizenship. If modern schools thus become the homes of their pupils for a full and consecutive course of four years, they will require, and we hope that they will receive, the services of an ardent, properly trained and adequately qualified teaching staff. In few schools can there be greater opportunities for a teacher of power and of wisdom than there will be in these schools. We earnestly hope that such teachers will be found, and that not only will the trained and experienced teachers of the present elementary schools offer themselves readily for the work, but also University graduates, who have received a fourth year of

professional training, will volunteer, and will be accepted, with no less readiness.

The scheme which we advocate can be simply stated. It is that between the age of eleven and (if possible) that of fifteen, all the children of the country who do not go forward to 'secondary education' in the present and narrow sense of the word, should go forward none the less to what is, in our view, a form of secondary education, in the truer and broader sense of the word, and after spending the first years of their school life in a primary school should spend the last three or four in a wellequipped and well-staffed modern school (or senior department). under the stimulus of practical work and realistic studies, and vet, at the same time, in the free and broad air of a general and humane education, which, if it remembers handwork, does not forget music, and, if it cherishes natural science, fosters also linguistic and literary studies. It is less easy to state the ideal which lies behind our scheme. But there are three great ends of human life and activity which we trust that our scheme will help to promote. One is the forming and strengthening of character-individual and national character-through the placing of youth, in the hour of its growth, "as it were in the fair meadow " of a congenial and inspiring environment. Another is the training of boys and girls to delight in pursuits and rejoice in accomplishments-work in music and art; work in wood and in metals; work in literature and the record of human history-which may become the recreations and the ornaments of hours of leisure in maturer years. And still another is the awakening and guiding of the practical intelligence, for the better and more skilled service of the community in all its multiple business and complex affairs-an end which cannot be dismissed as 'utilitarian' in any country, and least of all in a country like ours, so highly industrialised, and so dependent on the success of its industries, that it needs for its success, and even for its safety, the best and most highly trained skill of its citizens.

The forming and strengthening of character; the training of the tastes which will fill and dignify leisure; the awakening and guiding of the intelligence, especially on its practical side these are the ends which we have had in view; and it is in their name, and because we think it may serve, in its measure, towards their attainment, that we commend this report to our readers.

xxiv

Not the least among these ends is the forming and strengthening of character, both individual and national. It is here especially that a national system of education may serve to elevate a nation. Great Britain, like other countries, but perhaps more than most, is passing through an era of industrialism. Industrialism has its grave effects on national life. It demands, only too often, a narrow specialisation of faculty; it produces, only too readily, a patterned uniformity of work and behaviour; and it may, unless it is corrected, infect the minds of men with the genius of its own life. Education can correct industrialism, by giving to the mind the breadth and the fresh vitality of new interests, as it can also make industry more effective ; and we believe that the teachers of our country-given their opportunity -can bring the discipline of the school to aid the influence of home in making a new generation which alike in character, in tastes and in trained skill will justify them abundantly of all their labours.

CHAPTER I.

SKETCH OF THE DEVELOPMENT OF FULL-TIME POST-PRIMARY EDUCATION IN ENGLAND AND WALES FROM 1800 TO 1918.

In the following historical sketch of developments in higher primary education from the early decades of the last century to the passing of the Education Act of 1918, we do not aim at giving a consecutive account of the growth of elementary education as a whole. We allude, where necessary, only to the main stages in that development. Our object is to describe the various types of post-primary school which from time to time emerged from the general system of elementary education, and to give some account of the character of the teaching, the content of the curriculum, and the general aims of those schools.

PART I.—THE BEGINNINGS. OF POST-PRIMARY EDUCATION FROM 1800 TO THE ISSUE OF THE REVISED CODE IN 1862.

1. At the beginning of the last century, in spite of all the attractions which zealous founders of primary schools could offer, very few children of the poorer classes spent more than two or three years in full-time attendance at school. Few even of the educational enthusiasts of that time believed in a longer school life, and indeed many founders of primary schools were avowedly on their guard against teaching the children too much.

The state of public opinion on the subject of the curriculum and the length of school life in primary schools may be gauged to some extent by the terms of Peel's Factory Act, 1802, entitled "An Act for the preservation of the health and morals of apprentices and others employed in cotton and other mills and cotton and other factories."¹ Under this statute the employer was required to provide adequate instruction in reading, writing and arithmetic during the first four years at least of the seven years of apprenticeship. The Act provided that this secular instruction must be included in the twelve hours of daily occupation beginning not earlier than 6a.m. and ending not later than 9 p.m. Many of the apprentices who came within the purview of the enactment were young pauper children who were frequently brought from distant workhouses to work in the

¹⁴² Geo, III. C. 73.

cotton mills.¹ Though Peel's Act was imperfectly enforced, it nevertheless established useful precedents, and showed that the State was beginning to realise its social responsibilities in the matter of education.

There were however a few pioneers who recognised the desirability of prolonging school life and of teaching subjects other than the three R's, which at first formed the main objective of the numerous elementary schools which were being established, largely under the influence of Lancaster and Bell, in the early decades of the nineteenth century.

2. The promoters of the ordinary primary schools were, to some extent, indirectly influenced by the Sunday School movement, which was then at the height of its influence, and reading was regarded as particularly important in order to enable children to read the Bible. A Committee of the Society for Promoting Christian Knowledge, founded in 1699, and the Society for Bettering the Conditions and Increasing the Comforts of the Poor, founded in 1796, devoted much attention to primary education, but a more powerful impulse to the provision of schools on a large scale was given by the foundation of two great educational organisations, the British and Foreign School Society (1808) and the National Society for Promoting the Education of the Poor in the Principles of the Established Church (1811). The British and Foreign School Society supported the monitorial system of Joseph Lancaster. The National Society's schools followed the monitorial system of Dr. Andrew Bell, sometimes called the "Madras" system. In 1816 a Committee of the House of Commons, presided over by Mr. Brougham, afterwards Lord Brougham, reported that they had found reason to conclude that a very large number of poor children were wholly without the means of instruction. One of the Reports of this Committee pointed out that the education of the people was a matter in which the State was vitally concerned.*

⁴Under 43 Eliz. C 11, § 5, pauper children under the age of 9 years could be compulsorily apprenticed. This provision of the Elizabethan statute was not modified till 1819. 59 Geo. III. C. 13, § 7. ⁸ In the time of the Commonwealth, various Acts had been passed,

⁸ In the time of the Commonwealth, various Acts had been passed, making provision for salaries for schoolmasters and for their appointment, or removal from office, e.g., an Act of 22 February 1649, made provision for salaries to schoolmasters in Wales, and an Act of 8 June 1649, provided for payment of salaries and augmentations of salaries to schoolmasters in England and Wales. Firth and Rait, Acts and Ordinances of the Interregnum, II, pp. 142, foll. and 346 foll., cf. also the Act of 1 October, 1646, Op. cit. I, p. 83.

Down to 1833, the new primary schools which had been established in large numbers were wholly supported by voluntary contributions and school fees. In 1833 the Government, for the first time, made a grant of £20,000, to be applied to the erection of school houses. This grant was distributed on the recommendation of the two great Educational Societies mentioned above.

3. The supporters of Lancaster and Bell, both of whom had aimed primarily at teaching the three R's in their monitorial schools, soon found it necessary to compromise with employers of labour, landed proprietors and clergy, who were establishing schools from religious and other motives, and who favoured a curriculum somewhat on the lines of that in vogue in the Schools of Industry, a type of charity school with a severely utilitarian curriculum " mixing labour with learning," which had originated in the 17th century¹ and had been further developed in the last decades of the 18th century in association with the existing Poor Law system.³ Thus the curricula⁸ that were actually in use in many of the monitorial schools were at first largely based on the courses of instruction given in the Schools of Industry, which in addition to the three R's included such practical activities as cobbling, tailoring, gardening, and simple agricultural operations for boys, and spinning, sewing, knitting, lace-making and baking for girls.

For example, in the "Schools of Industry" at Kendal opened in 1799, the children were taught reading and writing,

Return of Endowed Charities (County of London) 1897 (c. 394) I. pp. 289-290.

¹Thomas Firmin's factory school in Little Britain, London (1681) was

¹Thomas Firmin's factory school in Little Britain, London (1681) was probably the earliest of the schools of industry. See Proposals for the Employment of the poor, by T. F. (1681), and Kirkman Grey, A History of British Philanthropy (1905) pp. 103-105. ¹Many of these Schools of Industry were however little more than sewing classes, e.g. "The Settlement of Industry" at Caistor. The theory of such schools was expounded by Mrs. Trimmer in her Oeconomy of Charity (1781). The younger Pitt, in his proposal for a reform of the Poor Law (1796), provided for the compulsory establishment of Schools of Industry for children whose parents were precisiving Poor Fallef of Industry for childron whose parents were receiving Poor Relief. • cf. the Gower Walk Free (Industrial) School at Whitechapel, founded

In 4807 by W. Davis, a philanthropic manufacturer, under the guidance of Dr. Bell. The trust funds " are to defray the expenses of schooling and instruction of a certain number of poor children of both sexes, as also of instructing and employing them in certain useful trades and occupations and in purchasing the necessary implements and tools for setting them to work, and in paying the wages of proper persons to instruct them therein."

geography and religion. Thirty of the older girls were employed in knitting, sewing, spinning and housework, and 36 younger girls were employed in knitting only. The older boys were taught shoemaking, and the younger boys prepared machinery for carding wool. The older girls assisted in rotation in preparing breakfast, which was provided in the school at a small weekly charge. They were also taught laundry work. The staff consisted of one schoolmaster, two teachers of spinning and knitting, and one teacher for shoemaking.1

Pupils at such schools were able to earn a little money by the sale of articles made in school, and in this way parents were induced to allow their children to remain longer under instruction.⁸

Thus from the first the primary schools established for children of the poorer classes were influenced by two ideals of education-(i) a definite training with a vocational aim, such as that given by the schools of industry, designed to improve the earning capacity of children immediately on leaving school, and incidentally to illustrate the soundness of the prevalent economic doctrine of the period-the instruction of the poor in habits of work and in thrift, and (ii) a general Education throughout the years of incipient adolescence.³ In practice, the first-named ideal, which was to some extent analogous to the aims of the contemporary Swiss educationalists, Père Girard, Wehrli and

² Records of the Society for Bettering the Conditions of the Poor, III, 300-312.

*cf. J. Lancaster, Improvements in Education (1806), p. 120-"One proper object of schools of industry is to enable children to earn as much money as will remove the difficulty occasioned by the poverty of their parents. By this means parents are enabled to keep their children at school . . . until they have acquired habits of industry, which will follow them into future life."

* cf. Mr. Roebuck's speech in the House of Commons on July 30th, 1833, in support of his resolution that the House should consider means for establishing a system of national education, in which he explained that the schools contemplated were to be confined to the education of the poor, and were to be of three classes :--

(1) Infants' schools ; (2) schools of industry for children between the ages of 7 and 14; (3) normal schools for the instruction of teachers.

The schools of industry would have two objects in view :---

"(i) The imparting of what might be termed scholarship; (ii) the knowledge of some trade." Hansard, Vol. XX, col. 159-161.

De Fellenberg, was usually followed, as it appealed more directly to parents and children as well as to the founders and promoters of these Schools.

4. Influenced by the example of Scotland, and of Prussia, France, Holland and other continental States, a small group of thinkers, led by Bentham and Place, aspired to advance still further, and pressed for schools to meet the requirements of the class immediately above the very poor. They aimed at establishing both higher grade elementary schools and secondary schools on the monitorial system, initiated by Lancaster.¹ Unfortunately, the course of studies which Bentham devised under the name of the "Chrestomathic Scheme" for the higher elementary education of children from 7 to 14 years of age was too encyclopaedic in character, and the proposal met with little support at the time.

5. However, the success with which certain schools connected with the British and Foreign School Society and the National Society gradually developed curricula of a higher elementary type and catered for a more prosperous class of pupils shews that Place and Bentham had anticipated a real need. Thus, in several British Schools, geometry, French, and even trigonometry were introduced into the curriculum for some of the older boys between 1819 and 1824. Singing and linear drawing were added a few years later.²

In the same way the National Society about 1838 was interesting itself in the question of establishing Middle Schools designed to offer the middle classes at moderate fees a useful general education based on Church principles. The ancient Grammar Schools were unevenly distributed throughout the country, and many of them gave an education little different from that provided by the primary schools. Again the Society observed that many of the ordinary private day schools were inferior to its own primary schools in point of discipline, teaching and religious instruction. It accordingly began to graft superior schools on its already existing Normal Schools. Thus a Middle School³ was founded at York, attached to the

¹cf. J. Bentham, Chrestomathia, Part I. (1816) and Graham Wallas,

Life of Francis Place, Chapter IV. *H. B. Buns, A Century of Education, being the Centenary History of the British and Foreign Schools Society, 1808-1908, p. 113. Select Com-mittee on Education (1834), Q. 262 foll.

^{*} This school was sometimes called the yeoman school. *

Training College. It was arranged in six classes, the lowest class containing some children of the age of 5 and 6 years. In addition to the three R's, Grammar, History, Latin and Mensuration were taught.¹ Schools of similar type were founded at London, Canterbury, Manchester, Lincoln, and elsewhere. At Manchester the first of four "Commercial " Schools established by the Manchester Church Education Society was opened in 1846. It provided a modern curriculum, including French, German, and drawing.

In these developments may be observed, probably for the first time, the tendency which has been implicit throughout the whole growth of primary education in England and Wales to throw up experiments in post-primary education.

6. Several of the ordinary National² Schools retained a considerable proportion of children over the age of 11, and provided appropriate instruction for them. The National School at King's Somborne in Hampshire was noted at this period for the variety and practical character of its curriculum. Mr. Moseley, Inspector of Schools, describing the School in 1847, stated that among the most interesting features of the Girls' Department was the needlework-" The elder girls are taught not only to work, but by paper patterns to cut out work for themselves, and the dresses of the First Class on the day of my examination were many of them thus cut out and all made by themselves." The boys in the First Class took algebra and the first book of Euclid, and mensuration was taught as an application of the principles of geometry. Vocal music was also included in the curriculum. Mr. Moseley states that the greatest . excellence of this school was the union of instruction in a few simple principles of natural science, applicable to things familiar to the children's daily observation, with everything else usually taught in a National School. In 1847 there were in the school 28 boys and 28 girls over 11 years of age.⁸

* Minutes of the Committee of Council on Education (1847-1848), I. pp. 7-38; Minutes (1844) II. 101-107; Minutes (1845) I. 103-106; cf. Rev. R. Dawes, Schools for the Industrial Classes, London, Groombridge and Sons, 1853, pp. 4-16.

¹ Birchenough, *History of Elementary Education*, 2nd ed., 1925, pp. 325-326. cf. Appendix II. s.v. Middle School. ⁸ National School at that time meant a School in union with the

⁸National School at that time meant a School in union with the National Society. This term and the similar term "British " for Schools associated with the British and Foreign Schools Society, were removed from official usage in 1906, *Report of Board of Education for* 1906–07, (Cd. 3862), p. 28.

7. A similar tendency to develop post-primary instruction for the older pupils was observable in many of the Wesleyan Schools which were being founded in considerable numbers from about 1843.

As Matthew Arnold pointed out in his reports, many of the children attending these schools were drawn not from the very poor, but from a more prosperous class of parents who were prepared to keep their children longer at school.¹ A considerable number of the pupils remained after the age of 11, and in addition to reading, writing, cyphering and scripture lessons, received instruction in English, grammar, geography, history, elementary science, hygiene and singing.² Some of the Wesleyan schools in rural areas had an agricultural bias, with lessons in mensuration, land surveying, bookkeeping, and agriculture.³ In the same way, some of the Wesleyan urban schools had a slight commercial bent. There were also throughout the country many private Elementary Schools in which older children were taken as well as younger.

One of the most potent causes which stimulated public interest in schools providing higher primary instruction of the type described above was the pressing need in the ordinary primary schools for an adequate supply of the assistant teachers who were gradually replacing the monitors of earlier days.

8. It is interesting to find that several Inspectors in the forties urged strongly the desirability of establishing completely organised schools for older children, under the charge of able teachers in central localities, with smaller contributory

¹cf. Matthew Arnold's General Report for 1852 :---" On the whole, the Wesleyan Schools which I have seen, must be considered as existing for the sake of the children of tradesmen, of farmers, and of mechanics of the higher class, rather than for the sake of the children of the poor." *Reports on Elementary Schools* 1852-1882, by Matthew Arnold, H.M. Stationery Office, 1910.

^a From information supplied to the Committee by Dr. Joseph H. Cowham, late Master of Method at the Westminster Training College, and Mr. Samuel Brook, formerly Headmaster of the Westminster Wesleyan Practising Schools, cf. Rev. J. Scott, Addresses to the Students in the Wesleyan Training Institution, Westminster (1869), pp. 53, 59, 212.

³The text-book in use was the Book of Agriculture published by the Commissioners of National Education for Ireland. The Committee of Council on Education never issued any official text-books:

schools in each village. For example, the Rev. F. C. Cook, in his Report for 1847, wrote—

"I adhere, however, to the opinion which I formerly expressed,¹ and which I now repeat, having had the advantage of conversing with many of the most experienced supporters of education upon the subject, that in most country districts it would be advisable to have a preparatory school in each village, and a completely organised school, under the charge of able teachers, in a central locality."²

A similar recommendation was made in the same year by another Inspector, the Rev. H. W. Bellairs.

"I think it very desirable that district schools should be formed for three, four, or five parishes, wherein, under an efficient master with apprentices, a superior education may be provided not only for the elder children of labourers, but also for such of the farmers, small tradesmen, and mechanics, as may choose to avail themselves of it."²

Suggestions of the kind quoted above had, however, little effect at the time, as the provision of primary schools was viewed as a parochial matter, and as the state of public opinion on the whole subject of elementary education and its relation to the education given in existing grammar schools was singularly blurred and confused.

9. Sir James Kay-Shuttleworth, Secretary to the Committee of Council on Education from 1839 to 1849, had been much impressed by the practical work which he had seen in Switzerland in the schools established by Père Girard, Wehrli and De Fellenberg, and by the success which had attended his efforts to introduce work of this type into some of the Poor Law Schools. He accordingly made a determined attempt to introduce more practical instruction into the ordinary primary schools.³ In the Regulations respecting

³ Minutes of Committee of Council on Education (1847-8), pp. 53 and 109.

¹ cf. Rev. F. C. Cook's Report on Eastern District for 1846 in *Minutes* of *Committee of Council on Education* (1846) I, p. 280. "It seems highly desirable to establish within an easy distance of small parishes good district schools, conducted by masters of reputation and talent, where, as is the case in Scotland, well disposed youths may continue and complete the studies begun in childhood."

³ Kay-Shuttleworth, Four Periods of Public Education, pp. 300-308, and pp. 287-292.

In the Battersea Training College founded by Kay-Shuttleworth in 1840, the young pupil-teachers were taught the various subjects of the elementary school curriculum on practical lines, with references to their bearing on every-day life. Similar methods were employed in the Battersea School used as a Practising School by the College students. T. Adkins: *History of St. John's College, Battersea*, pp. 66-67.

the education of pupil teachers and stipendiary monitors, which he submitted to the Privy Council in December, 1846, it was provided that pupil teachers at the end of their fourth year should be examined by the Inspector "in the first steps in mensuration with practical illustrations, and in the elements of land surveying and levelling." The women pupil-teachers in every year of their course were expected "to shew increased skill as seamstresses, and teachers of sewing, knitting, etc."

The minutes of the Committee of Council on Education for 1846 also provided for grants towards the provision in day schools of industry of field gardens, work-shops for trades, and kitchens and wash-houses, and for gratuities to the masters who taught boys gardening and crafts and to mistresses who gave satisfactory instruction in domestic economy.¹

10. Kay-Shuttleworth's efforts in this direction however had but little effect on the great mass of primary schools. Most of the persons concerned in developing the system of elementary education at that time were University graduates whose interests were chiefly literary and scientific. They accordingly, for the most part, pressed for more culture in the schools, and there was a noticeable tendency to emphasise the superiority of a general non-manual education over any sort of vocational training such as that given in the schools of industry.

It is interesting however to find that several Inspectors in the fifties expressed profound dissatisfaction with the purely literary character of the work done in most schools, and emphasised the importance of industrial training. The Rev. H. W. Bellairs, in his Report for 1856, after describing the work done in school gardens in a few schools in his district, stresses the importance of industrial training. After pointing out that industrial work was not practised either by pupil teachers or by students in Training Colleges, he concludes as follows :--

" If, therefore, it should be determined that instruction in manual industry ought to form a part of the peasant's education in school, it would be necessary for your Lordships to encourage it or insist upon it, on the part of the pupil-teachers and the students in Training Colleges. I see such clear and unmistakably good results from gardening, when a master takes to it in earnest,

¹ Minutes of Committee of Council on Education (1848), Vol. 1, pp. 4-6; 12-13
that I cannot but entertain hopes that the practice of this will, at all events, increase."¹

The gradual abandonment of practical work was doubtless partly due to economic considerations. It was soon discovered that any effective form of practical instruction cost much more than the teaching of the three R's. Moreover, it was almost impossible to arrange for such instruction in large classes taught by monitors. Owing to the growth of commerce and sea-borne trade in the middle decades of the last century, there was a great demand for clerks, and it was found in schools, where advanced work for older pupils was attempted, that it was much easier to train them for clerical work than for manual occupations. Matthew Arnold, writing about 1858, stated that the humane studies in the upper classes of the best elementary schools were by far the most interesting part of the curriculum.²

11. An important stage in the development of postprimary education is marked by the Report of the Royal Commission appointed in 1858 under the chairmanship of the Duke of Newcastle "To inquire into the state of public education in England and to consider and report what measures, if any, are required for the extension of sound and cheap elementary instruction to all classes of the people." The Commissioners in their Report, presented in 1861, stated that the plan of leaving the initiation of popular education to religious bodies had, on the whole, been justified by results, but they suggested that county and borough boards of education should be established with power to levy local rates in aid of efficiency.³ The weakness of existing arrangements lay rather in the doubtful value of much of the so-called educational provision, the early leaving age of the children, and the low standard of attendance. Even in the best of the inspected schools, only about one-fourth of the

¹Minutes of Committee of Council on Education, 1856–7, pp. 268–270. cf. ibid. p. 482.

²cf. Matthew Arnold's Report on Systems of Popular Education in use in France, Holland, and the French Cantons of Switzerland, printed in Vol. IV of the Report of the Education Commission (1858-1861), p. 103. "In England meanwhile what is the system of education offered to

[&]quot;A system not national, which has undoubtedly done much for

superior primary instruction, but which has indoubtedly hole initial for superior primary instruction, but which for elementary primary instruction has done very little."

^a Graham Balfour, Educational Systems of Great Britain and Ireland, pp. 15-17.

pupils reached the highest class. It appears, however, that the Commissioners thought that some teachers were disproportionately interested in the work of their older scholars to the neglect of the younger and less brilliant pupils.¹

PART II.—FROM THE ISSUE OF THE REVISED CODE OF 1862 TO THE PASSING OF THE ELEMENTARY EDUCATION ACT, 1870.

12. The Commissioners' recommendations were the result of compromise, and as the Government was not disposed to take the risk of attempting to embody them in an Education Bill, it devolved on Mr. Lowe, as Vice-President of the Committee of Council on Education, to make such administrative changes as were considered advisable. In order to meet the criticism that too much attention was given to the older scholars to the neglect of younger pupils, Mr. Lowe provided in the revised Code of 1862 that grants would not as a rule be earned by children above 12. This arrangement had the effect of leading teachers to devote most of their attention to pupils below that age and to concentrate on the teaching of "the three rudimentary subjects" and needlework for girls.

Mr. Lowe, explaining the principles of the revised Code to the House of Commons on 13th February, 1862, said "It proposed to give capitation grants on each attendance above a certain number—say 100, to be subject to reduction upon failure in reading, writing, or arithmetic. It was said that by this plan we were degrading education. The truth is, what we fix is a minimum of education, not a maximum. The object of the Privy Council is to promote education among the children of the labouring poor." Thus the higher primary work which was beginning to appear before 1861 in the best elementary schools was seriously discouraged by the Code of 1862. The curriculum was largely restricted to the three R's, and the only form of practical instruction that survived was needlework.

13. These rigid rules were slightly relaxed by Lowe himself and still more by his successor Corry, who stated in his Minute of 20th February, 1867, that one of his aims was "to encourage instruction beyond the elementary subjects." The intention

¹ Report of Education Commission (1858-1861), pp. 320-321. The accuracy of this statement was challenged by Matthew Arnold.

was to effect this by offering grants on the result of individual examination to schools which in addition to the obligatory subjects organised a three years' course of instruction for pupils in Standards IV, V and VI in at least one of the "specific" subjects of secular instruction beyond the three R's, e.g. geography, grammar, history, geometry, natural philosophy. It is clear, however, from the Reports of Matthew Arnold¹ and other Inspectors that this process of relaxing the rigidity of the Revised Code was not carried sufficiently far to resuscitate many of the "select classes" which had existed up to 1862.

14. The movement, however, was not wholly suspended by the operation of the revised Code, as at that time many country schools were maintained by the local squire, whose pride in his estates often led him to decline Government aid. In these elementary schools, outside the purview of the State system, an arrangement was frequently in operation which provided a central village school taught by a trained master, while the smaller schools of adjacent hamlets were staffed by women. Under such an arrangement it frequently happened that boys of 11 were sent for one or two years to the central school, thus strengthening considerably its upper classes.

At this time also a number of large industrial concerns maintained primary schools on their works² for the children of their employees. Schools of this type sometimes contained special classes at the top for the older and more gifted boys.

These attempts to organise "Tops" to elementary schools, inadequate as they may seem at the present day, nevertheless. marked a great advance at the time, and had a certain salutary influence on the numerous private schools and on many of the smaller grammar schools which were compelled to raise their standard of attainment.

15. The Report of the Schools Inquiry Commission (1864-1868) exercised a certain indirect influence on the development of higher primary education. The Commissioners recommended³

¹e.g. M. Arnold's general reports for 1863, 1867, 1869. Reprinted in *Reports on Elementary Schools* 1852 and 1882 by Matthew Arnold. H.M. Stationery Office, 1910.

^a Report of Committee of Council on Education, 1863-4, pp. 114-115, of. Rev. R. Dawes, Teaching of Common Things (1856). Groombridge & Co., p. 44. Smiles, Life of Stephenson, pp. 479-481. J. Talbot, Messrs. Chance's Schools, Smethwick, a shetch of their history from 1845 to 1887.

^{*}Report of Schools Inquiry Commission (1868) pp. 577-582.

that three grades of higher or secondary schools should be established according as the leaving age of the majority of pupils was at 18, 16 or 14. They thought that schools of the second type should be established in every town of over 5,000 inhabitants.

The third grade schools' for pupils leaving at about the age of 14 or 15 were to teach the elements of French and Latin. Such schools would now be regarded as "post-primary," but the Commissioners envisaged them as "secondary" because the Elementary School Code of 1862 had practically fixed the leaving age for elementary schools at 12. They represented a type intermediate between primary and secondary schools, resembling the Prussian Bürgerschulen and the Sekundarschulen of Canton Zürich as they existed in 1868.^a The Commissioners thought that it was not desirable to attempt to combine the work of all three grades in one school, nor to treat the work of schools of lower grades as a fragment of the work of schools of higher grade. Three different kinds of work required three different kinds of school. The Commissioners recommended that each kind of school should have its own proper aim set before it, and should be put under such rules as would compel it to keep to that aim.

Many persons interested in elementary education were much impressed by these recommendations and immediately set to work to grapple with the problem, which seemed to them urgent, and tried to develop new schools of the third grade type as well as "tops" to existing primary schools.

16. Several of the Reports (on the educational systems of foreign countries) prepared by Assistant Commissioners for the Schools Inquiry Commission (1864–1868) laid particular stress on the importance of grading schools. For example, the Rev. James

¹The Committee of Council on Education had expressed the opinion in an official letter on "Middle" Schools in 1856 that a system of "secondary" schools might, with great advantage, be added to the existing system of primary schools in all those localities where schools of the latter kind were sufficiently large or sufficiently numerous to afford a supply of children who had mastered the common elements of instruction, and were prepared to proceed with more specific studies. The letter ends as follows:—" Schools of this secondary kind are beginning to be established in different parts of the country under the name of Trade Schools, the instruction being generally directed towards the application of Science to productive industry." Minutes of the Committee of Council on Education, 1856-7. p. 42.

^{*} Soe Appendix IV, pages 304-308, and 311-313.

Fraser (afterwards Bishop of Manchester) in his Report on the Common School system of the United States (1866) writes :---'There can be no doubt that if we could introduce the graded system into our elementary town and city schools---it would, I think, be impracticable in country districts---we should be introducing a principle of union which would be a principle of strength. . . The gradation of schools is just the strength of the American system."¹ Similar passages occur in Matthew Arnold's Report to the same Commission on the educational systems of France, Italy, Germany and Switzerland (1868).² These Reports which were widely read at the time in association with the main Report of the Commission helped to prepare public opinion for the development of "Higher Grade" schools during the next three decades.

PART III.—THE ELEMENTARY EDUCATION ACT, 1870, AND THE DEVELOPMENT OF "HIGHER GRADE" SCHOOLS UP TO 1900.

17. The Elementary Education Act, 1870, marks a most important stage in the development of the national system of elementary education. The Act mapped out the country into school districts, each of which might have a School Board separately chargeable with the duty of providing elementary education within its own borders, which were to be boroughs or parishes or groups of parishes, London being constituted a district by itself. Section 5 of the Act enacted that "there shall be provided for every school district a sufficient amount of accommodation in Public Elementary Schools as hereinafter defined, available for all the children resident in such district for whose Elementary education efficient and suitable provision is not otherwise made."

Section 74 empowered School Boards to frame bye-laws making attendance at school compulsory for children between the ages of five and thirteen. This provision, however, was only permissive, and the bye-laws if made, were subject to numerous exemptions.

¹ Report on the Common School System of the United States, by the Rev. James Fraser, 1866, p. 319.

^{*} Schools Inquiry Commission, VI., pp. 623-633.

POST-PRIMARY EDUCATION IN ENGLAND AND WALES

18. In most parts of England and Wales the number of existing voluntary schools was not nearly sufficient to provide for the needs of all children of school age, and so for some years after the passing of the Act the School Boards were mainly occupied in providing Public Elementary Schools to meet the shortage of school places. The voluntary schools on their part made a great effort to strengthen and consolidate their position, and thus it came about that for several years after 1870 most of the schools retaining any considerable proportion of older children were voluntary schools.¹ The following descriptions of the work done in two "high grade " schools of this type, given by persons who were pupils at them in the early seventies, throw an interesting light on the general character and aim of the curriculum.

(i) Lancaster² National School.—The "head class" was composed of boys drawn from miles around. Admission was chiefly determined by an oral examination intended to reject all but the most promising candidates. This class supplied a number of intending teachers and from it boys, usually between 15 and 16 years of age, were appointed to vacant clerkships at industrial works which frequently led to partnership in the firms later on in life.

The curriculum beyond the three R's included a little Latin, and a great deal of mathematics, drawing and science.

(ii) Oswestry³ National School.—The "higher top" was largely composed of farmers' sons who came, after attending small country schools, particularly to acquire clear and accurate English speech. Entrance was not difficult; but pupils were expected to stay to the age of 16 or even later. Many went afterwards into merchants' offices in Liverpool and elsewhere.

^a There were no School Boards at Lancaster and Oswestry in the early seventies.

¹cf. Final Report of the Commissioners appointed to inquire into the Elementary Education Acts (England and Wales) 1888 (C. -- 5485), p. 168.

[&]quot;Similar schools (i.e., higher grade schools) promoted by voluntary managers were not unknown previous to the passing of the Education Act of 1870, and, as we have reason to believe, still exist. We have had before us as a witness the Master of St. Thomas' Charterhouse Church School, one of the best known of those voluntary schools which have supplemented the elementary course by higher branches of education. In the seventh standard, boys take up one or more of the following subjects : chemistry, mechanics, mathematics, botany, electricity, acoustics, and some other subjects."

In addition to the usual subjects much attention was given to English literature accompanied by Latin, grammar, algebra and arithmetic, practical mensuration, drawing, mechanics and heat, which included a certain amount of practical work.

19. From about 1870 the growth of public interest in education, fostered largely by the writings of Herbert Spencer, Huxley and others, began to make itself felt in various attempts of the Education Department to expand the curriculum of Elementary Schools. The policy initiated by Corry's minute of 1867 (described in section 13) was carried a stage further by the Code of 1871 which provided for a special grant for each individual scholar who passed a satisfactory examination in not more than two "specific" subjects of secular instruction beyond the three R's. At the same time the list of "specific" subjects was greatly extended so as to include foreign languages, various branches of pure and applied science, or any definite subject of instruction extending over the classes to be examined in Standards IV, V, and VI. In 1875, a further step was taken by the introduction of "class" subjects, viz., grammar, geography, history and plain needlework, for which additional grant was paid. Later Codes, especially that for 1880, extended the list of these "class" subjects which, if taught at all, had to be taught throughout the whole school above Standard I. The curriculum of an elementary school from 1875 to the later 90's thus consisted of three main parts-

1. The obligatory subjects, i.e., the three R's (called "the elementary subjects") with needlework for girls.

The optional subjects ---

1a. The class subjects, which were optional for the whole school above Standard I.

2b. The specific subjects which might be taught to individual scholars in Standards IV to VI.¹

20. In 1876 Lord Sandon included in his Education Act of that year a system of Honour Certificates, which gave free education for three years to pupils who had passed the Standard IV examination at 10 years of age and held a Certificate of regular

¹ See Special Reports on Educational Subjects 896-7), pp. 58-63.

attendance for five years.¹ This arrangement lasted only for five years, but several leading witnesses who gave evidence before the Cross Commission in 1888 spoke of the useful results of the system while it was in operation, and there seems no doubt that it helped considerably in the development of "tops" to many Elementary Schools.^{*}

The provisions in the Education Acts of 1876 and 1880 in regard to attendance bye-laws, and the like, had the indirect effect of producing a very considerable increase in the number of children who remained at school up to and beyond the age of 13. To meet the needs of these pupils a seventh standard was added in 1882 by the Education Department to the previously existing six standards.

21. It was found, however, that a number of children remained at school after passing the seventh standard. Ex-standard classes were accordingly formed for these, and after a time it was found convenient to draft off children from these schools Sometimes a building was erected for into one central school. the purpose and sometimes a previously existing school was set apart for the work, but in either case the school chosen * became what was called in the last two decades of the 19th century a "Higher Grade School." By far the greater number of these Higher Grade Schools had an upper portion arranged as an "organised Science Course or School" under the Science and Art Department, though some School Boards retained a few ex-standard scholars in their schools in "Science Classes" under the Science and Art Department.⁸ A number of School Boards, especially those in large urban areas, devoted much attention to the development of these "higher grade" schools. For example, Sheffield established about 1878 a "Higher Central

Elementary Education Act, 1876 (39 and 40 Vict. C 79, § 18). See also Lord Sandon's explanatory speech in introducing his Bill on August 5, 1876, quoted in Final Report of the Commissioners appointed to inquire into the Elementary Education Acts, England and Wales (1888), C. - 5485, p. 33.

^{*}Op. ot., p. 34. *In 1872 the Science and Art Department had organised a system of substantial grants for a three years' course in science and cognate subjects.

Directory of the Science and Art Department for 1872, pp. 33-36. See note on "Organised Science School" in Appendix II. ct. Higher (irade Board Schools and Public Secondary Schools (Statistics).

⁻Return to the Order of the House of Commons, dated 28 June, 1898-264, p. 3.

School" for the Sixth and Seventh standards, to which pupils were admitted by competition. The upper part of the school was arranged as an "organised Science School" under the Science and Art Department, and the course of instruction comprised mechanics, physics, chemistry, and drawing, which included machine drawing and construction. The Central School at Manchester, which was one of four higher grade schools in the city, was also an Organised Science School. The Birmingham School Board established a similar school with a three years' course. During the first year the pupils were seventh standard scholars earning grants from the Education Department. For the remainder of the Course they became students earning grants on examination from the Science and Art Department.¹ This procedure was adopted by other School Boards in financing and managing Schools of this type, which were² known locally as "Higher Elementary" or "Higher Standard" Schools. They were essentially an organic outgrowth of the system of elementary education established by the Education Act of 1870.*

The higher subjects usually taken up by the pupils in these schools included mathematics, plain geometry and projections, free-hand drawing, in addition to one of the following subjects machine construction and drawing, theoretical and practical chemistry, electricity.

22. As soon as it came to be understood that these schools were institutions at which education could be continued for a year or two longer than at the ordinary elementary schools a. large number of parents who intended to keep their children at school after the age of 13 began to send them to the "Higher Grade" school as early as possible in their school life. Furthermore, the fact that the pupils in these schools were to have a two years' course beyond the ordinary standards reacted on the education given in the standards, with the result that in many schools it became the practice to begin the teaching of elementary

¹ Final Report of the Commissioners appointed to inquire into the Elementary Education Acts, England and Wales, (C. - 5485), 1888, pp. 167-168).

² Mr. Hanson, Chairman of the School Management Committee of the Bradford School Board described the four Higher Board Schools existing in Bradford in 1880 as "simply advanced elementary schools." See his letter of November 17th, 1880 to Mr. H. Richard, M.P., printed as Appendix No. 7 to Report of the Departmental Committee on Intermediate and Higher Education in Wales (1881). C. 3047.

^{*} The School Board Chronicle, October 19, 1898, pp. 449-456.

mathematics and languages at the fifth or sixth standard. Many of the Higher Grade Schools had preparatory, junior or elementary sections.

A certain amount of science had long been taught in the best elementary schools. It was therefore a natural development that the ex-standard classes in higher grade schools should take up one or two science subjects and present pupils in them for the examinations conducted by the Science and Art Department so as to obtain the grants paid for 1st and 2nd class passes in these tests by individual pupils. The choice of science subjects offered by the Science and Art Directory was fairly wide, and the selection of such subjects by head teachers of higher grade schools was naturally influenced not only by the utility of a subject from the educational aspect, but also by the ease or difficulty of preparing pupils to pass in it and so earn grants on which the existence of the upper part of the school largely Thus, in a certain Midland city a class was depended. instructed in navigation, and in a girls' school situated in a large manufacturing town the headmistress proposed to teach agriculture. To check such eccentricities, the Science and Art Department encouraged Higher Grade Schools to adopt the organised Science Course which provided for instruction in mathematics, practical geometry, physics, chemistry, and drawing. This course was soon generally adopted by the schools.

23. The Reports of the Royal Commission on Technical Instruction (1882-1884), more especially the second Report (1884), had a considerable indirect effect in strengthening the position of Higher Grade Schools and in enriching generally the conventional curriculum of elementary schools.

The Commissioners recommended that the State should recognise the distinction between elementary and secondary education to a greater extent than had as yet been attempted, that instruction in the rudiments of the sciences bearing upon industry should form a part of the curriculum of elementary schools, and that instruction in drawing, and more especially in drawing with rule and compass, of a character likely to be useful to the children in their future occupations as workmen and artisans, should receive far greater attention than heretofore.

After commenting favourably on the plan adopted by the School Eoards of Liverpool and Birmingham of giving instruction in natural science by well qualified demonstrators, the Commissioners recommended that "Higher Elementary Schools, like those of Sheffield and Manchester," should be established, into which the more advanced pupils of the primary schools might be drafted, especially if the parents were able to keep them at school up to the age of 14 or 15.

It was also recommended that manual work should be introduced into the primary schools (as had already been done at Manchester and Sheffield) and correlated with the teaching of drawing, especially mechanical and geometrical drawing, both in ordinary schools and in higher grade schools.

The recommendations of the Commission in regard to higher technical teaching were largely incorporated in the Technical Instruction Act of 1889 which vested the newly established County Councils and other local bodies with power to supply or aid the supply of technical and manual instruction.

The phrases "technical instruction " and " manual instruction " were defined in the Act, as follows :---

"The expression ' technical instruction ' shall mean instruction in the principles of science and art applicable to industries, and in the application of special branches of science and art to specific industries or employments. . It shall not include teaching the practice of any trade or industry or employment, but, save as aforesaid, shall include instruction in the branches of science and art with respect to which grants are for the time being made. by the Department of Science and Art, and any other form of . instruction (including modern languages and commercial and agricultural subjects), which may for the time being be sanctioned by that Department by a minute laid before Parliament and made on the representation of a local authority that such a form of instruction is required by the circumstances of its districts."1. "The expression 'manual instruction' shall mean instruction in the use of tools, processes of agriculture, and modelling in clay, wood, or other material."

24. The Welsh Intermediate Education Act of 1889 facilitated the development of an adequate system of Secondary Schools in the Principality, but in England the public provision of Secondary

¹ Technical Instruction Act (1889), § 8. A very similar definition of "Technical Education" is given in the Welsh Intermediate Education Act (1889), § 17.

Schools was retarded during the last two decades of the 19th century by the absence of larger Local Authorities vested with educational powers. On the other hand, much attention was devoted by many public men and members of School Boards to what they regarded as the urgent need of the day, viz., more fully developed elementary education, particularly for children in the higher standards.

This is brought into high relief in the elaborate Reports of the Cross Commission (1886–1898) and particularly in the Final Report (1888).¹

The familiar arguments adduced for and against central elementary schools to-day were then brought forward in regard to the higher grade schools. "While the evidence before us is abundant for the purpose of shewing how popular, and for the most part successful, these higher elementary schools are in the various places where they have been founded, still opinions are much divided as to the policy of extending, or even continuing them."* Some witnesses, while much desiring to see a sound system of secondary education established, looked coldly upon higher grade schools, thinking that the ground they claimed to occupy would be better assigned to secondary schools, to which children might be promoted by means of exhibitions. Other witnesses expressed the opinion that the effect of withdrawing from the ordinary elementary schools all the children in the higher standards would be to injure those schools educationally by destroying a source of interest to the teachers and of ambition for the scholars.

On the other hand, it was urged that in view of the difficulty of finding sufficient teaching power in the ordinary elementary school to deal effectively with the few scholars attending the higher standards, a system of collecting these higher standard children from all the schools in the same town into one department and providing for them there a full course of higher subjects would secure better classification and prove to be a wise division of labour. It was contended that whatever harm might be done to the lower elementary schools by depriving them of their more forward scholars was more than outweighed by the superior

¹ Final Report of the Commissioners appointed to inquire into the Elementary Education Acts, England and Wales (1888), C 5485. Chapter V and passim.

^{*}Final Report, p. 169.

educational advantages enjoyed by children in the higher grade schools. The evidence shews that a considerable variety existed in the organisation and curriculum of such schools, and that the pupils were generally drawn from the more well-to-do working class.

25. The Committee was divided in its conclusions and recommendations: a majority of the Commissioners agreed that the Higher Grade Schools had many advantages. They recommended that the State should recognise the distinction between elementary and secondary education to a greater extent than had as yet been attempted. However desirable Higher Elementary Schools might be, the principle involved in their addition to the national system of education should, if approved, be avowedly adopted; and their indirect inclusion in the existing system was injurious both to primary and secondary education. If the curriculum of Higher Elementary Schools were restricted within due limits, avoiding all attempts to invade the ground properly belonging to secondary education, and if due precautions were taken to secure that promising children of poor parents were not excluded from the privileges to be enjoyed in them, such schools might prove to be a useful addition to the provision for primary education. The Commissioners held that in certain cases the object of Higher Elementary Schools might be secured by attaching to an ordinary Elementary School a class or section in which higher instruction was provided for scholars who had passed the VIIth standard. A strong minority of the Commissioners recommended that Higher Grade Schools should be encouraged which would prepare scholars for advanced technical and commercial instruction; such "technical "instruction should cover commercial and agricultural as well as industrial instruction.¹

26. During the next decade there was no great increase in the number of Higher Grade Schools, but a distinct rise took place in the general level of elementary education. The system which was coming into vogue of grading Elementary Schools into Junior, Middle and Senior Departments enabled improvements to be made in the courses of instruction for older pupils. In many small towns, the higher or Senior Standard Schools in

¹ Final Report of the Commissioners appointed to inquire into the Elementary Education Acts, England and Wales, 1888, (C. 5485), pp. 219, 239 and 248.

the early ninetics provided a curriculum on lines very similar to that of the Higher Grade School of the same period. Children drawn from schools over a wide area often sought admission to the best known of these Senior Standard Schools.

The reports of both the majority and the minority of the Cross Commission had excited considerable public interest, and steps were soon taken to give effect to some of its recommendations. For example, a number of important changes were introduced into the Code from 1890 onwards. Manual instruction was recognised but no special grant was paid for it. Physical exercises, including swimming, gymnastics and Swedish drill, were included in the curriculum. Shorthand, horticulture and hygiene were made "specific" subjects, and grants were paid in respect of laundry work, dairy work and housewifery.

A considerable extension of the curriculum took place when the system of individual examination and payment on results was gradually abandoned.¹

From one aspect the introduction of free education in 1891^s emphasised the special character of a few schools in each district, and more especially of those retaining pupils to an age later than the normal leaving age.

27. A further stage in the development is marked by the appointment in 1894 of the Royal Commission on Secondary Education, which reported in 1895, inter alia, in favour of a State system of Secondary Schools, including arrangements for transferring to them the more intelligent pupils from Elementary Schools, who desired to continue their education. The position of the Higher Grade Schools and other Elementary Schools doing work beyond the seventh standard was fully discussed in the Report, which pointed out that the name "Higher Grade Elementary School" had been applied in at (1) The first type, which might be described least three senses. as normal, was represented by the School which taught from the fifth standard upwards and gave an education for two years after the seventh standard, i.e., to the age of 15 at least. (2) Another type was that which taught from the lowest standard

¹ Report of Board of Education for 1910-11 (Cd. 6116) pp. 18-20. "The introduction of the "Block Grant" in 1900 marked the end of the system in force since 1862 by which the choice of subjects in Elementary Schools had been controlled mainly by monetary considerations." * Elementary Education Act, 1891, 54, and 55 Vict., c. 56.

upwards, also giving an education for two years (in some cases even four) after the seventh standard, though the proportion of pupils remaining after the seventh standard was seldom large. A school of either of these two types might or might not include an Órganised Science School working under the Science and Art Department. (3) "Lastly, there was the pseudo 'Higher Grade' School, which charged a fee, and was supposed to be more select, while in respect to its curriculum it was almost wholly elementary."¹

Following the threefold classification of Secondary Schools adopted in the Report of the Schools Inquiry Commission (1868),⁹ the Commissioners described Third Grade Schools as those of which the special function was the training of boys and girls for the higher handicrafts or the commerce of the shop and town. This could best be effected by continuing and enlarging the education of the Elementary School, with of course such addition of manual instruction as might be needed to educate the hand and eye of the craftsman and at once to define and illustrate the principles he had learnt. Higher grade schools, which were adduced as an example of the type required, were held to be an absolute necessity in any efficient system of Secondary Education. Properly organised they would become the crown of the elementary school system.

They were judged very differently by different witnesses, but one thing was generally admitted, namely that such schools were necessary to the completion and efficiency of the educational system. For boys and girls whose education would cease at 16, in the opinion of one witness, these schools supplied "the secondary instruction best suited to their wants." According to another witness "the demand for these board secondary schools had increased year by year in volume and intensity in the large centres of population." The Commissioners summed up their own views as follows :—"We may hold it as certain, then, that these schools have risen to meet a legitimate demand, and admit of correlation and development, but not of abolition or even repression."⁸

In their final recommendations the Commissioners pointed out that these higher grade elementary schools had a double

¹ Report of the Royal Commission on Secondary Education (1895), pp. 52-54.

^a See §15 ante. ^bOp. cit, pp. 143-144,

aspect, being in one sense Elementary Schools, and in another sense wholly or largely Secondary Schools, teaching subjects which could not be deemed elementary and not receiving in respect of those of their pupils who were beyond the so-called "standards" any grant from the Education Department. In point of fact, they did supply in those populous places where they existed much the same kind of Secondary Education which the Schools Inquiry Commission of 1868 had proposed to have supplied by their Schools of the Third Grade. The Commissioners accordingly recommended that such schools should be treated as Secondary Schools, placed under the jurisdiction of the Local Authority for Secondary Education, and co-ordinated with other Secondary Schools in the district by being brought into a definite and organic relation with other Secondary Schools and institutions of the districts, so that they should rather co-operate than compete with the latter where they existed, and should be made more available as places of preparation for advanced instruction.¹

28. In the course of the next few years, legislative and administrative action was taken to carry out some of the more important recommendations of this Report. For example, between May and November, 1897, a series of conferences took place at the Education Department between the Incorporated Association of Headmasters and the Association of Headmasters of Higher Grade Schools and Schools of Science and in August, 1898, the Department issued a joint Memorandum⁴, which had been adopted by the two Associations, on the relations of Primary and Secondary Schools to each other in a national system of education.

The Royal Commission of 1895 had recommended that one central education authority should be established. This was effected by the Board of Education Act, 1899, which merged the powers of the Education Department, the Science and Art Department, and the Charity Commission (in respect of educational trusts and endowments) in the newly constituted Board of Education, which was at the same time authorised to inspect

¹ Report of Royal Commission on Secondary Education (1895), pp. 289-290.

^a Education (Primary and Secondary Schools), Education Department, 1898, (C. 381). cl. Higher Grade Board Schools and Public Secondary Schools Statistics)—Return to the Order of the House of Commons, dated 28 June 1898.-264.

Secondary Schools. The control of the Board over secondary education was increased by the Education Act, 1902, which empowered the newly created Part II Local Education Authorities to aid higher education and provide new Secondary Schools. Even before the passing of the Act of 1902, the position of the Higher Grade Schools had been seriously affected by the decision of the Court of Queen's Bench (1901) against the London School Board (upheld by the Court of Appeal) on the point raised by Mr. Cockerton, the Auditor of the Local Government Board, that the School Board had spent the rates illegally on educating children on lines not provided for in the Code.¹

PART IV.—FROM THE COCKERTON RULING, 1900, TO THE PASSING OF THE EDUCATION ACT OF 1918.

29. In consequence of this ruling the Board of Education found it necessary to establish by Minute dated April 6th, 1900, a new system of Higher Elementary Schools. The Minute recognised a class of Elementary Schools which were to receive a higher rate of grant than ordinary Public Elementary Schools, on condition that they were so organised as to give a four years' course of instruction to children between the ages of 10 and 15, who had been certified by the inspector as qualified to profit thereby. The curriculum was required to show a sufficiency of science instruction, both theoretical and practical in each year, and to include one foreign language and elementary mathematics.² Special attention was devoted to drawing. Owing partly to the requirement that such Schools must have a dominantly scientific curriculum, irrespective of local conditions, and partly to the general uncertainty in regard to the future of Higher Elementary Schools, as distinct from Secondary Schools, few schools of this type were recognised, and in 1906 only 30 such Schools were in existence in England and Wales.

Meanwhile, after the passing of the Education Act, 1902, many of the "Higher Grade" Schools and Pupil Teacher Centres were being converted into Council Secondary Schools. The merging of this important type of higher primary education, which had slowly developed since 1870, into secondary education

¹ R. v. Cockerton (1901) I.Q.B. 322, and Rex v. Cockerton, C.A. (1901), I.K.B. 726.

^{*} Code of Regulations for Day Schools, 1901 (Cd. 513), Article 110.

marks a very important stage in the history of secondary education in England and Wales; for these new Municipal Secondary Schools, influenced by the tradition of the Higher Grade Schools, attached more weight on the whole to scientific and modern studies than the older types of Secondary School, especially for girls.

30. The development of Higher Elementary Schools and post-primary education generally after the passing of the Education Act, 1902, was much influenced by the policy of the Board in regard to Secondary Schools, which were defined in the Secondary School Regulations for 1905–1906 as being schools which " offered to each of their scholars up to and beyond the age of 16, a general education, physical, mental and moral, given through a complete graded course of instruction of wider scope and more advanced degree than that given in Elementary Schools."¹

The Regulations delimited the aim of the curriculum by requiring that a Secondary School must offer at least a full four years' course, providing instruction in a group of subjects so selected as to ensure due breadth and solidity in the education given. These subjects were defined as—

The English Language and Literature, together with Geography and History; at least one Language other than English; Mathematics, Science both theoretical and practical, and Drawing.

31. The progress of post-primary education after 1902 was also largely determined by Section 22 of the Education Act, 1902, which enacted that the power to provide instruction under the Elementary Education Acts, 1870-1900, should, except where those Acts expressly provided to the contrary, be limited to the provision in a Public Elementary School of instruction given under the regulations of the Board of Education to scholars who, at the end of the School Year, would not be more than 16 years of age; provided that the Local Education Authority might, with the consent of the Board of Education, extend those limits in the case of any such school, if no suitable higher education were available within a reasonable distance.

32. The Minute of April, 1900, which first created "Higher Elementary Schools" in the official sense of the expression, did not result in any considerable growth of such Schools. It should be mentioned that at this time (1903-06) much interest

¹ Regulations for Secondary Schools, 1905-6, Prefatory Memorandum, pp. 1-9, and articles 1 to 13.

was taken by persons concerned with the problem of higher primary education in the facilities afforded in Scotland for higher grade schools and departments¹, which suggested an inevitable comparison with the less generous provisions of the Code for Higher Elementary Schools in England and Wales. The Board in its Report for 1904-5 expressed the view that the causes which had restricted the growth of such Schools were the high cost of building, equipment and maintenance required under the Minute, and the predominantly scientific nature of the curriculum demanded. The Board, in the prefatory memorandum to the Code for 1905, pointed out that the development, under the new Regulations for Secondary Schools, of schools of that type with a complete curriculum had made it possible and necessary to reconsider the educational needs of those pupils who could not afford the extended period for study which would enable them to profit by admission to a Secondary School, but who could with advantage receive some education more advanced than that given in any ordinary Public Elementary School. After explaining that scholars in an Elementary School should not be transferred to Secondary Schools unless they could remain there to the age of 16 and preferably later, the Board pointed out that many would be going into employment of some sort at the age of 15 or shortly after, and that special educational provision was necessary for them so long as the ordinary Elementary School was attended by very many scholars who would leave at the age of 13. The scholar who must, at the age of 15, begin an industrial employment or enter the lower ranks of business needed a course of instruction different from that of the Secondary School, and yet higher and somewhat more special in aim than that given in an ordinary Public Elementary School. While developing more fully a study of . some of the fundamental subjects of the Elementary School curriculum he should also devote time to the study of other subjects which he could apply to his own practical needs. For those reasons the term "Higher Elementary School" was convenient as a descriptive title for this particular type of School.

33. The revised Regulations for Higher Elementary Schools included in the Code for 1905,² and repeated in subsequent

¹cf. M. E. Sadler, Report on Secondary and Higher Education in Derbyshire (1905), pp. 12-21.

¹Code of Regulations for Public Elementary Schools, 1905. (Cd. 2579). Chapter VI, Articles 38-42.

Codes up to 1917, were accordingly based on the principle that the determination of the curricula for such schools should be left to local consideration in the first instance, but that in each case the curriculum must be approved by the Board as a condition of the recognition of the school as a Higher Elementary School. The curriculum had to have for its object the development of the education given in the ordinary Public Elementary School and the provision of special instruction bearing on the future occupations of the scholars, whether boys or girls. The curriculum would not be approved unless it provided, together with this special instruction, a progressive course of study in the English language and literature, in elementary mathematics, and in history and geography. Drawing and manual work for boys, and domestic subjects for girls, had to be included in every case as part of the general or special instruction. Admission was limited to scholars who were not less than 12 at the date of admission, and had been for at least two years under instruction in a Public Elementary School. No scholars might remain after completing the third year of the course, or for any portion of a school year at the close of which they would be over the age of 16.

34. In July, 1905, the Board referred to the Consultative Committee certain questions affecting Higher Elementary Schools. In the letter of reference it was pointed out that the special problem of difficulty was the determination of the nature and amount of that special instruction which marked off the Higher Elementary School from the upper part of the ordinary Elementary School. The Board asked for the Committee's views regarding the principles which to them seemed of most importance in determining the character of the curriculum that would best meet the needs of the various possible kinds of Higher Elementary School. More particularly, the Board desired to be informed of the Committee's conception of the part (if any) which instruction in technical subjects should play in the curriculum of a Higher Elementary School.

In its report dated May, 1906,¹ the Committee took the view that a Higher Elementary School should continue the general

¹ Report of the Consultative Committee upon Higher Elementary Schools (1906) pp. 9, 96, 48 and passim.

education which a child had already received in the ordinary Elementary School; the course should develop in an unbroken progress the work already done, strengthen the foundations of primary education already laid, and attempt to build upon them as good a general education as the conditions would allow. The first need was " to secure for each child as much humanity. as much accurate knowledge of general elementary fact and as much mental power and manual aptitude, as could be expected during a short course of instruction extending over three years at a comparatively early age." Such a course must receive a bent towards the special needs of the life which the child would enter, as it was the immediate preliminary to livelihood. It should consist of three strands, which might be roughly described as humanistic, scientific, and manual, and in the case of girls, domestic. It was evident that in the circumstances the range of subjects must be strictly limited; a few subjects taught as well and sufficiently as possible rather than a larger number treated superficially; and all as far as possible taught in relation to each other. In regard to the question how such schools were to be distributed throughout the country and what was to be the relative predominance of the industrial and commercial types of curriculum, the Committee held that the number of centres in which a commercial type of curriculum was permitted ought to be comparatively small. In regard to the distribution of such schools in rural districts, in towns with a population of 20,000 to 50,000, and in large towns respectively, the Committee recognised that it was impossible to lay down any rigid rules as to the way in which the problem was everywhere to be solved; the problem would present itself differently in different places and would require in consequence different solutions. The Committee considered that a Higher Elementary School should not, under ordinary circumstances, be recognised in places where there would only be room for a single school giving education higher than that of the ordinary Public Elementary School. If Higher Elementary Schools providing a three years' course with the express object of fitting pupils to enter trades and factories were organised, it was essential that great pains should be taken to induce employers to take an interest in them. Pupils in such schools should not be allowed to prepare for external examinations, as the taking of such examinations was apt to influence unduly the character of the curriculum and to act in the direction of producing a pseudoSecondary School. Further it tended to encourage a deviation from the true type which had been so inimical to the Higher Grade Schools. The Committee, however, thought it was desirable that a school record corresponding to the French livret Scolaire should be instituted, and a certificate granted to all pupils who had satisfactorily completed the full three years' course.

35. No important modifications were introduced in the Regulations for Higher Elementary Schools after 1905, and the number of schools recognised under those Regulations between 1905 and 1917 was never large.¹ This was partly due to the fact that the requirements of the Regulations were rather exacting and the additional grant obtainable comparatively small. A number of Local Education Authorities, for example, London and Manchester, preferred to carry on schools giving advanced elementary education and working under the ordinary provisions of the Code.*

In London the Central School system dates from the educational year beginning April 1st, 1911.8 A number of Higher Elementary and Higher Grade Schools which had long been giving education considerably in advance of the ordinary Elementary School standard, including some built originally as Organised Schools of Science, were absorbed into the new system. Chapter XV of the London County Council Education Committee's handbook for Elementary Schools⁴ explains that the chief object of the Central School is to prepare girls and boys for immediate employment on leaving school, and that the instruction should therefore be such that the children will be prepared to go into business houses or workshops on the completion of the course without any intermediate special training. It is pointed out that Central Schools are designed for the provision of an educational course not provided in the Public Elementary graded schools or in the Secondary Schools, and that the curricula

¹In 1916-1917 there were only 31 Higher Elementary Schools in England and 14 in Wales. Report of Board of Education for 1916-17, pp. 10 and 17.

^{*} Report of Board of Education for 1911-12 (Cd. 6707), pp. 42-43.

Report of Board of Education for 1911-1912 (Cd. 6707), p. 32. Report of Board of Education for 1912-1913 (Cd. 7934), pp. 60-62.
* L.C.C. Elementary Schools H ndbook (1923), No. 2276, pp. 118 foll.

of such schools should be framed so as to have an industrial or commercial bias or both. The aim evidently was that the trend of education should be eminently practical without being vocational in any narrow sense. Thus the position of the Central School was intermediate between that of the Secondary School on the one hand and that of the Junior Technical School or Trade School on the other, being distinguished from the former by its lower leaving age and less academic curriculum, and from the latter by its earlier age of admission and the fundamental fact that it did not in any sense aim at providing technical training for any particular trade, or business.

About 1912 the Manchester Education Authority instituted six District Central Schools on rather similar lines, designed to give an improved general education to children up to the age of 15.1

Several other Local Authorities had established "Central" schools of like type before the passing of the Education Act, 1918.

36. A number of full-time Day Trade Schools, chiefly for boys, were established, especially in the London area, from about 1900 onwards. The first of these schools in London was the Trade School for Furniture and Cabinet-making founded at the Shoreditch Technical Institute in 1901 with a three years' course. They were designed to take boys on or near the completion of their elementary school career for a period of one, two or three years, and give a specialised training that would fit them to enter about the age of 16 into workshop or factory life with a certain definite prospect of becoming skilled workers or of rising ultimately to positions of responsibility as foremen, draughtsmen, or even managers. The aim of the courses was . to give a fairly wide, but sound knowledge of the scientific principles underlying the operations of the group of trades in preparation for which the school 'specialised, to afford such an initial training in handicraft as would lead to a thorough understanding of the essential character of the trade and to make the learner an asset of value when he entered the workshop.²

¹ Report of Board of Education for 1911-12, p. 43. ²See the report on the London trade schools for boys and girls in L.C.C. Education Committee's Report on eight years of technical education and continuation schools (No. 1576), 1912, pp. 63-66.

Character, cultivated observation, intelligence and adaptability were the essential factors aimed at. Such Trade Schools received grant as "Day Technical Classes" from 1904-05 onwards under Article 42 of the Regulations for Evening Schools, Technical Institutions, etc. Many of these were organised as Courses within an existing Technical School or College.

In 1913 the Board issued Regulations for a new category of Junior Full-time Schools to be known as Junior Technical Schools. These were Day Schools, providing courses for boys and girls during two or three years after leaving the Public Elementary Schools, in which a continued general education was to be combined with a definite preparation for some industrial employment at the age of 15 or 16. After prolonged consultation with representatives of Local Education Authorities and teachers in Technical Institutions the Board drew up Regulations which came into operation as from 1st August, 1913, under which Junior Technical Schools might be detached for administrative purposes from the other somewhat miscellaneous full-time or part-time courses aided under Article 42 of the Regulations as Day Technical Classes, and encouraged and strengthened by means of increased grants. These Schools are definitely intended to prepare pupils either for artisan or other industrial occupations or for domestic employment. Under the Regulations the Board required that each course should cover not less than two or more than three years and should occupy the whole time of the pupils during not less than 36 weeks of each year. The courses are normally planned to provide for pupils leaving the Elementary Schools at the age of 13 or 14. The staffs of these schools contain a reasonable proportion of members who have had practical trade experience of the occupations for which the individual schools furnish a preparation, and the establishment of advisory bodies containing representatives of employers and employees in those occupations is encouraged with the object of bringing each school into close touch with the industry to which it is related.

37. Section 2 (I) (a) of the Education Act, 1918, which came into operation on 1st August, 1919, gave a new direction to post-primary education by providing that it should be the duty of the local education authority responsible for elementary

education so to exercise its powers in regard to elementary education as to make, or otherwise to secure, adequate and suitable provision by means of central schools, central or special classes, or otherwise-

"(i) for including in the curriculum of puplic elementary schools, at appropriate stages, practical instruction¹ suitable to the ages, abilities, and requirements of the children: and

"(ii) for organising in public elementary schools Courses of advanced instruction for the older or more intelligent children in attendance at such schools, including children who stay at such schools beyond the age of 14."

It would appear from the Parliamentary Debates² that the "advanced instruction" referred to was not intended to be practical or vocational instruction, but practical general instruction. It was to be suitable not only to the older children who remained at school longer than the law required, but also to clever children who attained the highest standard, perhaps a year or more before they could lawfully leave school, and who were apt to drift into desultory reading if no advanced instruction suitable to their requirements were available.

In consequence of these provisions in the Act of 1918 the Board withdrew their Regulations for Higher Elementary. Schools.

The steps taken by various Local Education Authorities to provide and organise advanced and practical instruction on the lines indicated in the Education Act of 1918, are described in-Chapter II.

38. It will be seen from this historical survey that at every stage of the development it has been the general tendency of the national system of elementary education to throw up experiments

¹" Practical Instruction " is defined in Section 170 (4) of the Education Act, 1921, as meaning "instruction in cookery, laundrywork, housewifery, dairy-work, handicrafts and gardening, and such other subjects as the Board of Education declare to be subjects of practical instruction." *Vol. 105 Parl. Debates (House of Commons) May 7, 1918, 2056.

POST-PRIMARY EDUCATION IN ENGLAND AND WALES

in post-primary education. Though such experiments have again and again been curtailed or rendered difficult by legislative or administrative action, they have persistently reappeared in various forms. This fact in itself seems to indicate the halfconscious striving of a highly industrialised society to evolve a type of school analogous to and yet distinct from the secondary school, and providing an education designed to fit boys and girls to enter the various branches of industry, commerce, and agriculture at the age of 15.

CHAPTER II.

THE FACTS OF THE PRESENT SITUATION.

(i) THE NATURE OF THE PROBLEM.

39. It will be evident from the facts set out in the preceding chapter that the issue raised by the Committee's reference is not a novel one, but has attracted the attention of educationalists with increasing insistence during the greater part of the last half century. So impossible is it, indeed, to confine the different stages of education within closed compartments, especially when those compartments correspond rather to the conditions imposed by history or by administrative convenience than to the facts of human life and growth, that the national system of Elementary Education had hardly been established, when it began, through its own inherent power of expansion, to throw up its own offshoots into the world of higher education. For a period of almost fifty years attempts, differing in form but similar in object, have been made, with varying but increasing success, to organise in one way or another advanced instruction within the existing elementary school system.

Till recently, however, such action was generally taken by way of exception, and was not intended to provide for the needs of more than a limited number of unusually gifted children. What is new in the present situation is the growing agreement, reflected in the opinions expressed by most of our witnesses, that the time has come when a more comprehensive view requires to be taken of the educational task which the needs of adolescence impose on the country. At the present day the years between 11 and 14-15 form the opening phase of secondary education for a small minority of children, and the closing phase of elementary education for the great majority. Is it possible so to organise education that the first stage may lead naturally and generally to the second; to ensure that all normal children may pursue some kind of post-primary course for a period of not less than three, and preferably four, years from the age of 11+; and to devise curricula calculated to develop more fully than is always the case at present the powers, not merely of children of exceptional capacity, but of the great mass of boys and girls, whose character and intelligence will determine the quality of national life during the coming quarter of a century?

40. That, as we see it, is the problem. It is not peculiar to England and Wales. Educational organisation and policy are so closely dependent upon the varying characteristics historical, political and social, of different communities, that the experience of one can only with large qualifications be applied to another. The interpretation of such experience is always a matter of great difficulty, and conclusions based merely on a study of documentary accounts of foreign developments are, at best, highly precarious. For this reason we have refrained from attempting to make any exhaustive investigation into the manner in which the questions suggested by our terms of reference have been treated in other countries, and in referring to the action taken or contemplated by other countries we must not be understood to be pronouncing any judgment as to its wisdom or its probable success. The emergence of similar issues in several different communities is not. however, devoid of significance. It is, perhaps, worth noting, therefore, that the question of the education of the adolescent, and of the relations which should exist between primary and postprimary education, have since 1918 been the centre of an increasing volume of attention on the Continent, in America and elsewhere. It is in this sphere of educational policy, indeed, that some of the most instructive experiments of recent years have been made and that some of the most far-reaching proposals have been advanced.

41. At one extreme, in the United States, the classical example of an educational system in which primary and secondary education are normally intended to be not parallel. but successive, the desire to establish a more satisfactory correlation between the primary and post-primary stages of education has led to the establishment in many places of Junior High Schools, designed both to give a secondary course, complete as far as it goes, to pupils between 12 and 15, and to lay the foundations on which the work of the Senior High School can afterwards be built. At the other extreme, in France,¹ the typical representative of a system under which primary and secondary education hitherto have been, not successive, but parallel, there are some signs that the sharpness of the old division between them will in future be softened. There appears, for example, to have been a considerable increase in the number of Ecoles primaires superieures; and the barrier between

² See Appendix IV, (B), pp. 299-305,

the Elementary School and Lycée has been, at least slightly, lowered, by the assimilation of the courses in the classes primaires of the latter to the work done in the later years of the former. The development in Austria¹ of the plan of the Deutsche Mittelschule, designed to give a course of junior secondary education, with liberal provision for practical activities, to all children leaving the primary school, and the somewhat closer connection between elementary and higher schools which appears to be in process of establishment in parts of Prussia,¹ illustrates in different ways the criticism directed against arrangements under which the work of the primary school was felt sometimes to taper off into vacancy after the age of 11, and the desire to effect a more logical synthesis between the earlier and later stages of education.

42. The most instructive example of a systematic attempt to develop post-primary education, pursued with much care, practical insight and popular support over many years, is to be found, however, nearer home. It is supplied by Scotland, for an account of some of whose recent educational developments, in so far as they bear on the main problems before the Committee, we are indebted to Mr. J. C. Smith, and Dr. J. M. Wattie. There has always been a higher degree of unity between the different stages of education in Scotland than in England. The Act of 1872², which laid the foundations of the modern organisation in Scotland, was an Education Act, not, like the English Statute of 1870, an Elementary Education Act. Its declared purpose was to ensure that " the means of providing efficient education may be furnished and made available to the whole people of Scotland." One of our witnesses informed us that more than half of the schools which now rank as secondary have developed since 1900 out of primary schools.

43. Such a conception naturally both encouraged the development of advanced work in the elementary schools, and strengthened the continuity between the different stages of education which had always existed in Scotland. When, in 1901, the abolition of exemption by examination added almost a year to the school life of nearly half the children, the problem arose, as it was to arise later in England, of how to make the most effective educational use of the time thus gained. The answer was found in development along two main lines, which together led to a

¹ See Appendix IV (B). pp. 295-296, and pp. 305-308.

^{* 35} and 36 Vict. c. 62.

most remarkable expansion of post-primary education in a country where " secondary " education, in the narrower sense of the word "secondary "1, was already much more accessible and more widely diffused than it was in England. In the first place, the Scottish Education Department established " supplementary courses "---commercial, industrial, rural and domestic---which were to be begun at the conclusion of the primary stage, on the passage of a qualifying examination ordinarily about the age of were to lead to a "merit certificate." based mainly on 12: the pupils' school record, at the age of 14; and were designed "to make this last lap of school-life real, by giving it a turn towards the affairs of 'real life' on which pupils were so soon to enter." In the second place, and more important, the establishment by the Department in 1902 of the Intermediate Certificate was followed by a striking development of intermediate education-so striking, indeed, as almost to overshadow the supplementary courses. The Intermediate Certificate " served at once as a goal for the Higher Grade School, and as a midway hurdle for the secondary school." It was attainable on a three years' course, which could be taken either in an Intermediate School or in the Intermediate Department of a Secondary School : it had the incidental advantage over the supplementary courses that classes were smaller and the qualifications of teachers more carefully scrutinised, and it supplied " a good, well-balanced, but quite rigid course of secondary education." How remarkably such education has grown in the twenty years following 1902, is shown by the fact that in 1922-3 there were 29,336 pupils between 11 and 16 years of age in the Intermediate Schools, in addition to 55,058 pupils between 11 and 16 in secondary schools-figures which should be compared with those for England and Wales given at a later point in this chapter.

44. By that time, however, a further change was on the eve of being introduced. The Education (Scotland) Act, 1918, in addition to other important changes, had empowered the Department to appoint a day after which full-time attendance at school should be compulsory to the age of 15, and, though the power has not yet been exercised, it was thought necessary " to put things in such shape that effect might be given to the express intention of Parliament " as soon as circumstances should allow. As a

¹ See below, page 71, note ¹.

result of this fact, and of the feeling that there were some weaknesses in the existing arrangements, certain significant alterations were made, of which it is too early, as yet, to foretell the result. but which are of interest as showing the way in which it is proposed that an issue somewhat similar to that raised by our Terms of Reference should be handled in Scotland. The Supplementary Course and the Intermediate Course both disappeared, being merged in what is known as the Advanced Division, and the place of the Merit and Intermediate certificates was taken by a Lower and Higher Day School Certificate; the former to be awarded on a course of two years, the latter (which may also be taken by those pupils in secondary schools who do not intend to proceed to the leaving certificate) on a three years course, after the age of 12, at which the Primary School course comes to an end. The work of the Advanced Division may be carried on either in a secondary school, or in a " top " taking children from a group of primary schools, or in an entirely separate unit. In practice all three arrangements are found in the larger towns.

The curriculum of the Advanced Division courses is modelled largely on the Intermediate curriculum, but it is designed for a course of longer duration, and it is more varied and liberal in character. Science is one of the prescribed subjects, and a language (or languages) is included as an alternative subject. The latter is of importance in forming a link between the Advanced Division and secondary schools, and in facilitating the transfer of suitable pupils from the former to the latter. The requirements of the Code in respect of size of class, and qualifications and salaries of teachers, are the same for the Advanced Division as for the first three years of a secondary school; and all the Advanced Divisions are free.

45. A community must solve its educational problems in accordance with its own traditions and circumstances, and, even were the experience available for comparison more complete than it is, it would supply suggestions to be pondered rather than an example to be imitated. The impression left, however, by an examination of the experiments which have been made and of the projects which have been advanced is that the problem suggested by our Terms of Reference is making itself felt in different countries, and that there is in more than one of them a growing body of opinion which holds that the strengthening and broadening of the lower ranges of post-primary education, and the adjustment of them to the work of the primary school in such a way as to smooth the transition from one to the other, are among the most important of the issues immediately calling for attention. Nowhere has the consciousness of the urgency of the question been more acute in recent years than in England and Wales. Section 2 of the Education Act, 1918, and the circulars of the Board based upon this section, were the natural result of an anxiety which had long been growing as to the life and education of boys and girls during the years of adolescence, and of an increasing desire to adjust the work of the schools more closely to their requirements.

46. The rising interest in the problem presented by children between 11 and 15 or 16 can be traced in the literature, official and unofficial, on educational subjects for many years before 1918. It was due in the main to two different, but closely connected, considerations. The first directed to the individual demoralisation and social wastage too often following on the completion of the elementary school life, was emphasied in the Report by this Committee, on Attendance Compulsory or Otherwise at Continuation Schools, which appeared in 1909, as well as in the Majority and Minority Reports of the Poor Law Commission of the same year, the Report of the Departmental Committee on Juvenile Education in relation to Employment after the War, issued in 1917, and the Report of the Ministry of Reconstruction on Juvenile Employment published in 1918. The questions raised by these Reports, all of which made educational recommendations of far reaching importance, are partly outside our purview, and for an account of the social and economic conditions of the children concerned-" the educational and industrial chaos " described by the Departmental Committee of 1917-we must refer our readers to the relevant passages in the documents mentioned. But the problems which they described had also, as was emphasised in the Reports, an educational reference. For school and industry are different facets of a single society, and the habit of mind which isolates them from each other is a habit to be overcome. Education fails in part of its aim, if it does not prepare children for a life of active labour and of social co-operation; industry fails no less, if it does not use and strengthen the qualities of mind and character which have been cultivated by education. It is to a clearer realisation of the dangers to which many boys and girls are exposed at a critical period of their lives that the increased public interest in the education of children between 11 and 15

126647)

years of age is in great measure due. In considering the difficult questions connected with it—the curriculum best suited to develop their powers, the age up to which full-time attendance at school is desirable, the school as a training ground of character —the educationalist, unless he would build his castles in the air, is bound at every turn to take into account the probable future of the children and the nature of the industrial society into which, when their formal education has ceased, the majority of them will enter.

47. If one consideration which has concentrated attention on the years between 11 and 16 has been a growing sensitiveness to the social problem which they present, a second and not less significant has been the progress of education itself. The remarkable advance made in the period since 1902 has had the effect both of raising new questions and of re-stating old questions with a heightened emphasis. The improvement in the quality of primary education has raised the general level of attainment among the older pupils in the elementary schools, has thus strengthened the foundations upon which further education can be built, and, for an increasing number of children, has turned attendance at school from a tiresome obligation, from which escape is to be sought at the earliest possible moment, into an interest and a pleasure, which, if opportunity is forthcoming, and if the financial circumstances of the family permit, both they and their parents desire to be continued. The raising of the age of compulsory school attendance to the end of the term in which the fourteenth birthday is reached, which was completed by the final abolition of partial exemption in 1921, and has been followed by an increase in the number of children remaining at school beyond the age when the legal obligation to do so ceases, has emphasised the importance of ensuring that the fullest advantage is taken of the time thus gained, and has made it at once more urgent and more feasible to plan the education of children over the age of 11+ as a progressive course, with a unity and character of its own.

48. Anxiety lest the closing years of the elementary school should not be turned to the best account has found expression in the complaint that the older pupils are liable to be "marking time." Work already done, it is said, is being repeated and the result is that children themselves are sick of school, and, for all the progress which they are making, might as well be elsewhere. This criticism obviously raises important considerations, and we have been at some pains to collect evidence on the question how far it is, or is not, justified. There appears to be a considerable divergence of opinion upon this point among Local Education Authorities. Some state that in their areas there is no foundation at all for the complaint : others that while it would be untrue to say that all children over 12 are marking time, a considerable number over the age of 13+ are doing so; others that even where the statement is inapplicable to the great majority of children, it is true of a minority of exceptional ability who reach the highest standard at an earlier age than usual, and "whose further progress is restricted to what may be achieved by individual study, or to group work under the guidance of a teacher whose main energies are occupied by his class," Such differences are very largely to be explained, no doubt, by the varying conditions obtaining in different parts of the country and in particular, by the different problems presented by predominantly urban and predominantly rural areas-though it is important to observe that the problem of the rural school must not by any means be regarded as insoluble, since in some areas it appears to have been handled with great success. On two points there seems to be general agreement-that in the large urban schools the evil has been to a great extent overcome, but that in small rural schools it remains serious; and that the most hopeful methods of coping with it are to be found in the careful grouping of the older pupils (such as takes place, for example, when, as in some areas, children over 11 are accommodated in separate Senior Schools), in staffing on a scale which permits of individual teaching, and in the encouragement of independent methods of work, so that children may proceed in a subject at a speed which corresponds with their attainments and ability. In these conclusions, broadly speaking we concur. It seems to us that the complaint of marking time is partly based (like so many other criticisms of public education) on the impression that conditions, which are in fact gradually disappearing, have survived unaltered since the time when the critic himself was at school. But it is both inevitable and satisfactory that, with the enhanced appreciation of education, the work of the school should be judged by more exacting standards, and there seems to us sufficient foundation for the criticism to justify public opinion in attaching special importance to the further improvement of the education of children over the age of 11.

49. The progress of elementary education which has prepared the way for that development, has been reinforced by equally im-

(26647)

C 2

portant changes in other parts of the educational system. The expansion of public secondary education, which has resulted in the number of pupils attending grant-aided Secondary Schools being increased from 138,443 in 1907-8 to 354,165 in 1922-23, the improvement in its quality, and the development of Central and similar schools which began about 1910, and has already proceeded far in certain areas, have had profound reactions both upon the other parts of the educational system, and upon the public attitude towards the value of post-primary education. On the one hand, thankslargely to the bridges thrown by the Free Place system from the elementary to the secondary school, many thousands of parents, who twenty years ago did not think of education other than elementary as a possibility open to their children, have been familiarised with the conception of primary education as a preparatory stage which should lead naturally to some form or another of more advanced work; and a public demand for postprimary education has been created which the existing secondary schools, with the resources at present at their disposal, are not always easily able to satisfy. On the other hand, the growth of secondary and of central schools has revealed a wealth of ability among children attending the elementary schools, the existence of which is a ground both for confidence and for anxiety--confidence in the natural endowments of our fellow countrymen and anxiety lest, at the age at which the powers of the rising generation are most susceptible of cultivation and sensitive to neglect, the nation should fail to turn to the best account so precious a heritage. The precise proportion of children "capable of profiting" by post-primary education continuing to the age of 15+ is not susceptible of exact statistical expression. Any attempt to estimate the proportion must depend partly on the interpretation assigned to the word "profit", and partly also, in as much as children who show little response to one type of education maynevertheless derive much benefit from another, on the range and character of the facilities which are offered. So long, however, as the proportion of children for whose post-primary education special provision is made-whether by "higher tops" and analogous arrangements within the elementary schools, or by Central schools, or by Secondary schools-is not larger than it appears to be to-day, the problem of determining exactly the proportion of children capable of profiting is not, perhaps, of very great or immediate practical moment, since by general consent it is considerably greater in all parts of the country than the proportion

for which facilities at present exist. Nothing struck us more in the evidence submitted to us than the consensus of opinion among our witnesses as to the importance of developing such facilities further. As to the methods to be used there were, naturally, some differences—though not very wide differences—among them. As to the objective to be aimed at, there was something like unanimity.

50. Such agreement, which would not, we think, have been so noticeable even as recently as ten years ago, is partly the result of the practical successes in coping with the problem, to which we refer below, achieved by teachers and administrators. It affords grounds for a reasonable hope that the difficulties surrounding it may be overcome. But the difficulties, both of principle and of the practical application of principles, are real, and it would be a mistake to under-estimate them. Their solution can, at best, be only tentative, and while mere empiricism is to be deprecated, premature systematisation must not be allowed to close the door to experiment. The questions which need a reply are numerous and complex. What kinds of curricula are most likely to meet the varying requirements of children between 11 and 15 years of age, and what part should be played in them by practical interests and by more general literary and scientific studies? What should be the relations between primary and post-primary stages of education ? What are the main types of school needed for the latter ? In what relation should such schools stand both to "Secondary" Schools of the kind most common today, and to the advanced instruction already carried on in an increasing number of Elementary Schools? What should be the conditions prescribed for these schools in respect of such matters as staffing, building and equipment? Whence are the teachers to be recruited, and what qualifications should be expected of them? Up to what age is it desirable that the majority of scholars should attend such schools, and what are to be the relations between the schools and the world of industry ?

To such questions only provisional answers can be given. They are obviously vital. Before, however, we discuss them more in detail, it will be expedient to set out summarily the main facts of the present situation, and to describe the plans for developing post-primary education which have been put into operation by certain important Local Education Authorities.
THE FACTS OF THE PRESENT SITUATION

(ii) A STATISTICAL SUMMARY.

51. The broad facts of the present situation are not obscure and can be summarized in few words. As will be seen from Table I in Appendix III, there were, at the date of the Census of 1921, 3,662,620 children between 11 and 16 years of age. Of this number 2,014,608, or 55 per cent, were in 1922-23 attending Elementary Schools; 264,938, or 7.2 per cent, grant-aided Secondary Schools; 12,133, or $\cdot 3$ per cent, Junior Technical Schools; 785 were attending pupil-teachers Centres and 569 were rural pupil-teachers,¹ while a number which is uncertain, but which appears not to have exceeded 10,000, was in full-time attendance at schools of art, art classes, day technical classes and schools of nautical training.²

If the last group be omitted, about 63 per cent. of the 3,662,620 children between 11 and 16 were attending one or other of the above categories of schools, though, of course, a substantial proportion of the remaining 37 per cent. of children were attending schools not within the purview of the official statistics. The proportion of children in attendance at school falls off very rapidly after 14. Between 13 and 14 it was 88 per cent; between 14 and 15 it was only 31 per cent, a figure which, though deplorably low, nevertheless represents a substantial increase on the level of ten years ago; between 15 and 16 it was 9.9 per cent. The proportion of the 1,446,693 children between 14 and 16 shown by the official statistics to be attending school was just over one in five, or 20.5 per cent.

52. If we turn from a static to a dynamic survey of the facts —if, that is to say, instead of analysing the distribution between different types of schools, and between school and employment. of the population between 11 and 16 years of age, we inquire into

		*			
¹ The correspon	ading figures fo	r the age-group	> 11-15 wer	e as follo	¤s:—
Population ⁷	Elementary	Grant-aided	Junior	Pupil	Rural
11–15.	Schools.	Secondary	Technical	Teach-	Pupil
		Schools.	Schools.	ers]	each-
				Centres.	ers.
2,943,822	2,000,871	210,837	9,897	470	169
	(68 per cent.)	(7 per cent.) (3 per cent.)	
I Statistics supplied by the Based for 1000 04 -to- that is that man the					

² Statistics supplied by the Board for 1923-24 show that in that year the number of pupils between 10 and 19 attending these schools was 12,463. All except a small minority of these pupils were in full-time attendance. The part-time attendants at some place of education were, of course, much more numerous.

the fate of the children leaving school in a given year—the general results which emerge are much the same. According to figures which have been supplied us by the Board of Education,¹ the number of children leaving the elementary schools in the year 1923-24 was 668,749. Of this number 55,541 (8.3 per cent) entered secondary schools; 7,244 (1.1 per cent) entered Junior Technical and Commercial Schools, and 19,267 (2.9 per cent) entered other full-time institutions for Higher Education. Against this total of 82,052 (12.3 per cent) who left the elementary schools in order to continue some form of full-time education elsewhere, must be set 497,894 (74.4 per cent) who left to enter comployment, and 88,803 (13.3 per cent) who left for some other reasons not specified.

53. These summary figures enable a general idea to be formed of the magnitude of the problem. But conditions vary so widely from area to area, that, taken by themselves, they are liable to give a misleading impression. While it has not been possible for us to collect exhaustive figures of the conditions obtaining in all areas, certain Education Authorities have been good enough to supply us with returns relating both to the distribution of the school population over the age of 11 in the year 1923-4, and to the proportion of children leaving the elementary schools who passed in that year to other institutions for full-time education. Their effect is to show the widest diversity of educational provision in different areas. Thus the proportion of the total school population over 11 which is found in secondary schools varied from as low as 6.9 to as high as 42.5. The proportion of elementary school leavers who entered some other institution giving full-time education ranged from 4.4 to 45.4, or ten times as much ; while the smallest proportion entering secondary schools was 4.4 and the highest 27.6. Clearly, when the differences between the provision already made by different areas are so great, the organisation of advanced instruction for children between 11 and 15 years of age presents a problem whose dimensions vary very widely from one part of the country to another. There are authorities which have already gone a considerable way towards solving it. There are others in whose areas, as far as we can judge from the information at our disposal, the task remains to be begun almost from the foundations.

¹ See Table II, Appendix III,

54. Secondary Schools, which, in the sense of the word hitherto customary in England¹, account for 7.2 per cent. of the children between 11 and 16, are not within our purview. For this reason, though, as we explain in the following chapter, we think it important that care should be taken, in the development of other forms of post-primary education, to avoid any action which might undermine their efficiency or expose them to undesirable competition, we do not here discuss the problems connected with them. Of the place of Junior Technical schools, which contain •3 per cent. of the children between 11 and 16, something is said below.² At the present time, however, 55 per cent. of the children between 11 and 16, 68 per cent. of those between 11 and 15, and 83 per cent. of those between 11 and 14 are attending the elementary schools. It is these children who constitute our main problem. Important as it is to secure a steady increase in the number of children attending secondary schools of the existing type, it is evident that, even were the standard set by the Authorities where the provision of secondary school places is most generous made universal, there would still remain an actual majority of children for whom it would be essential to organise other facilities for post-primary education. To what extent are such facilities provided by Local Education Authorities at the present time?

55. To this question it was until recently impossible to give any precise answer, since the official statistics did not distinguish between the advanced courses carried on in Public Elementary. Schools (which include Central Schools) and their other work-Last year, however, the Board of Education made an inquiry into the number of authorities and schools " giving advanced instruction of the sort contemplated in Section 20 of the Education Act 1921," the results of which it has been good enough to place at our disposal⁸. While, owing to the ambiguity of the conception "advanced instruction," they must no doubt be used with a certain amount of reserve, they represent an approximation to the truth sufficiently close to be of very great interest, and throw valuable light upon the important question of the degree to which the provisions of section 20 of the Act of 1921 have found

¹ For the sense in which we recommend that the word "secondary" should be used, see Chapter III, page 71, footnote 1.

^{*} See pages 64-68. * See Table III, Appendix III.

practical expression in the organisation of the schools. The general conclusion which appears to emerge from them is that, in spite of the striking degree of initiative shown by certain Authorities, some examples of which we give in the last section of this chapter, the provision for advanced instruction hitherto made within the elementary school system is, when the country as a whole is considered, somewhat smaller than might have been expected from the attention which the subject has, in recent years, received. While the number of authorities in England and Wales which had arranged for "advanced instruction" was 158, the number of departments giving it was only 682, and the total number of pupils in advanced courses not more than 107.565. According to the Board's returns, therefore, just under half the Education Authorities in England and Wales had organised advanced instruction within the elementary school system. But the provision was more scanty than that figure would suggest. For the average number of departments per Authority, in which such instruction was given, was less than 5, and the number of children in advanced courses formed only 5.4 per cent, of the total number of children over 11 attending the public elementary schools. In this matter, as in that of secondary education, there was a marked divergence between the provision made in different parts of the country. In London the corresponding percentage was 8.5, in the areas of borough and urban district authorities 7.4, in the areas of county borough authorities 6.5, and in the areas of county authorities 2.7.

56. In the great majority of departments—647 out of 682—the advanced courses represented in these figures are planned to provide for pupils who may remain after 14, and in 329 cases they are definitely designed to cover a period of four years, the usual age of entry to them being 11 years and upwards; and in more than a third the parents are required to give a definite pledge that their children shall remain at school till 15+. It is obvious, indeed, on the one hand, that both the facility with which an advanced course can be planned, as a systematic whole, and its value to the pupil, will be greatly increased if the school life lasts for four years after the age of 11. It is not less obvious, on the other hand, that the disposition to remain at school will be strengthened by any arrangement of the curriculum which causes the pupil and his parents to feel that, so far from retraversing again ground already covered, he is beginning a new and vital part of his school career.

THE FACTS OF THE PRESENT SITUATION

It is of some interest to observe, therefore, that, on the whole, the tendency in recent years has been markedly in the direction of a lengthening of the school life. The number of children over the age of 14 attending the elementary schools was 47,066 in 1913-14, 125,292 in 1919-20, and 170,893 in 1922-23. Expressed as percentages of the age group 10-11, it was 7 per cent. at the first date, 18.8 per cent. at the second, and 26.1 per cent. at the third.¹ According to the latest available figures, therefore, just over one quarter of the children in the elementary schools between 10 and 11 remain in them beyond the age of 14.

57. The explanation is to be found partly ² in section 9 of the Education Act of 1918, re-enacted in section 138(1) of the Education Act of 1921, which requires children to remain at school to the end of the term in which they reach their fourteenth birthday, partly in the fact that the decline in the birth rate has diminished the elementary school population below 11, with the result of increasing the proportion to be found in the higher age-groups. But, even when due allowance is made for those factors, the increase in the number of children remaining at school both beyond 14, and, though to a less extent, beyond 15, is striking. While it naturally depends on economic conditions, being least in areas where there is a keen demand for the services of young persons in industry and highest where the pressure on parents to set their children to wage-earning employment is less intense, it is difficult to resist the conclusion that the proportion of children remaining at school beyond 14 is affected also by the nature of the provision made by Education Authorities. It is significant that it is considerably higher in the areas of county boroughs than in those of counties, and that in London, where there are numerous openings for young persons in commerce and industry, but where the organisation of advanced work within the elementary school system began at an earlier date³ and has proceeded further than in most other areas, it is higher than in

50

³ See Table IV, Appendix III.

The reasons for thinking that the provisions of this section are not a complete explanation of the increase in the number of children over 14 attending the elementary school are as follows :---(i) The increase has been continuous over a number of years; (ii) even after the new requirement the number of pupils shown by some authorities in the 14-15 ages group remains insignificant; (iii) the ages represented in the Board's statistics represent an average week throughout the year; (iv) there has been a considerable increase in the number of children in the 15-16 age-group.

^{*} See pages 31-32 and page 60.

either. The length of the school life of pupils in the London Central Schools has, we are informed, increased considerably since their inception.¹ Of those who left them in the year 1923-24. 41 per cent. did so at the age of 14; 22.6 per cent. between 14 and 15; and $36 \cdot 4$ per cent. after the age of $15.^{9}$ On the whole then, the facts seem to bear out the conclusion which would have been anticipated. It is that, while large numbers of children leave school prematurely owing to economic difficulties, with the provision of a better education for pupils over 11 the desire of parents that their children should have the advantage of it increases, and that the efforts which have been made in recent years by certain authorities to organise advanced instruction for the older children have contributed in an appreciable measure to the lengthening of the school life. This result appears to us extremely encouraging. If the facilities for such instruction, scanty as they are, have already had the effect of prolonging the period of school attendance, it seems reasonable to anticipate that their wider dissemination and better organisation is likely in the future still further to stimulate the appetite for more prolonged education.

58. We may now summarise the main statistical facts bearing on the dimensions of the problem. Of the 2,943,822 children between 11 and 15, 221,373 (7.5 per cent.), and of the 3,663,620 children between 11 and 16, 278,425 (7.6 per cent.), were in 1922-3 being educated in grant-aided secondary schools, junior technical schools, pupil-teachers' centres and as rural pupilteachers. In addition a number not exceeding 10,000 was found in 1923 in full-time attendance at schools of art, art classes, day technical classes, etc., and in 1925 107,565 children over 11 years of age were in advanced courses in elementary (including central) schools. The children over 11 in the elementary schools who were not, so far as is known, receiving "advanced instruction " in the meaning of Section 20 of the Education Act, 1921, numbered slightly over 1,800,000. Finally, between 14 and 15 there were 493,025 children, and between 15 and 16 641,811 or 67.7 per cent. and 89.3 per cent. of the corresponding age-groups, who were not attending any full time school

¹ Carnarvonshire has had a somewhat similar experience. In the town of Carnarvon the pupils over 14 in the Elementary Schools numbered 24 before the Central School was opened in 1912 and 153 in 1925. In Bangor the corresponding figures were 5 and 58.

^{*} See Table V, Appendix III.

represented in the official statistics. What proportion of them are attending schools outside the public system of education it is not possible to state. But it would appear safe to assume that approximately half the children in the country between 14 and 15, and approximately three-quarters of the children between 15 and 16, are not receiving full-time education of any kind.

59. The task before the nation is, therefore, a large one. The question what proportion of the 1,800,000 children between 11 and 15 attending elementary schools, who are not stated to be receiving "advanced instruction of the sort contemplated in section 20 of the Education Act, 1921," are capable of beginning post-primary education at or near the age of 11 cannot be answered till experiment has yielded fuller data than are at present available. The problem is to secure that, in one way or another, facilities for post-primary education may be made available for as many of them as is possible, and, in addition, that an increasing proportion of the children whose school life now ends altogether shortly after their fourteenth birthday, may continue their full-time education to a later age.

This problem, as we point out in our next chapter, is not to be solved by any single device of universal application. If the system of post-primary education is to be successful, it must correspond to the needs of the pupils, and if it is to correspond to their needs, it must embrace schools of varying types. Progress must take place, in short, along several different paths, and there must be a due proportion in the outlay of thought and expenditure devoted to each, so that the whole front may advance together. Before, however, discussing in detail the lines on which, as we think, development should take place, it will be convenient to examine shortly the steps already taken by certain representative Local Education Authorities.

(iii) STEPS TAKEN BY LOCAL EDUCATION AUTHORITIES TO DEAL WITH THE PROBLEM OF POST-PRIMARY EDUCATION.

60. Local Education Authorities have devoted much attention to the question of providing "courses of advanced instruction", since the Education Act, 1918, came into operation. The Act left very wide discretion to Local Authorities in this matter, and no attempt has been made by the Board to suggest, still less

52

to prescribe, the lines upon which courses of advanced instruction should be organised. Local Authorities have accordingly been free to develop the methods which they consider best suited to their local circumstances and needs. It is evident that the provision of such courses affords opportunities for clever children to rise in school more quickly, and at the same time prevents less gifted children from being left for an indefinite time low down in the school. Though the expression "advanced instruction" has never been officially defined,¹ it may probably be taken for working purposes to mean instruction more advanced than that ordinarily given hitherto to the older children in public elementary schools.

Apart from the provision of selective or non-selective central schools for older pupils only, a number of Authorities have organised courses of advanced instruction within existing elementary schools. Such courses fall into two main groups :----

(a) Those provided in large public elementary schools in which an advanced course can be organised in the upper part of the school for pupils who have passed through the lower classes. Upper classes of this type, intended to offer a course of advanced instruction, are sometimes known locally as higher or upper tops.

(b) Public elementary schools receiving children from other schools into their upper classes, which are so organised as to provided a course of advanced instruction. The upper parts of such schools are often described as "central classes."

It is evident that arrangements for advanced courses of the two types described above can, as a rule, only be carried out satisfactorily in the upper classes of large schools.

61. The central schools for older children only, which have been established up to the present by various Local Authorities seem to fall into two main classes :--

(i) Schools composed of children selected at about the age of 11, usually by examination, the majority of whom remain three and in some cases four years longer under instruction. In some parts of England these schools are called middle schools or intermediate schools, but they can best be described as central schools of the selective type.

See page 285,

(ii) Schools beginning work about the level of standard V. into which all or most normal children from a group of contributory schools in a district are drafted after they have pursued a course of instruction up to that level, and in some cases have also attained a specified age. These schools may be conveniently described as non-selective central schools.

In addition to the two types described above, a third variety of central school is found in some areas, offering a course of instruction corresponding more or less to that provided in ordinary elementary schools from standard V to standard ex-VII, but carried somewhat beyond that stage, and admitting pupils, on the application of their parents, provided that they satisfy the head teacher that they can do the work. As such schools are, in a sense, selective, they may from that aspect be regarded as falling under central schools of the selective type.

The first type of central school corresponds to some extent to the higher elementary school of the period 1900-1917¹. Central schools of the second type offer several points of resemblance to the higher standard schools with a science course at the top, which were developed in considerable numbers, particularly by the smaller School Boards, between 1885 and 1900^a. The third variety of central school is not unlike the higher grade schools which were established by a number of School Boards between 1870 and 1900, except that such schools used to charge fees.³

62. All these types of central school are also to be found, notas distinct schools, but arranged as departments at the top of large elementary schools. Furthermore, all the main ways described above of organising advanced courses, whether in existing elementary schools or in separate central schools for older pupils, may be found within one large administrative area. In one part of the area there may be a large "senior school" first-rate of its kind, with good buildings, equipment and staff, which can be so organised as to provide " advanced instruction " for its own older or more intelligent children on promotion from its junior departments. In another part a number of small schools may be sending older children to central classes at the top

⁻¹ Chapter I §§ 29-35.

Chapter I § 26.
Chapter I §§ 21-23.

of one of the schools chosen for the purpose, and in yet another part the Authority may be maintaining a new central school consisting wholly of children selected by means of some entrance test from the elementary schools in the neighbourhood.

63. The methods of admitting pupils to these courses are more fully described in Chapter VII, but we may say at this stage that there are three main arrangements :---

(1) Selection by means of a competitive examination;

(2) Selection by means of a qualifying test;

(3) Promotion on reaching a certain age, which is often combined with a requirement that the pupil shall have reached a certain level of attainment, e.g. standard V.

The age basis is common for senior schools with or without higher tops. For central classes a combination of age and qualifying examination is often employed. Competitive examination with various modifications is the method ordinarily employed for admitting to selective central schools. Pupils are often transferred to non-selective central schools on attaining a certain age, usually 11 + .

64. Local Education Authorities, in deciding what type of organisation to adopt for their advanced courses, necessarily take into account, in addition to general questions of finance, considerations such as the existing provision of secondary schools, junior technical schools, full-time junior domestic courses for girls, full-time junior classes in art schools and the like. For example, selective central schools of the first type described above are usually found in larger towns, especially those on which the provision of secondary schools has not been sufficient to meet the existing demand. Central schools of the second type have generally been established in areas well provided with secondary schools, or where the local industries and occupations afford openings for children of the age of 14 or thereabouts, and also in thinly populated rural areas. In such areas two other important factors have usually to be taken into consideration in connection with the establishment of central schools; first that it is difficult to secure a sufficient number of children of outstanding ability for a central school of reasonable size, and in the second place, that it is an economical arrangement to transfer all the older children of the smaller schools to centrally situated schools. The third variety of central school described above has been adopted by some Local Authorities, which hold that the lengthening of school life to the age of 15 and upwards can best be secured by the free choice of parent or child without compulsion of any kind.

65. Nearly all the courses of advanced instruction hitherto arranged are planned to provide for pupils who may remain at school up to the age of 15+1. Most of the methods of organising these courses described above are still in the experimental stage, except in a few areas, such as London, where the system of central schools dates from 1911. The great majority of the courses of advanced instruction are given in central schools or classes to which children are transferred, usually about the age of 11, from neighbouring schools. In many instances the accommodation for the central school has been obtained in an already existing building, by means of a redistribution of the pupils in a whole group of schools in the district. It is interesting to note that in less than half of the 551 departments claiming to provide courses of advanced instruction in England in 1925 had it been found necessary to provide special buildings for the purpose². It may be pointed out incidentally that the bringing together of younger children in separate schools, so as to secure the use of suitable separate buildings for the older pupils, renders possible better grading and is also more economical, since in cases where the age-range of the class is wide, as it must inevitably be in a small school for children of all ages, the class must be small. With proper grading, it is possible to arrange that larger classes are' taken by fewer teachers.

¹ Section 26 (1) of the Education Act, 1921, re-enacting section 8 (5) of the Education Act, 1918, provides that the Board may, on the application of the local education authority, authorise the instruction of children in public elementary schools till the end of the school term in which they reach the age of sixteen or (in special circumstances) such later age as appears to the Board desirable.

as appears to the Board desirable. ¹ cf. Education in England and Wales, being the Report of the Board of Education for the School Year 1924-25. (Cmd. 2695) pp. 83-84 and 91-92.

how many facets the problem has, and how varied are the means adopted to cope with it in different areas. When growth is taking place on every side, classification becomes exceedingly difficult, but for the sake of convenience we have attempted to group under a few headings the arrangements made by some representative Authorities.¹

(i) Authorities which have provided central schools of a non-selective type, to which all normal older children are transferred from groups of contributory schools at about the age of 11 +, e.g., Carnarvonshire.

(ii) Authorities which have organised central schools of a very slightly selective type, to which pupils are admitted on application from their parents, and on satisfying the head teacher that they can do the work, e.g., Warwickshire.

(iii) Authorities which have provided central schools of a slightly selective type, to which the majority of the older children are transferred after an easy examination at about the age of 11 +, e.g., Rutland.

(iv) Authorities which have adopted a system of highly selective central schools, e.g., London and Bradford.

(v) Authorities which are carrying out a far-reaching reorganisation of most or all of the elementary schools within their areas so as to provide central (sometimes called "intermediate") schools for the more gifted children who are not proceeding to secondary schools, and distinct senior schools for the remaining older children, e.g., Leicester.

(vi) Authorities which provide most of their courses of advanced instruction by means of "higher tops," forming integral parts of existing elementary schools, e.g., Durham County.

(vii) Authorities which have organised their courses of advanced instruction within existing elementary schools, either wholly for the pupils in certain individual schools, or also for a limited number of pupils drawn from other schools, e.g., Hornsey.

(viii) Authorities which up to the present have provided courses for the older children by means of "senior standard" schools, or of departments providing specially arranged three year courses, e.g., Dorset and Leeds.

² See also Table III, Appendix IIL

THE FACTS OF THE PRESENT SITUATION

(ix) Authorities which are adopting several of these arrangements simultaneously in different parts of their areas, e.g., Lancashire and the West Riding of Yorkshire.

(N.B.—The descriptions in Sections 67 to 78 are based on data supplied to the Committee by the Local Education Authorities in question.)

TYPE I.—CARNARVONSHIRE.

67. Since 1910 the Authority has been devoting much attention to the question of making better provision for pupils in the top standards of the elementary schools. Section 2 (1) (c) (ii) of the Education Act of 1918, enabled the Authority further to develop this policy, and there are now seven central schools in the area. There are nine secondary schools in the county, but no junior technical schools. In 1923-24 there were approximately 7,650 children over the age of 11 in attendance at all types of school. Of these 4,286 were in elementary schools, 1,906 in secondary schools, and 1,181 in central schools. Of the 2,504 children who left elementary schools in 1923-24, 462 passed into secondary schools and 551 into central schools. The policy of the Authority is to transfer either to secondary schools or central schools all pupils from council schools who have spent a year in standard \overline{V} . It has been found that, by collecting at one school the two top standards from the contributory elementary schools, it is not only possible to provide a teacher for each standard, but to sub-divide each standard according to the ability and attainments of groups of individual pupils. The courses of study in central schools are planned on the basis of a leaving age of 15 and approximate to those in secondary schools, except for the omission of a foreign language. Eight hours are allocated to languages-3 hours for Welsh, and 5 for English. The courses are varied to meet local needs, and stress is laid on handicrafts and domestic subjects. Since these central schools were established, the number of children remaining at school after the legal leaving age has considerably increased. Since 1st January, 1925, the legal leaving age in the county has been raised to 15 by bye-law under section 46 of the Education Act, 1921. The establishment of these central schools has not adversely affected the nine secondary schools in the area.

THE FACTS OF THE PRESENT SITUATION

TYPE II.—WARWICKSHIRE.

68. In 1923-24 there were 12,845 pupils over the age of 11 in elementary schools, 3,354 in secondary schools, 1,198 in central schools recognised as such by the Board, 1,033 in central schools not recognised by the Board, and about 100 in junior technical schools and other full-time schools giving education of a technical type. The Authority considered that it was not necessary to provide a junior technical school, as the needs of the area are met either by the junior technical schools in the adjoining urban areas of Birmingham and Coventry or by the day continuation school at Rugby. In the scheme submitted under the Education Act of 1918, the Authority proposed to provide 50 or 60 central schools or classes; 21 of these schools had been established in 1923-24. The type of central school varies according to local conditions. Some are wholly for children over the age of 11; others, situated for the most part in rural districts, are organised as central classes within schools containing junior pupils; some draw pupils from one town only, and others from extensive rural areas. Most of these schools have no local bias, two have a slight bent towards engineering, one towards mining, and one in the direction of agriculture. Pupils are admitted to the central schools and classes by means of an examination conducted by the teachers, who have been authorised to admit all children whom they regard as suited for "advanced instruction."

TYPE III.-RUTLAND.

69. There are no secondary schools in the area except Uppingham School and Oakham School which are largely non-local.

Most of the elementary schools are small village schools, not sufficiently large to support a senior top. The Authority, accordingly, decided to build 5 new central schools in various parts of the county, and 3 of these schools have, up to the present, been erected. Approximately four fifths of the children over the age of 11 in elementary schools are transferred to a central school on the result of an annual examination taken by all children at the age of 11+. The less able children remain in their own schools and attend special classes at a central school for one day in a week. The central schools provide a three years' course, and approximately 50 per cent. of the pupils in them remain voluntarily for periods varying from a term to one year beyond the statutory age in order to complete the course. The curriculum is not definitely vocational, but the various subjects are taught with reference to the future occupations of the pupils, which in Rutland are mainly rural.

TYPE IV.-London.

70. The circumstances which led to the establishment of central schools in London have been briefly described in Chapter I. In 1923-24 there were in the area 211,516 pupils over the age of 11 in elementary schools; approximately 40,600 pupils in secondary schools; 19,708 in central schools; and approximately 3,090 in junior technical (and trade) schools, full-time Junior domestic courses, and full-time junior art departments in art schools. There were also 10,105 pupils in part-time day continuation schools. The three years' programme approved by the county council in 1924 provides for an increase of 3,650 places in the accommodation afforded in aided and maintained secondary schools in the area. Steps are also being taken to provide three or four new junior technical schools. In 1925 there were 62 central schools affording accommodation for 22,000 pupils. These schools provide a four years' course with an industrial bias, a commercial bias or a dual bias, and are organised for boys, or for girls, or for both. Children in attendance at a public elementrary school who have attained the age of 11 are eligible for admission to central schools, subject to certain exceptions. The final selection of entrants rests with the head teachers of the central ' schools, who in choosing candidates have regard to the recommendation of the head teacher of the contributory school, the results of the junior county scholarship examination, and the probability of the children remaining at school sufficiently long to justify the change. In central schools with an industrial bias specimen drawings of the candidates and any other suitable evidence of manual dexterity are also taken into account.

TYPE IV .- BRADFORD (COUNTY BOROUGH).

71. The policy of the Bradford Authority in regard to the provision of courses of advanced instruction has been largely determined by the fact that the area is exceptionally well provided with secondary schools, and that the 8 provided secondary schools have ceased to charge fees since 1919. In 1923-24 the total number of children over the age of 11 in schools in the area

was 13,145. Of these 7,308 were in elementary and special schools, 5,056 in secondary schools, 431 in central schools and 75 in full-time junior classes at the school of Art. Three central schools were opened in 1920, one for boys, with an industrial bias and a commercial bias, one for girls, with a commercial bias, and the third for boys and girls, with a commercial bias. Pupils admitted to them must have attained a certain standard in the general scholarship examination, and their parents must have agreed to keep them at school up to the age of 15 + .

TYPE V.-LEICESTER (COUNTY BOROUGH).

72. When the Education Act of 1918 came into operation, in 1919, the Authority divided the area for purposes of reorganisation into districts. In each, of the districts, when a reorganisation has been effected, there is one intermediate school to take at the age of 11 +, selected children who, for various reasons, are unable to proceed to a secondary school, and two or more "senior" schools to accommodate all children of the age of 11 + who are not proceeding to secondary, intermediate, junior technical or junior craft schools. The contributory elementary "junior" schools only take pupils up to the age of 11 +. There were in 1924 2,799 pupils in secondary schools, 837 in intermediate schools, 4, 210 in senior schools, and 239 in schools of other types.

The intermediate schools offer courses planned to end at the age of 15 +, and the courses in the senior schools are arranged to end at the age of 14 +. The courses in the intermediate schools are more academic than those of the senior schools, less attention being devoted to practical work, and a modern language being included in the curriculum. Pupils are chosen for admission to intermediate schools by means of the annual general examination, which also serves to select pupils for secondary and junior technical schools.

TYPE VI.-DURHAM COUNTY.

73. This Authority provides courses of "advanced instruction" for children over the age of 11 by means of 54 higher tops, 4 upper standard or central schools, and 38 public elementary schools, in which the curriculum for pupils over the age of 11 has been extended. In 1923-24 there were 61,242 children over the age of 11 in attendance at schools in the county area, of whom 51,736 were in ordinary public elementary schools, 5,722 in

secondary schools, 3, 202 in "higher tops," and 582 in commercial schools and colleges, private schools and upper standard schools. The higher top system was first introduced in 1918 into 30 elementary schools, and extended to 54 schools in 1924. The system aims at widening and enriching the curriculum of the ordinary elementary schools, and provides parallel classes for those children who develop mainly on literary lines, and for those whose interests are chiefly practical. In 1924 there were 11 higher tops providing a two years' course, 38 offering a three years' course, and 5 organised for a four years' course. The teachers are given full discretion in the matter of curricula and in the choice of books and educational equipment. The teachers are largely responsible for the admission of entrants to the higher tops, which takes place on the result of a simple written and oral examination and a survey of the child's school record. The consent of the parent is also required before a pupil can be admitted to the higher top.

TYPE VII.—HORNSEY BOROUGH (AUTHORITY FOR ELEMENTARY EDUCATION ONLY).

74. This Authority has organised courses of advanced instruction in individual elementary schools, in preference to establishing central schools. Since 1920, 6 advanced courses of this type have been established—3 for boys, 2 for girls, and 1 mixed. The courses are planned for pupils who are likely to remain at school beyond the age of 14 +, and it is made a condition of admission that the parent should furnish an undertaking to keep the child at school beyond that age. The selection of candidates for admission is made mainly on the result of the examination for admission to secondary schools.

The curricula for these courses are planned on a broader basis than those for the ordinary elementary schools and include a modern language. No bias was at first given, but in 1923 commercial instruction was introduced in three of the courses for pupils in their third and fourth years and an industrial bias was given to one of the courses for boys.

TYPE VIII.-DORSETSHIRE.

75. In 1923-24 there were in the county area 7,169 pupils over the age of 11 in elementary schools, 2,385 in secondary schools, and 22 in schools of other types. No central schools have as

62

yet been established, but there are a number of "senior standard" schools for pupils between the ages of 11 + and 14 +. There is one junior technical school in the area.

TYPE VIII.-LEEDS (COUNTY BOROUGH).

76. In 1923-24 there were in Leeds 23,434 children over the age of 11 in elementary schools, 4,588 in secondary schools, and approximately 600 in two day preparatory trade schools and one day school of commerce. The policy followed by the authority in regard to the courses of advanced instruction is based on the view that "instruction to children over the age of 11 years should be given either in the elementary school or in the secondary school, with the exception of education which is definitely technical in character." The existing secondary schools afford accommodation for approximately 6,300 pupils (i.e., about 13.6 per thousand of the population.) The Authority proposes gradually to increase this provision to at least 20 places per thousand of the population, and at the same time to provide more schools of the junior technical type. It is stated that courses of advanced instruction are being organised within elementary schools for those children of the age range of 11 + to14 +, who do not enter either a secondary school or a junior technical school. In 1924 there were in the public elementary schools of the area 27 departments providing three years' courses of advanced instruction for boys, and 11 departments providing three years' courses for girls. The curricula followed in these courses comprise specialised syllabuses adapted for individual pupils or for the needs of certain districts of Leeds.

TYPE IX.-LANCASHIRE.

77. In 1923-24 there were in the county area 45,947 pupils over the age of 11 in elementary schools, 10,155 in secondary schools, 1,427 in central schools and classes; higher elementary and senior schools and advanced courses, 289 in junior technical schools, and 29 in full-time day classes in schools of Art. There are three junior technical schools in the county all situated in districts where the engineering industry predominates. The schools offering advanced courses comprises (a) selective central schools which take a certain number of the older pupils from groups of contributory elementary schools (b) schools containing an elementary section and a higher section to which neighbouring contributory schools send pupils [i.e., "central classes "], and (c) schools with a self-contained higher section to which other schools do not send pupils. Entrants to the selective central schools and classes are chosen on the recommendation of the head teachers of the contributory schools. Their recommendation in turn is based upon a general review examination conducted by the Authority, for all pupils in public elementary schools of the age of eleven. The curricula of central schools and classes vary according to the district, and the courses extend over three, four or five years.

TYPE IX.-YORKSHIRE, WEST RIDING.

78. In 1923-24 there were in the West Riding 63,960 pupils over the age of 11 in attendance at public elementary schools, 10,630 at secondary schools, and 106 at Doncaster junior technical school. There were also a few pupils over the age of 11 residing within the West Riding area who were in attendance at central schools, junior technical schools, full-time day classes at schools of art, and the like, situated in the areas of other authorities (chiefly county boroughs within the West Riding). There were at that time no schools of the central type in the West Riding and the "courses of advanced instruction" provided were given in the "tops" of public elementary schools. However, during the year 1923-24, the Authority approved the establishment of 11 "Middle" schools providing accommodation for approximately 3,500 pupils. These Middle schools were to be housed, ... either in new buildings, or in existing elementary schools suitably . remodelled for the purpose. The Authority has also decided to provide further secondary school accommodation. At the present time the secondary schools in the area afford accommodation for all pupils who attain 60 per cent. marks in the County examination for scholarships and free places.

NOTE ON JUNIOR TECHNICAL SCHOOLS, JUNIOR COMMERCIAL SCHOOLS AND FULL-TIME JUNIOR CLASSES IN ART SCHOOLS.

JUNIOR TECHNICAL SCHOOLS.

79. The origin, aim and province of the junior technical school in the more restricted sense of that expression has been briefly described in Chapter I. Its purpose is to give a course of instruction of two or three years for children who have

previously attended elementary schools, and the curriculum is planned to continue the pupil's general education and at the same time to provide a special training for entry into some particular occupation or group of occupations. The recognition of a school of this type by the Board normally depends in part on the existence of such relations between the Local Authority (or Governing Body) and neighbouring employers in the occupations in question as affords reasonable assurance that pupils will find appropriate employment on completing the course. Hitherto, these schools have aimed at not turning out more pupils than can be absorbed by the local industry or group of industries for which each several school affords a preparation. The normal age for admission has been 13, and the course has ordinarily lasted for two or three years. In a number of the girls' schools pupils enter at the age of 14 and take a two years' course. Hitherto, the Board has required that the course should be planned as a preparation for employment upon its completion, and not as a preparation for further full-time instruction. The Board has also required hitherto that a reasonable proportion of members of the staff should possess practical trade experience of the occupations for which the school furnishes a preparation.

80. The junior technical schools recognised up to the present appear to fall into two classes :---

(1) Those dealing with industries in which manual craftsmanship is still of great importance; in these schools, which are popularly known in the London area as "trade schools," the practical work is intended to develop a substantial measure of personal craftsmanship. Such schools provide in some degree a substitute for a year or two of apprenticeship or ordinary learnership.

(2) Those concerned with industries connected with engineering in which machinery is largely used, and in which the scientific principles underlying the construction and use of machinery are of paramount importance. Manual skill up to a certain point is taught in schools of this type, but its full development demands a range of machines with which the pupil can only become familiar in the works.

All the junior technical schools for girls fall within the first class. A few boys' schools in the London area are of the firstnamed type, but outside London most of the boys' schools conform to the second type, and prepare boys either for engineering or for the group of constructive trades which, according to local circumstances, comprise building, engineering, and occasionally shipbuilding. In schools of the second type, a large proportion of the time is usually assigned to mathematics, science and mechanical drawing. It is evident that in junior technical schools of the first type the curriculum is primarily vocational. Schools of the second type, though from one aspect largely influenced by the requirements of certain groups of industries, seem to us to be less definitely vocational than the "trade schools." We consider that schools of the first type, within their own province, are doing most valuable work and should be developed so far as is possible in accordance with the needs and requirements of certain local industries.

We think that the same is true of junior technical schools of the second type.

81. It is convenient to deal here very briefly with two criticisms on existing arrangements for junior technical schools which were made by several of our witnesses. The representatives of the Association of Teachers in Technical Institutions and of the Association of Technical Institutions, together with several individual witnesses, urged that the age of admission to these schools should be fixed at the age of 11+ instead of 13+ and that for two years from 11 + to 13 + the pupils should be given a course parallel to that provided in secondary schools as a foundation for the more technical instruction which would begin at the age of 13+.

We are strongly of opinion that all junior technical schools of the trade school type should continue to be arranged as vocational courses for two or three years from the age of 13+. If any local authorities desire to organise a school somewhat on the lines of a junior technical school of the second type, it is quite open to them to organise and conduct such a school as a secondary school with an industrial bias under the Regulations for Secondary Schools. It must be remembered that the junior technical school as contemplated in the Regulations for Further Education is definitely a vocational school, differing in this respect from the central school, which only provides a bias in the direction of industry in the last years of the course. Further, when a pupil is admitted to a junior technical school under the



conditions under which these schools have hitherto been working, he is assumed to have made up his mind about his future occupation, and so his whole education henceforth is directed towards some definite occupation or group of occupations. Junior technical schools of the type, which prepare boys for industries connected with engineering and the like, appear on a first view to be less restricted in their aim than the "trade" schools, but it must be remembered that all pupils in these schools devote a large proportion of their time to studies such as mathematics, science and mechanical drawing, the time allotted to these subjects being very appreciably longer than the time that would normally be assigned to them in a central school with an industrial bias. Furthermore, in a central school with an industrial bias there would generally be the possibility of an alternative course for such pupils as did not desire to take the course with the bias.

We think that it is highly inadvisable that a boy or girl should be placed at so early an age as that of 11 + in a school planned to give a course of definitely vocational education. The arrangement by which pupils are admitted to junior technical schools at the age of 13 + greatly diminishes the risk of committing the child to a course which may ultimately prove unsuitable, and we accordingly recommend that for the present the normal age of entry to these schools should remain fixed at 13+.

82. Several witnesses urged strongly that a modern language should be included in the curriculum of junior technical schools chiefly on the ground that it made it easier for pupils in such schools to pass examinations such as those conducted by the Institute of Mechanical Engineers, or matriculation examinations. This argument in itself does not seem to us to carry much weight as these schools were expressly planned for the definite object of fitting boys or girls to enter industrial employment immediately on leaving school. We note that the rule which appeared in the Board's Regulations for these schools up to 1925 to the effect that the inclusion of languages (other than English and Welsh) in the curriculum would not be approved unless such instructions could be shown to be of direct vocational value in connection with the occupations for which the school afforded a preparation, has been omitted from the Regulations for Further Education for 1925. We understand that the principal reason for not encouraging the study of a modern language was that in practice it is difficult to find time for the effective study of a

THE FACTS OF THE PRESENT SITUATION

foreign language in a school with a curriculum occupying as much as 30 hours a week and extending in most cases only over two years. We recommend that the question of including a foreign language in the curriculum of such schools should be decided at each individual school in the light of local circumstances and the requirements of the group of occupations for which the school affords a preparation. Much would depend on whether teachers could be obtained possessing the special qualificaions required for teaching a modern language profitably in a very limited time, and whether there were a sufficient number of pupils with any aptitude for linguistic study.

JUNIOR COMMERCIAL SCHOOLS AND CLASSES (NOW CALLED JUNIOR TECHNICAL SCHOOLS).

83. Up to the present the Board have recognised a limited number (about 30) full-time junior commercial courses of two or three years for pupils aged 13 or 14 on admission. From one aspect such classes or schools are parallel to junior technical schools in the narrower sense. We are disposed to doubt whether in the future there will be any considerable field for such schools, as in most areas central schools with a commercial bias for children between the ages of 11 + and 15 + and secondary schools with a commercial bias in the later years of the course for pupils between the ages of 11 + and 16 +, or 17 +, should afford a sufficient preparation for commerce, combined with a good general education. It must be remembered, however, that there are at present in many towns a considerable number of parents who desire their children to have some more specific or intensive preparation for office employment than has hitherto been provided by the available secondary and central schools. A large number of private commercial schools and business. colleges have sprung up to meet this demand. If central schools giving a commercial bias in the last years of the course develop in the future on the lines we anticipate, we think that the demand for the recognition of junior commercial schools with a two or three years' course for pupils aged 13 or 14 on admission will probably gradually diminish. The more specialised form of education provided by schools such as junior commercial classes should guard against two dangers (i) that it may limit the range of occupations into which the pupils can enter on leaving and (ii) exercise a somewhat narrowing influence on the curriculum as a whole.

,68

THE FACTS OF THE PRESENT SITUATION

FULL-TIME JUNIOR ART DEPARTMENTS IN ART SCHOOLS.

84. These departments for pupils under the age of 16 are in a manner parallel to junior technical schools in the narrower sense, and the courses include the study of drawing and artistic handicraft, combined with a certain amount of general education for pupils under the age of exemption. As a rule, artistic industries are not conducted on so large a scale in any one town or area as to create a substantial annual demand in any specific industry for young persons who have remained in full-time attendance at such a school to the age of 15 and upwards. In a few areas, where such a demand exists, it is possible to organise a junior technical school such as the school of cabinet-making at Shoreditch, or the school for book production and for silversmithing at the London Central School of Arts and Crafts. On the facts before us, we are of opinion that junior full-time art departments are of genuine value within their own province, and we think that where local conditions require them, they might with advantage, be further developed.

85. It is worth noting that the institution of the junior technical schools and junior art departments described above has not, as a rule, involved additions to previously existing accommodation, as most of them are carried on in the premises of polytechnics, technical colleges, and art schools. Such information as is available in regard to the expenses of maintenance suggests that the cost per head in these schools is comparable with that of secondary schools and not with that of elementary schools.

69

CHAPTER III.

THE LINES OF ADVANCE.

86. In our preceding Chapters we have traced the steps taken to make special provision for the education of children between the ages of 11 + and 15 +, and have endeavoured to indicate the dimensions of the problem which awaits solution. As our survey shews, that problem has behind it a history extending back almost to the beginning of public education in England, and it has given rise, particularly in recent years, to much fruitful educational activity. It is on the basis of the experience thus obtained that further progress will now be made. The question is not one of erecting a structure on a novel and untried pattern, but of following to their logical conclusions precedents already set, and of building on foundations which have long been laid. The initiative of enlightened Education Authorities and the progress of educational science have revealed both the possibilities of post-primary education and the practical steps by which those possibilities may be made a living reality. What is now required is to act upon the lines suggested by the results of the efforts " already made, to secure for all normal children the opportunities · which have hitherto been confined to a small, though growing, number among them, and to extend as widely as possible, though with due regard for differences of local circumstances and needs, methods of organisation that have proved their value in the limited field in which they have hitherto been applied. We proceed accordingly to set out shortly our conclusions regarding the principles upon which the further development of the education of children of the age mentioned in our terms of reference ought, as it seems to us, to be based.

(i) THE REGRADING OF EDUCATION.

87. The first main conclusion which we have reached is concerned with the successive stages in education and with the relations which should exist between them. It is as follows :— Primary¹ education should be regarded as ending at about the age⁴ of 11+. At that age a second stage, which for the moment may be given the colourless name "post-primary," should begin; and this stage which, for many pupils would end at 16 +, for some at 18 or 19, but for the majority at 14 + or 15 +, should be envisaged so far as possible as a single whole, within which there will be a variety in the types of education supplied, but which will be marked by the common characteristic that its aim is to provide for the needs of children who are entering and passing through the stage of adolescence.

⁸ Attention should be called to the fact that the expression "age of 11 +" is not intended to be used in a precise chronological sense. The mental as well as the chronological age of the pupil must be taken into account. (See the Report of the Consultative Committee on Psychological Tests of Educable Capacity (1924)). We do not, however, consider that mental age and educational attainments should be made the sole consideration in determining the exact age at which transference takes place from the primary to the post-primary stage of education. We recognise disadvantages both to the individual pupil and to the social life of the school, in the transference of the more gitted boys and girls at the chronological age of 8 or 9 to classes in which the average age of the pupils is 11 + . as well as the danger of keeping less able children of the age of 13 or 14 years in the same class as younger pupils of 9 or 10 years of age. We are disposed to view with approval the procedure of those local education authorities which, on the cue hand, permit the more gifted boys and girls of the chronological age of 10 years to compete for scholarships and free places to Secondary Schools and for admission to existing Central Schools, and on the other hand allow children of the chronological age of 12 + , who for one reason or another have been temporarily retarded in their development, another opportunity of competing at a later stage.

¹ The pecularities of English educational terminology are chiefly to be explained by its history, of which some account is given in Chapter I, and in the Notes on Nomenclature in Appendix II. The term "secondary education" is at present employed in two senses; first, in the more general sense in which we hope that it may come to be used, to indicate the second or post-primary stage in education, in all schools of a secondary or post-primary type; and in the second place in a more restricted sense (in which it is ordinarily used to-day) as meaning the education given in schools recognised under the Board's Regulations for Secondary Schools. In Part iii of the present chapter we have suggested that it is desirable that education up to the age of 11 + should be known by the general name of "primary education," and education after the age of 11 + by the general name of "secondary education" the new post-primary schools which we dosire to see developed being thus regarded as a particular form of secondary education. When we use the expression in the narrower sense (in which it is most commonly used to-day) we have placed it in inverted commas, except where the context excludes any ambiguity and in quotations from evidence where witnesses employ the phrase in their own sense.

Such a conception of the relations between primary and post-primary education obviously presents some points of contrast with the arrangement which has hitherto obtained in England. under which, until recent years, approximately 90 per cent. of children have received elementary education up to the age of 13 or 14, and a small minority have been transferred to secondary education, or to that given in central schools, at about the age of 11; and we discuss later the administrative problems to which, if generally accepted as the basis of educational organisation, it would give rise. It appears, however, to correspond to the views held by a large and influential section of educational opinion. and it has already received partial recognition both in administrative action taken by the Board and in a recent resolution on educational policy of the House of Commons¹. There was, indeed, something like unanimity among our witnesses as to the desirability of treating the age of 11 to 12 as the beginning of a new phase in education, presenting distinctive problems of its own, and requiring a fresh departure in educational methods and organisation in order to solve them.

Thus—to quote only a few of the opinions submitted to us by witnesses of widely varying types of experience—Professor T. Percy Nunn informed us that he had "long been strongly in favour of a 'clean cut' across our public educational system at the age of 11+," that he wished "to see the present parallel arrangement of elementary and secondary schools replaced definitely by an 'end-on' arrangement, based upon the principle that education falls naturally into two divisions or phases (i) primary education, the education of childhood, and (ii) postprimary education, the education of adolescence," and that "it

¹ Extract from the Official Report of the Parliamentary Debates in the House of Commons, 8th April, 1925. Resolved.

[&]quot;That, in view of the grave intellectual and social wastage caused by the fact that the great majority of children leaving elementary schools fail to obtain further education of any kind, a wastage aggravated by the present state of unemployment, and in view of the declaration of the Departmental Committee on scholarships and free places that 75 per cent. of the children leaving elementary schools are intellectually qualified to profit by fulltime education up to the age of 16, this House is of opinion that local education authorities should be called upon to prepare schemes by which within a reasonable period adequate provision may be made for secondary or some form of full-time post-primary education for all children up to the age of 16, for a progressive increase in the percentage of free places maintained in grant-aided secondary schools, and for the development of maintenance allowances on such a scale that no children may be debarred from higher education by the poverty of their parents."

is vital to regard all types of post-primary education as attempts to solve, by means appropriate to the differing cases, what is essentially a single problem, namely the education of adolescent boys and girls." "What we should aim at," stated Mr. R. F. Cholmeley, "is going forward from the 11+ stage on parallel lines : I do not believe it is impossible to devise a sufficient variety of parallel schemes of education, admitting the attainment of a creditable standard, to enable all the 11 + children to be scattered among them, with at any rate very much less implication than now prevails as to the superiority of one over another." Practical administrators spoke with equal emphasis to the same effect. The Association of Directors and Secretaries of Education, for example, dwelt on the importance of regarding education as " a single organic whole," and urged that post-primary education, while embracing various types of institution, should " include all education of the second stage, including what is now termed 'secondary education.'" "It can be laid down as a postulate," stated Mr. Salter Davies, the Director of Education for the County of Kent, "that the organization of the education of children in the bulk up to 15-16 years of age cannot be carried out effectively so long as the practice prevails of thinking in terms of more or less parallel educational systems instead of concentrating on the problem of the education of children and adolescents as a whole." Mr. Hallam, Chief Officer for secondary education in the West Riding of Yorkshire, deprecated " any form of organization which deals with these two sets of children (i.e., those attending 'secondary' schools and those outside them of the same age-11 to 15) in separate compartments," and spoke of " the main line of educational advance" as one "leading to a system passing on at about 11, all children, except the definitely subnormal, from elementary schools to junior secondary schools, where the result of two or three years work would indicate the lines which the child's further development might best follow."

As far as we can judge, those views are endorsed by the bodies which represent the experience of professional teachers. The representatives of the National Union of Teachers, while emphasizing its demand that "as soon as it is possible, secondary education shall be provided for all children capable of benefiting from it," submitted proposals intended to "result in the provision of education which might be called secondary in character for those children who are not attending 'secondary schools ' in the

(2:647)

D

narrower sense of the words." The evidence given on behalt of the Association of Head Mistresses stated that "the break in school life for children attending primary schools should come at 11+, the age at which the free place scholar will pass into the secondary school. All the children, at the age of 11+, should pass either into secondary schools, or into schools, which for want of a better name, we will call Central Schools." The representatives of the Association of Assistant Mistresses urged that "children who remained at school till the age of 15+ should follow a continuous course from 11+, at which age they should be transferred to a different school," which " should approximate closely to the existing Secondary School in regard to accommodation and staffing." Recent expressions of opinion by organizations representing the layman rather than the expert suggest that a similar conception is being increasingly accepted outside the ranks of professional educationalists. The witnesses who came before us on behalf of the General Council of the Trade Union Congress stated that in their view " all children about the age of 11+ should be transferred from elementary schools to some form of secondary school or 'central' school," and on April 8th 1925, the House of Commons carried a resolution in favour of the provision of secondary or some form of full-time post-primary education up to the age of sixteen.¹

88. At the risk of overloading our Report, we have ventured to quote these expressions of opinion at some length, because the general agreement of administrators and teachers that primary education should be regarded as ending, and post-primary education as beginning, at the age of 11+ seems to us important, as supplying, at any rate, a starting-point from which the further problems involved in our reference may be attacked. The principal reasons for this consensus of opinion are, we think, two. In the first place there is the argument of the psychologist. Educational organization is likely to be effective in proportion as it is based on the actual facts of the development of children and young persons. By the time that the age of 11 or 12 has been reached children have given some indication of differences in interests and abilities sufficient to make it possible and desirable to cater for them by means of schools of varying types, but which have, nevertheless, a broad common foundation.

¹ For full text see footnote on page 72.

Moreover, with the transition from childhood to adolescence, a boy or girl is often conscious of new powers and interests. If education is to act as a stimulus—if it is to be felt to be not merely the continuance of a routine, but a thing significant and inspiring—it must appeal to those interests and cultivate those powers. It must, in short, grow and expand with the growth of those for whom it is designed. And it will do this most successfully if its successive stages are related to each other in such a manner that the beginning of a new stage in education may coincide with the beginning of a new phase in the life of the children themselves.

The arguments derived from educational theory are reinforced by practical considerations. For, in the second place, the tendency of educational organization during recent years has been to mark the years 11 to 12 as the natural turning point up to which primary education leads, and from which post-primary education starts. For one thing, it is the age at which children sit for the free-place examination and at which transference to the secondary school, in the earlier days of public secondary education not seldom made at 13 or even 14, now normally takes place. For another, the development of forms of post-primary education other than "secondary" in the conventional and restricted sense of the word (such as that of the Central Schools, admission to which usually takes place on the basis of the freeplace examination) has had the effect of further emphasizing 11 + as the natural end of the primary course. Similarly the raising of the age of compulsory school attendance to the end of the term in which a child becomes 14 has made it at once more possible and more urgent to plan the work of children over 11 as the beginning of a fresh stage in their education.

Both legislators and administrators have lent their sanction to the same view. Section 2 of the Education Act, 1918, as re-enacted in Section 20 of the Education Act, 1921, expressly laid upon Local Educational Authorities the duty of making provision for the advanced instruction of the older and more intelligent children attending elementary schools; the Board in Circular 1350¹ has emphasized the importance of special arrangements being made for discharging that obligation; and, as shown in the preceding chapter, an increasing number of Local Education Authorities are regrading their schools, or work

¹ The Organisation of Public Elementary Schools, issued on 28th January, 1925.

^(\$6647)

D2

within their schools, in such a way as to ensure that after the age of 11 as many children as possible may enter upon a course of education designed to meet the special needs of adolescence. "The problem," to quote one of H.M. Divisional Inspectors of Elementary Schools, "is not to be solved by merely thinking how to carry on for twelve months longer the work which now ends normally at 14, or very shortly after 14. It would be wiser to go back three or four years and consider how best to plan a course or courses for boys and girls from 11 to 15 + ... We agree with that statement of the problem. What it means is that the years immediately following 11 are no longer to be regarded (as normally in the past) as the final phase of elementary education. They are to be thought of rather as the beginning of a new phase, a phase which must be treated, in the words of Professor Nunn, "as a unitary process, with its own distinctive character, planned, in its several varieties, as a whole."

In view, then of the administrative developments which are at present taking place, and of the pronouncements of educationalists of experience and authority, we are justified, we think, in stating that the tendency of educational practice and thought is to favour a regrading, and that such a regrading will have as one of its effects to substitute a classification into successive stages, primary up to 11 + and post-primary after that age, for the traditional and overlapping categories of "elementary" education for nearly all children up to the age of 14 and " secondary " for a small minority of children from the age of 11. In saying this, we should like at the outset to guard against certain misunderstandings. We do not, of course, imply that there can or ought to be a sharp division between primary and post-primary education; on the contrary, it is precisely the division of education into compartments (such, for example, as "elementary" and "secondary") which seems to us to be one of the defects of the present system. We desire not to accentuate that division, but to diminish it, and, as we state below, we propose that primary education, far from being cut off from post-primary education, shall lead on to it as a matter of course.

Nor, again, are we under any illusion as to the gravity of the difficulties which are involved in translating into practice the general principles which have been laid down by the witnesses quoted above and which we have accepted. We recognize, as they recognized, that in education, as in other departments of social policy, it is not possible to proceed per saltum, that no generation ever has a clean sheet on which to write, that each generation must build with materials inherited from the past on pain of not building at all, and that, as educational ideals are applied, their outlines will be blurred by the necessity of compromising with practical exigencies. But an objective is not less valuable because it can hardly be fully achieved. The past history of education in England does not suggest that a pedantic and impracticable subservience to abstract principles or to theoretical consistency is the most formidable of the dangers against which it is necessary to be upon our guard. Before, therefore, proceeding to indicate the steps which we think should be taken in the near future, we propose to complete our statement of the general aims towards the attainment of which, as it seems to us, such steps should be designed to lead.

89. Our second conclusion is little more than a corollary to our first. It is as follows :--All normal children should go on to some form of post-primary education; and while, taking the country as a whole, many more children should pass to "secondary" schools in the current sense of the term than pass at present, it is necessary that the post-primary grade of education should include other types of post-primary schools, with curricula varying according to both (a) the age up to which the majority of pupils will remain at school and (b) the different interests and abilities of the pupils, to which the bias or objective of each school will naturally be related.

In selective Central Schools the course should be designed to cover the period from 11+ to 15+. In others, so long as the leaving age is 14+, the course should be framed to cover the period 11+ to 14+, but provision should be made for the needs of any pupils who will remain up to the age of 15+.

The statement that all normal children should go on to some form of post-primary education springs naturally from the considerations which we have already advanced. If primary education ends about the age of 11, there remain at present for all children three years—in the near future we hope there will remain four—during which attendance at school is legally obligatory, and, apart from the requirements of the law, there is, as the figures given in our preceding chapter show, an increasing tendency on the part of parents to keep children at school to a later age than was till recently customary. The problem is to secure that these years are used in the most effective manner. The question, in short, is not (as in the past) whether some children should be selected for post-primary education, but how to organize post-primary education for all children in the manner best calculated to ensure that each may receive the kind of education best suited to cultivate its powers. In the words of Mr. Salter Davies, "By general consent the normal age of transition from the strictly elementary to the more advanced form of education is at 11 or thereabouts. Reform lies in adopting the corollaries that follow from this . . . It is no longer a question of determining whether some or all should enjoy the benefits of secondary education. The deciding factor is whether the aptitudes of a group of pupils will enable them to profit most by this course or by that."

We regard the general recognition that the aim of educational policy must be, not merely to select a minority of children for the second stage, but to secure that that second stage is sufficiently elastic, and contains schools of sufficient variety of type, to meet the needs of all children, as one of the most notable advances made since the establishment of a system of public Education. What it means is that the second stage in education succeeds the first because children have reached a phase of their development when they are ripe for it, not merely because their parents have the means to pay for it, or because they are of such unusual capacity that the community thinks it worth while to provide it for them. Thus all go forward, though along different paths. Selection by differentiation takes the place of selection by elimination. Educational policy, to quote a sentence from the evidence of Mr. Cholmeley; " proceeds on the assumption that all children (limited for the purposes of this inquiry to all 'normalchildren ') have got to be set on the road of education, and aims at organizing things accordingly."

(ii) THE TYPES OF POST-PRIMARY SCHOOL REQUIRED.

90. If it is important to insist that there is a point in the development of all children at which they ought to begin their post-primary education, it is not less important to remember that such education will be successful only in so far as it is related to the actual requirements of the children themselves. There are diversities of gifts, and for that reason there must be diversity of educational provision. Equality, in short, is not identity, and the larger the number of children receiving postprimary education, the more essential is it that that education should not attempt to press different types of character and intelligence into a single mould, however excellent in itself it may be, but should provide a range of educational opportunity sufficiently wide to appeal to varying interests and cultivate powers which differ widely, both in kind and in degree.¹

The question how many different types of school the postprimary system will require to provide can only be answered as the result of a wider experience than is at present available. What is needed is experiment and elasticity, and in what is said below we must not be understood to be suggesting any final or exhaustive scheme of organization. Subject to that caution, we may state our third main conclusion. It is as follows:— As post-primary education develops, the schools dealing with the post-primary or secondary stage of education should include (in addition to Junior Technical and Trade Schools) at least the following main types :—

(i) Schools of the "secondary" types now commonly existing[®] which at present follow in the main a predominantly literary or scientific curriculum, and carry the education of their pupils forward to the age of at least 16+.

(ii) Schools of the type of the existing selective Central Schools, which give at least a four years' course from the age of 11+, with a realistic or practical trend in the last two years.

(iii) Schools of the type of the existing non-selective Central Schools, which may either be the only central schools in their area, or may exist side by side with selective central schools and cater for those children who do not secure admission to such schools.

¹ The need of variety in the post-primary system was strongly emphasized in the Report of the Departmental Committee on Scholarships and Free Places published in 1920. It recommended (Recommendation 4 p. 47) "That variation in the type of secondary schools with a minimum leaving age of 16 should be encouraged, and that secondary schools should be supplemented by others of various types with a maximum leaving age of 16."

We recognise that the variety of type smong Schools now known as "Secondary" is increasing. Further, as will be seen from paragraph 99 below, we propose that the word "Secondary" should be extended to include the new types of post-primary school, whose establishment is recommended in this Chapter.

THE LINES OF ADVANCE

(iv) Senior Classes, Central Departments, "Higher Tops," and analogous arrangements, for providing advanced instruction for pupils over the age of 11+, for whom, owing to local conditions, it is impossible to make provision in one or other of the types of school mentioned above.

We recognise, of course, that it will be some considerable number of years before post-primary schools are brought into existence in sufficient numbers for all children to be transferred to one or other of them, and that in the meantime the organization of post-primary education must often take place, as stated above (iv) and below (p. 88), in the elementary school itself. We regard this arrangement, however, though we realize that it will be necessary for some time to come, as a transitional one. We are well aware that much excellent work is already done in the upper ranges of elementary schools, and that further improvements are taking place every day. But in our view the balance of advantage is in most cases (though doubtless for a long time to come there will be exceptions) in favour of emphasizing the fact that a new stage in education begins at 11 + by transferring as many children as possible at that age, not merely to a different type of teaching within the same school, but to " another institution, with a distinctive staff, and organized definitely for postprimary education."1

The suggestion that two types of post-primary school (and, if senior classes be counted as a separate category, three types) will be required in addition to secondary schools of the existing type and to junior technical schools, leads naturally to the question of their special characteristics and of the relations which should exist between them. The "secondary" school, in the sense in which the word "secondary" is most commonly used to-day, falls outside our terms of reference, and there is only one point on which it is necessary to touch in connection with it. That point is, however, important. It is the necessity of ensuring, in the development of other forms of post-primary education, that nothing is done to cripple the development of secondary schools of the existing types. Exactly what proportion of the children leaving primary schools should pass to such schools in preference to the others suggested, it is not possible, we think, to say. The percentage so passing at present appears to be approximately

¹ Memorandum sent to the Committee by Professor T. Percy Nunn.

8.3, and varies apparently from under 5 to over 27. By general consent it is desirable that it should be largely increased. The growth of secondary education in the last twenty years has been one of the most remarkable movements of our day, and it is vital that nothing should be done to cramp its future development.

We do not think that any danger of the kind is involved in our proposals, and several of the Inspectors who gave evidence before the Committee were inclined to hold the same view.¹ The representatives who came before us on behalf of the Association of Municipal Corporations stated that, the more effective the Central School became, the greater would be the demand for secondary education, and that it was largely the work which was being done in Central Schools which prepared the minds of the public for that done in the "secondary" school. Another of our witnesses informed us that in his area, before the Central Schools were opened, some apprehensions had been felt that their establishment would react adversely on the numbers attending the Secondary Schools, but that the actual result had been the opposite; the increase in the number of pupils attending Secondary Schools "had been greatest in those places where Secondary Schools and Central Schools had been running side by side", and in his opinion "the existence of Central Schools created an enthusiasm for education of a post-primary character, which had the effect of swelling the number of entrants to " secondary schools."

On the whole, it seems to us reasonable to anticipate that the development of new forms of post-primary education will assist and strengthen Schools of the existing "Secondary" type, both by spreading more widely an interest in post-primary education, and by providing a course of education designed to meet the needs of children who cannot stay much beyond the age of 15; thus making it easier for "secondary" schools to require, as is generally agreed is desirable, a longer period of school attendance from the pupils entering them. At the same time, it is proper to enter a caution to the effect that anything like competition between "secondary" schools and other forms of post-primary school, which would lead to one attracting to itself pupils better

³ "The development of such schools (i.e., post-primary other than 'secondary'), which would have been highly dangerous to secondary education 20 or even 15 years ago ought not to be so now." Memorandum sent to the Committee by Mr. W. C. Fletcher, late Chief Inspector of Secondary Schools.
qualified to profit by the other, is to be avoided. In establishing new schools an authority must obviously have regard to the existing supply of post-primary education, to the public demand for further facilities, and to the question which of the existing types of school suggested above is most likely to meet the needs of children for whom satisfactory provision is not yet made. In practice, with the exercise of ordinary care, the risk of undesirable competition will not, we believe, be very serious. In the last ten years, both "secondary," education,¹ in the conventional sense of the word "secondary," and other forms of post-primary education, have been developing with considerable rapidity together. We hope and expect that they will continue to develop side by side even more rapidly in the future.

91. While, however, we look forward to a steady expansion of the work of the existing "secondary" schools, and of others of the same type to be established in the future, we think that it is none the less necessary on that account to develop post-primary schools of a somewhat different character. Our reasons for thinking this are two. The first is based on a consideration of the age at which the majority of pupils are likely to cease their formal education. If a course of education is to be effective, there must be a reasonable probability that the majority of those who start it will go forward to complete it, in the sense not that they "finish their education," but that they pursue that particular plan of study as far as it will take them. It is true, of course, that the period for which children remain at school is largely dependent upon economic considerations, and that, as one of our witnesses emphasised, any classification of them which implies that a child who leaves school at 15 or younger is " of a different kind" from one that stays to a later age is to be deprecated. The relevance of the leaving age to the curriculum . is simply a matter of practical convenience. It springs from the fact that, in considering the subjects which it is worth while to begin, and the manner in which the teacher is to treat them, it is necessary to take into account the time which the majority of § pupils will be able to give to them, and the point to which while at school they will be able to carry their studies. The work of a good school is not in short, a series of unrelated lessons, but an organic whole, in which the earlier stages derive much of their meaning from the later, so that the pupil who stops midway is, apt to leave with a sense of frustration, and, if many pupils do the same, the curriculum of the school cannot be planned effectively.

¹cf. Report of the Board of Education for 1923-24 [Cmd. 2443], pp. 9-40.

Once a system of education has become established and is generally appreciated, the average age of attendance tends to rise, for the satisfactory reason that parents value the education which their children are receiving and make sacrifices in order to keep them at school. That has happened in the case of " secondary" schools, in which the average length of the school life was 2 years 7 months both for boys and girls for the years 1907-10, 3 years 3 months for boys and 3 years 4 months for girls in the year 1921-22, and 3 years 7 months for boys and 3 years 8 months for girls in the year 1923-24. It is happening also, we are informed, in the case of some central schools. We do not doubt that the same tendency will operate to lengthen the school life in the types of school which we have in mind. But it must be recognized, we think, that for some time to come the majority of pupils will leave at or about the age of 15, or even earlier, which means that their school life will be approximately a year shorter than the average school life of "secondary" school pupils (which is tending still further to rise) and two years shorter than that of a considerable number among them. The curriculum and organization of schools must take account of that fact. They should be designed mainly for the needs of pupils the great majority of whom will leave not later than 15. If individual pupils desire to remain beyond 15, and the school desires to retain them, there should not be any rule making that arrangement impossible, though children who wish to continue their education for any considerable period should normally, we think, be transferred at the proper moment to another school providing an appropriate course. But the main concern of the school must be to provide a course of education suitable for the majority of children who will leave at 15+.

92. Our second reason for desiring the wide development of post-primary schools of a type more analogous to the "central" than to the existing "secondary" schools is based on a consideration of the curriculum most likely to be suitable for the pupils concerned. It is that experience suggests that the type of education best adapted to the requirements of a large proportion of the children between 11 + and 15 + years of age is one which has a less "academic" bias, and gives a larger place to various forms of practical work, than is customary in "secondary" schools to-day. At the age of 11 or 12 children are waking to various new interests suggested by the world about them. Many of them are already beginning to think of their future occupations.

and anxious to be doing something which seems to have an obvious connection with them. Many more, without having any clear idea what they will do when they leave school, feel ill at ease in an atmosphere of books and lessons, and are eager to turn to some form of practical and constructive work, in which they will not merely be learners, but doers, and, in a small way creators. If education is to retain its hold upon children at this critical stage of their development, it must use, and not reject, these natural and healthy impulses. It must recognize that there are many minds, and by no means minds of an inferior order, for which the most powerful stimulus to development is some form of practical or constructive activity. The work of the school must not seem, as sometimes, perhaps, it still does, the antithesis of "real life," but the complement of it. Children must as far as possible be helped to feel that, when attending school, they are handling, though in a different atmosphere and from another angle, the matters which seem to them interesting and important outside school. Its significance in short, must be made as plain to them as possible, by being obviously related to the work of the world, as they see it in the lives of their parents, their older brothers and sisters, and their friends.

It is essential, of course, that nothing should be done to prejudice the continuance of the general education of the pupils, or to cramp their mental development for the sake of demanding some form of specialised proficiency. But, as an experienced educationalist, who emphasised strongly the importance of avoiding premature specialisation, pointed out, "there is no reason why any of the materials of a good general education should not be found in activities bearing directly on the immediate environment of the children." It is to be noted, indeed, that more than one of our witnesses, for example, Mr. Hallam and the Association of Directors and Secretaries for Education, expressed the opinion that some of the pupils in the existing "secondary." schools would profit more by a less academic curriculum.

93. Our fourth main conclusion, therefore, is as follows:— A humane or liberal education is not one given through books alone, but one which brings children into contact with the larger interests of mankind; and the aim of the schools in categories (ii) (iii), and (iv) above should be to provide such an education by means of a curriculum containing large opportunities for practical work and related to living interests. In the earlier years the curriculum in hese schools should have much in common with that provided in the schools at present commonly known as "secondary"; it should include a foreign language, subject to permission being given to omit it in special circumstances¹; and it should be given a "practical" bias only in the last two years.

The need that the curriculum of many post-primary schools should contain large elements of practical work has been emphasized by almost all our witnesses, and is not likely, we think, to be seriously questioned. In emphasizing it, it is necessary, however, to guard against a misapprehension. It might, perhaps, be suggested that the purpose which we have in mind could be served by a wide extension of Junior Technical Schools, and that, if this took place, the development of post-primary schools of other types, with a considerable practical element in their curriculum, would be unnecessary. That suggestion implies, we think a misunderstanding both of the work of Junior Technical Schools, and of the objects to be aimed at in the wide development of post-primary education which we have in mind. Junior Technical and Trade Schools are doing admirable work and it is hoped that they will continue to develop. But their principal function has been hitherto to give a preparation for industries requiring somewhat specialized technical qualifications; and the areas in which they can develop in any number are, therefore, those in which such industries exist on a considerable scale.

What we have in view, in urging the need for the development of post-primary schools with a "realistic" or "practical" bias, is not that such schools should aim at giving a technical or vocational education, such as is offered by Junior Technical Schools, but that they should use " realistic " studies as an instrument of general education, as they are already used by a considerable number of central schools to-day, and as academic studies are used for the same object by existing "secondary" schools. A good general education can be given through a curriculum which provides large opportunities for practical work, and such an education it should be the object of these schools to give. We reserve till later any detailed discussion of the curriculum. But we think that the pupils in all types of post-primary schools should normally have the opportunity of learning a foreign language-which in most case will be French; that in the earlier years the curriculum should have much in common with

¹ cf. Regulation 10 of the Regulations for Secondary Schools, 1924.

that provided in existing "secondary" schools; and that only in the last two years should a definite bias be given to it. We think further that it is of the highest importance that provision should be made for easy transfer from these schools to "secondary" schools, and, hardly less important, easy transfer in the opposite direction.

It is important not to over-emphasise the difference between the schools the further development of which we have recommended above, and those of the type usually known as " Secondary" to-day. As we point out below, in spite of the existing nomenclature, all alike are concerned with an education which should logically be regarded as Secondary, and differ from each other merely as the different species of a single genus. During the early part of the school life of the pupils attending them, the curriculum will be substantially the same in all, the practical bias (where such a bias exists) being developed only in the last two years. Nor must it be forgotten that in many areas the provision of "secondary" education (in the narrower sense of the word) still falls so far short of the demand, that what below we call the "Modern School,"1 whether selective or non-selective, must inevitably, under existing conditions, supply the needs of many pupils who would, were the provision more abundant, be found in "Secondary "Schools.

94. Subject to these qualifications, the essential characteristics which differentiate the newer types of post-primary school from the existing Secondary Schools are simple, and can be stated shortly as follows :---

(i) The former will normally have to plan their work on the assumption that the school life of most of their pupils after the age of 11 + will not at any rate in the immediate future last for more than three, or, four years. In other words, these new post-primary schools will plan their courses for a period of three or four years, whereas in existing "secondary" schools, which should retain their pupils to the age of 16 at least, the tendency is to plan the course for a minimum period of five years from 11 + to 16 +, with the objective of the First School Examination, for which pupils are usually presented about the age of 16 +. (ii) In view of these considerations, the subjects of the curriculum in post-primary schools for the first two years of the course from 11 + to 13 + should, as we have indicated, be much the same as those of the "secondary" school, but the whole course of instruction being planned for three or four years, instead of five or more years as in the "secondary" school, they should be simpler and more limited in scope. In other words, in the "secondary" school the teacher may properly begin trains of investigation that are going to be completed at a higher age, say 16 or 17. In the new post-primary Schools where the great majority of the pupils will be leaving at 15 + at the latest, some of these trains of investigation and thought cannot be completed. The course must therefore be shorter, and the subjects handled in a simpler way.

(iii) The treatment of the individual subjects of the curriculum and the methods of instruction will, from another point of view, be rather different from those in a "secondary" school, as the leaving examination for those pupils who care to take it will be of a character widely divergent from that of the First School Examination, for which the majority of pupils in "secondary" schools are presented. As will be seen from the description of the suggested Leaving Examination for post-primary Schools given in Chapter IX of this Report, any test imposed would be of a much less rigid character than the First School Examination. Thus, the courses of instruction in Post-Primary Schools, though leading up to a definite objective, need not be influenced to the same extent by the requirements of an external examination, and the teachers will accordingly be free to frame courses in the several subjects of the curriculum (with some bent in many cases towards agriculture, commerce or the local industry or group of industries), which should, so far as they go, constitute a coherent body of knowledge in each several branch and in the curriculum as a whole. A well planned scheme, properly co-ordinated and extending over three or four years, would, though in one aspect self-contained and complete so far as it went, nevertheless form a good basis on which to build any further course of study on academic, technical or artistic lines.

(iv) A fourth point of difference between these new postprimary schools and existing "secondary" schools is that, though the subjects included in the curriculum would be much the same as those in a "secondary" school, there should, in our view, be two points of difference in detail, -viz.:--(a) a second foreign language would not, as a rule, be taken in a post-primary school, and (b) more time and attention would, on the whole, be devoted to practical instruction.

(v) The courses of instruction in the last two years of the post-primary schools, retaining a considerable proportion of pupils up to the age of 15 +, should not be vocational. At the same time, however, the treatment of subjects such as history, geography, elementary mathematics, and a modern language, should be "practical" in the broadest sense, and directly and obviously brought into relation with the facts of every day experience. The practical applications of subjects such as elementary mathematics and drawing, as adjuncts and instruments of thought in the study of other subjects, e.g., handicrafts, geography, elementary physics and biology, might with advantage be emphasised. Thus, the courses of instruction, though not merely vocational or utilitarian, would aim at linking up the school work with interests arising from the social and industrial environment of the pupils.

95. The range of the varying facilities which can be offered will naturally depend on the character of the area under consideration. In densely populated urban areas it may be possible to provide both selective and non-selective post-primary schools ;... in the more sparsely populated districts it may be more practicable to establish non-selective post-primary schools with parallel forms for the more gifted and the slower children ; while, as an alternative to the non-selective Schools, it will probably in many areas be. necessary for some time to come to provide for a substantial proportion of the children over 11 by means of the development of Senior Classes in the existing Elementary Schools. Whether hat particular arrangement is adopted or not, the desirability of Schools which will offer advanced instruction to children who do not pass to selective post-primary schools is not, we think, open to question. Even when places in the latter, and in "secondary" schools of the existing type, are more numerous

than they are to-day, it seems probable that there will still be a considerable number of children who, for one reason or another, are somewhat slower and more backward than their fellows. For such children it would be discouraging and depressing to enter a school where they always found difficulty in keeping pace with the work of other pupils, and for them it is therefore advisable to contemplate the provision of a school where the pace will be somewhat slower, and where practical work will play an even larger part in the curriculum than it does in the Central schools of to-day. Where, for practical reasons, the provision of more than one type of post-primary school (in addition to " Secondary " schools) is not possible, the necessary discrimination between pupils of different degrees of ability will require to be made, as suggested above, by a system of parallel forms. How numerous these "slower" children will be, only experience can decide; it may be hoped that with the improvement of conditions in the primary school and in the home their number will diminish. But in any case it will be necessary to allow for them in any scheme of educational organisation. To the practical problem of the form which such provision should take we refer below.

96. Our fifth main conclusion is as follows:—At the age of 11 + pupils from primary schools should normally be transferred to a different school, or, failing that, to a different type of education from that given to pupils under the age of 11 +, though provision should be made in exceptional cases for the transfer of children at a later age, provided that their school course in the new institution lasts sufficiently long to allow of their deriving benefit from the transfer.

We need not say more as to the desirability of beginning postprimary education at the age of 11, nor need we emphasize the importance, which is obvious, of making provision for the transfer of children in exceptional cases at a later age. It is necessary, however, to explain why we think that the most desirable course, though it will often not be possible for some time to come, is that children should pass to a new school at the age of 11. It is, briefly, that we desire to mark as clearly as possible the fact that at the age of 11 children are beginning a fresh phase in their education, which is different from the primary or preparatory phase, with methods, standards, objectives and traditions of its own. We want both them and their parents to feel that a hopeful and critical stage in their educational life is beginning in a school environment specially organized to assist it. That result seems to us most likely to follow if they begin that new stage in a new school, and we were impressed by the evidence as to the advantage of transfer given by the representatives of certain areas (for example, Leicester) where arrangements for transferring all, or nearly all children, to intermediate or senior schools, are in force. The point was put very clearly by an Inspector, who attributed the success of the Rutland Scheme to the following considerations, (i) that the buildings were new and completely separated from the schools already in existence, (ii) that the staff was new, (iii) that the curriculum was new and different from anything in the existing schools. He was strongly of opinion that an *ad hoc* school would be better in nine cases out of ten for educating children after 11 years of age.

We recognise, of course, that there are arguments on the other side which deserve consideration: children become deeply attached to the elementary school which they have attended, and teachers are reluctant to lose them, though it is to be observed that the evidence submitted by the National Union of Teachers appeared to favour transference in many cases at 11 + to another school.¹ It seems to us on the whole, however, that the advantages of transfer to another school outweigh its disadvantages, and that, wherever possible, arrangements should be made by Local Education Authorities, as has already been done in some areas, to enable such transfer to take place.

The form which such arrangements will take must depend upon the circumstances of the area in question. In some urban areas it will be possible, by a reclassification of schools, to set aside certain of the existing elementary school buildings for post-

¹A memorandum sent to the Committee by the National Union of Teachers, after suggesting that children should in some cases be transferred after the age of 11+ to juhior technical schools, and in others should be grouped in senior departments, to be specially organised in existing elementary schools, continues as follows:—"In other cases, children would be transferred at the age of 11+ to mother school building, and a form of organization where such transfer takes place would in many cases be preferable to the retention of the schools building where they passed the earlier years, as it is undesirable that pupils of the age of 15 should be taught under the same roof as children under the age of 11. Raising the school age to 15+ must lead either to the building provision might be made by means of laboratories, work rooms, domestic service rooms and so forth, for the continued education of pupils to the age of 15+."

primary work, and to arrange, as has been done at Leicester, that all children pass either to a central or a senior school. In rural areas, the difficulties are obviously greater, but in some of them, where distances are not too great, it may be possible to achieve somewhat the same result by the provision of mechanical means of transport : Rutland, for example, where more than threequarters of the children over 11 + attend central schools, supplies bicycles on easy terms. In districts such as some colliery districts, which are developing rapidly, and where no supply of elementary schools at present exists, it may be expedient in building the schools needed, to plan them in such a way that a junior, middle and senior school may all be included in the same building, though, for the reasons given above, we should prefer that, as a general rule, post-primary work should, whenever possible, be carried on At the same time we realise the in a separate building. particular difficulties which confront some rural schools. Indeed. it may sometimes be in the best interests of education and village life that a village school should continue to supply education to the age of exemption, and here the development of senior classes may be the only available solution. We consider it important that, where ever possible, separate new post-primary schools should be provided for boys and girls respectively. We regard the mixed central school as a less satisfactory arrangement, which should not as a rule be adopted except in cases of necessity. We think that, whenever it is feasible, the postprimary school should be arranged so that the boys will be supervised by a headmaster and the girls by a headmistress. It is hardly necessary to point out that such arrangements are especially desirable in schools consisting of pupils who are passing through the early years of adolescence. Whatever provision may be made, however, it is plain that, taking the country as a whole, there must be a large addition to the number of school buildings available for post-primary education, if the developments which are now being discussed by many Local Education Authorities are to go forward, as it is desirable that they should. It is evident that the task of Local Education Authorities would be facilitated if effective steps could be taken to simplify school buildings and to reduce their cost. We understand that ever since 1911 the Board has been devoting much attention to the problem of the cost of school buildings, and we hope that effective means may soon be discovered for reducing appreciably the cost of such buildings

without detriment on the educational side. The whole question is clearly too technical to be discussed here in detail, but if a satisfactory solution could be found, it would be a most important practical step towards the objectives outlined in our Report.

The provision of additional buildings must in any case, however, be a matter of time. Where no re-arrangement of existing schools can provide separate accommodation for pupils of the post-primary age, the course which remains, pending the creation of additional accommodation, is the development of senior classes in the existing schools, on the lines already suggested by the Board. Though (apart from exceptional cases) we regard this as in the nature of a transitional arrangement, it is that which for some time is likely to be most common, and it is therefore of great importance that, when no rectification of school buildings is practicable, every possible step should be taken within the limits of the existing organization (for example by reducing the size of classes, by increasing the facilities for practical work, by encouraging individual work on the part of pupils, and by careful staffing) to improve the quality of the education given in the senior department. If such an arrangement is to yield the full advantages which it is capable of offering, there are certain conditions which, as it seems to us, it is essential should be observed. The first is that senior classes are likely to be satisfactory, even as an interim arrangement, only when the number of children in the school is sufficiently large to make possible effective organization and the development of a keen and vigorous spirit. For this reason the arrangement is one which seems unsuitable for a large number of small rural schools. In their case it seems specially necessary, though unfortunately it is often 'specially difficult, to bring the older pupils to a common centre. The second condition is that the transition from the junior to the senior department must be-clearly defined. Pupils must feel that entry into the latter marks the beginning of a new stage in their. education ; they must not think that it is simply the same thing as before under another name. The third condition is that the senior department must be suitably staffed and equipped for dealing with post-primary education. As the Association of Municipal Corporations emphasized in its evidence, there should be due provision of specialist teaching, and as much care must be taken to organize the work of the senior department on its appropriate lines as would be taken to organize a separate school,

97. Our sixth main conclusion is based on a large body of evidence bearing on the subject of transfer. It is as follows:— Adequate arrangements should be made for transferring children who shew ability to profit by "Secondary" Education beyond the age of 15+ from Central to "Secondary" Schools at the age of 12 or 13. Conversely, similar arrangements should be made for transferring pupils from "Secondary" Schools to Central Schools or to Junior Technical Schools, as need may be.

We must deal here, however briefly, with this point, which we discuss further in Chapter VII, in its bearing on existing arrangements for the admission of children to post-primary Schools. A large number of our witnesses specially emphasized the importance of providing adequate arrangements for transferring pupils who showed ability to profit by Secondary education beyond the age of 15+ from " central " schools to " secondary " schools at the age of 12 or 13. There is abundant evidence to shew that some boys and girls develop late, and may at the age of 12 or 13 display distinct aptitude for the type of education given in existing "secondary" schools. We think that, where it is possible to do so, arrangements should be made for the transfer of such pupils to "secondary "schools. Several of our witnesses also referred to cases which had come within their own experience of boys and girls who, having gained free places for "secondary" schools, had later shewn themselves better adapted for a less academic type of education than that given in most of the existing "Secondary" Schools. These witnesses accordingly urged that adequate arrangements should be made for transferring such pupils from "Secondary" Schools either to "Central" Schools or to Junior Technical Schools, as the case might be. We wholly agree with this view.

(iii) QUESTIONS OF CLASSIFICATION AND NOMENCLATURE.

98. It will be seen from the preceding paragraphs of this Report that we believe that the present tendency, both among administrators and students of education, is to favour a gradual movement in the direction of regrading the stages within our educational system in such a way that the first or primary stage of education may cease about 11, and may then be followed by a second or post-primary stage, which will contain schools varying both in the type of education which they offer and in the length

of the school life of their pupils, but which will have the common characteristic that it is designed to meet the needs of adolescence, as primary education is designed to meet the needs of childhood. This movement, as one of the chief inspectors of the Board pointed out to us, is neither of recent origin, nor confined to this country. It has not been the result of official inspiration or dictation. It has sprung naturally and spontaneously from causes which have their roots deep in the life of society and in the practical working of our educational system-an increased demand among parents for post-primary education, a wide realization of the waste which arises when the powers of children are not fully cultivated, a clearer appreciation of the facts of child life and growth, a growing anxiety and ability on the part of the Local Education Authorities to meet that demand, to mitigate that waste and to adjust their organization to those facts-and it would go forward, we think, even if no special effort were made to encourage it. But it may be assisted, or it may be retarded : it may have a body of wellinformed opinion behind it, or it may struggle forward in the face of apathy, or even of opposition. Believing, as we do, that such a regrading of education is to be welcomed, we desire that its character and objects may be easily grasped and widely appreciated.

The progress of education depends, in the long run, on the existence of a belief in its importance sufficiently strong to induce men and women, individually as parents and collectively as citizens, to make sacrifices in order to promote it. Such an attitude is much more general to-day than it was even so recently as ten years ago. But an educational system is most likely to command public support, if the principles upon which it is based are widely understood; and those principles are most likely to be understood, if the terminology used to distinguish the main types and departments of education is, as far as possible simple and self-explanatory-if, in short, it is not based on historical accidents or social conventions, but corresponds to the broad phases and obvious requirements in the life of those for whom education is designed. The terminology in which an educational system is described determines, in fact, to a considerable extent, the way in which large numbers of men and women, who cannot be expected to understand the niceties of phraseology, think about education itself.

From this point of view the nomenclature at present in use for the different departments of education seems to us to leave something to be desired.

As is shewn in Appendix II, it has a long history and contains expressions which, owing to the rapid educational progress of the last 20 years, have survived into a period when the facts of educational organization and the views generally accepted as to educational policy differ widely from those of the time in which they originally became current. In particular, it suffers from embodying ideas which were natural at a time when "Elementary " and " Secondary " education were still normally regarded as distinct and separate systems, but which are inappropriate, and indeed positively misleading now that the tendency of educational development is more and more to emphasize that they must be regarded as successive phases in a continuous process through which all normal children ought to pass. We agree, in short, with the statements of the Association of Directors and Secretaries of Education quoted earlier in this Chapter, that education should be viewed as an "organic whole" and that post-primary education should include all education of the second stage, comprising what is now termed "Secondary education "; and we think that the nomenclature used to describe the different stages of education should, as far as possible, be such as to emphasize that conception. While recognising the difficulty of changing terminology commonly used, we believe it to be important nevertheless that the difficulty should be faced, and, as far as possible, overcome.

99. These considerations lead us to our seventh main conclusion. It is as follows:—It is desirable that education up to 11 +should be known by the general name of Primary Education, and education after 11 by the general name of Secondary Education, and that the schools mentioned above (§ 90) which are concerned with the secondary stage of education should be called by the following designations :—

(i) Schools of the "Secondary" type most commonly existing to-day, which at present pursue in the main a predominantly literary or scientific curriculum, to be known as Grammar Schools.

(ii) Schools of the type of the existing Selective Central Schools, which give at least a four years' course from the age of 11+, with a "realistic" or practical trend in the last two years, to be known as Modern Schools.

THE LINES OF ADVANCE

(iii) Schools of the type of the present Non-selective Central Schools, with a curriculum on the same general lines as in (ii) and with due provision for differentiation between pupils of different capacities, also to be known as Modern Schools.

(iv) Departments or Classes within Public Elementary Schools, providing post-primary education for children who do not go to any of the above-mentioned types of Schools, to be known as "Senior Classes."

The first question which will occur to anyone who considers our proposed change of terminology will be: How will it affect educational law (for example, the law of school attendance), and educational administration (for example, the division of powers between authorities for Elementary Education only and authorities for Higher Education) ? To this question we return below, in speaking of the administrative problems to which the development of post-primary education now taking place is likely to give rise. It is possible that they may in the future create a situation in which the legislative changes urged by some of our witnesses may be necessary. At this point we are concerned with recommending, not changes in the legal organization of education, but only changes in the terminology by which the different stages of education are generally described.

We think that a more general use of the terminology suggested above is desirable, irrespective of any changes which may in the future be made in the law. Within the existing legal framework ... a movement in the direction of regrading education into a first or primary stage up to 11 + and a second or post-primary stage after 11 + is, as we have stated, already taking place, and has in some areas gone a considerable way. What we desire is that terminology should be adjusted to facts, and that changes of organization should be accompanied, as they take place, by changes of nomenclature. There is nothing, for example, to prevent a Local Education Authority from dividing its elementary education into two stages, as many, indeed, have already done; nor would there be anything to prevent it, if it thought fit, from calling the first "Primary Education" or "Elementary Education. Primary Grade," and the second (whether given in the same building as the first or a separate one) " Junior Secondary Education," or "Elementary Education, Secondary Grade." No doubt, it would be more logical to make a clean cut, and to

require that all post-primary education shall be treated from a legal and administrative point of view as part of the secondary system; and should such a development, which would necessitate legislation, occur, we should be disposed to view it favourably. But if that change, the possibility of which obviously depends on numerous factors outside our purview, does not take place, it still remains equally important to secure that the educational terminology generally in use shall correspond as closely as possible to educational realities, and shall emphasize those features in the educational process which are really significant. If it does take place, its path will have been made all the easier, if the public mind has been already prepared for it by thinking of educational organization in the terms which we have suggested.

100. It will be observed that the changes of nomenclature proposed above fall into two divisions. The first (Primary and Secondary) are concerned with the generic names for the first and second stages in education. The second are concerned with the specific names of the particular institutions (other than those giving technical education) which fall within the second stage. The desirability of finding a nomenclature which will indicate with reasonable clearness the relation between the first and second stages of education, is, we think, generally recognized. The word "elementary," which at present describes the first stage, has several defects. For one thing, it now includes a good deal of education (such as, to give only one instance, that of the Central School) which from an educational point of view belongs to the second stage, and thus obscures the very fact which it is important to emphasize, namely, that the natural transition in the educational life of most children occurs about 11 + . For another thing, it does not by itself carry the suggestion which ought to be conveyed, that there is a first or preparatory stage of education through which all children pass before going on to the second stage. In the third place, it was in origin a social rather than an educational category, describing not a particular stage of education, but the education of a particular class of children, and though that implication has largely vanished in practice with the great improvement in the quality of the schools, faint suggestions of the original conception still sometimes cling to the word and confuse the public mind.

The word "secondary" is in many ways an admirable one. It suggests clearly and precisely the essential fact that the concern of the secondary school is with the second stage in education. But unfortunately, its broad generic sense has tended to be over-shadowed by a narrower specific sense in which it is used to describe, not the second stage in education, but a particular type of education within that stage. The final result is somewhat bewildering. On the one hand, a good deal of secondary education, in the broad sense of the term, is being given under the name of elementary education. On the other hand some part, at least, of the education in "secondary" schools, as the word is used to-day, is being given to children who are below the age at which secondary education is usually thought to begin.

The reason of this situation is to be found, of course, in the past history of English education. In origin secondary and elementary education were not two stages of education, but two separate systems of education, which, to quote the words of the Board, "have grown up independently of each other." In the past twenty years profound changes have taken place, which have gone far to break down the division between them. Secondary school places have increased; free places have thrown a bridge between them and the elementary schools : new forms of postprimary education have developed within the elementary school system itself. But the terminology was crystallized before these changes took place or could be foreseen, and it has survived into conditions which are profoundly different from those for which it was designed, and which are becoming more different every year. Before 1902 it may have corresponded roughly to the ... facts of the educational system, and to the ideas regarding educational policy which were then generally accepted. To-day it corresponds to neither. One witness after another has emphasized that the first stage of education should end, and, the second begin about the age of 11+; one witness after another has told us of \cdot the new developments in the sphere of post-primary education which are being undertaken by Local Education Authorities.

The problem is to find a simple system of terminology, which avoids making more changes than are necessary, and which at the same time makes clear the essential principles to be observed in organizing education. It seems to us that the words "Primary" and "Secondary" satisfy these conditions better than any others. They carry their meaning on their face and set the relations between the first and second stages of education in the right

perspective. " Primary " is a word which, after being almost given up, is coming back into use, because it is felt to convey the right suggestion. It is increasingly used by educationalists. It is also employed, we are informed, by some Local Educational Authorities. The word "Secondary" is the logical correlative of "Primary," and it obviously describes the second stage in education.¹ It is open to the objection that it is used by educationalists (though not, perhaps, by the general public) as a term of art describing a particular kind of post-primary education, not post-primary education in general. We do not think, however, that that objection is so serious as to be fatal to our proposal. Public opinion is gradually becoming conscious, it seems to us, that there are other kinds of secondary education besides those given in schools which are " secondary " in the technical sense of the word, and we believe that the larger significance which we wish to claim for the word will be accepted without any very great difficulty.

101. It is necessary, in addition, to distinguish by specific names the different types of school giving secondary education. Of the names which we have suggested-Grammar School,* Modern School and Senior Classes-the first is intended to be applied to schools of the existing "secondary" type, which pursue in the main a predominantly literary or scientific curriculum, the second to schools analogous to the existing selective and nonselective central schools, the third to departments or classes within Public Elementary Schools designed for pupils who do not pass to either of the above types of schools. The extension of the name Grammar School to cover not only the old foundations to which it is usually applied, but the larger number of County and Municipal Secondary schools which have been founded since 1902, involves a new departure. But the name seems to us to have several advantages. It suggests a predominantly academic curriculum, in which languages and literature along with mathematics and natural science play a considerable part. It links the newer developments of secondary education to an ancient and dignified tradition of culture. Its associations are valued by the public; and we are informed that in some cases secondary schools established quite recently by Local Education Authorities have been called Grammar Schools for that reason.

¹ See the notes on primary and secondary education in Appendix II., pages 268-268, and 273-274.

^{*} See pages 268-269.

THE LINES OF ADVANCE

For the second and third type of school a name is needed which indicates that their curriculum, as compared with that of the Grammar School, will be more realistic, in the sense of being more closely related to practical interests. The German name for such schools-Realschulen-does not seem to have any complete analogue in English. But we think that the word "Modern," expresses adequately what we mean, and that it will convey to the public the right suggestion-that the education which these schools offer, without being primarily vocational, gives a prominent place to studies whose bearing on practical life is obvious and immediate. The term "Senior Classes" proposed for the fourth type of school is not free from objection. We suggest it because it gives a general and simple description of arrangements, which, while varying largely in their form, are marked by the common characteristic that they are designed for the older pupils who have not been transferred to any of the three types of schools referred to above.

100

CHAPTER IV.

CURRICULA FOR MODERN SCHOOLS AND SENIOR CLASSES.

102. In the previous Chapter we gave some general indications of the lines upon which curricula in Post-Primary Schools should be framed, and in a later Chapter on Bias we discuss the special work which might be undertaken in the latter years of the school course. Here we are concerned more specifically with the curriculum as a whole, and we offer some general suggestions based on the evidence we have received and upon the actual practice in existing Post-Primary Schools in various areas.

There appear to be two opposing schools of modern educational thought, with regard to the aims to be followed in the training of older pupils. One attaches primary importance to the individual pupils and their interests; the other emphasises the claims of society as a whole, and seeks to equip the pupils for service as workmen and citizens in its organisation. When either tendency is carried too far the result is unsatisfactory. If, on the one hand, the education of older pupils be kept too general in the supposed interests of individual development, the pupil is apt to find himself ill-equipped on leaving school to cope with the demands of modern life. If, on the other hand, undue stress be laid in the school course on the needs of later life, and the training of the pupil be made too specific, the individual man or woman may be sacrificed to the workman or citizen. A well-balanced educational system must combine these two ideals in the single conception of social individuality. The general aim should therefore be to offer the fullest possible scope to individuality, while keeping steadily in view the claims and needs of the society in which every individual citizen must live. There has, in our view, been too great a tendency in some quarters to regard the school as an isolated unit, and education as something apart from the main stream of life. The complaint made by many of our witnesses that the curriculum for older children has too frequently been divorced from real life, and that many pupils, in consequence, lose interest and merely "mark time" in their last years at school is, so far as it is well founded, an inevitable result of the tendency to regard the education of older children as an end in itself. The system of education in vogue in any highly civilised community at any given time is only one aspect of the national life, and is conditioned and influenced at every point by contemporary social and economic factors. Further, the school is only one of many forces that go to mould the intellectual, moral and physical character. The home, the general social environment, the churches, the State and the voluntary organisations, all have a share in the process.

103. The provision of curricula for the older children in Elementary Schools, where even in a single school may be found a wide range of types of mind and of conditions of environment. is not a simple matter; and uniform schemes of instruction are out of the question if the best that is in the children is to be brought out. We have had much evidence indicating that schools have planned special curricula with a large measure of success, and that this has not only given the children greater powers of adaptability in the occupations which they afterwards take up, but has also raised the standard of their intellectual attainments. The suggestions which we make are accordingly for the further development of this tendency rather than for the breaking of new ground. Indeed in our educational system, as in our other institutions, evolution rather than revolution is in the long run the swiftest and most effective method of progress. Nor should these suggestions be regarded as being of universal application, since both the extension of new methods in education and the varieties of local social conditions and environment render it necessary to frame curricula with strict reference to the conditions of each individual Modern School or group of Senior Classes.

104. For our purpose, however, there are three main types of post-primary work :---

(i) that carried on in selective Modern Schools;

(ii) that carried on in non-selective Modern Schools;

(iii) that carried on in the specially organised upper sections of elementary schools.

In all these three types children over the age of 11 should be classified as a unit distinct in the matter of instruction from those under that age. This will, of course, take place automatically when the older children are taught in a separate building, but even when they are within the same building as the younger pupils they should be treated as a separate unit, and separate provision should be made for them. The differentiation between the work of the older pupils and that of the children under the age of 11 will shew itself in several ways. There will be a greater amount of specialisation on the part of the teachers ; the lesson periods will be of longer duration ; note-books will be increasingly used ; there will be less formal instruction, and more individual study and written work. In practical instruction this differentiation is already apparent. Incidentally, we think that, wherever possible, the rooms for practical work should form an integral part of the school buildings, in view of the importance of securing that the children's education in its various aspects is properly considered as a whole, and that the work itself should be under the control of the head teacher.¹

105. The extent to which specialisation is carried will largely depend upon the number, qualifications and tastes of the staff. It is clear, for example, that a much wider range of special interests will be found among the teachers in Modern Schools than among those of the senior classes of an elementary school, which necessarily form a smaller unit. While it is of vital importance to maintain the close personal contact with pupils which can be gained by teachers in schools where little specialisation is practised, and while much may be said against excessive specialisation, it requires a teacher of exceptional personality and of unusual sympathy with children to arouse the same enthusiasm and interest in a subject as can be aroused by the teacher who has made a special study of it. On the other hand, if specialisation is introduced, it is essential that children should be aided to regard the work which they undertake as a unity, and to avoid the illusion that the world of knowledge consists of a series of separate and unrelated subjects. It should be added that the coherence of the various branches of the curriculum, and the continuity of the work from one promotion period to another, may be secured not only by the appointment of specialist teachers, but also by conferences of the whole staff (such as are already held in many schools from time to time). at which the schemes of work in the various subjects can be thoroughly discussed. Such conferences give each teacher an opportunity of understanding the significance of the whole course

¹ We recognise that at the present time domestic and handwork centres are often separate from the school buildings, serve several schools, and are under a separate head. This cannot be altered at once; but we think it desirable that such centres should, wherever possible, be attached to a school, which should be the Modern School of the area in question. cf. p. 231.

of instruction to which he is contributing his share, and also offer ample opportunities for criticisms leading to improvements and readjustments. But it must be remembered that, with the extension of the bounds of knowledge in each of the several subjects, the attitude of mind acquired by the pupil towards it, and his ability to search for further information from satisfactory sources, become at least as important as the information he actually obtains; and for this purpose a teacher with special knowledge is clearly the best guide.

106. We believe that three requirements should be kept steadily in mind by all who are responsible for planning curricula for Modern Schools and Senior Classes. We would state them in the following terms :---

(1) The curriculum should be planned as a whole in order to avoid overcrowding;

(2) it should be planned with a view to arousing interest and at the same time ensuring a proper degree of accuracy;

(3) it should be planned with a due regard to local conditions, and to the desirability of stimulating the pupils' capacities through a liberal provision of opportunities for practical work.

107. For many years teachers have been aware of the difficulties created by the large number of separate subjects in the framing of a school time-table; and the tendency now, in many schools, is to regard the curriculum as a whole, and to make fewer sub-divisions. This is a principle which we would recommend to the consideration of all teachers. Its most important effect is to secure due proportion in the time allotted to, and in the treatment of, the different subjects. Beyond this, however, the observance of such a principle has many other advantages. There are subjects which share together an area. of common ground. In mathematics and science, for example, calculation is often a common feature. If the teachers concerned adopt the same methods in the use of mathematical processes, much time is saved, and confusion in the mind of the pupil is avoided. In history and geography, again, a more extended treatment, going beyond brief oral lessons, encourages work in written English. Similarly in science and geography some of the work is common, and covers the same ground. The recognition of this fact means a definite economy of time. For this

reason, and in order to ensure that, wherever possible, the teaching of one subject shall throw light on another, some head teachers supply every member of the staff with copies of all the syllabuses planned by the teachers responsible in the different subjects and in use throughout the school.

108. This process of unifying the curriculum extends also to the subjects themselves. Thus the terms English literature (prose and verse), composition and grammar are replaced in the school time-table simply by English ; mathematics, too, is used to cover arithmetic, mensuration, algebra, geometry and, to some extent, geometrical drawing. Although there is a danger that on this plan a disproportionate amount of time may be given by individual teachers to one aspect or another, it should not be difficult to guard against this ; and indeed in mathematics the various branches are already being taught together as a single subject. On the other hand, the gains of such an arrangement are many. It brings the various sides of a subject into proper relationship with one another, and in this way encourages understanding and intelligent appreciation. It enables the teacher, when dealing with one branch, to make considerable excursions into others, whenever such excursions are necessary to a clear understanding of the matter under consideration. It also enables him to vary the length of time devoted to any particular phase of a subject in order to meet the changing needs both of his class as a whole and of individual pupils. The total effect of all these arrangements is that much time is gained, overlapping is avoided, the work runs more easily, and pressure from the overcrowding of the curriculum is relieved.

109. The second requirement which we have suggested should be kept in mind in planning curricula concerns more especially the individual subjects. The best results cannot be attained if the content of the curriculum is unsuitable, or badly planned, or if its presentation is uninspiring. The argument which we have urged in favour of viewing the curriculum as a whole applies in a similar way to the planning of the syllabus of work in each subject. We regard it as essential that each syllabus should be constructed as a whole before the distribution of its parts over the successive years of school life is taken in hand. The presentation of each of the successive parts should be constantly made to serve the general unfolding of the subject. In mathematics it is scarcely possible to do otherwise, because

(26647)

each stage calls into play the work of previous stages. But in subjects such as history and geography attention to this principle is not readily secured. Definite provision should therefore be made in the compilation of the syllabus. To this end it is desirable to consider what kind of training may be given and what permanent ideas may be fostered by each subject, with due regard to difference of tastes among the children concerned, the general conditions affecting their outlook, and the possibility of some continuation of study in the years after leaving school. The content of the syllabus should be such as will secure this training and the formation of these ideas. The number of the ideas which it is essential to grasp in the study of any subject is not large, and the matter of cardinal importance is that the teacher should help his pupils to grasp them. The danger which confronts a teacher (and it is a danger which may even increase, in proportion to his zeal and industry) is that he should "condescend upon particulars " to an extent which bewilders the mind that he seeks to enlighten.

110. Some plan of this kind ensures that the work set out shall be (i) in accordance with the pupils' capacities, (ii) reasonable in amount, (iii) firm and clear in texture, and (iv) such as will secure something more than a passing interest. We attach much importance to this last point. An interest which stimulates the pupil's curiosity, and urges him to put forth serious efforts to acquire further knowledge, obviously leads to a steady advance in the standard of attainment and an increasing degree of accuracy and thoroughness. Once the pupil's interest is genuinely aroused, nothing but the best, according to his insight and his capacities, will satisfy his aspirations. There are few teachers who have not seen, in one connection or another, the remarkable excellence of the work which is done by pupils when the subject has gripped their imagination and aroused their interest and enthusiasm. But we would not be understood to suggest the possibility of interesting every pupil in every subject in all its aspects, or to imply that there is no drudgery to be undertaken. On the contrary we would urge the recognition of differing interests. Pupils should be encouraged to follow, within reasonable limits, any special bent which they may possess. Thus in geography one pupil may be specially interested in map work and the relation between configuration and lines of communication. another in travel and exploration, and another in meteorological

observations; in history, heraldry captivates some, methods of warfare others, and changes in dress or in manners and customs others; in art one is inclined to architectural drawing, another to decorative design, and a third to sketching scenes from nature and natural objects. These excursions into different phases of a subject, so far from interfering with any essential grasp of the whole, add a stimulus and an enlightenment which bring in their train a fuller comprehension and a higher standard of attainment, together with a degree of accuracy, care and thoroughness which is to be welcomed. Moreover, the pooling of such efforts opens up endless possibilities, and, in addition to its great moral value, leads to the production of work of the highest quality.

111. The need of bringing the curriculum into relation with local conditions is being more and more felt. This is partly because, with a general lengthening of the period of schooling, it is now possible to give the instruction of older pupils a useful trend towards the occupations which await them ; partly-and more fundamentally-because the nature of the educational process is better and more widely understood. Sound teaching, it is recognised, must be based upon the pupil's interests; and these, though they may in time reach out to the end of the world, begin at home in the attraction and challenge of things around him. Where this truth is neglected, a child's study of science and mathematics, of geography and history, and even of literature, may often be little better than a sterile commerce with abstractions; but where it is intelligently and skilfully applied, it may affect deeply and permanently the growth of his mind and character. Accordingly, we welcome the increasing tendency in schools of all kinds to develop differences in curriculum corresponding to the special character of the natural and social environment ; and in this connexion we desire particularly to call attention to the valuable memoranda which the Board has recently published with the purpose of helping country teachers to work out a type of education founded upon the occupations and natural setting of rural life.

At the same time we must stress the point that though a child's education should be based largely upon what he sees in his parish it ought not to be parochial. It may, indeed, be maintained with much truth that he is sent to school in order that his knowledge and sympathies may not be confined within local bounds, but may be widened and enriched by intercourse

(26647)

with a larger world. While, then, a teacher may rightly use his pupils' studies of their surroundings to enlighten their natural affection for familiar things and to fit them to fill usefully a place in the local life, he should not stop here. These studies should be made gateways by which the pupil's understanding may pass to some comprehension of the world's variety, and of movements and achievements of the human spirit that are universal in their significance.

112. We regard it as most important that the new Modern Schools and Senior Classes should not become inferior "secondary" schools or offer merely a vague continuation of primary education. We have already explained how the work of the older boys and girls in the ordinary school subjects will normally differ from the work of children at the primary stage, and have urged (what we now desire to reinforce) that the natural capacities and interests of the pupils, their social and natural environment, and the external incentives to study, should all exercise a definite influence upon the curriculum.

113. There is no question that among the pupils of the new post-primary schools the desire and the ability to do and to make. to learn from concrete things and situations, will be more widely diffused than the desire and the ability to acquire book-knowledge and to master generalisations and abstract ideas. Accordingly " practical work " in its several forms must fill a large place in the curriculum. But this does not mean that the pupils' intellectual training is to be regarded as of secondary importance. It has been amply shown that for many children the attainment of skill in some form of practical work in science, handwork or the domestic arts may be a stimulus to higher intellectual effort. In other words, the child's predilections being towards things practical, his intellectual activities are most strongly stimulated when they are directed to practical ends. Moreover, apart from the question of stimulus, boys and girls with the type of interests we have in view can grasp concepts through practical work much more easily than by devoting long periods to the abstract study of ideas. The abundant practical work which we wish to see provided in the new schools is thus to be regarded partly as a means of intellectual training specially suitable to the interests and capacities of the majority of the pupils. We must, however, add that the attainment of a reasonable standard of practical skill is in itself an object of importance in a Modern School,

particularly if it leads to mastery of one or more of the simple arts and crafts whose educational value we emphasise elsewhere.¹

114. We desire next to develop a little further the thesis that the general character of the teaching should take account of the pupils' natural and social environment. It is sometimes assumed that if every school could be equipped with the same supply of books and apparatus the same standard of attainment might be reached. But this does not necessarily follow. The child's power of acquiring knowledge depends largely upon his experiences. The more imited these are in number and variety, the more difficult is it to acquire a real knowledge from books. The experiences of many children are largely confined to the locality in which they live, and their studies should start from these conditions and gradually extend them. In such an arrangement the curriculum will not consist merely of a simplified edition of ordinary scholastic studies, but will be different in content and treatment, inasmuch as it will be more closely connected with the pupil's environment. If this is done, the child goes forward with a clearer mind and in the end makes quicker progress than he would by pursuing a course of more formal studies.

It should be possible in the case of certain staple industries, such as agriculture, mining, the textile trades and transport, to give the children some knowledge of these industries, and of their significance in the national life. In addition, of course, every effort should be made to enlarge the range of the children's experiences beyond the limits of the area in which they live.

115. We come now to external incentives. In the last years of a pupil's school life, especially when he is nearing the leaving age, both his own attitude towards school work and that of his parents are strongly influenced by consideration of his future occupation. To disregard this influence is to lose one of the strongest motives for the continuance of the pupil's education. If the curriculum can be so shaped as to give pupil and parent some assurance that valuable results will be obtained, then the co-operation of both is assured. For instance, if a boy is aware that skill in drawing or knowledge of chemistry or of mathematics will be needed in his chosen occupation, he will generally reach through technical drawing and design, through applied chemistry or practical mathematics, a standard higher than he would attain, if the subjects were taught in a more academic way. The same

¹ See page 231.

considerations apply to work bearing on commerce, where a higher standard in written English, in the foreign language taken, in arithmetical calculations, and, generally, in ability to make use of appropriate works of reference, may be attained by similar methods. Nor does the specialisation of a pupil's studies, in these directions necessarily mean a sacrifice of his general education. It is a mistake to suppose that any form of work inclining towards industry is necessarily opposed to true educational development. So long as it is not too specialised and is carried on in conjunction with an adequate measure of cultural studies it often tends to raise rather than lower the standard of what we commonly call general education. Such work in a school has the additional advantage that it enables the teachers to bring out the relation between general studies and occupations—between life and livelihood.

116. Finally, we would urge the desirability of generating from the school studies interests which will continue through after-life and will enlarge the opportunities for a fuller enjoyment of leisure. Among these we attach much importance to interest in those arts and crafts whose practice demands only a relatively easy technique, but which provide boys and girls with a valuable means of self-expression and cultivate in them an appreciation of simple beauty and sound workmanship in house-fittings, dress, and other things in common use. Several of our witnesses stated that one of the weak points in courses for older children at the present time was that the pupils talked about things instead of doing them, and assimilated information without acquiring interests; it was said that this criticism applied especially to some' of the science teaching. It was not sufficient, they argued, to read a number of books, unless the habit of reading for pleasure and information was formed; it was not enough to teach scientific principles unless a scientific and critical interest in the world around was created. We think that if the teaching of elementary science with practical illustrations drawn from the pupil's environment could be closely linked up with the courses in handwork and drawing, much might be done to create and foster interests that would continue through life. English literature also is clearly a subject of great importance from this point of view, and much indeed will have been effected if the pupils can be trained to appreciate good general literature, or, if they are interested in such subjects as gardening or engineering,

SCHOOLS AND SENIOR CLASSES

to read publications bearing on them. Similar considerations apply to history, geography, music, physical exercises and games, which, if taken on lines similar to those which we indicate in the following chapters, may arouse permanent interests in those pupils who have a natural aptitude and taste for any of these branches of the curriculum. We believe that teachers will be glad to do what they can to secure the further development of such interests by making known the means of continued cultural and vocational education provided in the locality for those who have left school, and by urging their pupils to make use of them.

Note.—On the various subjects of the curriculum see the suggestions contained in pages 188–247. Particular attention may perhaps be directed to the suggestions on the teaching of science (pp. 220–226), and to the Section on the various forms of Practical Instruction (pp. 230–238). But the whole of that part of our Report is an essential complement to the general considerations contained in this and the next Chapter; and it contains our detailed views on the question, remitted to us in the terms of reference, of "the curriculum of courses of study suitable for children who will remain in full-time attendance at schools other than Secondary Schools up to the age of 15+."

CHAPTER V.

THE PLACE OF A "BIAS" IN THE CURRICULUM OF MODERN SCHOOLS AND SENIOR CLASSES.

117. All the Central Schools in the London area from their inception in 1911 have had a definite bias, either commercial or industrial, and in some cases both. The general education provided for all pupils comprises English, mathematics, history, geography, art, practical science, music and physical exercises, together with handwork for boys, and needlework and domestic subjects for girls. To these subjects is added in all schools with a commercial bias, and in some schools with an industrial bias, a modern language, usually French, including dictation, composition, conversation, and a study of standard French authors. After two years a bias is introduced. In schools with a commercial bias shorthand and bookeeping are introduced in the third year, and typewriting and office routine in the fourth. To make room for these additional subjects some of those taught in the earlier years are discontinued. Boys usually drop handwork or science, or both; girls drop music and cookery and laundry practice. In boys' Central Schools with an industrial bias, special attention is devoted to practical mathematics, practical science, and handwork. Stress is also laid on technical drawing, which includes designing, scale drawing, tracing and the making of blue prints. In girls' Central Schools with an industrial bias, more time is given in the last years of the course to needlework, art, science and domestic subjects. A certain degree of bias is also given to the instruction in the ordinary subjects of the curriculum. In geography for example, special attention is devoted to the study of railways and trade routes, foreign markets, products (raw and manufactured), and imports and exports. In the same way, arithmetic may be studied from the commercial or industrial aspect-commercial arithmetic being largely concerned with money problems, such as interest, discount, annuities and insurance, and industrial arithmetic dealing with mensuration, estimates of cost and quantities.

OF MODERN SCHOOLS AND SENIOR CLASSES

118. Many Authorities have followed the example of London and have organised Central Schools with a commercial or an industrial bias, or both. In recent years the tendency in several Central Schools of this type has been to give less weight to the bias and to devote particular attention, at any rate in boys' Schools, to mathematics, science, art and handwork.

Central Schools for girls, which often follow courses of study very little different from those of "Secondary" Schools, shew less trend than is generally to be found in Central Schools for boys towards the special requirements of local occupations.

In several urban areas, however, a definite attempt is being made to provide domestic courses for girls in Central Schools in addition to commercial and industrial courses. These domestic courses give special prominence in the last year or two of school life to housecraft in its various branches, to bookkeeping based on household accounts, to needlework, to sick nursing, and to elementary hygiene based on a science syllabus which comprises the necessary foundation of elementary chemistry and biology. Such domestic courses are intended for girls who wish either to pursue domestic occupations in the home, or ultimately to become managers or housekeepers in hotels, private houses and institutions of various kinds. Courses with a commercial bias for girls are generally designed to fit them for clerical posts or for situations as secretaries, and usually include some instruction in the elements of bookkeeping, shorthand and typewriting. Courses with an industrial bias for girls generally comprise instruction in dressmaking, millinery and the like.

The degree of the bias which is given to the course in boys' Central Schools varies greatly in different areas. In a few districts containing large engineering works, the bent in the direction of engineering is very noticeable, and except for the fact that Central Schools in such districts do not employ trade instructors, their curricula in the last years of the course often bear a strong resemblance to those of some Junior Technical Schools. In the Central Schools of a few towns on the sea-board, such as Scarborough and Lowestoft, specialised instruction is provided for boys going to sea. Similarly some of the Central Schools and classes giving advanced instruction at Devonport, Plymouth and Portsmouth frame their curricula to suit examinations which determine the admission of boys to the Royal Dockyards. Another type of Central School, which is not uncommon in the north of England, provides courses which serve as the first portion of a curriculum intended to be completed in Evening Schools.

The practical difficulties of providing a double bias (e.g., commercial and industrial) in a single School are considerable, and we were informed that in several instances the double bias had been largely abandoned, especially in mixed Central Schools. Some mixed Central Schools, however, still provide four separate courses, two in commercial subjects, and two with an industrial or technical bias, for boys and girls respectively. The "technical "course for girls is predominently domestic in character. One of the Central (Intermediate) Schools in a large town in the northern Midlands provides three courses, a general course, a practical course, and a third course, in the last year, intended mainly to enable young persons who will be entering factories to appreciate art and music, and to make good use of their leisure time.

119. On the other hand we were informed that there is a considerable group of Central Schools and Classes which provide a general course without any noticeable bias, offering many points of resemblance to the syllabus of an ordinary "Secondary" School. Even in Central Schools professing to have a definite bent, the bias is not as a rule introduced till the third or in some cases even the fourth year of the course. Frequently, the bias merely consists in a certain grouping of subjects, or is indicated by the greater emphasis laid on handwork for boys and domestic subjects for girls, and the introduction of shorthand and typewriting for girls and for a number of boys. In many Central Schools which do not profess to have any definite bent, special emphasis is nevertheless laid upon what are regarded as "practical" subjects, particularly mathematics, physics and mechanics, and technical drawing. We were told that a number of Central Schools refrain on educational grounds from providing a " commercial " bias in spite of strong pressure from parents. In other cases we were informed that it would not be possible without special equipment to give any specific bias towards local industries. On the whole, however, there was general agreement among our witnesses that it was desirable to give a practical trend to the curriculum of Modern Schools and Senior Classes, and that such a trend should be largely determined by the character of the local industries and occupations,

OF MODERN SCHOOLS AND SENIOR CLASSES

120. We have collected a considerable body of evidence from employers on the subject of vocational bias. Their replies to the question "What kind of qualification is most desirable in your work, e.g., scientific, mathematical, mechanical, artistic, literary or linguistic?" may be summarised as follows:---

The engineering firms thought that it was desirable that trade apprentices should have had a thorough grounding in elementary mathematics and science together with a literary training sufficient to enable them to express themselves properly. Intelligence was more valuable than previous experience. Habits of careful observation, and a readiness to think things out by a process of scientific reasoning, were specially important.

The textile manufacturers stated that for the various technical processes mechanical qualifications were desirable. Accuracy in carrying out simple instructions dealing with manipulative or clerical work was specially important. On the clerical side, accuracy in keeping accounts, good handwriting, general neatness, and a sound knowledge of English grammar and composition, were desirable; and in the higher branches of correspondence a knowledge of one or more foreign languages was useful. For buyers and for commercial travellers quick observation, a power of reasoning, and a high grade of general intelligence were necessary.

The chemical manufacturers and soap-makers thought that pupils who remained at school the longest stood the best chance of becoming efficient workers later, though at first such pupils were not so attentive to works rules and discipline as those who entered the factory at 14 years of age.

The cocoa manufacturers stated that the most important qualifications for their purpose were receptivity of mind, keenness of observation, application to work, adaptability and general intelligence. Acquired knowledge was subordinate in importance to these qualifications. The majority of the workers needed no special qualification, but it was essential that they should have had hand and eye training. A high degree of manual dexterity was very useful, and for some of the girl employees the development of the artistic sense was important.

A firm of boot and shoe manufacturers stated that, though no special qualification was required for their work, they had observed "a certain lack of initiative, resourcefulness and ambition in children entering the works straight from school owing, we believe, to the character of the Elementary School education." They thought that this was largely due to the shortness of the school course.

Several great distributing firms stated that a good general education was the best foundation on which to build, though after 14 years of age some training in commercial methods might be of advantage. A thorough knowledge of elementary mathematics was especially valuable.

The farmers and agriculturalists thought that, on the whole, there should be more practical work and less book work in rural schools. Some were of opinion that it would be desirable to give the curriculum of Central Schools in rural areas a definite bias towards agriculture in the last year or two of the Course. Several farmers drew attention to the importance of teaching the older pupils in rural schools to take an interest in country life. It was suggested that much could be done to this end by means of school gardens and by the inclusion in the science curriculum of some account of farm animals and the life history of certain insects.¹ Attention was also drawn by several farmers to the great importance of a knowledge of elementary mechanics in modern agriculture. They thought it was desirable that boys in country districts should learn something at school about the machinery and plant used in modern farming.

In connection with their suggestions in the matter of bias in post-primary schools, several employers drew particular attention to the need for closer co-operation between head teachers and employers of labour. For example, the educational superintendent of a great engineering firm wrote —

"At present there seems to be very little co-ordination between the headmasters of schools and employers of labour. I am continually finding cases of lads who applied to my firm in order to take up apprenticeship or pupilage, whose previous education renders it impossible for us to make use of their services. On questioning these lads, I often find that they have no idea whatever as to what was the best course to pursue at school in view of the fact that they wished to become engineers."

Several employers expressed very similar views.

¹In justice to the schools it should be pointed out that much is being done on these lines.

A number of head teachers have established relations with local employers, and have attained useful results thereby. We think, however, that in general there has not been sufficient contact between teachers and employers, and that it would in future be desirable for head teachers to obtain the views of local employers and employees before giving any trend or bias, particularly of an industrial character, to the curriculum of modern Schools and Senior Classes in the last two years of the course.

121. We consulted a number of head teachers of Central Schools on the subject of bias. Their views may be summarised as follows :---

There was general agreement that a large proportion of the pupils are more attracted by the practical work than by the literary subjects.¹ For example, the head teacher of a large Central School in a Midland town wrote—

"Practical work, such as science, manual instruction, and housecraft, makes an appeal at all ages both to the boys and girls in my school. Of the general school subjects, literary subjects appeal particularly to the girls, and mathematics and science to the boys."

The head teacher of a boys' Central School in a seaport town wrote :---

"The favourite subjects are mathematics and science, manual instruction and drawing."

Most teachers were of opinion that it was undesirable to introduce any marked bias until the third or fourth year of the course. It was generally observed that children during their last years at school took the greatest interest in those subjects which were most likely to be of practical use to them on leaving school. In this connection, however, a number of head teachers informed us that there were no industries or types of occupation in their districts which called for special consideration in the school curriculum. Several teachers had found that the three groups of subjects which appealed most to pupils were—

(i) the industrial group for boys, in which special attention was paid to science and mathematics, woodwork and metalwork;

¹ It must be remembered that a large number of the children with literary tastes have passed on into Secondary Schools, as holders of iros places.
(ii) the commercial group for boys and girls, which included shorthand, bookkeeping and typewriting;

(iii) the domestic group for girls, which included cookery, laundrywork, needlework, sick nursing, elementary chemistry and hygiene.

Most teachers had found that, when a choice of subjects was provided in the last years of the course, it created additional interest in the work, and offered an inducement to pupils to remain longer at school.

122. As we have already indicated in the preceding Chapter, we regard it as most important that in Modern Schools and Senior Classes the teaching in the several subjects of the curriculum should have throughout the course some relation to local environment, and should be brought into close association with the every-day surroundings of the pupils. This will secure their interest and shew them the bearing of the teaching upon the facts of their every-day life. We should mention, in this connection, that we collected from Local Education Authorities and individual teachers in Elementary Schools a large body of evidence dealing with the statement so frequently made that many of the older pupils were simply "marking time." It appears from the replies that, where it was true, that the older pupils in Elementary Schools had lost interest in their work during the last years at school, this result had often been due not only to inadequate staffing and the absence of proper equipment, but also to the fact that the instruction given appeared to the pupils to have little or no bearing on the problems of their daily environment. We were told that in a number of cases the defect had been remedied. by a modification of the curriculum on the lines we have suggested above, and by maintaining the necessary touch with the industrial and commercial conditions of the district. The teachers have obtained this result by devising a realistic curriculum which stimulates the interests of the pupils without curtailing their general education. Thus in boys' schools a prominent position in the curriculum is assigned to studies such as mathematics, science, and drawing, which are treated on practical lines. In this way, many head teachers are in a position to help their pupils on leaving school to obtain suitable employment. Schools conducted on these lines, even though they may not give a definite industrial or commercial bias to the curriculum in the last years of the course, may nevertheless with justice be described as having established a liaison with the local industries.

123. Many witnesses called attention to the necessity for a careful study of the general economic conditions of any given district, and of the occupations into which most of the pupils of local schools passed on leaving school, before any steps were taken to give a definite bias to the curriculum in the last years of the course. Several head teachers of existing Central Schools and classes in rural areas pointed out that it was a common mistake to suppose that all or even a majority of the children in an agricultural district were likely to be engaged in agriculture or its ancillary occupations. In point of fact, in many rural areas, only a small percentage of the pupils in rural schools find employment on the land. Again, the head teacher of a Central School for boys in a large mining town in Yorkshire writes :--"Though this is regarded as a mining town, the percentage of boys leaving the Central School and taking up employment in mines is only on the average about five per cent. Most of my pupils find employment as shop assistants, clerks and apprentices in Engineering Works," Other teachers and administrators remarked that many local industries throughout the country were at present suffering from depression and were, in consequence, unable to assimilate more than a limited number of new workers ; furthermore the mobility of labour in modern economic organisation was a fact which should always be borne in mind. We think, therefore, that Local Authorities and head teachers of Modern Schools would be well advised to exercise some caution before giving a very definite bias to the curriculum in the later years of the course. On the other hand, we are profoundly convinced of the truth of the view, which we have already stated in several passages of this Report, that throughout the whole course in Modern Schools and Senior Classes the treatment of the various subjects of the curriculum should respond sympathetically to the local environment.¹ The children should be encouraged to take an interest in local industries and occupations, and illustrations for the teaching of the several branches of the curriculum should be drawn where possible from local examples.

124. We regard it as important that, when a bias towards a group of occupations is introduced in the later years of the course, it should not be allowed to dominate the curriculum or to prejudice the general education of the pupils. As we have already indicated, we are strongly of opinion that any such bias in Modern Schools and Senior Classes should be of a general

¹ §§ 106, 111, 114.

character, unlike the specific vocational teaching given in many Junior Technical Schools and Junior Art Departments. Most of the employers who gave evidence were opposed to any highly specialised curriculum for pupils up to the age of 15, and several stated that they preferred that after the age of 14+ pupils should continue their general education with a slight bias only in the direction of industry or commerce. One firm of chemical manufacturers were of opinion that the education given, even up to 15+, should not prepare the pupils for any special trade, though it might be possible to provide them with a better conception of the objects and conditions of business houses and industrial concerns. A firm of retail distributors stated that in their view specialised education might commit young people, before they were capable of making a choice, to a special calling for which they might subsequently prove quite unsuitable. With these views we concur, and we think that in no circumstances should the general education of pupils in Modern Schools and Senior Classes up to the age of 15+ be sacrificed to a bias in any direction, however well adapted to local conditions such a bias may in itself be. In cases where a definite bias is introduced in the later years of the course, care should be taken to make adequate provision for the needs of such pupils as may gain greater advantage by following a more general course of study.

125. It will be convenient at this stage to define our attitude towards the important question of vocational education in its bearing on any bias that may be given to the curricula of Modern Schools and Senior Classes in the last years of the course. We use the expression "vocational education" as meaning a course of teaching and training which gives to the pupil's studies a definite direction towards the requirements of some particular calling or some group of callings. Such a form of education for older pupils is not only legitimate and reasonable, in view of the conditions of modern life, but for many pupils may also be the best for personal development, since it not infrequently releases the finer energies of mind, which a more general education would leave inert. It must, however, be remarked that the educational value of a vocational course depends to a great extent upon the nature of the vocation. Many occupations, such as the building trades, dressmaking and millinery, cabinet and furniture making and engineering, demand special knowledge and skill. Full-time vocational education for such occupations

is already provided for pupils between the ages of 12 or 13+ and 15+ in many of the existing Junior Technical Schools.¹ The kind of bias which we contemplate for Modern Schools and Senior Classes is of a more general kind, and cannot strictly be described as vocational education.

126. We propose to use the term "practical bias" to denote the emphasis laid in the school curriculum on practical aspects of certain subjects without involving work in the technicalities of any one specific trade or occupation. The aim which we suggest is that, while no pupil in a Modern School or Senior Class with a taste for industry, commerce or agriculture should be educated with a view to any one specific calling, he should none the less receive such a training as will make it easy for him to adapt himself on leaving school to any occupation in the group of occupations to which the bias is related. We recommend however, that such a bias should be introduced gradually, as the result of experiments over a term of years.

Our conclusion on the subject of bias is accordingly as follows:-Modern Schools and Senior Classes should, as a rule, give a practical bias to the curriculum in the third or fourth year of the course. This bias should be introduced only after careful consideration of local economic conditions and upon the advice of persons concerned with the local industries. It should not be of so marked a character as to prejudice the general education of the pupils. Adequate provision should be made for the needs of such pupils as may gain greater advantage by following a more general course of study.

CHAPTER VI.

THE STAFFING AND EQUIPMENT OF MODERN SCHOOLS AND SENIOR CLASSES.

(i) STAFFING.

127. We have devoted special attention to the important subject of the staffing of selective and non-selective Modern Schools, and discuss below the sources from which, in our opinion, the teachers may be drawn and the qualifications which we think they will need for their work.

Most of our witnesses regarded as specially important : (i) the personality of the teacher, (ii) knowledge of a subject or group of subjects, as shown by proved capacity in other schools and continued study after leaving the training college, (iii) an intimate knowledge of elementary school children, acquired through experience in teaching them. Many witnesses thought that, if the conditions in regard to personality and previous experience in teaching were satisfied, a graduate was to be preferred; but several were of opinion that graduates fresh from the training departments of universities were not particularly suitable for post-primary schools inasmuch as some previous experience in teaching elementary school children was an almost indispensable condition of success. In this connection, we were informed that young teachers, both from the universities and from the training colleges, who had had no experience in elementary schools were, as a rule, rather disposed to take an academic line to the detriment of the practical side of the work in Central Schools.

128. There is no question that for some years the teachers in Modern Schools and separately organised Senior Classes not only should be, but must be drawn from the men and women who have had experience in teaching the upper standards of the present elementary schools. But in so far as our chief recommendation becomes effective, the upper standards of elementary schools will disappear and therefore cease to be a source of teachers, being replaced by the institutions whose staffing is in question. Thus, although it may always be desirable to encourage a free flow from primary to post-primary schools, the majority of the staff of the new institutions, considered as a whole, will in time be recruited directly, as are the majority of teachers in other distinctive types of institutions, for instance, secondary schools. In short, the new post-primary schools, if they are to fulfil their purpose will generate their own traditions, create their own special types of curricula and gradually form their own teachers. The close co-operation that may be expected to grow up between them and the training colleges and training departments of the universities should do much to ensure that young teachers appointed directly to the schools have learnt the right attitude towards their work and understand something of the nature of the task to which they are called.

129. There appears in general to be a strong feeling in favour of whole-time teaching in Central Schools, and it would seem that comparatively few of these schools make use of visiting teachers. Part-time teachers are, however, sometimes employed for quasi-vocational subjects, such as millinery, dressmaking, shorthand, and more rarely art and handwork. On the other hand, visiting teachers are employed extensively in rural and scattered areas, where for various reasons it is difficult to establish a selective or non-selective Central School, and where provision for courses of advanced instruction is made by means of part-time central classes, upper tops, senior departments, and In Central Schools it is now the ordinary practice to the like. include among the whole-time staff properly qualified teachers of handwork for boys and of domestic subjects for girls. As regards senior classes, more especially those in rural areas, most of our witnesses thought that visiting teachers of special subjects would often have to be employed.

130. There was general agreement that it was difficult to obtain properly qualified teachers of foreign languages trained in the latest methods. We have indicated in the suggestions on the teaching of the several subjects of the curriculum in Modern Schools appended to this Report¹ the steps which we think might be taken to increase the supply of properly qualified teachers of languages for Modern Schools. Again it was pointed out that it was not at present easy to secure for Schools in rural areas teachers who were competent to give an agricultural bent to the curriculum, more especially in elementary science. It was also stated that there was not an adequate supply of teachers qualified to give instruction in art in its bearing on various industries in Central Schools with an industrial bias. Further there was general agreement among our witnesses that definite steps should be taken to improve the

¹ See pages 212-213

existing arrangements for training teachers of handicraft and domestic subjects. It was pointed out incidentally that it would be a great advantage if teachers of cookery and laundry-work were also qualified to teach needlework and kindred subjects. In this way, they would obtain variety of occupation and also relief from the standing posture which is necessary in teaching cookery or laundry-work, but imposes a severe strain on the teacher who gives instruction continuously in those subjects.

131. We were informed that the arrangements in regard to the appointment of the staff of Central Schools varied very considerably. In some areas the members of the staff are selected wholly by the Local Education Authority and the choice is limited to teachers already in their service. On the other hand, a considerable number of Authorities throw open appointments in their Central Schools to teachers from other areas. In most cases the head teacher has some voice in the appointment of the assistant staff and in selecting them considerable importance is often attached to special gualifications. We consider that it is most desirable that the head teacher should be consulted, when vacancies are to be filled on the assistant staff. Indeed it is difficult to see how a staff can be properly organised, and how the work in the different branches of the curriculum can be adequately correlated to form a coherent scheme of study, unless the advice of the head teacher be sought when vacancies are to be filled.

132. Our present educational system is often criticised on the ground that boys and girls on leaving school at 14+ are found, after a few years, to have forgotten and in a sense lost much of what they had learnt at school. It may indeed be that this criticism is exaggerated, but nevertheless, we consider that the new Modern Schools for pupils over the age of 11+ may well be regarded as affording an opportunity for consolidating the pupils' attainments as well as for teaching the application of what they have learned to the affairs of every-day life.¹ Developing this thought, we are of opinion that in selecting head teachers for Modern Schools, Local Education Authorities should aim at choosing men and women who are interested in the social and industrial conditions of their pupils and of their pupils' parents, whose outlook on life is not predominantly academic or professional, and who are not predisposed to base their curriculum on some conventional examination system. Many excellent

¹ cf §§ 111, 114, 115.

teachers, though competent in their own subjects, may lack wider interests and have too limited a background of general knowledge to be able to link up their own special knowledge in an interesting way with the affairs of every-day life. Only head-teachers possessing experience and knowledge of the kind indicated above can bring the curriculum, methods and general being of these schools into living touch with modern problems, and can appreciate not merely the requirements but the dignity of occupations which are not exclusively professional or academic. The head teachers of such schools should be men and women who, while possessing an intimate knowledge of their children's needs, have also developed an extensive and shown themselves to range of interests. DOSSESS initiative and capacity to strike out fresh lines of development and to introduce a new spirit into their schools. They would naturally seek, while avoiding strictly utilitarian schemes of work, to develop courses of instruction by cautious and judicious experiment over a number of years, with the object of devising curricula calculated to bring their pupils into closer touch with local economic conditions and with the requirements of modern civilisation. Having become familiar to some extent with the details of certain industries or commercial concerns. they could introduce this knowledge judiciously into their teaching, selecting such matter as would excite the interest of the pupils and illustrate different points in the subjects of the ordinary curriculum. Such schemes of work, if properly thought out and co-ordinated, would possess a high ' educational value. Indeed, from one aspect the three types of post-primary school designed for pupils leaving at the age of 14+ or 15+ might be regarded as providing an introduction to modern social and economic life. From this point of view, the Modern School, and possibly also some of the Senior Classes, might be developed so as to constitute a real bond between the school, and industry, commerce or agriculture. Much might be effected to this end, not only by the highly desirable means of developing games, societies and other corporate activities within the school, but also by judicious association and co-operation with suitable local organisations and clubs¹ where such exist.

¹e.g., Young Farmers' Clubs, the girls' departments of Women's Institutes, glee clubs, local athletic clubs, debating societies.

133. We consider that members of the assistant staff should be selected broadly on the same principles as those stated above. The specialist teacher, in addition to having a knowledge of his own subject or group of subjects should know something about the social and industrial conditions of the district, and should be able to correlate the instruction in his own subjects with cognate branches of the curriculum. We think that in all schools, but especially in schools such as the new Modern Schools, where there is a much wider field for fruitful experiment, it is essential that teachers should have a broad-minded, liberal and practical outlook. The teachers in Modern schools should be constantly establishing connections between school studies and life. It is not sufficient for them to possess knowledge practical and theoretical. They should have the power and the art of applying what they know judiciously to a given case. For example, the geographer should be able to use his geographical knowledge in the field, and in history a constant consideration should be "How does this or that fact. movement, and so forth, which we have been studying, bear upon or help to explain any features of modern civilisation."

134. We are of opinion that the sources from which teachers may be drawn are more various than is sometimes realised. We have four main categories in our mind :---(a) the trained certificated teacher from a training college; (b) the graduate who has taken a four years' course in a training Department of a University or the graduate who, after taking the ordinary three years' course for a degree, has spent a fourth year in the Training Department of a University.; (c) the graduate who, without being trained in the formal sense, possesses special experience which might serve in lieu of training (e.g. in a "Secondary" or Preparatory School, or in some branch of social or industrial work); (d) the specialist teachers trained in the subject which he teaches.

135. Categories (a) and (b) need little explanation, since they consist of those from whom the profession of teacher in primary schools is at present generally recruited. Both the primary schools, and the future Modern Schools and Senior Classes, may be regarded as a very important training ground for teachers. A future teacher in a Modern School or Senior Class might well have obtained a stimulus as a pupil in the Modern School or Senior Class itself, before transference to a Grammar (i.e., Secondary) School at the age of 14+ or 15+. We understand that an arrangement at present obtains in London by which pupils in Central Schools who desire to become teachers, and who have passed the First School Examination at the age of 16+, are then transferred to a Secondary School. We hope that a large percentage of teachers in Modern Schools and Senior Classes will be graduates, and that the four year students in University Training Departments who now tend to seek employment in Grammar (i.e. Secondary) Schools will find a new field for fruitful work in Modern Schools and Senior Classes. It is indeed probable that a large numbers of students who have completed courses of training in University Training Departments will take up work in post-primary schools; for as Modern Schools are developed and a larger number of pupils remain after the age of 14+, the work will become more attractive in itself. Furthermore, salaries in post-primary schools of different types, which from the legal standpoint are all Public Elementary Schools, are better than they were, and the general conditions in regard to buildings, playgrounds, and the like are improving, and it is hoped will continue to improve. While, however, we should value the presence in Modern Schools of teachers with degrees. we do not think that the possession of a degree should in any way be a condition of employment. On the contrary, we believe that there are a large number of non-graduate teachers in existing Elementary Schools who would be admirably gualified to undertake work in post-primary schools.

136. As regards category (c), while we consider that it is important that the great majority of teachers in post-primary schools should have taken a course of training, we should be reluctant to rule out the possibility of appointing a certain proportion of graduate teachers who do not possess this oualification. We believe that there are a considerable number of persons who, without possessing professional training, hold academic degrees, have had some experience of teaching, and at the same time possess social experience of a kind that should be specially valuable in enabling them to relate the educational work of the school to the needs and interests of practical life. We would suggest, however, that before full recognition should be accorded to teachers of this type they should serve a period of probation in the post-primary school under adequate supervision and give evidence of having devoted some study to the theory of teaching.

137. In regard to category (d) we are of opinion that the staff of Modern Schools should always contain a certain number of specialist teachers, who would be responsible for the instruction in handicrafts, domestic subjects, art as applied to industrial processes, and other practical subjects. We were informed that some of the most successful instructors in woodwork. leatherwork, decorative art, and the like, in existing Central Schools with an industrial bias, had spent some time after leaving the Training College in Art Schools, or Technical Colleges, or in Industrial works, and had in this way acquired first hand knowledge of various technical processes and of trade methods generally. We would urge that Local Authorities should aim at getting specialist teachers of this type for their Modern Schools. We have already stated elsewhere that in our opinion every Modern school should have on its permanent staff full-time specialist teachers of the various practical subjects.

As regards category (d) we also think that it might be desirable to have, wherever possible, on the staff of Modern Schools a certain number of men and women from other callings, e.g., engineers and craftsmen of various kinds, provided of course that they were possessed of special knowledge and experience, which might be particularly valuable in giving a practical bent to certain parts of the work of the school.

138. It is evident that a large body of teachers with special qualifications for teaching the various branches of the curriculum on practical lines, according to the varying needs of different localities, will be required for the new Modern Schools and Senior Classes. We think therefore that Training Colleges should make special efforts, as several of them are already doing, to provide adequately for the needs of students intending to take up work in these post-primary schools. A third year course, either continuous or deferred. provides a good opportunity for specialisation in one subject, and this may prove one of the best methods of preparing teachers for work in a Modern School. Many witnesses conversant with the needs of rural areas pointed out that it was particularly important to secure the services of suitable men and women teachers with a sympathic knowledge of the country and its pursuits, who would be capable of giving a rural trend to the work in Modern Schools and Senior Classes in agricultural districts. In this connection, the Ministry of Agriculture and Fisheries, in a memorandum sent to the Committee, stated that a sympathetic treatment of rural subjects could not be given except by teachers possessing the necessary qualities. They suggested that special courses¹ for Rural Teachers might be organised by some of the University Bodies possessing Departments of Agriculture which could collaborate with and assist the local academic Departments of Education.

Several witnesses pointed out that, though short vacation courses were useful for this purpose, a more continuous and more intensive course was required to train a body of men and women who would be capable of undertaking fruitful work in Modern Schools in rural areas, especially those with a definite agricultural bias in the last years of the course. We note with interest the provision for supplementary courses for teachers made in Articles 10 and 25 of the Board's Regulations for the Training of Teachers, 1926, and we hope that full advantage will be taken of the opportunities thus offered. We observe that these new Regulations throw upon the Training Colleges the responsibility for submitting proposals for courses. It is much to be hoped that some Colleges will definitely offer courses for teachers of older children in rural Schools. In this connection we desire to state that in our view it is especially important that teachers of modern languages should be afforded facilities for taking courses abroad immediately following their ordinary course at a Training College. In general, we hope that the various Training Colleges in organising their supplementary courses will take account of the special needs of teachers of the various branches of the curriculum in Modern Schools and Senior Classes.

139. We desire also to call attention to the significance and value of the vacation courses which have been organised for all teachers by the Board of Education, Local Education Authorities, University Bodies, and various Associations. As Modern Schools of various types develop, and as their needs become more clearly defined, we hope that the Board will encourage Local Authorities, University Bodies, and other organisations, to arrange some vacation courses specially designed for teachers in these Schools and in Senior classes. In this connection, we note that in the important Circular on Rural Education (Circular No. 1365) issued by the Board in May, 1925, it is pointed out that special training will be needed for a large

¹ See the Board's pamphlet on *Rural Education*, 1926 (Educational Pamphlets, No. 48).

number of rural teachers, and that it is very desirable that Local Education Authorities should organise special courses and classes for them. The Board go on to make a suggestion, which was also put before us by several of our witnesses, that in organising such courses an effort should be made to use the expert staffs and the equipment of the Agricultural Colleges and Farm Institutes. With this suggestion we cordially agree, and we think great gain would result if the Agricultural Colleges and Farm Institutes could be brought into closer connection with School teachers.¹ In this matter, much might be effected by close co-operation between the Board of Education and the Ministry of Agriculture.

We observe with interest that in several areas facilities are being afforded to teachers in Rural Schools to take the Certificates and Diplomas awarded by bodies such as the Royal Horticultural Society, the National Poultry Association and the British Bee-Keepers' Association. We think that short Vacation Courses would be especially useful for teachers of Handicraft in Modern Schools and Senior Classes.

140. There was general agreement among our witnesses that the work of the Central School was in certain respects more exacting than that of the ordinary Public Elementary School, and that some inducement was needed, if the best teachers were to be secured. Several witnesses were of opinion that a better salary scale, such as existed generally for Higher Elementary Schools up to 1918, would help to this end. After careful consideration of the facts as known to us, we have come to the conclusion as follows :- The gualifications of teachers in Modern Schools and in Senior classes should follow the lines from time to time laid down by the Board for existing Secondary Schools, though, as has been pointed out; more teachers in practical subjects will be required in these post-primary schools, as they will frequently have an industrial, commercial or agricultural bias, and will accordingly need some teachers with special qualifications. We think that the teachers should have ample time for preparation and private

¹ In this connection we desire to call attention to the excellent scheme of training in house and farm management {"enseignement ménager agricole") which has been organised by the Belgian Ministry of Agriculture for women and girls from the age of 14 years, intending to engage in rural work. A description of this scheme of agricultural education for girls and women is given in a report by Miss Wark, Chief Woman Inspector of the Board of Education, and Miss Pratt, one of the Women Inspectors of the Board of Agriculture, printed in the Journal of the Ministry of Agriculture, Volume XXXII, No. 11, February, and No. 12, March, 1926.

MODERN SCHOOLS AND SENIOR CLASSES

reading and should be afforded full opportunities for attending vacation and other short courses. The standard of staffing in proportion to the number of pupils in the school as well as the qualification of the teachers should approximate to those required for the corresponding forms in Secondary Schools. This recommendation is based on the view which we have already stated that all education above the age of 11+ should be regarded as "secondary."

(ii) THE EQUIPMENT OF MODERN SCHOOLS.

141. We understand that at present most Central schools have a woodwork room for boys, a domestic subjects room for girls, a laboratory, a room for practical work, and an art room. As regards the provision for metalwork, some Central schools have a separate room for this purpose, but in many instances one end of the woodwork room is fitted up with a forge for metalwork. The equipment of laboratories varies very much. We think that the necessary equipment for courses in elementary physics and in addition the apparatus required for teaching the elements of chemistry, botany and elementary biology should always be provided. The " practical " room, fitted with flat top desks and supplied with a sink and other simple fittings might be used, as it is in many cases at present, for the simpler parts of the work in elementary science and also for certain forms of practical work.

142. We consider that in principle the standards of equipment in modern schools should approximate to those in Secondary Schools. In our view, as in that of many of our witnesses, the education of children over the age of 11 in Modern Schools or in Senior Classes is one species of the genus "Secondary Education." It is not an inferior species, and it ought not to be hampered by conditions of accommodation and equipment inferior to those of the schools now described as Secondary. We attach great importance, therefore, to ensuring that, so far as possible, and with due allowances for differences in the character of the curriculum and the age range of the pupils, the construction and equipment of Modern Schools should approximate to the standard from time to time required by the Board in schools working under the Regulations for Secondary Schools. At the same time, we fully recognise that finance is a limiting factor, and as it is not feasible at once to establish conditions such as we have described, we must be content to recommend the establishment of the best conditions obtainable in the circumstances.

CHAPTER VII.

THE ADMISSION OF CHILDREN TO MODERN SCHOOLS AND SENIOR CLASSES.

143. As we have explained in Chapter III, there was on the whole general agreement among our witnesses that primary education should end and post-primary education begin about the age of 11+, and that pupils from Elementary Schools should normally be transferred at about that age to a different school or, failing that, to a type of education different from that given to pupils under the age of 11+. We have described the educational and administrative considerations which may be urged in favour of transferring children to a different type of education at the age of 11+1. At the same time, our witnesses agreed that it was highly important that provision should be made in exceptional cases for the transfer of children at a later age from one type of post-primary school to another, provided that their school course in the new institution would last sufficiently long to allow of their deriving benefit from the transfer.

We have collected a large body of information bearing on the existing practice of various Local Education Authorities in regard to the admission of pupils to selective Central Schools and Classes, and we accordingly give a general description of these arrangements, making certain suggestions as to how in our view the existing procedure might be improved or rendered more effective.

144. It is now the usual practice for Local Education Authorities to hold examinations for elementary school children at or about the age of 11, in order to select boys and girls suitable for free places in Secondary Schools, and frequently also for admission to selective Central Schools, where such exist. As a rule, the normal age of entry for these examinations is 11+, but many, if indeed not most Authorities allow the brighter children to sit for them at the age of 10, if they so desire. In this way, it is possible for a child to have two chances, though the number of children who actually avail themselves of the opportunity of sitting at the age of 10 is generally small. Some Authorities in order to afford all children two chances of sitting for the examination, place the upper age limit at 12 (i.e., up to the last day before the thirteenth birthday.)

² i.e., up to the last day before the twelfth birthday.

SCHOOLS AND SENIOR CLASSES

There are various administrative and educational reasons against so high an age, and indeed this practice is in fact becoming less common. One serious disadvantage arising from such an arrangement is that most children, though two chances are offered, are apt to defer sitting for the examination till the last opportunity. Furthermore, there is a noticeable tendency for an undue proportion of the older children to be successful in the examination, unless rather drastic arrangements are made for conceding age allowances to younger candidates.

145. The Free Place Examination is conducted in writing, and the obligatory papers are confined to English and arithmetic, though in some areas a general paper is also set, which however under the Board's Rules¹ has hitherto been permissible only for candidates under 12 years of age, if its character be such that it can properly be regarded as an additional English paper.

A considerable number of Authorities also held an oral examination as an adjunct to the written test, and a few Authorities, in addition to the oral examination, have recourse to an oral reading test. In some cases reference is made to the elementary school records. Some Authorities arrange an oral examination for all candidates, though in practice this is necessarily confined to small areas; others, including some large Authorities, hold an oral examination for border-line and doubtful candidates only. During the last few years several Authorities have been conducting experiments in the application of psychological tests of intelligence, which are usually set in the form of a separate written paper of group tests, for all candidates at the second stage of the Free Place Examination as described below. A few Authorities also employ individual tests of intelligence, as part of their oral examination, more particularly for doubtful and border-line candidates.

146. In many areas, particularly those of large Authorities where there are great numbers of children to be examined, a preliminary "weeding-out" examination in English and arithmetic is conducted in the local elementary schools, and the children selected by means of this test are then required or permitted to sit for a more elaborate examination in English and arithmetic, which is generally held at a few convenient centres throughout the

¹ Regulations for Secondary Schools (England), 1924, Appendix A. Rule 3 (b). This regulation is not included in the Board's Regulations for Secondary Schools, 1926.

area. Some Authorities at the special request of the parent or head teacher allow a child to be presented for the Free Place Examination proper even though he may have failed to pass the preliminary qualifying test in his local elementary school.

In areas in which the expedient of holding a first or qualifying examination is adopted in order to reduce the number of entrants for the Free Place Examination proper, this first examination should be, and as a rule is, so arranged as to give every industrious child of average capacity a fair chance of passing. If however the individual Authority has decided to ascertain generally what children in the area are such as would benefit by a Secondary education, a qualifying standard is fixed in advance, which of course, if it is to be a true qualifying standard, should have no relation to the number of free places available. For either purpose, but particularly for the latter, it is evident that the examination should be simple and straightforward, and consequently such as to spread the candidates throughout the whole range of marks. It cannot be said that Authorities, which have recourse to a preliminary examination, have been wholly successful in achieving this result. The special difficulties attaching to the standardisation of the marking, particularly in English, in the examination of very large numbers of children have prevented the majority of Authorities, even had they so desired, from attempting to set up a definite qualifying examination in the true sense of that rather ambiguous expression. The fact is that the expression " gualifying examination " is used to describe either an examination designed to admit to higher education all children, qualified to profit by it, or an examination intended to select only those candidates for whom the resources of the Authority enable it to make provision. It may be pointed out that an examination designed to secure a true qualifying standard must necessarily be costly where large numbers of candidates are presented, and those most familiar with the working of such an examination would probably agree that at best an appreciable measure of error still remains. Most authorities accordingly content themselves with providing a rough and ready preliminary test, which is often conducted almost independently by the teachers of the local Elementary Schools, and by passing forward a liberal number of candidates to the Free Place Examination proper they endeavour to ensure that no candidate with any chance of success is overlooked.

147. The Second Examination or Free Place Examination proper was originally intended to be a qualifying and not a competitive examination.¹ Under present conditions, however, it is necessarily competitive, except in those few cases where there exist sufficient free places for all candidates who have attained a reasonable minimum standard. It may perhaps be doubted, whether, in cases where it is claimed that such a procedure is followed, the minimum standard is not, in practice, set rather high. In general, the degree of competition varies according to the number of free places to be awarded, and while it is still desirable that the papers set in this second examination should be generally simple in character, they naturally include as a rule more difficult questions designed to discriminate the more gifted children from the general body of candidates. In some areas, for example in that of one large County Authority, the Free Place Examination proper approximates to a gualifying examination, as every pupil who obtains marks over 60 per cent. is awarded a Free Place. These Examinations for Free Places in Secondary Schools are also used for selecting candidates for admission to Selective Central Schools in the following way. The successful candidates in order of merit are given the choice of entry to particular Secondary Schools, or if they so desire, to specific Central Schools. Candidates high up on the list usually, though not always, choose free places in "secondary" Schools, and in consequence the bulk of the entrants to selective Central Schools are drawn from candidates lower on the list, Recourse is frequently had to special arrangements in areas where the same Examination is used to select pupils both for Secondary and Central Schools.

148. In the areas of many Authorities the Free Place Examination proper is, as indeed is clearly desirable, conducted by Examination Committees containing representatives of Secondary, Central and ordinary Public Elementary Schools. Their actual functions, however, in regard to setting and marking the papers vary greatly from area to area. In a few cases an outside Examining body or individual wholly unconnected with the

¹ cl. The statement by Mr. M'Kenna, President of the Board of Education in the House of Commons on 15 May, 1907-

[&]quot;These free places would be for Public Elementary School children who would not be asked to compete with children outside but who would only be asked to pass a qualifying examination." 174 Parl. Debates (15 May, 1907) 1054.

local schools is responsible, in part at least, for the conduct of the examination.

Some Authorities content themselves with holding a preliminary examination only, leaving the final selection wholly to the head masters or mistresses of the Secondary and Central Schools. There is however every gradation in the actual practice of Authorities between such an arrangement, and a procedure which leaves scarcely any responsibility to the staffs of Secondary and Central Schools except in so far as they are represented on the Examining Board.

149. The character of the oral examinations, which in some areas are held subsequently to the written examination, either by the Examining Committee or by the head master of the Secondary or Central School, vary from the impressions gained after a few minutes' interview with the candidate to a test carefully standardised so far as its character permits. The general impression of competent observers appear to be that, at any rate as at present conducted, these oral tests probably involve a not less margin of error than the written tests. There is, nevertheless, equally a consensus of opinion that oral examinations are of value in the process of selection among border-line candidates, and perhaps also here and there in reassessing the capabilities of the candidate whose head teacher considers that he has not done himself justice in the written work, especially, in cases of indisposition or undue nervousness. The oral examination also serves to disclose instances of physical defect, and cases where it is improbable that a child will remain for a reasonable time at the Secondary School or Central School. In one large county area where a specially elaborate oral examination is in use, supplemented by a conference with class teachers and an examination of the candidates' note-books, the placing of the successful candidates is sometimes readjusted to a considerable extent.

150. It is not an uncommon practice to make a percentage allowance for each month below the maximum age of entry. Otherwise, it is found that the candidates whose birthdays fall within a month or two of the maximum age secure an advantage over those born later. One large Urban Authority has come to the conclusion that the intellectual development of children in the course of a single year is so great as to render papers appropriate for older children unsuitable for the younger to a degree which cannot be corrected by an allowance of marks for age, and has accordingly surmounted the difficulty by holding two separate examinations each year.

151. In some areas individual psychological tests of intelligence have been employed in association with the oral examination, and are held to be of special value in arriving at a comparatively accurate estimate of the candidate's capacity in cases where there is suspicion of cramming. On the other hand, there is some evidence of a tendency to prepare beforehand for individual intelligence tests, especially now that they are being more extensively applied.

152. From the point of view of the selective Central School admission by means of the Free Place Examination appears on the whole to be regarded as satisfactory. Some evidence indeed was forthcoming that children placed high as a result of the examination often sank considerably on entering the Central School, while, on the other hand, some children placed low in the examination rose rapidly after spending a few months in the Central School. It is, however, a common experience in all grades of education that early promise is not always fulfilled. It is indeed often too true that these examinations as at present conducted determine a child's fate at an early age. So long however as the demands for higher education on the part of well qualified candidates exceeds the supply, some method of selection is inevitable, and it may at least be urged that existing methods supply some kind of common measure which is almost impossible to secure by various individual impressions.

153. There is much difference of opinion on the merits of accepting recommendations by head teachers of contributory schools as an alternative to, or as an integral part of, a preliminary test qualifying candidates to sit for the Free Place Examination proper. A considerable number of attempts have, however, been made to obtain from the head teachers of the elementary schools some grading of their pupils by marks or otherwise in accordance with their work at school. Such an arrangement is liable to be unsatisfactory owing to the extreme difficulty of securing effective standardisation as between school and school. The most that can be said is that in some small areas with few schools the members of the Examining Board or the Secretary of the Education Committee have become so familiar with the practice of the different teachers as to be able to achieve some satisfactory measure of standardisation. School records, where used, are probably best employed as an aid to an oral examination in border-line or exceptional cases. In very many areas, the heads of both Central and Secondary Schools are allowed to make some final choice among a limited number of candidates sent forward. The head teachers of Central Schools are usually much influenced in making the final selection by reports from the head teachers of the contributory schools.

154. In some rural counties and small urban areas a general examination has not yet been instituted, and it is the usual practice to transfer to the so-called Central or Intermediate Schools all children who have reached a particular standard in their local elementary school, generally standard V. It was stated that under such arrangements children of comparatively low capacity might be (in some instances) transferred while more gifted children were withheld.

155. It has been observed as a matter of interest that, when the examination for free places in Secondary Schools and for admission to Central Schools is wholly voluntary only about 10 per cent. of those qualified by age to sit for it are actually presented for examination. Regarded purely from the standpoint of existing circumstances, and without reference to such questions as what supply of higher education should be provided and what the nature of that education should be, it seems to be true that the general compulsory examination of all children qualified by age is probably on the whole the most satisfactory arrangement. as it brings the opportunities of higher education to the notice of all parents, and not merely of those who by accident or tradition are already cognizant of them. Many parents who would hardly think of sending a child in for a scholarship examination will nevertheless make great sacrifices in order that the child may be able to accept a scholarship which has been actually offered. Moreover, a general compulsory examination is makes possible the final choice of candidates from a much wider field, thereby almost inevitably securing a more equitable selection and a higher standard of capacity; at the same time the danger of the use of this examination as a criterion of the work of the school should always be borne in mind.

156. Apart from any inevitable defects in the working of an examination system used in many areas for testing large numbers

of children, there was general agreement among our witnesses that it is difficult to forecast how a child at the age of 11+ is likely to develop. In consequence, there are a number of misfits even in those areas where the Free Place Examination is conducted with the greatest care. Some pupils in Central Schools, on attaining about the age of 12+ or 13+, shew a real capacity for studies leading up to the First School Examination. We are strongly of opinion that every effort should be made to facilitate the transfer of such pupils to Secondary Schools. On the other hand, several witnesses pointed out that some children who obtained Free Places in Secondary Schools developed practical interests which could probably best be fostered in the less academic atmosphere of the Modern School. Such pupils should, in our opinion, be transferred where possible from Secondary Schools to Modern Schools or to Junior Technical Schools. At the present time several Authorities facilitate the transfer of individual pupils from Central Schools to Secondary Schools by providing special exhibitions to Secondary Schools for pupils between the ages of 12 and 13. Other Authorities offer special Free Places at Secondary Schools for competition to pupils of 14 years of age receiving "advanced instruction " in Public Elementary Schools. We would suggest that Authorities should consider the whole question of extending facilities of this sort to enable exceptional pupils in Modern Schools to proceed to Grammar Schools at the age of 12 or 13 or even later.

157. Our main conclusion is accordingly as follows :--While we think all children should enter some type of post-primary school at the age of 11 +, it will be necessary to discover in each case the type most suitable to a child's abilities and interests, and for this purpose a written examination should be held, and also, wherever possible, an oral examination. A written psychological test might also be specially employed in dealing with border line cases, or where a discrepancy between the result of the written examination and the teacher's estimate of proficiency has been observed. Where Local Education Authorities so determine, a preliminary examination might be held in order to discover candidates who should be encouraged to go forward to the free place examination proper.

Arrangements for organising and conducting examinations for admission to schools of different types should be left to the Local Education Authorities.

(28847)

71

CHAPTER VIII.

THE LENGTHENING OF SCHOOL LIFE.

158. In the preceding chapters we have described the relations which, in our opinion, should exist between the primary and secondary stages of education, and have given some account of the different types of school and curricula which will be needed in order to meet the varying requirements of the largely increased number of young persons who, in the near future, will pass, it may reasonably be hoped, to the secondary stage. For, if our proposals are realised, primary and secondary education will be linked to each other as the successive phases in a continuous process, and all normal children will begin some form of secondary education about the age of 11+.

They will begin it, but for how long are they to continue it ? That question is obviously, from every point of view, of the highest importance. The effect of education on mind and character depends, in part at least, on the length of time for which its influence is exercised. The task of planning a satisfactory course of post-primary education is greatly simplified if the period which it is designed to cover is sufficiently long to allow of its being given a certain unity and completeness. The habits of orderly work and intelligent co-operation, which it is part of the function of a good school to promote, are more likely to be a power in later life, if the seeds sown at school have been sheltered sufficiently long for them to take root and grow, before boys and girls are plunged into the stress and turmoil of wage-earning employment. Even if the great majority of children continued, as to-day, to cease attending school shortly after their fourteenth birthday, we should still regard the regrading of education proposed above as a necessary and important step in educational progress. But it seems to us evident that its value will be greatly increased if children can look forward to a somewhat longer period of school attendance after the age of 11+ than is normally the case at the present time. For that reason we proceed to discuss how far it is desirable and practicable that the period of school attendance should be extended in the near future.

159. Into the early history of the law of school attendance we need not enter in detail. The Education Act of 1870 conferred on School Boards power to make bye-laws requiring the attendance of children from 5 to 13, subject to the provision that such byelaws must grant exemptions on certain conditions to pupils between the ages of 10 and 13, and the Education Act of 1880 turned this power into a duty. The Elementary Education Act of 1900 empowered Local Authorities to compel attendance (subject to numerous exemptions) up to the age of 14, and at that point, in spite of several projects for fresh legislation, the law stood still for the next 18 years-though in fact there was during that period a noticeable increase in the number of children who remained at school up to or beyond the age of 14. When the Departmental Committee on Juvenile Education in relation to Employment after the War explored the subject in 1917, it summed up the situation by stating that " in a sense it is true to say that the statutory leaving age is already 14, but the ways in which earlier exemption can be obtained are so numerous, and in many localities are so freely taken advantage of, that the effective leaving age often approximates rather to 13 than to 14." The position on the eve of the War, the Committee stated, was that between the ages of 12 and 13, when the enrolment in state aided schools of all kinds reached its maximum, it included 662,000 children : that 185,000 dropped out at 13, about 85,000 between 13 and 14, and about 266,000 at 14; and that only 84,000 or about 13 per cent. received any kind of full-time education after 14, while even of these the majority remained at school only for a few months beyond the attainment of that age.

160. Down to the war, therefore, approximately 40 per cent. of the children left school before reaching the age of 14. Since that date, two changes of great importance have taken place, of which the first is familiar to everyone, but the second is not so generally realised as is desirable. In the first place, there has been a change in the law. The Education Act of 1918 abolished all existing forms of exemption from school attendance below the age of 14, including half-time, and made it obligatory on a child attending a public elementary school, who attained the age of 14 during a school term, to remain at school until the end of the term. The Act empowered local education authorities to make bye-laws requiring the attendance at school between the ages of 14 and 15 either of all children or of "children other than those employed in certain specified occupations." It also enabled authorities to grant individual exemptions to children between the ages of 14 and 15. Since, therefore, 1st July, 1922, which was the appointed day fixed by the Board of Education for Section 8(1) of the Education Act of 1918 to come into operation, all exemptions from school attendance up to the age of 14 have ceased, and all children whose fourteenth birthday falls within a school term must remain at school until the end of that term. In areas where a bye-law requiring children to attend school up to the age of 15 has been made under Section 46 (2) of the Education Act of 1921, a child in attendance at a public elementary school who attains that age in the course of a term is under an obligation to remain at school until the end of the term.

161. The Education Act of 1918 has not, however, been the only cause of the lengthening of school life in recent years. In the second place, there has been a striking increase in the number and proportion of children remaining at school beyond the age at which attendance ceases to be legally obligatory. We have already called attention in Chapter II to this development, and we need not here do more than recapitulate the essential facts. As will be seen from Table IV in Appendix III of our Report, the number of pupils over the age of 14 in Public Elementary and Special Schools was 47,066 in 1913-14, 125,292 in 1919-20, and 170,893 in 1922-23. At the first date pupils over 14 form 7 per cent. of children of the age group 10 to 11 attending school; at the second 18.8 per cent.; and at the third, 26-1 per cent. While this growth in the number of children remaining at school beyond the age of 14 is partly to be attributed to the provision of the Education Act. 1918, that children should remain to the end of the term in which their 14th birthday occurs, that requirement does not as is pointed out above, provide a complete explanation of the movement. The increase is not spread evenly over the whole country. In some districts it is insignificant, and it is most noticeable in the areas of those Authorities which have been at pains to improve the provision made for the older children. Nor must it be forgotten that, small as the number of children over? 15 attending the Elementary Schools still is, it has multiplied. nearly threefold in the ten years 1913-14 to 1922-23, rising from •8 per cent. of the age group 10-11 at the first date, to 2-1 per cent at the second. The truth would appear to be that the last ten years have seen a change in the attitude both of children and of parents towards the work of the Schools. The improvement in the quality of education, and, in particular, the success of the efforts which are being made to meet more effectively the requirements of the older pupils, has met its natural, but welcome

142

response in a heightened appreciation of the value of education and in an increased willingness on the part of parents to make sacrifices in order that their children may continue to receive it.

162. The desirability of prolonging education must depend largely on the character of the education which is offered. It is in the light of these developments and of the possibilities which they reveal-of the efforts which are being already made by Local Education Authorities to raise the standard of post-primary education and of the larger programme which we have sketched in this report-that the question whether it is expedient to raise the age of compulsory school attendance to 15 should be considered. The proposal is not a new one. It was advanced in the Majority Report of the Poor Law Commission which reported in 1909 as a means of protecting young persons against the demoralisation of character arising from premature entry into industry. It was given sympathetic consideration in the Final Report of the Departmental Committee of 1917 on Juvenile Education in relation to Employment after the War, though it was rejected for the time being on the ground that public opinion was not yet ripe for the change. It was advocated partly on educational, and partly on social and economic, grounds in the report issued by the Ministry of Reconstruction on Juvenile Employment during the War and after, which appeared in 1918. A partial and tentative step in the direction suggested was taken by the sections in the Education Act of that year, referred to above, under which local education authorities have power, subject to the approval of the Board, to make bye-laws requiring children to attend school up to the age of 15. The two county councils which have so far made bye-laws have both also made liberal use of the power of granting exemptions, and they thus appear to have employed the bye-laws as a means of retaining at school children who would otherwise have entered unsuitable employment rather than as a means of establishing any general system of education for all children up to the age of 15.

163. We have been at some pains to ascertain from the Directors of Education of a number of representative local education authorities how they would view a proposal to raise the age of compulsory attendance to 15. With this object, we addressed to them two questions, to which the great majority of those whom we approached have been good enough to reply—(i) provided that suitable provision is made for the education of children over 14,

are you of opinion that the time is ripe for compulsory attendance to 15? (ii) in the event of the age of compulsory attendance being raised to 15, what period do you consider would be necessary in your area in order to provide the teachers and accommodation needed? The answers received to these questions, some of which were of great interest, varied in their tenor, but we think we fairly represent their general trend in saying that the majority thought it educationally advantageous to raise the age of compulsory attendance to 15, that a considerable number held that the time was ripe for taking such a step at once, or almost at once, and that a somewhat larger number believed that practical difficulties of one kind or another made it questionable whether the reform, however desirable in itself, could be carried out in the immediate future. It should be noted, however, that some of those who were doubtful on the last point appeared to think that, if the necessity of providing for an increased number of children arose, it would be possible to secure the necessary teachers and accommodation within a few years. The task of making the provision required will in some districts be somewhat lightened by the decrease in the school population which has taken place as a result of the decline of the birth-rate, the effect of which will be, as the President of the Board of Education stated on July 22nd, 1926, in the House of Commons, a fall in the next three years of upwards of 20 per cent. in the number of children over the age of 11 in elementary schools. In these circumstances, there is reason to believe that, at any rate in some areas, the lengthening of the school life need not involve the erection of new buildings or the engagement of additional staff. It must not, of course, be assumed that all the space thus set free will be suitable.

164. Problems of educational organisation cannot be sharply divided from other departments of public policy. It is evident that the question whether it is desirable to extend the age of compulsory school attendance to 15, like the question whether it was desirable to extend it from 13 to 14, to abolish "half-time," and indeed to establish any system of public education at all, is not one which can be, or is likely to be, decided on educational grounds alone. The economic and social issues which arise are only too familiar. On the one hand, there are considerations of the reactions on industry of withdrawing children between 14 and 15 years of age from industrial employment, of the ability and

willingness of parents to dispense with part or all of their earnings. and of the financial cost involved to the nation in providing education for something approaching half a million children during an additional period of a year. On the other hand, there is the proved social and intellectual deterioration resulting from the premature entry of many thousands of young persons into wage-earning employment, the grave waste of part of the effort and money applied to the early stages of child life, which is inevitable when education ceases abruptly at 14, the tragic paradox of a situation in which year to year some 450,000 young lives are poured into industry at a time when industry cannot find employment for its adult workers. It may be urged that it is unreasonable to incur the burden of prolonging education at a period of great economic depression. It may be equally urged that it is unreasonable to attempt to harvest crops in spring, or to divert into supplying the economic necessities of the immediate present the still undeveloped capacities of those on whose intelligence and character the very life of the nation must depend in the future. There is no capital more productive than the energies of human beings. There is no investment more remunerative than expenditure devoted to developing them.

165. On the financial aspects of the question we do not feel called to express an opinion. The possibility that the financial reactions of educational policy may be overlooked is not, perhaps, a very pressing danger, and we have confined ourselves to a consideration of those educational aspects of the question with which alone we are qualified to deal. Provided that due provision is made, on the lines suggested in our earlier chapters, for the extension and improvement of postprimary education, the desirability on educational grounds of raising the age of compulsory school attendance from 14 to 15 is not, it seems to us, open to doubt. Such a step would do far more than merely add 12 months to the school life of the great majority of the children. Its effects would be, not merely quantitative, but qualitative, and would be felt in the years before 14 as well as in the years after it. For the extending from three to four years of the period available for post-primary education would not only make it easier for such education to be planned as a coherent and progressive course with a character and quality of its own, but would also (and this is of much more importance) ensure that it continued sufficiently long to act as a permanent influence for

good in the lives of those who passed through it. In education, as in industry, there is a law of increasing as well as of diminishing returns. Too often it is the sad experience of the teacher to lose his pupils at the very moment when his earlier efforts are about to bear fruit, and when powers which have seemed for long to lie dormant are on the eve of bursting into life. The addition even of a few months to the present school life may not seldom enable him to kindle into flame the spark which but for them would have been extinguished. Nor is it a minor advantage that, by remaining at school till 15, children will be protected more effectively than to-day against many social dangers which surround the adolescent. In many areas regular wage-earning employment is not available for them below that age, and they spend the months immediately after leaving school in casual and sometimes demoralising occupations. If their school life lasts till 15, they will enter industry straight from school with intellects more sharpened and characters more fortified, and their physique more fit to bear the burden of the work which life will lay upon them.

166. While, however, the educational arguments for raising the age of compulsory attendance to 15 appear to us unanswerable, we are none the less aware of the practical obstacles which must be overcome if that policy is to be carried out. Apart from the question of finance, which is not within our purview, those which deserve serious consideration are two. The first is the difficulty experienced by parents of small means in dispensing with the earnings of their children until the age of 15. The second consists in the fact that, if children are to be retained at school for another year with advantage to themselves and the community, an increase of staffing and, (when the existing buildings are already fully utilised,) of accommodation, will be required.

As the figures cited above shew, the habit of retaining children at school after the age of 14 has been growing in recent years, and there is good reason to hope that, with the further improvement in the quality of post-primary education, the willingness of parents to make sacrifices in order that their children may enjoy the benefits of a longer school life will shew a corresponding development. The fact remains, however, that under existing economic conditions, the pressure to curtail the education of children who ought to remain at school is too often almost irresistible. Granted that some parents who could afford to dispense with the children's earnings withdraw them from school prematurely, it is still

146

nevertheless only too true that a large number of parents, especially when there are several children in the family, are liable to be faced by a genuine and cruel dilemma. They wish to do the right thing by all their children, but they know that, if the eldest boy or girl continues at school instead of going to work, the younger brothers or sisters may suffer, and they hesitate to expose them to a sacrifice from which they would not shrink themselves. In such circumstances, the proposal to raise the age of compulsory attendance to 15, unless accompanied by some form of financial provision to ease the strain, is exposed to the possibility of opposition, even in quarters in which on educational grounds it would meet with approval. This difficulty is genuine, and must not be under-estimated. On the other hand, it must not be exaggerated. The objection that pupils who remain at school are prejudiced in finding employment, which has been brought against proposals to raise the school age by local bye-law, does not apply when the age is advanced throughout the country as a whole, since in that case they are all in the same position, and one does not gain at the expense of another. The sacrifice involved is not comparable to that incurred when a child enters a " Secondary "school of the existing type, for the parents of such a child must normally undertake that he will remain at school till at least the age of 16, while our proposals involve an addition to the school life of only one year. The postponement of the age at which young persons enter employment may, to some appreciable extent, lighten the burden of unemployment among adults, and, in so far as it has that effect, will result in the income of working class families being increased rather than diminished. Local education authorities already spend considerable sums upon maintenance allowances, which are applied mainly in aiding children to prolong their education in "Secondary" schools. Section 24 of the Education Act of 1921, reproducing in substance section 11 of the Education (Administrative Provisions) Act of 1907 as extended by Section 24 of the Education Act, 1918, enables a local authority for elementary education to give scholarships, including maintenance allowances, to children in Public Elementary Schools above a given age. The question of the scale upon which such allowances should be given on any general plan to pupils in Modern Schools and Senior Classes, and of the terms upon which they should be awarded, is not one upon which we feel qualified to make definite recommendations, but public opinion would, we believe, regard favourably some extension of expenditure in those cases where serious hardship would be involved if no financial assistance were forthcoming.

167. The difficulty presented by the fact that, if children remain at school till 15, additional teachers, and in many cases additional accommodation, will be required, is not a new one. It has arisen whenever, in the past, the school age was raised, or the standard of staffing and school building made more exacting. At the present time, conditions in this respect vary widely from one area to another. Several Authorities which we have consulted have stated that they can make the necessary provision almost immediately; one or two have stated that as much as seven years or more would elapse before satisfactory arrangements could be completed. The majority of those who have given us their opinion appear to think that a period of 2 to 4 years would be sufficient to enable them to deal effectively with the problem of providing for the increased number of children who, if the school age were raised, would be in attendance. In this matter, time is evidently of the essence of the problem. Neither teachers nor buildings can be improvised, and, in the case of all but a minority of Authorities, an interval must necessarily elapse before the requisite supply of both can be made available. On the other hand, if the preparations require some considerable time for their completion, it is all the more important that they should be begun as soon as possible. The intervening period is most likely to be employed to good purpose, if the date at which attendance up to the age of 15 will become obligatory is determined in advance, and if, as a consequence, local education authorities are in a position to plan the work of development with the knowledge that it will be necessary within a definite period to provide for an increased school population.

168. The course of wisdom, therefore, it appears to us, would be to pass legislation fixing the age of 15 as that up to which attendance at school will become obligatory after the lapse of five years from the date of this Report—that is to say at the beginning of the school year 1932. Such a step would have several advantages. It would be in accordance with the policy laid down in a resolution passed in the House of Commons on April 8th, 1925; it would give notice to parents and employers of the impending change; it would enable Local Educational Authorities to make the necessary arrangements for meeting it; it would give an added impetus to the development of post-primary education, by making evident that it would last in the near future for a period of not less than four years from the age of 11 +. We do not pretend, of course, that even with the interval suggested the reform would be free from difficulties, but we believe that they can be overcome, as even more serious difficulties in the way of educational progress have been overcome in the past; and the decline in the school population, to which we have alluded above, makes the present a peculiarly favourable moment for coping with them. In the suffering and anxiety of the years since 1914, public opinion has been stirred to a clearer realization of the contribution which a more prolonged and thorough education may make to the intellectual vitality and moral well-being of the rising generation. The time has come, it seems to us, when the country should be prepared even at the cost of some immediate sacrifice, to take a step which will ensure that such education shall have larger opportunities of moulding the lives of boys and girls during the critical years of early adolescence.

169. In the preceding paragraphs of this Chapter we have confined our attention, in accordance with the terms of reference, to the question of full-time education up to the age of 15 + . It must not be supposed, however, that we under-estimate the part. which may be played in the future by the development of a system of part-time education. Even when the age of full-time attendance is prolonged by one year, the dangers to which young persons may be exposed on leaving school are likely sometimes still to be serious, and the importance of ensuring that they remain in contact with educational influences will continue to be urgent. Provisions for developing a system of part-time education have been on the statute book since 1918.1 In recommending that the age of full-time attendance should be raised to 15, we have not forgotten the contribution which those provisions may make to the problem of securing that education is a vital influence in the lives of all young persons up to a later age.

¹ Sections 75 to 79 of the Education Act, 1921, re-enacting sections 3 10, 11 and 12 of the Education Act, 1918

CHAPTER IX.

THE QUESTION OF A LEAVING EXAMINATION.

170. The majority of our witnesses were opposed to the establishment of any special leaving examination for pupils in post-primary schools, chiefly on the ground that the institution of any public test would adversely affect the present free development of such schools by stereotyping the curriculum and teaching. They considered that such an examination would probably cramp the individuality of particular schools, narrow the educational outlook, and bring about a general loss of the freshness and elasticity which at present characterised many of them. It would probably also have the further result that pupils, teachers and the general public would tend to estimate the value of the work done in any particular school by the number of its successes in the examination. In general, pupils under the age of 16 were so immature that examinations of this character could not be a fair test of the work of a school.

171. At the same time, a large number of witnesses, while deprecating the institution of a special examination designed for pupils in these schools, were nevertheless of opinion that no demur should be made to the presentation of individual scholars from Central Schools and classes for Examinations such as those conducted by the various University examining Bodies, the London Chamber of Commerce, the Royal Society of Arts, the College of Preceptors, and the Union of Lancashire and Cheshire Institutes. Several witnesses were of opinion that individual pupils who after entry to the Central School developed on literary lines, and who could not conveniently be transferred to a "Secondary" School, should be allowed to enter for the First School Examination, provided it were clearly understood that this was only an exceptional arrangement and that the general work of the post-primary school should in no case be adapted to meet the requirements of that examination.

172. A large number of witnesses, while disliking any special leaving examination, suggested that a school leaving certificate might be given to pupils in post-primary schools, which could be signed by the head teacher and countersigned by the local Secretary or Director of Education. It was admitted, however, that at the present time most employers attached comparatively little significance to any form of school record, whereas, on the other hand, the Certificate of having passed the First School Examination carried considerable weight with them. In fact, that Certificate had at the present time more economic value than the diplomas of other bodies for whose examinations children in Central Schools were presented. The great objection to any form of school record alone would seem to be that the standard of different head teachers varies considerably, and that therefore the value of such a record would be best appreciated where the school is known to the employer.

173. Some witnesses, however, definitely favoured the institution of a special leaving examination for pupils in postprimary schools, to be taken at the age of 15+, chiefly on the ground that it would provide a clear objective for the work of the school and would also in time be of value to ex-pupils of such schools as a hallmark of attainment.

174. On the whole we are of opinion that it would be desirable to make available a special examination of a type suitable for pupils leaving post-primary schools, for the following reasons :—

(i) If no special examination were instituted for these postprimary schools, they would probably endeavour to aim, as some of them do now, at presenting considerable numbers of pupils for academic examinations such as the First School Examination and the Matriculation Examination, inasmuch as the certificates of such tests not only have at present an economic value for persons seeking employment, but also help to qualify for admission to institutions providing specialised instruction in commerce, technology and art.

(ii) It seems to be the general experience of teachers that a well devised leaving examination exercises a beneficial effect on the work of a school, as it sets up standards at which to aim and provides an incentive for the pupils to remain at school to the end of the course.

(iii) It has generally been found that children enjoy working for a well arranged examination test, which acts as a useful stimulus, provided of course that the examination syllabus is not allowed unduly to dominate the curriculum.

(iv) Boys and girls are handicapped, both from the economic and the educational standpoint, unless they can produce some tangible evidence of their attainments. It seems highly desirable that pupils from post-primary schools should be enabled when

152 THE QUESTION OF A LEAVING EXAMINATION

seeking employment to enjoy advantages comparable to those possessed by pupils leaving "Secondary" Schools at the age of 16+, who have passed the First School Examination.

175. Believing in principle that some type of leaving examination should be established for pupils in post primary schools, we proceed to discuss the question whether any existing examinations, even if in their present form they do not wholly fulfil the requirements of Modern Schools, might be extended or modified to suit the special needs of these schools. Among the principal organisations providing examinations for pupils of the age of 15+ are the various University Examining Bodies, the Royal Society of Arts, the London Chamber of Commerce, the College of Preceptors, the Union of Lancashire and Cheshire Institutes, and the East Midlands Educational Union.

The First School Examination, which was expressly designed for pupils who had spent four or five years in a "Secondary" School, is manifestly unsuited to pupils who remain in postprimary schools up to the age of 15+, as it presupposes a course of teaching extending over four to five years, whereas in Modern Schools and Senior Classes the course will, as a rule, be limited to three or four years.

The examinations conducted by the other bodies mentioned above hardly seem suitable in their present form for the purpose in hand, as they would appear to be either too literary or too restricted in scope. Nor would it seem that they could readily be adapted to suit the requirements of Modern Schools and Senior Classes, as such modification would probably deprive them of their distinctive character to an extent that would prevent them. from fulfilling their own proper functions namely, testing a more academic or theoretical type of education than in our view should be provided in post-primary schools.

176. In view of the multiplicity of existing examinations which are available for pupils of the age of 15+, we are naturally reluctant to recommend any further addition to the number. We have been, however, forced to conclude that selective or non-selective Modern Schools and some of the Senior Classes which retain some pupils to the age of 15 require a new examination framed in correspondence with their needs. But in order to allow some further time for the free development of such post-primary schools, we recommend that such a special examination should

not be established for at least three years, and that the syllabus for it should be carefully adjusted to the needs of broad and varied curricula. Furthermore, we are of opinion that whatever the local leaving age may be, this examination should be designed to be taken by pupils at the age of 15+ with the definite object of encouraging them to remain at school up to that age.

177. Moreover, we are of opinion that the presentation of pupils for any such special leaving examination should be wholly optional, both in respect of the individual pupil and of the school as a whole. Any individual student should be free to take a more academic examination, such as the First School Examination, if he or she so desires, though in general the presentation of pupils in postprimary schools for examinations of this kind should always be regarded as exceptional. We attach special importance to the view that entry to any such examination should be voluntary, and we think that any attempt on the part of Local Education Authorities or head teachers of individual post-primary schools to make entry for such an examination obligatory, in fact if not in name, should be rigidly held in check.

178. We are of opinion that the organisation of an examination of this type could best be undertaken by a number of joint boards in different districts throughout England and Wales, consisting of representatives appointed by the Local Education Authorities, both for higher and for elementary education, by the universities of those districts, and by the teaching profession in its various grades. It might also be desirable to include on these Examining Boards representatives of organisations intimately concerned with education in its broader aspects. We would suggest that these Examining Boards might also appoint as members persons having special educational experience, irrespective of the consideration of residence in a particular area. For example, representatives of some of the Technological and Agricultural Colleges might be appointed or co-opted on some of the Boards. We suggest that the Board of Education should take the initiative in setting up these Examining Boards, in the first instance, and should assume a leading part in working out the details of their organisation ; the Board could for example help to delimit appropriate areas for the several Joint Examining Boards, and convoke conferences in those areas to facilitate the proper organisation of the local board.
We are strongly of opinion that pupils in post-primary schools should enter for any such examination as individuals and not as members of forms or standards. We also think that individual pupils in "Grammar" Schools should be allowed to sit for this examination if they so desire, just as individual pupils in modern schools should be permitted in certain cases to take the First School Examination.

We think that arrangements might well be made by which the certificate of having bassed such an examination might be endorsed by the head teacher of the individual school, who could state thereon the degree of efficiency attained by the individual pubil in those subjects which were not offered in the examination either becaus they were optional or because they were practical subjects, such as handwork,¹ or gardening, or craft work. The Certificate which we contemplate would thus be a composite document, and one of two courses might be adopted in regard to it, either that the diploma of the Examining Board should be endorsed by the Head Teacher, or that the head teacher should sign the certificate, which should then be endorsed by the Examining Board. 0n the whole, we have decided to suggest that the former arrangement should be adopted, and we also recommend that pupils who for any reason did not take the leaving examination, or failed to pass it, should if they so desired, be supplied with an internal School Certificate, signed by the head teacher and countersigned by the Local Director of Education.

¹ It is possible, and we hope probable, that some scheme for giving credit for proficiency in these subjects, which will place them more on a parity with others, may be developed in the future.

CHAPTER X.

ADMINISTRATIVE PROBLEMS.

179. We now pass on to discuss the question whether any reorganization or adaptation of the existing administrative system is necessary or desirable, in view of the proposals made above, and, if so, what form that adaptation or reorganization should assume. We have already stated our opinion that, even if no change of the kind takes place, the general use of the terms " primary" and " secondary " to describe the first and second stages in education is both possible and desirable. We hope, that is to say, that even if the expression "Public Elementary School" is retained as a legal designation, public opinion and official phraseology may increasingly recognise and describe education up to the age of 11 as the primary stage, and that it may be generally recognised that the post-primary or secondary stage of education begins at that age, even though it may not take place in what is called to-day a "Secondary School."

180. At the same time, the question whether a change not merely in terminology but in educational law and administration is needed to keep pace with the rapid change in educational facts is clearly a very important one and calls for most careful consideration. Several witnesses have pressed it on our attention. Thus Sir Robert Blair emphasized the need for the treatment of the problem of post-primary education for pupils from about 12 to 16 as one whole. " There was a danger that with authorities for elementary education and authorities for higher education covering the same geographical areas in the counties; with Central Schools under the authority for elementary education, and Secondary Schools under the higher education authority; with local authorities' differences of outlook, both educational and financial : and with the division of the Board of Education into Elementary, Secondary and Technical branches, the treatment might be one-sided and incomplete. The way in which the administrative organization had grown up centrally and locally was a hindrance rather than a help to the treatment of the problem as a whole."

Mr. Salter Davies. Director of Education for Kent, pointed out that the effective organization of the education of children up to the age of 15 + was hampered by various difficulties, some of which were inherent in the nature of the problem, while others were primarily historical and accidental. Of the latter, two called for special note :-- " One is the prevailing practice of dividing education into three systems-Elementary, Secondary and Technical, each distinguished by its own particular rules and regulations. The second difficulty lies in the prevalence of the system of dual control. In regard to the former difficulty, the development of three systems was natural enough, so long as the problem of education had to be attacked piecemeal. It became evident, however, that even before the passing of the Education Act, 1902, such a division hampered the development of education. That Act, from some aspects, probably strengthened the barriers between the three systems of education. Encouragement was given to the rapid growth of the great system of Secondary Schools primarily designed for the talented minority, and for those whose parents were prepared to give them a longer school life. At the same time, the upward development of the Public Elementary School, if not actually discouraged, was not made easy, as the local authorities had experienced in their attempts to develop a system of Higher Elementary Schools. The results could hardly have been otherwise, seeing that the Education Act of 1902 had established two sets of administrative authorities, one of which was concerned almost wholly with the problem of elementary education. The Education Act of 1918 aimed at unifying within the existing administrative system all forms of educational activities, yet left the three systemselementary, secondary and technical-intact. The result had been a constant effort to bridge the gulf which separated elementary from secondary and technical and Further Education, both in regard to standards of accommodation, equipment, staffing and salaries."

We will discuss briefly the three main administrative difficulties to which the witnesses quoted above and many other witnesses referred, namely :---

(a) the division of education into three compartments; Elementary, Secondary and Technical, each with separate rules and regulations; (b) the existence, within the areas of local authorities for higher education, of smaller local authorities having control over elementary education only, within the area of their boroughs or urban districts;

(c) the existing system of "dual control."

A.—The division of education into Elementary, Secondary and Technical.

181. This tripartite division is the outcome of the historical development of education in England and Wales. Before the passing of the Board of Education Act in 1899, elementary education (including higher grade schools) was administered by the Education Department in Whitehall. Endowed secondary schools were largely controlled by the division of the Charity Commission which dealt with educational trusts, and technical education was administered by the Science and Art Department, which however, largely owing to the lack of adequate provision of secondary schools, had since 1873 been giving extensive assistance to Schools of Science and organised Science Classes, many of which were held in the premises of grammar schools, or of higher grade schools which, from the legal point of view, were "Public Elementary Schools." The Education Act of 1902 repealed the Technical Instruction Acts of 1889 and 1891, and divided education into elementary and "other than elementary," a classification based chiefly on administrative and financial considerations. The councils of counties and county boroughs were constituted the local authorities for higher education, and in addition, boroughs with a population of over 10,000 and urban districts with a population of over 20,000, according to the census of 1901, were constituted local authorities for elementary education within their own areas. The Education Act of 1918 aimed at unifying within the existing administrative system all forms of educational activities, but in effect left the three systems of elementary, secondary and technical education intact, though from the strictly legal point of view it preserved the two-fold classification of education into higher and elementary set up by the Education Act of 1902.

182. Several of our witnesses were of opinion that some of the difficulties inherent in the present tripartite arrangement could probably be removed without much difficulty by administrative action on the part of the Board of Education. In this connection, it

should be pointed out that the division of the Board into distinct branches for Elementary, Secondary and Technical Education came to an end in November, 1922, and though separate Regulations are still issued for these three divisions of education, there is a noticeable trend towards unification. There are still three separate Principal Assistant Secretaries of the Board responsible for the administration of the Grant Regulations, and the carrying out of the Board's policy under the Education Act of 1921, in regard to Public Elementary Schools, Secondary Schools, and Technical and Continuation Schools; but, apart from these three Officers, most of the higher staff of the Board engaged in these branches of administration are non-specialised. Under the present system, each officer is allocated to a territorial area, and deals with all branches of education in that area. Similarly, there is less and less division between the different branches in the actual working of the Board's system of inspection. For example, Central Schools are inspected jointly by Inspectors of Elementary Schools and Inspectors of Secondary Schools, and an Inspector of Elementary Schools may co-operate in the work of an Inspector of Secondary Schools or vice versa.

The recent reorganisation of the Board's Inspectorate has proceeded on the lines of amalgamating the three branches of secondary, technical and elementary education, in the higher stages, so that in each Division there will ultimately be one Divisional Inspector with his assistants, responsible for surveying the needs of their area as a whole, in co-operation with local authorities, and reporting to the Board upon the provision for education as a whole in each individual area and its efficiency, and upon the further accommodation required in all types of school.

183. It was, indeed, pointed out by some witnesses that though the tripartite division of education had now no statutory basis, and might from one aspect be regarded as a survival of an earlier stage in the development, it was nevertheless founded on significant differences between the teachers in the three sets of institutions concerned. Thus it was still true to say that the typical teacher in a Public Elementary School held the Board's Certificate and had probably passed through a training college ; a large proportion of the masters and mistresses in Secondary Schools were University graduates, but had not as a rule taken a course of professional training ; and many members of the staffs

ADMINISTRATIVE PROBLEMS

-

of Technical Colleges and Schools possessed professional or craft qualifications, and in many cases had also had practical experience in industry or in business. These differences still found outward expression in the various associations of teachers in Technical Colleges and Institutions, teachers in Secondary Schools and teachers in Public Elementary Schools, and the existence of these distinct organisations was an element in the situation that could not be ignored.

184. On the other hand, it is evident that the forces making for unification are very powerful. For example, the Teachers Registration Council, which was authorised by section 16 of the Education Administrative Provisions Act of 1907, and was formally constituted by Order in Council dated February 29, 1912, contains representatives of teachers of all types charged with the duty of framing and keeping a register of teachers in which the names are arranged in one column and in alphabetical order. The Council was established at the request of the teachers themselves, and its register, which now includes nearly 80,000 names, may be regarded as a symbol of the growing unity of all forms of teaching work. Further, there are numerous indications that the various associations of teachers are tending to draw closer to one another for joint action in matters affecting their common interests. Thus there is a Joint Committee which acts on behalf of the chief associations of elementary and secondary school Similarly, a number of the larger local education teachers. authorities have set up consultative committees composed of teachers from elementary, secondary and technical schools, which can advise on behalf of the teachers in all these types of schools within the administrative area.

It may be noted too, that Rule 2 of Appendix A in successive issues of the Regulations for Secondary Schools up to 1925 pointed out that it was desirable that persons with experience of teaching in Public Elementary Schools, as well as those who had had experience in "Secondary "Schools, should take part in conducting entrance tests for candidates for admission to "Secondary " Schools.

On the whole therefore it may be said with truth that the forces making for unification are growing in strength, and we hope that the artificial barriers between the three types of education will rapidly disappear.

ADMINISTRATIVE PROBLEMS

B.—Authorities for Higher Education and Authorities for Elementary Education.

185. Under section 1 of the Education Act of 1902, as reenacted in section 3 of the Education Act of 1921, the local education authorities for higher education are county councils (including London) and county borough councils. The local education authorities for purposes of elementary education are :---

(a) The councils of boroughs with a population of over 10,000 according to the census of 1901;

(b) The councils of urban districts with a population of over 20,000 according to that census;

(c) The council of every county borough;

(d) The council of every county in respect of the county area (exclusive of the areas mentioned in (a), (b) and (c) above).

It should be mentioned that under section 3 of the Education Act, 1902, as re-enacted in section 70 (2) of the Education Act, 1921, any non-county borough or urban district has power to spend money on higher education, provided that the amount raised out of the rates shall not exceed the amount that would be produced by a rate of 1d. in the f. This power is a survival of powers originally conferred by the Technical Instruction Acts of 1889 and 1891.

186. It was almost inevitable that certain difficulties, such as those described by the witnesses quoted below, should have arisen since the Education Act of 1902 came into operation, owing to the practical working of a system of local government which had established in the same area two types of independent authorities, one responsible mainly for elementary education in part of the area, the other responsible for higher education for the whole area, and for elementary education in districts not otherwise provided for. To take an extreme instance, the area administered for educational purposes by the Lancashire County Council contains 27 authorities for elementary education only (19 non-county boroughs and 8 urban districts). However most counties in England and Wales only contain a small number of areas which are autonomous for purposes of elementary education, and several contain none at all.¹

Section 20 of the Education Act, 1902 made provision for arrangements whereby the council of any county borough or urban district might, with the approval of the Board of Education, relinquish any of its powers or duties under the Act in favour of the county council. Up to the present, however, only a small number of authorities have done so.

187. Before the Education Act of 1918 came into operation, there were various provisions in previous Education Acts enabling local authorities to combine for different purposes, but the Act of 1918 repealed the existing provisions and introduced one comprehensive provision covering every kind of combination. This is contained in Section 6 of the Education Act of 1918 (as re-enacted in Section 6 of the Education Act of 1921). It enables Councils having powers under the Act to combine for the purpose of performing any duty or exercising any power under the Act, and affords very wide facilities for such combination. Section 2 (i) (c) of the Education Act of 1918 (as reenacted in Section 8 of the Education Act of 1921) provides for co-operation between Authorities for Elementary and Higher Education in matters of common interest, and particularly in respect of the preparation of children for further education in schools other than elementary, and their transference at suitable ages to such schools.

It will thus be seen that the Education Act of 1918, as reenacted in the Education Act of 1921, contains a whole series of provisions intended to facilitate co-operation between authorities for elementary education and authorities for higher education. It seems tolerably clear that, if an authority for elementary education chose, without adequate consultation and co-operation with the county authority having powers for higher education, to carry out the duty imposed on it by section 2 (i) (a) of the Education Act, 1918,² to make adequate and suitable

¹The actual distribution of the areas of local authorities for elementary education only among the 48 administrative counties of England (excluding London), may be summarised as follows:—6 counties contain no autonomous areas; 16 counties contain one each; 8 counties contain 2 each, and 8 counties contain 3 each. The remaining 10 counties contain respectively 4, 5, 6, 7, 8, 9, 12, 13, 16 and 27 autonomous areas.

Of the 13 counties in Wales, 8 contain no autonomous areas, 2 contain 2 each, 2 contain 3 each, and one contains 7.

[&]quot;Re-enacted as section 20 of the Education Act, 1921.

provision by means of central schools, central or special classes, or otherwise for organising in public elementary schools courses of advanced instruction for the older or more intelligent children, some of the central schools or classes so established might affect adversely some of the "secondary" schools administered by the county authority.

188. Many of our witnesses drew particular attention to the difficulties caused in regard to post-primary education by the existence of these two sets of local education authorities. For example, the Director of Education for a large county area expressed the opinion that the natural development of education would sooner or later compel the country to make up its mind what was to be the administrative unit for all forms of education. It was fast becoming impossible to continue the arrangement under which the education of a number of urban areas was administered by two local authorities. The smaller the area, the greater were the difficulties. Another Director of Education informed us that there were 13 authorities for elementary education forming *enclaves* within the area of his county with the result that the education of the county had to be fitted into 13 systems. "It was indeed a task that almost passed the wit of man."

The criticisms offered on behalf of headmasters of "Secondary" Schools situated in the area of authorities for elementary education only were somewhat severe. One headmaster, who had circulated a questionnaire on the subject to a large number of headmasters of "Secondary " Schools, situated in the areas of authorities for elementary education only, stated that, though in a few instances the local Central Schools were too recently established to have had any effect on neighbouring " Secondary " Schools, nevertheless, in the great majority of cases, the headmasters of the "Secondary" Schools were agreed that the new Central Schools, established by Authorities for Elementary Education only, were having a prejudicial effect on the numbers and standard of. entrants to the Secondary Schools. For example, in a town with a population of 30,000, no fee-paying pupil from the urban area had applied for admission to the local "Secondary" School in September, 1924. In another town, the number of fee-payers from the urban area entering the "Secondary" School had fallen from 64 in 1921-22 to 19 in 1924-25. This was believed to be largely due to the establishment of a new Central School in the town.

189. It should be mentioned that we have received no complaint of ill-effects produced on "Secondary" Schools by the establishment of Central Schools by a county borough or a county council having powers both for higher and elementary education. Indeed. the Director of Education for Carnaryonshire, where the local authority has established 7 Central Schools, stated that these new schools had not adversely affected the 9 "Secondary" Schools in the county area, and that while the numbers in all the "Secondary" Schools in Carnaryonshire had increased during the past 10 years, the increase had been most noticeable in those places where "Secondary" Schools and Central Schools had been running side by side. Furthermore, the representatives of the Association of Municipal Corporations informed us that no difficulty had been experienced in securing co-operation between County and County Borough Authorities in the matter of Central Schools and contributory schools. The only instances brought to our notice in which there had been friction or lack of co-operation between different Authorities in regard to Central Schools and their contributory schools were those in which the local education authority providing the Central School had powers in respect of elementary education only.¹ On the whole, it would appear that the relations between county Authorities and Authorities for elementary education only in their areas are tolerably friendly, and that the cases in which there has been any serious lack of co-operation between the two sets of authorities are comparatively few in number. For the present, therefore, we think that adequate co-operation might be secured between the two sets of Authorities, if fuller advantages were taken of the various provisions in the Education Act of 1921, designed to facilitate co-operation between Local Education Authorities.

190. Nevertheless, we cannot but realise'that the wider'problem to which many of our witnesses called attention still remains. That problem may be stated briefly as follows:—As the law now stands authorities for elementary education administer only Elementary Schools which include, however, in view of section 20 of the Education Act of 1921, a large portion of post-primary schools (e.g., Central Schools and Classes, Senior Schools, Senior Departments and Higher Tops), which we, in common with many of our witnesses, regard as belonging properly to the secondary grade of education. Will it be possible in the future for the

¹ The submission of schemes by Authorities under §§ 1, 4 and 5 of the Education Act, 1918, as re-enacted in §§ 11, 12, 14 and 15 of the Education Act, 1921, enables the Board to exercise some control over the provision of central schools.

country to acquiesce permanently in the division of part of the secondary grade of education between two separate authorities in the same area, with the result that an authority for elementary education only may start a Modern School or Senior Class when neighbouring "Secondary" Schools under the administration of the authority for higher education are not fully used ?

191. In theory there appear to us to be four main lines on which the local administration of education might be reorganised. The first is legislation abolishing Authorities for elementary education only and transferring all their powers and duties in respect of education to existing Authorities for higher education. The second is legislation transferring to Authorities for higher education all the powers and duties of those authorities for elementary education only which are concerned with areas that do not reach a certain minimum standard of population, and vesting with full powers in respect of higher education those Authorities which are concerned with areas that attain the minimum standard in question. The third is legislation creating new provincial Authorities in which the Authorities for elementary education only and the Authorities for elementary and higher education will both be merged. The fourth is co-operation between Authorities for elementary education only and Authorities for elementary and higher education, with the object of securing by mutual agreement that just as representatives of an Authority for elementary education only already take part in the initiation and administration of "Secondary" Schools maintained in its area by the authority for higher education, so the authority for higher education should be fully consulted before Modern Schools or other modes of provision for post-primary education are developed. by an Authority for Elementary Education only.

192. Of these four possible arrangements, we should propose to eliminate the first, which, though it is simple and logical and would probably effect a great saving in expense, would raise very difficult political issues; and we would suggest that, in progressive stages, first the fourth arrangement and then the second should be adopted, and that ultimately the question should be considered whether the third would not be the finally satisfactory plan. Our suggestion, it will be seen, is meant to reconcile a necessary reform with that gradual evolution which is so marked a feature in our constitutional history.

The fourth arrangement, which we have mentioned, may be readily and immediately adopted. It is contemplated, as we have shown above, in several sections of the Education Act of 1918, as

re-enacted in the Education Act of 1921 ; it already obtains in several areas throughout England and Wales, and it appears to work reasonably well. We recommend, therefore, as an interim arrangement for the immediate future, the general adoption on the lines indicated above of the methods of co-operation between the two sets of Authorities which are contemplated in various provisions in the Education Act of 1921.¹ But this is only a first step ; and we should like to see a further step taken-and that at as early a date as possible. A number of Authorities for elementary education only cover a restricted area and command but small resources; and we cannot expect a universal development of Modern Schools. on such a scale as will make them accessible to all children, if such Authorities are left to face the difficult task of securing the provision of such schools within their areas. Werecommend, therefore. that at as early a date as possible legislation should be introduced for the transference to Authorities for higher education of all the powers and duties of those Authorities for elementary education only which are concerned with areas that do not reach a certain minimum standard of population. But even if such legislation is passed. there will still remain the difficulty which arises from the existence of two sets of authorities; nor can we believe that the large problem of the provision of a general system of post-primary education in all the alternative forms which are necessary (Modern Schools, Senior Classes, Junior Technical Schools and the like) can really be solved or duly co-ordinated with the provision of "Secondary "Schools unless and until a large and comprehensive Authority is instituted and empowered to deal with the large and comprehensive duty which lies upon the community. Such an Authority, we conceive, will, in the majority of cases, have to be broader than the geographical county, all the more as county boundaries, over which children must often pass to reach the place of education best suited to their needs, already raise difficult problems; and we look forward accordingly to the institution of a few large Authorities each of which would represent some grouping of contiguous Authorities united by common characteristics and common needs. We accordingly recommend that consideration should be given to the question whether it might not be a desirable objective of educational development that provincial Authorities for education should be instituted, in which the Authorities for elementary education only and the authorities for higher education should both he ultimately merged.

¹Education Act, 1921, §§ 6, 7, 8.

ADMINISTRATIVE PROBLEMS

C.—The Existing System of Dual Control.

193. The development of a system of post-primary education, under which children are transferred about the age of 11 + from primary schools to other institutions and other forms of instruction, has already caused attention to be turned, in certain areas, to difficulties arising from the fact that Elementary Schools are to-day under two types of management. In the future, and as post-primary education expands, these difficulties, unless steps are taken to remove them, may arise more frequently and may retard progress along the lines which are suggested in this Report and which we believe that educationalists are generally agreed in regarding as desirable. With the larger aspects of the system of dual control we are not concerned, but it confronts Local Education Authorities, managers of non-provided schools, and the various voluntary societies or denominations with practical problems of considerable importance, the solution of which will demand foresight and goodwill on the part of all concerned. It is desirable, therefore, to state shortly the nature of the questions which from time to time arise, and the principal ways in which it has been proposed that they should be settled.

194. A Local Education Authority which is anxious to develop post-primary education is liable to find itself hampered by the fact that some of the schools attended by children over 11 years of age are not directly under its control. It may desire, for example, to group the older children from several schools in a single institution giving advanced instruction on the lines of Section 20 of the Education Act, 1921 ; but if it does, it may find that the non-provided schools which such children at present attend are reluctant to part with them. It may wish to reorganise the schools in its area in such a way as to reserve certain of them for children over 11; but here again it may find that such reorganisation involves expenditure which the Managers of Non-Provided Schools are unwilling or unable to incur. It may propose to erect a new school specially designed to give postprimary education ; but it may be discouraged from doing so by the knowledge that a sufficient number of children to justify the expenditure involved will not attend unless the managers of non-provided schools are favourable to the venture, and by the fear that it cannot count with certainty upon their co-operation. It is confronted with difficulties arising from the fact that the

buildings of a considerable number of non-provided schools, whatever their value if they be judged by the standard of the period at which they were erected, are not well adapted to meet the actual requirements of to-day. Such points could be amplified, but it is not necessary to labour them. It is evident that the existence in a single area of two sets of schools doing the same work, under different management, is not favourable to simplicity or economy of organisation. Mr. Salter Davies, the Director of Education for the County of Kent, expressed the opinion that a necessary "requisite in developing an effective school organisation was the abolition of the present system of dual control." In existing circumstances, he added, the efforts of a Local Education Authority to provide improved facilities, in districts where voluntary schools existed, were frustrated by the refusal or inability of the voluntary managers to co-operate. In Kent there had been no bad feeling, but of course the division of Public Elementary Schools into two separate classes, to some extent under different management, "was an extraordinary complication." Several other witnesses have spoken to the same effect about the difficulties inherent in the present situation.

195. If Local Education Authorities are liable to find their plans for developing post-primary education hampered by the existence of dual control, the societies and denominations concerned with non-provided schools are also faced with a situation that demands their serious consideration. At the present time, there are only a few non-provided schools which have been founded or exist exclusively for the provision of post-primary instruction for children over the age of 11; and the vast majority of nonprovided schools are elementary schools of the ordinary type, which carry their pupils forward continuously, from the stage of the infants' department to the age of 14, in the same building and under the same management.¹ If in the future a system of post-primary instruction in separate schools or classes is organised entirely by local authorities from the public funds, the nonprovided elementary schools will lose their pupils about the age of 11: and the societies or denominations which established these schools, and for more than 100 years past have contributed voluntarily, along the lines of their interests and convictions,

¹ It should be mentioned that since 1919 a number of non-provided Central Schools (Church of England and Roman Catholic) have been established.

to the general system of national education, will cease henceforward to be concerned (at any rate directly, and through a fulltime system of voluntary schools) with the education of children who are passing through the important and critical period which lies between the age of 11 and that of 15. In any case, and even apart from so drastic a consequence, it is natural that those who are concerned with voluntary schools should feel some anxiety when they come to study our proposals and the possible effects which they may produce. The difficulties which we have endeavoured to state are more likely to be overcome if they are frankly faced, and it is proper that they should receive attention. At the same time their importance must not be exaggerated. It is common ground to all concerned, both Local Education Authorities and the various denominations, that the welfare of the children must be the first consideration, and that the development of post-primary education on broad and generous lines has much to contribute to that welfare. When the attainment of that end occupies (as it normally does) the first place in the minds of those to whom it falls to handle the problem, experience shews that it is possible to devise arrangements which at once facilitate the work of the Local Education Authority in providing post-primary schools and satisfy the desire of the various denominations that the children belonging to them shall receive denominational instruction.

196. The President of the Board has lately referred to the schemes which have been tentatively sketched out by various Authorities. We cannot do better than quote the general description which he has given of their character.¹ "Generally speaking, these schemes resemble each other pretty closely, and appear, broadly speaking, to amount to this: that authorities should be empowered to accept the transfer of voluntary schools to them upon conditions which would allow denominational instruction to be given in them on certain days in the week. In all other respects the transferred schools are to be conducted in school hours as Council Schools, but religious instruction within the terms of Section 28 of the Act of 1921 is to be provided in all Council Schools and, during the hours set apart for such instruction, facilities are to be afforded, where desired, for the withdrawal of children for denominational teaching outside the school premises. Alternative schemes have been proposed under which the local authority is to have the power to assist voluntary schools without

¹ See "The Times" of Saturday, June 26, 1926, page 10.

requiring their transfer, but upon conditions which will give the authority more control than at present over the management, organisation and grouping of schools."

The President remarks that these schemes have not yet assumed a definite form, and that it is not yet clear how far they command a general assent. "But," he adds, "their character is clear. They do not seek to lay down new principles, but aim at removing certain administrative difficulties by local agreement. They provide means whereby voluntary bodies may make mutually advantageous arrangements with the local authority for the future management of particular schools or groups of schools, but they do not contemplate any general change in the relationships and functions of the State and voluntary bodies, or in the position and duties of teachers."

197. An example of such arrangements between voluntary bodies and Local Education Authorities is one under which, in accordance with the provisions of section 30 (5) (c) of the Education Act of 1921, the managers of contributory schools may have adequate representation in the management of the Modern Schools to which children from their schools are transferred. This arrangement is already in force in some areas, and we are told it works amicably and admirably. At the same time, there are other possible arrangements which deserve to be mentioned.¹ The authorities responsible for voluntary schools may, for example, in suitable districts meet the situation which would arise if effect were given to our proposals by limiting the number of their schools which deal with the education of younger children, and by using the resources which are thus set free for the purpose of starting new Modern Schools for the education of older children. They may, indeed, feel a natural reluctance to close any existing institution; but they may none the less recognise that it is preferable to close a number of the smaller schools dealing with younger children in order to maintain a Modern School of some size which provides an education for children over the age of 11.

¹ In this connexion reference may be made to the powers possessed by Local Education Authorities under section 34 of the Education Act, 1921 (re-enacting section 31 of the Education Act, 1918), in regard to the organisation and grouping of non-provided schools of the same denominational character.

198. In conclusion we feel bound to express our earnest hope that the voluntary societies and managers of non-provided schools, in spite of the anxieties which they may naturally feel will aid, to the best of their power, the development of postprimary schools of the type for which we have suggested the name "Modern." The welfare of the nation at large will be advanced by the growth of such schools ; and the voluntary societies have the power to aid or retard that growth. If they promote arrangements for the satisfaction of their needs in such Modern Schools controlled by the public authority, they will be aiding the better education of the youth of England at its most crucial stage of development, and they will be aiding thereby the betterment of England at large. If they oppose the transference of children to Modern Schools, and prefer their retention, up to the age of 14, in senior classes conducted in elementary schools, they will be hindering the growth of Modern Schools, with all their possibilities, and they may also be hindering the highest development of the children themselves. New postprimary schools can hardly be erected if there is no adequate attendance, and the demand and attendance will be seriously diminished if a system of senior classes in existing elementary schools is to be widely retained. Children can hardly develop to the height of their powers, if they remain in small numbers in their old elementary school, instead of going forward to gain the fruits both of the stimulus which comes from a new school and of the better organisation and teaching which the larger numbers gathered together in such a school permit and encourage. On every ground, therefore, we would reiterate our earnest hope that voluntary societies and public authorities, the co-operation of which has been a power, if it has also been a problem, in English education, will unite to establish the Modern School firmly as an integral and general part of our national system.

NOTE ON THE IMPORTANCE OF SECURING THE APPOINTMENT, WHERE POSSIBLE, OF PERSONS WITH SUITABLE QUALIFICATIONS AS MANAGERS OF MODERN SCHOOLS AND SENIOR CLASSES.

199. Throughout our Report we have emphasised the importance of bringing the instruction given in Modern Schools and Senior Classes into closer relationship with local conditions and needs.

ADMINISTRATIVE PROBLEMS

We think that a definite attempt might well be made to associate with the work of every Modern School and most, if not all, Senior Classes representative local men and women, who would be able to contribute knowledge and personal interest such as should be a constant help in developing the work of the school or class on lines suited to local needs and social conditions. The persons appointed to serve as managers should be representative in the widest sense, including members of different professions and persons concerned with commerce, industry, or agriculture, whether as employers or employees. In many cases this is already achieved. but we understand that it is sometimes found difficult in certain districts to induce men and women with suitable qualifications to act as managers. This, in some instances at any rate, may be due to the fact that some Local Authorities leave comparatively little discretion to the managers of provided schools. We would accordingly suggest that local authorities might be well advised to follow the existing practice of several large Authorities, and assign to these bodies of managers well defined powers and duties, including some voice in the appointment of teachers. It seems to us that a carefully chosen body of managers, including persons with special knowledge of local conditions and local peculiarities, might often be of great service to the Authority in matters connected with the conduct of the Modern School or Senior Class, more especially as forming a link between the staff, the parents of the pupils, and local employers. The managers might fulfil a very useful function, as indeed they often do at present, by explaining and interpreting to parents, local employers and the community generally the special province, function and aim of Modern Schools and Senior Classes.

171

• •

CHAPTER XI.

SUMMARY OF PRINCIPAL CONCLUSIONS AND RECOMMENDATIONS.

200. Our conclusions and recommendations are as follows :----

The Nature of the Problem.

1. The problem of providing full-time post-primary education for children between 11 and 15 years of age, who are not proceeding to "secondary" schools in the narrower sense of the word, is neither new nor confined to England and Wales. It has made itself felt in this country since the beginnings of public elementary education, and has produced a variety of experiments of which the central schools are the latest example ; while it has also been the subject of much attention in Scotland, in some of the States and Provinces of the Dominions, in various parts of the United States of America, and in several European countries. In recent years, however, the question has assumed special prominence for the reasons given in the text of our Report. (Chapters I and II and Appendices II and IV.)

The need for a universal system of post-primary education.

2. The experience already gained as a result of the work done in central schools, junior technical schools, and the senior classes of elementary schools justifies the conclusion that, both on educational and on social grounds, it is of urgent importance to ensure that, with due allowance for the varying requirements of different pupils, some form of post-primary education should be made available for all normal children between the ages of 11 and 14, and, as soon as possible, 11 and 15. Progress must necessarily be tentative and experimental, but the objective—a universal system of post-primary education—should be held clearly in view, and the measures necessary to attain it should go steadily forward (Chapters II and III).

CONCLUSIONS AND RECOMMENDATIONS.

The general Scheme of Post-Primary Education.

3. Primary education should be regarded as ending at about the age of 11+. A second stage should then begin, and this stage, which for many pupils would end at 16+, for some at 18 or 19, but for the majority at 14+ or 15+, should, as far as possible, be regarded as a single whole, within which there will be a variety of types of education, but which will generally be controlled by the common aim of providing for the needs of children who are entering and passing through the stage of adolescence. (Chapter III, §§87 and 88.)

4. All normal children should go forward to some form of post-primary education. It is desirable, having regard to the country as a whole, that many more children should pass to "secondary" schools, in the current sense of the term. But it is necessary that the post-primary stage of education should also include other types of post-primary schools, in which the curricula will vary according to the age up to which the majority of pupils remain at school, and the different interests and abilities of the children.

In selective post-primary schools the course should be designed to cover the period from the age of 11+ to that of 15+. In non-selective post-primary schools, so long as the leaving age is 14+, the course should be framed to cover the period from the age of 11+ to that of 14+, but provision should be made for the needs of pupils who remain at school to the age of 15+. (Chapter III, §89.)

5. The schools which deal with the post-primary stage of education should include (in addition to Junior Technical and "Trade" Schools) the following types :--

(i) Schools of the "secondary¹" types now commonly existing, which at present follow in the main a predominantly literary or scientific curriculum, and carry the education of their pupils forward to the age of at least 16+.

(ii) Schools of the type of the existing selective Central Schools, which give at least a four years' course from the age of 11+, with a "realistic" or practical trend in the last two years.

¹ See note on page 71.

(iii) Schools of the type of the existing non-selective Central Schools, which may either be the only Central Schools in their area, or may exist side by side with selective Central Schools and cater for those children who do not secure admission to such schools.

(iv) Senior Classes, Central Departments, "Higher Tops" and analogous arrangements, by which provision is made for the instruction of pupils over the age of 11+ for whom, owing to local conditions, it is impossible to make provision in one or other of the types of school mentioned above. (Chapter III, §§90, 91 and 92.)

6. A humane or liberal education is not one given through books alone, but one which brings children into contact with the larger interests of mankind. It should be the aim of schools belonging to the last three types to provide such an education by means of a curriculum containing large opportunities for practical work, and closely related to living interests. In the earlier years the curriculum in these schools should have much in common with that provided in the schools at present commonly known as "secondary"; it should include a foreign language, but permission should be given to omit the language in special circumstances; and only in the last two years should a "practical" bias be given to the courses of instruction provided. (Chapter III, §93.)

7. At the age of 11 + pupils from primary schools should normally be transferred to a different school, or, failing that, to a different type of education from that given to pupils under the age of 11 +; but provision should be made in exceptional cases for the transfer of children at a later age, provided that the course which they pursue after such transference lasts sufficiently long to be of value to them. (Chapter III, §96.)

Nomenclature.

8. It is desirable that education up to the age of 11 + should be known by the general name of Primary Education, and education after that age by the general name of Secondary Education, and that the schools mentioned in conclusion No. 5 above, all of which are concerned with the secondary stage of education, should be called by the following designations:—

(i) Schools of the "secondary" type most commonly existing to-day, which at present pursue in the main a

predominantly literary or scientific curriculum, to be known as Grammar Schools.

(ii) Schools of the type of the existing selective Central Schools, which give at least a four years' course from the age of 11+, with a "realistic" or practical trend in the last two years, to be known as Modern Schools.

(iii) Schools of the type of the present non-selective Central Schools, with a curriculum on the same general lines as that of the Modern Schools just mentioned, and with due provision for differentiation between pupils of different capacities, also to be known as Modern Schools.

(iv) Departments or classes within public elementary schools, providing post-primary education for children who do not go to any of the three previous types of schools, to be known as "Senior Classes." (Chapter III, §§98 and 99.)

Curriculum.

9. The general characteristics of Modern Schools will be as follows :--

(i) They will plan their courses for a period of 3 or 4 years, and these courses will accordingly be simpler and more limited in scope than those in Grammar Schools, which are planned for 5 or more years.

(ii) Though the subjects included in the curriculum of Modern Schools and Senior Classes will be much the same as those in Grammar Schools, more time and attention will be devoted to handwork and similar pursuits in the former.

(iii) While the courses of instruction in Modern Schools in the last 2 years should not be vocational, the treatment of the subjects of the curriculum should be practical in the broadest sense and brought directly into relation with the facts of every-day life. The courses of instruction, though not merely vocational or utilitarian, should be used to connect the school work with the interests arising from the social and industrial environment of the pupils. (Chapter III, §§92-94, Chapter IV passim, and Chapter V, §122.)

• §

10. In framing the curricula of Modern Schools and Senior Classes due regard should be paid both to the capacities of the pupils and to the local environment. The curriculum should in each case be planned as a whole, in order that the teaching of the various subjects may be so adjusted as to secure uniformity in the presentation of any matter which is common, and to prevent overlapping. Similarly, in the arrangement of the time-table. any rigid separation of the different sides of a subject should be avoided. In framing the several syllabuses, each subject should again be regarded as a whole; and all detail irrelevant to the purpose in hand should be eliminated, in order that the pupil may not be overburdened, and an opportunity may be given for the development of individual tastes. Finally, every effort should be made to ensure a close connexion between the work in school and the pupil's further education after leaving. (Chapter IV, §106-§116.)

Practical Bias.

11. Modern Schools and Senior Classes should, as a rule, give a practical bias to the curriculum in the third or fourth year of the course. This bias should be introduced only after careful consideration of local conditions and upon the advice of persons concerned with the local industries. It should not be of so marked a character as to prejudice the general education of the pupils. Adequate provision should be made for the needs of such pupils as may gain greater advantage by following a more general course of study. (Chapter V, §126 and *passim*.)

Further Education.

12. It is desirable that teachers in Modern Schools and Senior Classes should endeavour to secure the continued education of their pupils after school age by drawing attention to such facilities for further instruction, whether cultural or vocational, as are available in the area. (Chapter IV, $\S116$, Chapter VIII, $\S169$.)

Junior Technical Schools.

13. Junior Technical Schools of the "Trade School" type, which train pupils for a particular occupation, are doing valuable work within their own province, and should be encouraged, wherever the needs and requirements of local industries provide an adequate demand. (Chapter II, §80.)

CONCLUSIONS AND RECOMMENDATIONS

14. The same is true of Junior Technical Schools which train pupils for the general group of industries concerned with engineering in its various branches, in which an understanding of the scientific principles underlying the construction and use of machinery is of importance. (Chapter II, §80.)

15. The question of including a foreign language in the curriculum of Junior Technical Schools should be decided for each individual school in the light of local conditions and the requirements of the group of occupations for which the school affords a preparation. (Chapter II, §82.)

Full-time Junior Art Departments in Art Schools.

16. Junior full-time Art Departments are of genuine value in their own sphere, and where local conditions require them might with advantage be further developed. (Chapter II, §84.)

Facilities for the transference of pupils from one type of postprimary school to another.

17. Adequate arrangements should be made for transferring children, who shew ability to profit by "Secondary" education beyond the age of 15+, from Modern to Grammar Schools at the age of 12 or 13. Conversely, similar arrangements should be made for transferring pupils from Grammar Schools to Modern Schools or to Junior Technical Schools, as need may be. (Chapter III, §97, and Chapter VII, §156.)

Qualifications of leachers and standard of staffing in Modern Schools and Senior Classes.

18. The qualifications of the teachers and the standard of staffing in proportion to the number of pupils in the school should approximate to those required in the corresponding forms of Grammar Schools. More teachers, however, will be required in practical subjects, since Modern Schools will, as a rule, have an industrial, commercial or agricultural bias, and will accordingly need some teachers with special qualifications. We think that the teachers should have ample time for preparation and private reading, and should be afforded full opportunities for attending vacation and other short courses. (Chapter VI, §140.)

Equipment of Modern Schools and Senior Classes.

19. The education of children over the age of 11 in Modern Schools and Senior Classes is one species of the genus "secondary education." It is not an inferior species, and it ought not to be hampered by conditions of accommodation and equipment inferior to those of Grammar Schools. We attach great importance, therefore, to ensuring that, so far as possible, and with due allowance for differences in the character of the curriculum and the age range of the pupils, the construction and equipment of Modern Schools should approximate to the standard from time to time required by the Board in schools working under the Regulations for Secondary Schools. At the same time, we fully recognise that finance is a limiting factor, and, as it is not feasible at once to establish conditions such as we have described, we must be content to recommend the establishment of the best conditions obtainable in the circumstances. (Chapter VI, $\xi142$.)

Arrangements for the admission of children to Selective Modern Schools and Senior Classes.

20. While we think that all children should enter some type of post-primary school at the age of 11+, it will be necessary to discover in each case the type most suitable to a child's abilities and interests. For this purpose a written examination should be held, and also, wherever possible, an oral examination. A written psychological test might also be specially employed in dealing with border-line cases, or where a discrepancy has been observed between the result of the written examination and the teacher's estimate of proficiency. Where Local Education Authorities so determine, a preliminary examination might be held in order to discover candidates who should be encouraged to go forward to the free place examination proper.

Arrangements for organising and conducting examinations for admission to schools of different types should be left to the Local Education Authorities. (Chapter VII, §157.)

The Lengthening of School Life.

21. It is desirable that legislation should be passed fixing the age of 15 years as that up to which attendance at school will become obligatory after the lapse of five years from the date of this Report—that is to say, at the beginning of the school year 1932. (Chapter VIII, $\S168$.)

A Leaving Examination for Pupils in Modern Schools and Senior Classes.

22. A new Leaving Examination should be framed to meet the needs of pupils in selective and non-selective Modern Schools and in the Senior Classes which retain some of their pupils to the age of 15; but, in order to allow further time for the free development of such schools, this special examination should not be established for at least three years, and the syllabus for it should be carefully adjusted to the needs of broad and varied curricula. Whatever the leaving age may be, this examination should be designed to be taken by pupils at the age of 15+ with the definite object of encouraging them to remain at school up to that age. (Chapter IX, §176.)

23. The presentation of pupils for any such leaving examination should be wholly optional, both in respect of the individual pupil and of the school as a whole. Any individual pupil should be free to take another examination, such as the First School Examination, if he or she so desires. We attach special importance to the view that entry to the examination should be voluntary. (Chapter IX, §177 and §178.)

24. The organisation of an examination of this type could best be undertaken by a number of joint boards in different districts throughout England and Wales, consisting of representatives appointed by Local Education Authorities, both for higher and elementary education, by the universities of those districts, and by the teaching profession in its various grades. These examining bodies might also appoint as members persons having special educational experience irrespective of the consideration of residence in a particular area. For example, representatives of some of the technological and agricultural colleges might be appointed or co-opted. (Chapter IX, §178.)

25. The Board of Education should take the initiative in setting up these examining boards and in working out the details of their organisation. It might, for example, help to delimit appropriate areas for the several joint examining boards, and convoke conferences in those areas to determine the proper organisation of the local board. (Chapter IX, §178.)

26. Individual pupils in Grammar Schools should be allowed to sit for the Leaving Examination in Modern Schools and Senior Classes, if they so desire, just as individual pupils in Modern Schools should be permitted in certain instances to take the First School Examination. (Chapter IX, §178.)

27. Arrangements might also be made by which the certificates of having passed the Leaving Examination might be endorsed by the head teacher, who could state thereon the degree of proficiency attained by the pupil in those subjects which were not offered in the examination, either because they were optional or because they were practical subjects such as handwork, or gardening, or craft work. We hope, however, that suitable arrangements may be developed in the future for giving credit for proficiency in practical subjects, which will place them more on a parity with the other subjects of the curriculum. (Chapter IX, §178.)

28. Pupils leaving the post-primary schools at the age of 14+, or pupils who for any reason have not taken the leaving examination or have failed to pass it, should, if they so desire, be supplied with an internal school certificate signed by the head teacher and counter-signed by the local Director of Education. (Chapter IX, §178.)

Administration.

29. We note that the existing division of education into Elementary, Secondary and Technical, is losing its rigidity, and we hope that the artificial barriers between these three divisions will rapidly disappear. (Chapter X, §184.)

30. It would appear that the relations between County Education Authorities and the Authorities for Elementary Education only which act within their areas are in general friendly, and that cases in which there has been any serious lack of co-operation between the two sets of Authorities in regard to the provision of "courses of advanced instruction" are comparatively few in number. We think that, for the time being, adequate co-operation might be secured between the two sets of Authorities, L fuller advantage were taken of the various provisions in the dEocation Act of 1921, designed to facilitate co-operation between lscuif Education Authorities. (Chapter X, §189.)

CONCLUSIONS AND RECOMMENDATIONS

31. In theory there are four main lines on which the local administration of education might be reorganised with a view to improving the provision of secondary education in the broadest sense of the word :--

(i) Legislation might be introduced abolishing Authorities for Elementary Education only and transferring all their powers and duties in respect of education to existing Authorities for Higher Education.

(ii) Legislation might be introduced for transferring to Authorities for Higher Education all the powers and duties of those Authorities for Elementary Education only which are concerned with areas that do not reach a certain minimum standard of population, and vesting with full powers in respect of Higher Education those Authorities which are concerned with areas that attain such a minimum standard.

(iii) Legislation might be introduced creating new provincial authorities in which the Authorities for Elementary Education only and the Authorities for Higher Education were merged together.

(iv) There might be further co-operation between existing Authorities for Elementary Education only and Authorities for Higher Education, with the object of securing by mutual agreement that the Authority for Higher Education should be fully consulted before Modern Schools or other forms of provision for post-primary education were introduced by an Authority for Elementary Education only. (Chapter X, §191.)

32. The first of these four possible arrangements may for the time being be set aside, as it would raise difficult political issues. It is accordingly suggested that in progressive stages first the fourth arrangement and then the second should be adopted, and that ultimately the question should be considered whether the third would not be the finally satisfactory plan. (Chapter X, §192.)

33. We recommend, therefore, as an interim arrangement for the immediate future, the general adoption of methods of cooperation between the two sets of Local Education Authorities such as those suggested in (iv) of the recommendation No. 31. (Chapter X, $\S192$.)

34. We recommend that at as early a date as possible legislation should be introduced for the transference to Authorities for Higher Education of all powers and duties of those Authorities for Elementary Education only which are concerned with areas that do not reach a certain minimum standard of population, and for the vesting of full powers in respect of Higher Education in those Authorities for Elementary Education only which are concerned with areas that attain such a minimum standard. (Chapter X, §192.)

35. Finally, we recommend that consideration should be given to the question whether it may not be a desirable objective of educational development that provincial authorities for education should be instituted, in which the authorities for Elementary Education only and the Authorities for Higher Education shall both be ultimately merged. (Chapter X, §192.)

36. It is our earnest hope that the voluntary societies and managers of non-Provided Schools will aid to the best of their power the development of post-primary schools of the type for which we have suggested the name "Modern," and will help to establish the Modern School firmly as an integral and general part of our national system of education. (Chapter X, §198.)

37. Local Education Authorities generally might follow the existing practice of several large Authorities and assign to the managers of Modern Schools and Senior Classes well defined powers and duties including some voice in the appointment of teachers. (Chapter X, §199.)

38. Persons appointed to serve as managers of Modern Schools and Senior Classes should be representative in the widest sense, including members of different professions and persons connected

182

with commerce, industry or agriculture, whether as employers or employees. (Chapter X, §199.)

> (Signed) W. H. HADOW (Chairman). P. ABBOTT. *¶S. O. ANDREW. ERNEST BARKER. §E. R. CONWAY. †D. H. S. CRANAGE. GORELL. LYNDA GRIER. IVOR H. GWYNNE. FREDA HAWTREY. PERCY JACKSON. A. MANSBRIDGE. **1A. J. MUNDELLA.** E. M. TANNER. R. H. TAWNEY. ***S. TAYLOR.** W. W. VAUGHAN. W. C. WATKINS. •W. H. WEBBE. J. A. WHITE.

ROBERT F. YOUNG (Secretary).

28th October, 1926.

- * Subject to reservation in Note, p 186.
- Subject to reservation in Note, p 184.
- Subject to reservation in Note, p 186.

³ Subject to reservation in Note, p 184. 3 Mr. Andrew disagrees with the nomenclature proposed in Chapter 111 399 (i) (ii) and (iii) and repeated in Chapter X1-Recommendation No. 8 (i) (ii) and (iii).

We are asked to consider and report on "Courses of Study," and I gladly sign all the educational suggestions for diverse courses, of four years, covering suitably all scholars above eleven or twelve years of age : my doubts arise on legal and administrative points.

I cannot adopt all the stress laid on the transfer of these scholars to other schools. In many cases such transfer is expediently wise, but in others it may be unnecessarily destructive to the school thereby "decapitated," and a disadvantage to the scholars thus "promoted"; especially if the transfer is to deprive them of the statutory and administrative rights and safeguards, which the law provides for scholars in "Public Elementary Schools." (§99.)

In the organisation of local administration we need devolution rather than the centralization suggested; whilst the framework of Local Education Authorities should be brought into accord with the general system of Local Government. (§192.)

And even in such a simple matter as the lengthening of school life, all experience shows that the wiser course is to press the local use of optional powers, as the true and only effective prelude to mandatory legislation. ($\S168$.)

I am sorry to disagree on these points with colleagues who have been so kind and courteous in accepting suggestions from me in other directions.

A. J. MUNDELLA.

NOTE BY MISS E. R. CONWAY ON THE COMMENTS IN §96, AND FOOTNOTE THERETO, OF CHAPTER III (page 90).

By extracting this note from its context, it is my opinion that full weight has not been given to the evidence submitted by the National Union of Teachers. The paragraphs in which it occurs read as follows :—

"It is probable that in many schools provision may be made for the continued education of scholars to the age of 15 plus. Sufficient accommodation may be available, suitable rooms for special instruction may exist, or may be provided without difficulty, and the necessary school equipment may be secured. In such schools there would be a break in the school life at the mental age of 11 plus. The department, whether for boys or girls or mixed, would consist of two sections, the junior department containing pupils from the age of admission to 11 plus, and the senior department from 11 plus to 15 plus. The age of admission to such a composite department would be determined by local conditions, but usually the age for admission would be that at which transfer takes place from an infants' department to a department for older scholars.

In other cases, children will be transferred at the age of 11 plus to another school building, and a form of organisation where such transfer takes place would in many cases be preferable to the retention of the scholars in the school building where they passed their earlier years, as it is undesirable that pupils of the age of 15 should be taught under the same roof as children under the age of 11. Raising the school age to 15 plus must lead either to the building of new schools or to the remodelling of existing schools in order that full provision may be made by means of laboratories, work-rooms, domestic science rooms and so forth, for the continued education of pupils to the age of 15 plus."

I am definitely of opinion that the Union's suggestions include arrangements where advanced instruction may be adequately provided in existing schools. This will prevent the injury to the educational efficiency, which a system of transfer of all the brighter pupils may bring. The teaching of the older and brighter children acts as a stimulus to the staff, and their removal will destroy a source of interest for the teachers, and of ambition for the children. The fact that older and younger children are dealt with in the same school building is also a valuable aid to character training, giving the older pupils that sense of responsibility to their younger and weaker colleagues which develops into the mutual care and consideration which is so helpful in the life of a community.

"In other cases," namely, in those Schools where such arrangements cannot be made owing to inability to provide satisfactory equipment, accommodation, playground space and other amenities, it is desirable to make separate provision. The effect of the Union's evidence is, in my opinion, to stress the necessity of making full and generous provision for advanced instruction unhampered by conditions which now hinder its proper development.

E. R. CONWAY.

NOTE BY THE REV. DR. D. H. S. CRANAGE IN RESPECT OF RECOMMENDATION No. 24.

I am very doubtful as to the wisdom of setting up a number of new examining boards in different parts of the country. I am not convinced that the existing bodies, strengthened by representatives of the various interests concerned, could not do the work efficiently. If, however, such boards are considered necessary, I think it should be laid down that the setting of papers should be delegated to a central committee, on which all would be represented. Such a committee could easily set papers on some of the subjects which would apply to the whole country, and also provide alternative papers to cover the needs of the various districts. Co-ordination of standard is important, so that the leaving certificates, as in the case of secondary schools, should have an approximately equal value, wherever they were obtained. It would be very difficult to ensure that on all the boards there should be "persons having special educational experience, irrespective of the consideration of residence in a particular area." It would be comparatively easy to secure the services of such persons on a central committee sitting in London.

D. H. S. CRANAGE.

NOTE BY MR. S. O. ANDREW, MR. S. TAYLOR AND MR. W. H. WEBBE IN RESPECT OF RECOM-MENDATION No. 21.

We are sorry we are unable to agree with the majority of our colleagues in regard to Recommendation No. 21.

In our view, the weight of evidence on this point is summed up accurately in the first sentence of section 162 of Chapter VIII. "The desirability of prolonging education must depend largely on the character of the education which is offered" and in the third sentence of section 165 "Provided that due provision is made on the lines suggested in our earlier Chapters, for the extension and improvement of post-primary education, the desirability on educational grounds of raising the age of compulsory school attendance from 14 to 15 is not, it seems to us, open to doubt."

At the same time, in section 166, it is emphasised that "... if children are to be retained at school for another year with advantage to themselves and the community, an increase of staffing and (when the existing buildings are already fully utilised), of accommodation, will be required."

We are entirely in agreement as to the desirability of gradually extending the school life. We differ from our colleagues in believing that it is quite impossible within the time mentioned in the Recommendation, and indeed within a much greater time to fulfil the conditions which our colleagues have accepted as fundamental.

The experience of Local Authorities who have been actively endeavouring during the last few years to develop the education of older children along the lines suggested in our Report, has shown that, from every point of view such a rate of development as is contemplated would be impossible.

We do not desire to emphasise the magnitude of the financial burden which such a rapid development would throw on a community already overburdened, nor do we stress the Administrative difficulties of making such an enormous change in so short a time, without completely unbalancing any general programme of educational advance.

It is, we think, sufficient to point out that such a change would involve the provision of accommodation for half a million more children, and the training and selection of about 15,000 to 20,000 teachers of a particular type, with a large percentage of practical teachers, of whom there is notoriously a shortage at the present time, and all of them imbued with a real understanding of the new ideals and of the new methods which we desire our Modern schools to exhibit. We believe that such a task could not possibly be completed in the time suggested.

We believe the proper line of advance to be by fostering the efforts which are now being made by Local Authorities. The effect of these efforts is shown in section 161 of Chapter VIII, and if the figures could be brought up to date, we are sure that the rate of progress would be seen to have been maintained. Such "heightened appreciation of the value of education and increased willingness on the part of parents to make sacrifices in order that their children may continue to receive it" is entirely healthy, and should be encouraged in every way by constant improvement, as circumstances permit, in the provision made for older children. The time will naturally come when the educational machine has so far developed, that it is capable without disaster of taking in, by a general raising of the school leaving age, the comparatively small number of children between 14 plus and 15 plus who will still remain outside it, but in our view that time is much further off than our colleagues believe.

> S. O. ANDREW. S. TAYLOR. W. H. WEBBE.

SUGGESTIONS ON THE TEACHING OF THE SEVERAL SUBJECTS OF THE CURRICULUM IN MODERN SCHOOLS AND SENIOR CLASSES.¹

The school may be regarded as an ordered society in which knowledge is acquired and pupils are disciplined in certain forms of activity which have the greatest and most permanent' significance in the wider world outside. Such activities seem to fall into two main groups.

In the first place there are the moral and physical activities necessary to a proper social and individual life—religion, manners, the principles of moral and social behaviour and the care of health and bodily movement. The curriculum will accordingly comprise suitable moral and religious instruction and general physical training including the acquisition of habits of graceful movement by means of physical exercises and dancing, and the development of the spirit of team work and co-operation by means of corporate games.

¹ See page 111.

In the second place, there are the intellectual activities necessary for an understanding of the body of human civilisation and for an active participation in its processes. These may be regarded as falling into the following divisions :---

(1) Language, including literature, and the arts of writing and reading. Under this heading may be included both the study of English in its various aspects, and that of a foreign language.

(2) Geography and history, of which the former on its physical side has connections with natural science, and the latter is closely related to the study of literature.

(3) Mathematics, including the elementary study of number and space.

(4) Elementary science.

(5) Handwork, including drawing and applied art, and the various branches of practical instruction.

(6) Music.

We now proceed to deal shortly with each of the several subjects of the curriculum.

It is scarcely necessary to point out that the suggestions which we offer are necessarily tentative and do not in any way claim to be exhaustive.

We desire to express our gratitude to the various organisations and individuals who sent us valuable memoranda on the teaching of the several subjects of the curriculum, which we have used largely in preparing these Notes; more particularly we desire to thank the Geographical Association, the Historical Association, the Educational Handwork Association, the Ling Association, and the Association of Teachers of Physical Training, which sent us detailed memoranda bearing on the teaching of their subjects in post-primary schools:

RELIGIOUS KNOWLEDGE.

The teaching of religious knowledge, like that of English, cannot be confined to a separate period or number of periods. It will affect the teaching of other subjects, such as history and literature, and the wise teacher will be anxious, in the various departments of school activity, to bring home to the pupils, as far as their capacity allows, the fundamental truths of religion and their bearing on human life and thought.
We have not ventured to make any detailed suggestions with regard to the teaching of religious knowledge. We feel that, in a matter which touches such profound issues, and in a subject which, while it will be approached by all with reverence, will also be treated differently from school to school and from teacher to teacher, it is the part of wisdom to rely on the initiative and the particular interests of head-masters and head-mistresses. We commend the subject earnestly to their attention : and we content ourselves by referring to two syllabuses which we think that all who are concerned with teaching will find of value. The first is the Cambridgeshire Syllabus of Religious Teaching for Schools (Cambridge University Press, second edition, 1926), which was drawn up by a Committee on which various denominations were represented. It gives a syllabus of a three years' course for children of 11 to 14 years of age (pp. 28-32), and it also contains suggestions for the teaching of boys and girls from the age of 14 to that of 16 (pp. 33-37). The introductory pages on the teaching of religion, and the notes at the end on religion and corporate life, and on hymns and prayers, are full of suggestion.

The second is the Syllabus of Religious Instruction published by the Education Department of the County Council of the West Riding of Yorkshire. It contains, in addition to a statement of General Principles, a detailed syllabus (Course C) for pupils from 11 to 14 or thereabouts (pp. 11-20). It also includes a list of passages for memorising, and valuable addenda on method, hymns and prayers, and story-telling as an art (pp. 22-26).

ENGLISH.

Any course in English designed for pupils in post-primary schools should be regarded as a continuation and development of previous work done up to the age of 11+. At the same time English should not be treated as an isolated subject confined to certain definite periods assigned to it in the time table. In every branch of the curriculum pupils should be trained to express their ideas, either orally or in writing, in accurate and appropriate language. It will, therefore, be advisable to exercise a careful supervision over the use of English in every subject.

One of the chief aims of the course should be to secure clear and correct speech. To this end, definite training should be given in distinct articulation and the proper use of the organs

ENGLISH

of speech. In schools where the services of an expert teacher are available, the elements of phonetics might well become a valuable introduction to the study not only of a foreign language but also of English. The classification of speech sounds and the association of each with an appropriate symbol, the investigation of the use of those sounds in the pupils' own speech, and the use of the various organs of speech, illustrated by exercises for practising different sounds, might, if skilfully handled, afford a most interesting subject of study.

Good intelligible English should be the recognised language of the school. It is clearly of the first importance that the teacher himself should set an example in making use of good English. In oral instruction he should provide frequent occasions for natural conversation between himself and individual pupils. Opportunities should also be afforded for practice in continuous narrative. Some dramatic work associated with good literature may well be attempted, as is already done in many schools. In some schools opportunities may present themselves for developing an interest in local dialect and explaining its historical significance.

From the moment a child enters an Elementary school, he will have had continuous and progressive training in the use of English, and by the time he is admitted to a Modern school or a Senior Class at the age of 11+, a certain command of good spoken English should have been acquired. At this stage, speech training should largely consist in the study of phrasing, enunciation, reading aloud and recitation, and so far as possible in the systematic development of the power of extemporary speech. In this respect, traditional methods require to be revised. Undue emphasis has hitherto, in many instances, been laid on written exercises. Furthermore, the examination system demands proficiency in writing answers on paper. It is almost unnecessary to point out that effective speaking is nearly as important as effective writing. One of the most effective means of practising oral speech is the encouragement of debates for older children, provided they be properly organised and conducted on lines appropriate to the age and interests of the scholars. The subject proposed for discussion might be studied beforehand in books, newspapers, and works of reference, and also by means of individual inquiries at home and elsewhere. As a variation on debates, brief lectures might from time to time be given by

individual pupils on some subject which they know well, and such lectures might then be followed by a class discussion. The general aim should be to train pupils to express themselves on familiar subjects clearly, fluently and consecutively.

A certain amount of dictation and even of transcription of carefully selected passages in prose and verse should be included in the written work, but the most important part of that work must always be composition, which should be regarded as a method and means of eliciting the pupil's knowledge and experience in many subjects, rather than as a subject in For this reason the extension of the children's itself. experience, interest or knowledge is a valuable aid to the acquisition of facility in expression. A whole book, or a lesson in its entirety, is often too wide a subject for a single composition exercise, and as a rule definite questions furnish more suitable subjects. Descriptions provide good topics for literary exercises. and the children's own experiences open up a field that offers material for concrete, definite and detailed accounts. In their written work the pupils should above all be trained to set out their thoughts in ordered sequence and to arrange their essays systematically in paragraphs. This of course presupposes a preliminary survey of the topic handled by the writer, and the preparation of a rough outline of the heads of the subject matter. Pupils should be encouraged to criticise their own efforts and thus progressively to increase their command of English. As bearing on this point, we would draw attention to the desirability of training pupils in Modern schools and Senior classes in the art of letter-writing. Such letters should arise out of circumstances and conditions which the pupils clearly realise or which have come within their personal experience and should have a definite purpose.

In order to inculcate and develop a love of literature. in his pupils the teacher should treat it as a form of art in which life has been interpreted. The grammatical and linguistic sides of the study of literature, though important, should be kept in a secondary place in post-primary schools. This especially applies to the study of great creative work, more particularly poetry, which, being deeply tinged with emotion, cannot be fully appreciated without a certain emotional response on the part of the pupil. At the same time the grammatical side should not be neglected, and it devolves on the teacher to ensure that so far as possible every pupil in the class

ENGLISH

has thoroughly mastered the meaning of the passages which are being studied. Even for pupils of this age much pleasure and profit may be derived from a study of the precise significance and use of individual words and phrases in a work of great literature. Select passages of prose or poetry of a character that appeals to the pupils' imagination and interest should be committed to memory and recited from time to time in class. It is not necessary or desirable that all the pupils in a class should learn by heart the same pieces, and a special choice of passages for this purpose might well be left to the tastes of individual pupils.

The chief object in the teaching of literature is the communication of zest, and this is possible only if the pieces selected are those which the teacher can read with full enjoyment. Commentary should be used solely as a means of heightening the pleasure of great literature, of explaining its content where explanation is needed, and particularly of tactfully drawing attention to the beauty and appropriateness of its form. Some simple instruction in metre as well as in prose style might well be given. Students should be encouraged to write exercises in verse. This will improve their vocabulary, enable them to appreciate the technical qualities of verse composition, and may also be a great enjoyment in itself.

The private reading of the scholars will of course vary according to their individual tastes, and it is obvious that within reasonable limits they should be encouraged to read widely for their own pleasure. On the other hand, so far as school work is concerned, books must necessarily be the chief source of information for the pupils, who should accordingly be trained to read and use them with definite objects in view, or in other words to concentrate their reading in so far as it bears on their work. To this end, exercises, problems and questions arising out of their reading should be set them. and the older pupils in Modern schools, and in many Senior classes, should be trained to use works of reference, and to select and collate the particular information required. The proper use of an index should be explained. It is scarcely necessary to point out that similar methods should be employed in history, geography and other subjects, which from a broader aspect all form part of the teaching of English. The efforts of the pupils in these directions should always be tested in such a way that the tests should not only have a stimulating effect, but should also disclose the young student's limitations and shew the teacher where guidance is specially needed.

The school library, more especially on the side of English literature, forms a very important part of the equipment of an efficient school. The balance and range of the books should be such as to include historical novels and biographies, books of travel, English classics and good anthologies of English verse. These works might be arranged in class libraries, and there should, if possible, also be a general school library, which should include some good standard works of reference such as those mentioned above and histories of the county or city. In schools where a bias of any kind is given to the curriculum, the library should also contain some good general works on technical subjects. Additions to the collections of books for class study might be made by adding a few copies of different works, rather than many copies of the same book. In areas where there is a local public library, teachers often encourage their pupils to make use of it, or of any other facilities offered by the local authority. In many districts the librarian of the local library collaborates with the school authorities, a portion of the library is reserved for the use of pupils in post-primary schools, and a special catalogue is prepared for juvenile readers. The teachers on their part post up in the class-room lists under subject heads of any suitable books obtainable in the local library which bear on the syllabuses used in the school, and visits by the scholars to it for purposes of study are arranged. In rural areas recourse is had to the arrangement by which sets of books circulate to the schools from a distributing centre.

There can be no doubt that too much time and attention were formerly devoted to the study of formal grammar in elementary schools, and in consequence a natural reaction set in. A considerable proportion of that time was occupied in dealing with intricate technicalities which had no obvious bearing on the teaching of English composition. Moreover there was a great difference of opinion as to the value of any formal instruction in the subject. We think, however, that some instruction in the elements of grammar is valuable, especially where classical languages are not taught, and that such instruction might best be given in connection with the teaching of composition, and to a less extent in association with reading aloud. Some knowledge

HISTORY

of grammar enables the children to test their own English, and we would urge that such knowledge of formal grammar as is required to enable the pupils to understand the art of writing correct English is indispensable and should be included in the time-table. In many instances there would probably be no need to have a text-book in grammar, but the pupils should of course, know the parts of speech and their functions in the sentence. In order to secure these results in a systematic way, a course of instruction should be arranged which would fulfil the practical purposes in each individual school. It should be drawn up by the teacher in the light of his own knowledge of the power of expression and understanding of language shewn by his scholars.

HISTORY.

Of all the subjects in the curriculum history, in the larger sense of the term, is the most difficult for young people to comprehend; yet it contains materials which should make it most interesting. Its difficulty is well recognised, for, as the Board's "Suggestions for the consideration of teachers and others concerned in the work of Public Elementary Schools" point out, history deals with the actions of men and women, and its province must therefore be a difficult one for children to explore. Nor indeed is this the only ground which makes it a specially difficult subject for young people. The terms that occur so frequently in dealing with the subject-liberty, freedom, tyranny, democracy, aristocracy, diplomacy, kingship, empire, government, parliament, and terms allied to these-bear different interpretations at different periods. The generalisations necessarily used often involve such large assumptions both of historical knowledge and of experience as to make them liable to be little more than mere phrases to the pupils. The generally accepted standards of action and conduct in different fields-and especially in public affairs--vary from age to age; and the whole outlook of people in the various periods of the past is conditioned by circumstances of thought and environment of which we can never know more than a part. So much difference do these factors make that what in one age is regarded as an evil may, in another, come to be looked upon as a benefit. For the same reasons arrangements which, in the abstract, seem just and sensible may, in practice, prove quite unworkable. To present

material of this nature in such a way that truth may appear, even approximately, is a difficult task. Despite this difficulty, there is much in historical studies that children can appreciate and enjoy. In the first place, much of history deals with people who, in their actions, excite within the pupil the primitive emotions, courage, fear, anger, pity, admiration and joy, as well as the desire for fair play. Achievement, too, plays a large part in the subject; and dramatic moments of success or failure always absorb the eager attention of youth. Furthermore the colour, strangeness, and incongruities of other times as compared with our own never fail to capture the imagination of young people. Moreover, at this age they are beginning to be curious about the origins of things around them ; they discover that in many subtle ways the past is ever present, and the whole environment assumes a new and interesting expression. Therefore, for these reasons alone, history should occupy an important place in the curricula of all types of post-primary school. But there is another value in the study of history which makes the subject of first importance. If it be true that education should enable man to adapt himself more readily to his environment, it follows that history has a very definite contribution to make to the education of the individual as a member of society.

The need for instruction in civics or citizenship has long been recognised, and sporadic attempts are made from time to time to introduce specific courses on the subject somewhere in the schemes of instruction for older children. Opinion is divided, however, as to the necessity for this, if the syllabuses in history are well thought out and the work is carried on by specially qualified teachers; for a little consideration of the responsibilities and duties of the individual towards the community in which he lives will show that they arise out of conditions which are historic in character. What then can be done in the matter of . history teaching to meet the demand that men and women shall, as far as possible, be satisfactorily educated to meet these civic responsibilities? The answer is partly suggested by a consideration of the existing practice—practice which shows a commendable diversity.

In this diversity, however, judging from the evidence before us, there is one feature which is common practically to all types of schools; it is still true to say that an outline of the history of the English people forms the main feature in almost

HISTORY

every school. But whereas in the past it was mainly a political outline, various modifications in the direction of including other aspects of the subject, such as social history, constitutional history, and so forth, have been introduced. The political outline of the earlier schemes was based upon a general tradition that every child should know something of the chief events and outstanding characters in English history. And this 'information' point of view has been responsible also for many of the modifications; for not only social and constitutional history, but elements of economic history, imperial history, and world history, have all, in turn, claimed a place in the history schemes as being "what every child ought to know." But there are limits to a child's mental capacity, and the weight of the syllabus has compelled the introduction of differentiation, and of experiment in various types of history schemes, together with inquiries as to what should be our aims in teaching the subject. While there is still much experimental work required, there appears to be an increasing amount of agreement on certain fundamental points both as to the purpose of history teaching, and as to the suitability of the material to the pupil's stage of development.

Before considering these points we must, at least briefly, review what is done with the children before they attain the age of 11+. There is much evidence of a general agreement that stories of historic personages are the most suitable form in which the subject may be introduced. If however we regard history proper as the study of the development of the organised life of a community, this work can scarcely be called history. Nevertheless, as an introduction for the purpose of arousing interest in historical characters and historical events, it is most valuable. In some of the best schools these stories are connected mainly with pre-historic times and the ancient civilisations, Egyptian, Babylonian, Persian, Greek and Roman. Through such work as this the children acquire at least the idea that there were great peoples in the world long before the time when the Romans conquered Britain, and that to these peoples we owe some of the ordinary things that form part of our every-day life. And although at this stage little real historical knowledge is possible. a sense of the order in which the different civilisations follow one another can be created, with the advantage that the Romans and the ancient Britons no longer appear as though history began with them.

When we come to the post-primary stage, as we have already seen, agreement is less well defined, for although an outline of English history is the dominant element it is frequently modified by the stress laid on some special aspect. The general principles governing the teaching of history can no longer be summed up in terms of the information supplied. How then can the governing principles, if any, be stated? The best teachers would probably claim that they have a four-fold objective in teaching the subject-first and foremost to give the pupil an abiding interest in history; then to enable him (1) to get some appreciation of past ages. (2) to understand something of the interaction of events and of the development from one set of conditions to another as time progresses, and (3) to see the present as a development of the past. In working towards these aims the teacher is developing an attitude of mind and processes of thought which are peculiar to historical studies; the pupil must think of things historical not only in relation to the times in which they exist but in relation also to the long train of antecedents from which they come and the new growths to which they give rise, i.e., he must acquire the habit of thinking not only of the surrounding circumstances of any particular event, but also of what has gone before and what comes after. Incidentally, he will see with an increasing degree of fullness something of the complexity of even simple problems of public life. In all this work it will be seen there is nothing impossible, for it is independent of the kind of historical material selected. Provided the pupil is acquiring the habit of looking at human endeavour historically, and not as it were in isolation, the teaching is fulfilling these conditions. Naturally, the accuracy and completeness with which it is ' done depend upon the intellectual stage which the pupil has reached, and the suitability of the material used. With these young people the historical matter should not involve. too many abstractions, and these should be such as can be illustrated by means of the pupil's knowledge or experience. Furthermore too many factors of a diverse kind should not be considered together. This second limitation suggests that, while the chronological order of events needs to be maintained, the presentation should be topical; e.g., in the later Middle Ages, such subjects as Feudal Times, The Church and the Crusades, The Hundred Years' War, Guilds and Towns, and similar topics, are taken as a whole rather than in the sections which come under separate reigns or even separate centuries. A difficulty of another

HISTORY

kind is involved in the amount of material that it is possible to present. Time demands that this shall be extremely small in proportion to the whole; hence the danger of lack of perspective. But direct reminders of the fact that large omissions have been made overcome this danger to some extent.

Despite these difficulties the fact that we need consider only habits of thought, together with the notions involved. simplifies the problem of selection of material; for, in this way, the child's stage of development becomes the chief consideration. In this connection, it is quite clear, from the evidence, that schemes containing a considerable element of social history make the strongest appeal to the pupils we are considering. The ever increasing popularity of books dealing with social life is a further evidence of this. The reasons are not far to seek. The matter deals with subjects well within the child's comprehension. It lends itself to the making of sketches. an activity which the pupils particularly enjoy; frequently the locality provides a considerable amount of concrete evidence. Nevertheless, the eminent suitability of social history does not preclude the addition of such other elements as can be made intelligible to the young mind. Indeed, it would be difficult to separate other sides, e.g., William of Normandy's Conquest of England, the monastic orders, the guilds, the manorial courts, the church festivals and parish work, or the features of knighthood and chivalry, from the social life of the people.

It is probable that the history of the pupil's own community will continue to be the principal part of the work. For in taking this he not only has, either around him or in an easily accessible form, much concrete evidence, but he lives under traditions and customs which are themselves the outcome of the history he will be studying; and this makes it easier for him to understand something of the development of these traditions and customs, and stimulates his curiosity about the origins of things. In this connection the fourth aim-to view the present as a development of the past-can be accomplished only if the history, at least in outline, is brought down to the present. Consequently, it will be necessary so to space the work that all periods of British history are treated in the three years from 11 to 14. As to the distribution of the work over these three years. there is considerable diversity in cases where this arrangement is adopted. Some schemes still adhere to the time honoured divisions in which 1485 and 1689 are taken as the dates of break.

Others touch but lightly upon the period to 1485, presumably because something has been attempted in the earlier years of the pupil's school life, and treat more fully the period 1485 to 1689 in the first year of the post-primary course. The remaining period 1689 to the present is then divided in two, with 1789 as the dividing date. Others again make the periods-(i) to 1485 (ii) 1485-1715 (iii) 1715-1926; here the idea is to give more fully than usual the Scottish and Irish contribution in the middle period and, in the third period, to emphasise the element of colonial adventure as well as that of industrial expansion, so that the three periods run-English history, British history, Imperial history. But whatever division is made, the main thing is to secure that no large factor should be entirely omitted. This does not imply a general uniform syllabus, but it does imply that the whole period, at least from the time of the Romans to the present, should be covered in some form. In each of the various types of schools the kind and amount of material included in the history course will depend upon the particular quality of mental ability in the children and the facilities, in the matter of illustrations and apparatus, for making the work of real living interest.

A feature, which is becoming increasingly marked, is the introduction of world history into the schemes of work for these older pupils. It has always been the case that the relations of England with the continent have involved excursions into the history of countries outside the British Isles (e.g., in the Hundred Years' War, points from French history have always been introduced), but these excursions were only for this purpose of making intelligible the actions of England; the Hundred Years' War, to take the example quoted, was not treated as a general event in European history. In a few schools a three years' course in world history instead of English history has been adopted.

But in the majority of cases, where world history has been introduced, it is taken in one of three other ways. In some Central Schools a preliminary sketch, up to the time of the Romans in Britain, is given in the first year. This preliminary sketch has the merit of being either a revision, on somewhat more advanced lines, of the work done in the junior classes in some schools before the children reach the age of 11+, or the equivalent of that work. This is followed by a three years' course on British history concurrently with such features of world history as have markedly influenced our own. In other instances, this arrangement has been partially reversed. For

HISTORY

the first three years the course consists of British history with so much world history as may be understood, and as is necessary to the fuller understanding of our own. In the fourth year a series of topics from world history is taken. This series consists of subjects drawn from (i) ancient history, (ii) the points in general history already touched upon in the British history work, together with a minimum of connecting topics which are necessary to complete the outline. In this arrangement it is argued that the preliminary training in British history gives a concrete background which ensures some understanding of the wider generalisations in world history, and that the general topics are not too far removed from the work already accomplished.

But whatever arrangement is adopted there appears to be considerable general agreement (a) that the main work of the course should be general British history, with some idea of its world setting; (b) that in the earlier years the social and dramatic elements should be predominant; and (c) that the various other aspects should be taken. (i) in close connexion with the social background, or (ii) more fully as special courses, only in the later stages. In Modern Schools there is much to be said for making the last year a time for the introduction of economic history. There are good reasons for this; the subject bears obviously upon the pupil's future occupation; young people of 15 years of age are more than a little inclined to discuss economic questions : the material for its study is nearer to their immediate interests; it brings in much matter connected with legislation; it involves responsibilities connected with the individual as a member of a community; it necessitates the consideration of material factors outside one's own country; incidentally, it introduces the pupils to the great complexity of economic problems which are so often regarded as matters of common sense. It is of course necessary that this work should be simple, and that the economic factor in history should not assume a disproportionate importance in the minds of the learners. The general course will have done something to prevent this, but the teacher will need constantly to remind his pupils of other forces-none the less powerful because unseen-which mould the destinies of nations. As alternatives to economic history such subjects as the machinery of government, the development of self-government in the Dominions, the development of law, or world history, are well worth experiment in the final year of school life.

201

3 Having discussed the principles underlying the teaching of history and the chief general features of the many varied schemes in use we offer some suggestions for its development. One of the teacher's most difficult tasks is the selection of historical details to form the syllabus. Despite the limitation of the pupil's mental range there is a great quantity of historical material which he can understand and enjoy and from which selection must be made. It is important, therefore, that there should, be in every Modern school a teacher with special knowledge of and interest in this subject; and that he should be responsible under the general direction of the head teacher for the organisation of the work and the framing of the syllabus. Bearing in mind the principles enunciated above, the teacher will select preferably such incidents and details as lead to some understanding of the society in which the pupil lives, and of the working of its institutions, together with some notions of the way in which it has come to its present stage. In presenting this he will not confine himself to special aspects, but will rather take every opportunity to bring out the reaction of various aspects and events upon one another, and the interaction of geographical and historical influences. Perhaps a word of warning is necessary here. The implications which arise in the mind of the pupil when considering historical data and his interpretation of generalisations throw a great responsibility on the teacher if the pupil is to make a beginning in the process of acquiring the power to form independent judgment ; for at this stage a complete understanding is impossible because his background of historical knowledge is so small. It is important, therefore, that he should not accept ready-made generalisations without realising something of the qualifications to which they are liable; and this realisation will depend upon the attitude of the teacher and the way in which the material is presented.

9. In coming to the 19th and 20th centuries the part played by the teacher becomes more difficult still. While on the one hand he will probably have the advantage of a much shorter historical period to cover in a year, and that with children nearing the end of their course, on the other hand that period is much more crowded with events—events which are so near as to make it difficult to see them in due proportion. But with a well-read and judicious teacher, and with a selection of topics suitable to the young mind, the work should not be impossible. In any case such material as is selected should be linked up with current

HISTORY

events, and the growing sense of the interdependence of communities, as shown, for example, in the work of the League of Nations, should receive due prominence.

Whatever historical details are selected to form the various sections of the scheme, it should, in its entirety, form a coherent whole with a definite framework of knowledge in chronological sequence. Of this framework much will be forgotten in later life; a few vital dates and facts should, therefore, be driven home at every opportunity—preferably by the use of a time chart. In covering the work of the scheme many forms of activity should be encouraged. Opportunities should be given for discussion and informal talk, for independent reading both for a specific object and for general information; there should also be some training in individual inquiry by means of books, newspapers and historical maps, some simple survey work in connection with local history, educational visits, and school journeys; and records of such work should be produced in written form by the pupils.

Work of this character, however, cannot be carried on unless special attention is given to apparatus. Besides attractively written text books a library of some kind is essential, and it should contain, besides a few good works of reference, books which would serve to amplify the text book outline and to illustrate contemporary conditions at different periods ; historical novels; good historical maps; a sufficient number of copies of a good historical atlas; and a generous supply of good illustrations. For books, illustrations and historical atlases are to the teacher of history as important as apparatus in the science laboratory is to the teacher of science; and good training in history is impossible where the work is confined to the text-book. Excellent illustrations are to be obtained from the various art galleries, the British Museum, and the Victoria and Albert and other museums at a trifling cost; and the Medici Society has produced a whole series of reprints of great pictures, designed for school use to illustrate the history of art.

GEOGRAPHY.

The importance of geography as a subject in the curriculum for all types of post-primary education needs little arguing. Travel and correspondence have now become general; the British dominions are to be found in every clime; put these facts alone

(20647)

are sufficient to ensure that the subject shall have an important. place in every school time-table. But these utilitarian reasons are not the only ones that make its claims to inclusion in the timetable incontrovertible; and, from some points of view they are not even the most important. For however useful geographical information may be its value must rest, for the purpose of our reference, on its use as an instrument of education, i.e., as a means of developing the growing interests of the pupils. In this connection, it has proved itself to be a subject which, when well taught, makes a very strong appeal to them. As a consequence, it should occupy no subsidiary or doubtful place, but should be one of the principal items in the curriculum. During the last twenty-five years the method of teaching geography has noticeably changed ; perhaps no subject has made a more general advance, and the main principles are now widely known. Never theless, it may be of value to set them forth briefly here. The main objective in good geographical teaching is to develop, as in the case of history, an attitude of mind and a mode of thought characteristic of the subject. In the study of any one region the following elements are involved :--(i) the physical and climatic conditions that go to form the region ; (ii) the characteristics of the inhabitants; and (iii) the conditions and effects of their work. The objective which we have stated requires as an essential principle that these three elements should be viewed, habitually together, and their relationship and interaction thus constantly studied.

The extent to which this principle can be satisfactorily carried out must depend primarily upon the training and qualifications of the teacher. For it is fatally easy to make false deductions on unsatisfactory or insufficient data, and to learn striking generalisations without any conception of the materials from which they should be formed. Moreover, the increase in the facilities for more rapid and more general communications, the wider dissemination of knowledge, the opening up of fresh natural resources, the development of new industries, and the varied rates of growth in the population of different areas make great demands upon the teacher for a constant readjustment of his outlook. It is important, therefore, that, in all Modern schools and Senior classes, the teacher in charge of the subject in addition to his general qualifications and training, should have given, and should be able to give, some special attention to it

GEOGRAPHY

and further, that in selective Modern schools, where the ages of the pupils may range from 11 to 16, it is desirable that he should have had some special geographical training also.

Second only to the qualifications of the teacher is the provision of adequate equipment. In this perhaps some differentiation might be made between the various types of school. In schools where the linguistic attainments of the pupils are high and their background of experience is considerable, a more adequate provision of text books, which at the same time will be of a more advanced character, is necessary than in schools where pupils are less advanced in these respects. This more advanced literary material will demand more accommodation and more equipment for practical work, although there will not be so great an amount of the latter. On the other hand, in the other type of school, more provision will be needed for school journeys, educational visits, and for the construction of simple apparatus. Where circumstances permit, and in the planning of new schools, it would be advantageous to equip one class-room, having a southern aspect, as a geography room. If the geographical work of all or most of the classes were taken in this room, the necessity for duplicating larger apparatus, such as wall maps, would be removed. But whatever difference there may be between school and school, much of the equipment will be common to all types. Of this common equipment the first and most important item is a sufficient supply of good atlases to ensure one for each pupil; and in this provision we would urge generosity. An atlas should be the most frequently used volume in the pupil's outfit. All other books he changes from time to time; his atlas must be with him throughout his school career, and it is handled in such a variety of ways that, if used as it should be, its life is inevitably shorter than that of most other books. The atlas should have a good index, and the maps should be artistically produced. There is a great attraction for pupils in the study of good maps; and such is the fascination that they will take up map studies with as much pleasure as they take up recreation. Supplementing the atlases, there should be a supply of wall maps and one or two globes. The wall maps should be of various kinds, not merely physical and political maps; maps showing other distributions, such as rainfall, temperature, vegetation, population, trade routes, geological conditions; are necessary; and where possible, closely

interconnected distributions should be shown on the same map. For observation work, particularly in connection with the study of maps dealing with climate, there should be in every school a barometer, a maximum and minimum thermometer, and a wet and dry bulb thermometer. Apparatus such as a simple plane table and sighting rule, a sundial, and perhaps a simple theodolite, might easily be made in the Handwork Room, or in the Centre for practical instruction.

In the matter of books, some differentiation would be required. For in selective Modern schools and particularly in schools in which a high standard of work is possible, the content of the syllabuses would be more ambitious and more academic in character, so that in the later years, say from 13 onwards, the type of book in use might be very much on the lines of a good ordinary text book. On the other hand, in schools where such books are too difficult, text-books of a semi-descriptive type would be used throughout, although the content of such books would be set out in accordance with the principle governing good geographical teaching. The problem of the style of the books for such schools needs special consideration. The tendency is for the geography of the British Isles to be dealt with on fairly simple lines, and the world as a whole in more technical language. But modern teaching tends to the presentation of some world aspects concurrently with the study of the British Isles, and books dealing with these larger areas in simple language are, as a consequence, very necessary. In addition to the text-books for use during the course, there should be a supply of works containing good descriptions drawn from the accounts of travellers and explorers.

In addition to books, collections of illustrations typical of scenery and conditions of life in different regions should form a regular part of the school equipment, especially in Senior Classes and in the non-selective Modern school. In this connection, some teachers have themselves formed excellent collections from poster and picture-card advertisements of business firms and railway companies, and from the publications of the Dominion Governments. But only pictures which bring out some special geographical feature, or which illustrate some geographical principle, should be included, and when they are in use, attention should be concentrated on these features. For this reason lantern slides are often a more effective aid

GEOGRAPHY

because they are usually made with the definite object of illustrating some special point. Moreover, the illustration is sufficiently large to be seen and studied by the whole class under the guidance of the teacher. It is obvious that the portrayal of objects and scenes which involve movement cannot be adequately represented by means of lantern slides. In the illustration of such scenes the use of the cinematograph is most desirable. Beyond this material for the use of children there are certain publications other than text-books which should be provided, primarily that teachers and pupils in all types of schools may follow the movements of commerce and industry. These are "The Statistical Abstract of Trade," "The Labour Gazette," "Commercial Intelligence," the reports of the Board of Agriculture, the publications of the Dominion Governments relative to conditions of life, labour and settlement in the respective Dominions, and a work such as "The Statesman's Year Book" or "Whittaker's Almanack,"

The suitability of the equipment necessarily plays a large part in determining the content and stages of the geography course in the average elementary school; but as there are now at least a few text-books dealing with all parts of the world in comparatively simple language a variety of alternative schemes is increasingly possible. Whatever course may be taken, however, it will presuppose a certain minimum of preliminary study during the age period from 7 to 11. It is reasonable to assume that under average conditions the average child by the age of 11 will have acquired (i) some simple notions, by direct observations, of the sun, wind and weather, and of the seasons; (ii) simple ideas, again from direct observation of actual scenery or of suitable photographs, of the principal features composing landscapes, and of their representation on maps; (iii) some knowledge of the prominent physical features of the British Isles, of two or three outstanding features of our climate and of the major industries, together with a few of their principal centres; and (iv) some simple ideas, mainly from descriptions and pictures, of the shape of the earth, of the distribution of land and water, and of the clearly defined climatic areas such as the Arctic regions, the desert areas, the Steppe lands, and the forest belts, including the wet tropical lands.

Starting from this basis, in which the general character of the work is descriptive, the course for the senior pupils will require a, different treatment. This difference will show itself in three ways:—(1) in a systematic study of all kinds of maps so far as they are suitable to the age of the pupils; (ii) in a closer observance of principles, enunciated at the beginning of this section, in their application to regional studies; and (iii) in the more frequent unaided use of the text book, by the children themselves, for the purpose of extracting information and making summaries.

In the understanding of maps, the educational visit, the school journey, the weather observations and records, and suitable pictures, will all play a very valuable part. All observations, whether of physical features or of weather conditions, should be kept in close relationship with the type of map which represents them. The map of the locality should be thoroughly understood in its relation to the area which it covers, and much attention should be given to the study of contour maps for the purpose of imagining distance, direction and the configuration of the land. By these means, maps begin to suggest to the pupil's mind the concrete ideas which they are intended to convey. Map projections and simple surveying should be reserved for the later stages ; but the simple uses of latitude and longitude might be taken at the beginning of the course. It is quite easy for the children to see that latitude and longitude combined give the precise situation of any place; that latitude enables them to find the angle of incidence of the sun's rays at midday in different parts of the world, and also assists in judging distances; and that longitude is specially useful in estimating the hour of the day in different countries. In order that children may appreciate the true comparative sizes of various areas it is desirable that the maps in any particular series should be drawn to the same scale.

But the interpretation of maps is not the only practical value which can be drawn from a thorough study of the locality. The home district, or some easily accessible one, is an essential for the first-hand study of geographical relationships—lines of communication and configuration, sites of castles and defensive features, sites of villages and water supply and drainage, soils, rocks and local industries, vegetation, etc. In this respect rural schools are well served, and we would urge much outdoor study in geography as well as in science in these schools, for in this way the geography, even of foreign countries, becomes a

GEOGRAPHY

much more real thing. In schools situated in the centres of great cities this problem is much more difficult of solution, but every child should have some opportunities of studying, map in hand, the configuration of a district. Consequently, for these, the educational visit and, if possible, the school journey should be as certainly a part of the school time-table as the subjects themselves. On another side, however, town schools have an advantage over rural schools. The industries, the warehouses, the shops, the railways and the docks can be used, not only to illustrate the interaction of geographical and human elements, but also, to demonstrate the interdependence of the peoples of the world.

Important as this work is it is still only a means to an end. Side by side with this must proceed an ordered study of the geography of the world together with some more detailed study of those regions which directly concern the British boy or girl. In dealing with this, such differentiation as there may be will be determined partly by the length of the course, and partly by the rate at which pupils can assimilate book work. There is much to be said for completing a simple general sketch in the first three years in all types of school. In the senior classes and in some classes of the non-selective Modern school, less geographical detail would be given, and more concrete and experimental work carried out. But apart from this, the regular study of maps, the making of rough sketch maps, the insertion of distributions in outline maps, and the practice of making notes and of writing essays should be general.

Assuming that children by the age of 11 have acquired the body of geographical knowledge mentioned above, we give a brief indication of the kind of work which a three years' course might cover. In the work of the children under the age of 11 the British Isles claim the fullest treatment, but this treatment will be largely descriptive. It forms, therefore, a good basis for the work of the first year with senior children. Accompanying this would be the study of some portion of the world which would involve all the main climatic zones. For this purpose, either the Americas or the three southern continents would be suitable. In the second year the remaining portion of the world would be studied, by comparison and contrast, wherever possible, with the parts of the world covered in the first year; this would be supplemented by a short revision of the geography of the British

The third year for the Senior classes and non-selective Isles. Modern school might then be very properly devoted to the British Empire. But even here the geography taken should not be rigidly exclusive of the other parts of the world. Some such scheme as this ensures not only the observance of satisfactory principles in dealing with the subject, but also some geographical knowledge, in proper perspective, of the world as a whole. Moreover, by spacing the work in this way, the amount of detailed knowledge of the different regions will be in proportion to the bearing those regions have upon the lives of the children. Naturally, in covering such a large area the detail will not be great, but the pupil will have acquired the habit of looking at geography geographically, of quick intelligent use of maps and atlases, and of referring to books to obtain the information which he seeks. Nevertheless, essential details should be firmly grasped and the essential names clearly fixed in the memory.

In the selective Modern school where there is a fourth year it might be occupied with a thorough study of the British Isles in their world relations. In the school with an industrial bias some of the greater industries-cotton, wool, steel and so forth-might be studied in detail in connection with (i) areas supplying the raw material, (ii) areas receiving the manufactured articles, and (iii) the competition of areas of other nations carrying on the same industries. On the other hand, schools with a commercial bias might pay special attention to commercial questions including those of transport, distribution, markets and so forth. In both classes of schools this course might be accompanied by a broad study of the great natural regions of the world, with a view to the pupil's understanding the basis of the classification in each case. In rural schools the course, in addition to providing for the same general education in geography, might be arranged to include vegetation and food products, with some reference to the interdependence of industrial and agricultural areas.

A MODERN FOREIGN LANGUAGE.

We may begin by summarising our reasons for suggesting the inclusion of a modern foreign language in the courses of study for post-primary schools. In the first place a foreign language is an excellent educational subject, since it brings into play and stimulates the mental activities of the pupils and widens their

A MODERN FOREIGN LANGUAGE

outlook and interests as citizens of the world. From another aspect, it affords a good means to literary culture, through the study of works of great literature, and thus to a truly liberal education. Further, it may be of practical use in certain industries and occupations, and helps to equip the pupils for the work of earning their livelihood. It has thus at once a disciplinary, a literary and a practical value.

The choice of the foreign language to be learnt must depend to a great extent on the locality in which the school is situated and on the supply of teachers. French, or Spanish, or German, are already being taught in most Secondary schools and in certain Central schools, while French is taught in a few elementary schools which are attempting advanced work. It is possible that in post-primary schools in certain districts a European language, other than the three named above, might sometimes find a place.

At the present time, provision is not infrequently made for a four years' course in a foreign language in secondary schools and in the existing Central schools in London and Manchester. The experience thus gained proves that much can be achieved in this time with pupils between the ages of 11 + and 15 +. It seems probable, however, that something of value could be done, even in a three years' course, for children between the ages of 11 +and 14 +, provided that favourable conditions be assured, and that a lesson in the language be given every day, *i.e.*, 5 periods (of not less than 40 minutes) a week.

There seems no doubt that, when modern languages are more generally taught in Modern Schools and Senior Classes there will be 'a noticeable demand for evening classes, in the various languages studied, from former pupils of post-primary schools who desire to continue their studies.

Eleven is a suitable age at which to begin the study of a modern foreign language. The child's perceptions are acute, his vocal organs are still flexible, and he is comparatively free from that morbid dread of ridicule which may impede the progress of older pupils. Initation of sounds and learning by heart will present little difficulty. Furthermore, the pupil's interest is easily aroused and he is quick to imbibe the life and spirit of a foreign language. Indeed, it is found that most children take up this new study with remarkable enthusiasm.

Modern methods of teaching living languages make great demands on the teacher, who is now expected to train his pupils to use the language for purposes of conversation and intercourse from the earlier stages. At the present time, the supply of teachers qualified to give such instruction is limited. The supply from Universities is to a great extent absorbed by the Secondary schools. Until that source of supply has been largely increased, Modern Schools and Senior Classes will probably have to look chiefly to teachers trained in the two year colleges. Some of the students from these colleges take a third year in completion of a degree course and are thus able to pursue a course comprising a modern language. Others study a modern language as part of their training college course, and some again take a third year for the purpose of studying a language abroad. Few of these students during their two years' course at college have received any training in the new methods of teaching modern languages, nor. except in rare instances, any practice in teaching. There are indeed some students who have done well in their college course in a modern language and have continued their studies after leaving the training college, but they are at a noticeable disadvantage in comparison with their colleagues who have specialised in other subjects of the curriculum, unless they find opportunities for spending some of their holidays abroad. For example, a specialist in geography might often be consulted by his head-master in drawing up schemes and syllabuses, and would probably be allowed considerable discretion as to the content of the syllabus in geography, and the methods to be followed. The specialist in modern languages, however, who enters an ordinary elementary school will for the reason given above have few opportunities for teaching a foreign language, and thus putting into practice the knowledge which he has obtained. is obvious that local education authorities will have to encourage teachers who have specialised in modern languages to keep up' and improve their knowledge of the subject by affording them opportunities to attend classes and holiday courses whether at home or abroad. It was, however, pointed out to us that the Universities, through their four years' training courses for teachers, are producing a supply of teachers, part of whose training has consisted of an intensive study of a modern language, including residence abroad, and who form a recruiting ground which has not hitherto been sufficiently exploited.

A MODERN FOREIGN LANGUAGE

If it were possible without lowering the standard of qualifications to extend the number of exchanges under the Convention, which has been in operation since 1905, for the exchange of language teachers between this country and France, we think that the Modern Schools would be very suitable to be included in the scheme.

As the whole course lasts only three or at the most four years we consider that it is desirable that 5 periods a week should be assigned to the study of the modern language. In any case we regard 4 periods a week as the minimum. Songs, recitations and games in the foreign language should form an integral part of the teaching, and if they are judiciously used should prevent any lesson from becoming tedious and reconcile the pupil to the really hard work of acquiring a mastery of the grammar structure and vocabulary of the foreign language. To take French as an example, teachers of that language should aim at making their pupils able :--

(i) to pronounce French in a way not displeasing to their hearers;

(ii) to understand spoken French ;

(iii) to speak intelligently on subjects within the range of their experience;

(iv) to understand the meaning of the printed language ;

(v) to write freely if not accurately in French;

(vi) to realise that a knowledge of French will give them the key to a famous literature.

Though the preliminary training should be mainly oral, increasing accuracy can be obtained by frequent practice in such written work as dictations, reproductions, and answers in French to questions set in French.

A grammar, preferably in French, should be used, but at first it should be employed mainly for reference. French should be spoken during the lesson as a rule, if not exclusively, by both teacher and pupils. Phrases and vocabulary in every-day use should be made familiar by frequent practice both orally and on paper. Composition exercises should be largely based on oral work and on the texts read in school. These aims and this method can of course be modified to suit the teacher's gifts and the results of his or her experience with children of the age and mental attainments common in these schools, but they will be a guide at starting and, though suggested for French, apply with little alteration to the teaching of any modern foreign language.

Wherever possible, the teaching of the modern language should be carried on in one particular room, which should contain a collection of maps, pictures, postcards, foreign calendars, artistic advertisements, etc., calculated to interest the pupil in the new language and people. The room should also contain a small lending library containing works which would appeal not only to the more advanced pupil, but also to the beginner. For example, it should contain books used by young French, Spanish or German children. It would also be desirable, if possible, to take in a newspaper, or illustrated periodical, in the foreign language; and in schools where there is a slight industrial, commercial or agricultural bias, it might be advisable to subscribe to a foreign periodical, bearing in some way on the special bias, which would appeal to boys and girls with practical tastes, who would be less likely to be attracted by purely literary works. The classroom might also contain a gramophone, with a set of suitable records of passages in prose and poetry in the foreign language. Such records can be used to advantage in connection with dictation lessons and with the teaching of pronunciation and rhythm.

Lectures might also be arranged from time to time on various aspects of everyday life, say in France or Germany, with appropriate lantern slides illustrating rural and urban life, and the industries, art and scenery of the country in question.

The size of classes will depend on the general organisation of the post-primary school, and in some cases will probably be as large as 40. It is, however, highly desirable, when classes are of this size, that during the first year of the course the class should be divided into two sections, each section being taken separately for the foreign language.

ELEMENTARY MATHEMATICS.

There seems to be general agreement that the subject of arithmetic as taught to-day, not only in primary but in other types of schools, is in need of considerable improvement in regard to both choice of material and the use made of it. Arithmetic has been too long dominated by the traditional utilitarian value of the subject. It has been and still is frequently regarded solely as a " bread and butter " subject, providing the necessary facility and accuracy in such arithmetical work as will be required by the pupil in his after life. But the amount of this indispensable arithmetical knowledge, while of considerable importance, is in reality comparatively small and would not in itself justify the time given to the subject. It has, however, in its presentation in schools, been added to and overlaid by matter which is often without meaning to the child and is seldom of value to him in after life. On the other hand our modern industrial system with its complex ramifications, and the part played by science in the modern civilised community make greater demands upon the mathematical knowledge of the ordinary citizen. The scientific and engineering inventions of the modern world, motors, aeroplanes, wireless telephony and the like, all require, even for a superficial understanding of them, some knowledge of mathematical principles and their applications, Civic, national, and even international finance, closely associated as they are with our daily existence, require for an intelligent comprehension of them an increasing amount of mathematical knowledge. It is desirable, therefore, that much of the traditionary arithmetic of the schools should be replaced by new material which will provide a wider mathematical training for the child, and that there should be included in the mathematical training of all normal children suitable parts of mensuration. algebra, geometry and trigonometry, especially such as are necessary for the intelligent comprehension of some of the problems of our everyday life.

The causes which lead us to propose the introduction of new material, as well as this new material itself, also make it necessary to modify the methods of treatment. There is little doubt that the mechanical, lifeless and abstract treatment of arithmetic which has been so common in the past has produced for many a distaste for the subject which has persisted throughout life. There is need, therefore, for more vivid, more logical and more practical methods in teaching the subject, methods which will cause the pupil to appreciate both the beauty of mathematical truths and their practical applications. If mathematical teaching is to be satisfactory there must be recognition of the two aspects of mathematical truths. On the one hand are the abstract relations which these truths have between themselves and on the other are relations to realities outside themselves. Thus in the early history of mathematics a study of the geometrical properties of similar triangles enabled Thales to determine the height of a pyramid. The history of mathematical progress is a record of development of these two aspects of mathematical truths in close association with each other, and the view that they can exist as distinct forms of intellectual activity has exerted a harmful influence upon mathematical teaching. Every course therefore should aim at developing in the pupil an appreciation of the meaning and teaching of a coherent system of mathematical ideas and the realisation of the subject as an instrument of scientific, industrial and social progress.

It is apparent from evidence given to the Committee that there have been great improvements in the teaching of arithmetic in primary schools during recent years and that many teachers have developed their mathematical teaching upon satisfactory modern lines. The Committee recognise, moreover, that conditions in primary schools have frequently made it difficult to teach mathematics satisfactorily. A short school life, large classes and poor grading have both limited the amount of mathematics it has been possible to teach, and in many instances led to undue attention being devoted to mechanical processes. With the establishment of Modern schools on the lines recommended by the Committee, many of these difficulties will no doubt disappear. It is hoped that, in a large number of cases, there will be a definite four-year course between the ages of 11 and 15, and the arrangements for grading at the beginning of the course together with the organisation into smaller classes, will produce conditions favourable for a really satisfactory treatment of the subject. It should thus be possible, with the better pupils at least, to work through a more extensive and more logical course in elementary mathematics.

It has been stated above that parts of arithmetic, still to be found in many curricula, may profitably be discarded as being unnecessary for the development of mathematical ability in after life. It is suggested that the following, among others, should be thus omitted :---

Complicated fractions. Recurring decimals. Complicated work in practice in H.C.F. and L.C.M. Cube-root.

The omission of this work will make possible a freer treatment of arithmetic ; the subject can be utilised to form a basis for other branches of mathematics which will be treated as logical developments of it. The pupil will come to view the subject of mathematics as a coherent system, the various parts acting and reacting on one another. The treatment, consequently, will not follow the usual academic lines. For example algebra will be introduced naturally when, after suitable practical work on the area of a rectangle, the pupil generalises his results, makes deductions, and employs symbols for the first time to express a formula. As his work in arithmetic and mensuration grows, so his formulæ become more complex : necessity arises for their transformation and manipulation, and out of this necessity the pupil learns how to solve an equation and how to transform his formulæ to make them easier for use; thus he is led to simple factorisation, easy operations, algebraical fractions and other developments. Indices are introduced as convenient abbreviations: their laws are thus readily observed and ultimately lead to logarithms, which most pupils come to regard as one of the really useful things which they learn in mathematics. It is desirable that the child should not be burdened with the academic work in algebra, such as is to be found in most text-books on the subject. The really essential thing is that the pupil should have a clear understanding of the significance of formulæ, should be able to manipulate them, to solve equations arising out of them and to use graphical methods intelligently.

Geometry may be suitably introduced when the pupil is dealing with the areas of rectangles, squares and triangles. In general there will be little formal deductive work, save from experiments, and the course in general will follow the lines of experimental geometry, such as is now to be found in good modern text books. It should not be confined to two-dimensional work, Practical work in the mensuration of solids will necessitate a certain amount of three-dimensional geometry of a simple character. It will be closely associated on the one hand with the work in mensuration and arithmetic, and on the other, through geometrical drawing, with manual training. It should not, however, develop merely in a series of mechanical exercises in geometrical drawing. Such work has its usefulness, but it is more important that geometry should be utilised, as far as is possible, within the limits imposed by circumstances, as a means of training in deductive processes and logical thinking.

Much of the work, especially in the earlier stages, will be rendered more interesting and stimulating by a judicious use of mensuration, provided that this does not resolve itself merely into learning and manipulating a number of formulae. It should rather be regarded as providing concrete material both for abstract reasoning, which is difficult for children at this stage, and for the development of other branches of mathematics. Much of the early work in mathematics is most effective and most convincing to the pupil when based upon his own experience or upon his instinctive or acquired knowledge, and the handling of concrete objects and practical experimental work will be found invaluable as aids in providing such a basis. This practical work should include not only exercises in weighing, measuring and drawing, but also the construction of models by the child and experimental work indoors and out of doors. With models of his own making, mathematical work comes to possess for the child a reality which can come to many in no other way. For example, the idea of volume and its measurement presents little difficulty to the child who builds up solids by means of cubic inches or cubic centimetres, especially if he has himself constructed them from paper or wood. Again, the use of his own model theodolite to find the height of his school or of a distant spire will produce a lasting and vivid understanding of mathematical ideas and operations which otherwise are a source of great difficulty. The child should also be led to feel the necessity of some particular rule or some new process in order to solve some problem or to help him in some practical difficulty such as will occur in intelligentlyconducted work in mensuration, wood-work or experimental science. Hence practical work will be a valuable part of the mathematical course. Not only does it supply a concrete and experimental basis upon which the child may proceed to abstract reasoning, but it vitalises the work for the pupil and stimulates his interest in it. It will also lead to co-ordination with other subjects in the curriculum, especially hand-work, geography and elementary science.

The following is suggested as providing a suitable course of work based on the principles stated above :---

Numbers. Growth of the number system.

Elementary operations with numbers.

Our money system with the usual applications.

The meaning of a fraction. Simple operations with tractions. Decimals.

The measurement of length, area, volume, weight, capacity and time with appropriate tables.

The metric system.

Areas of rectangles, squares, triangles, surfaces of prisms, etc. Appropriate geometrical work.

Volumes of prisms.

Generalisation of results in above work on areas, etc. Introduction of symbols. Construction of elementary formulæ. Use and manipulation of formulæ. Easy equations. Transformation of formulæ for purposes of computation. Easy factors.

Use of squared paper. Construction, meaning and use of graphs. Drawing to scale.

Meaning and use of averages.

Factors; common factors; H.C.F. and L.C.M. Simple algebraical examples.

Further work on fractions.

Decimalisation of money. Calculation of cost.

Ratio; constant ratios. Ratios connected with angles. Sine, cosine and tangent of an angle. The right angle triangle.

Surveying problems and other practical applications. Square root.

Equal ratios; proportion; proportional quantities. Proportional division. Similar figures.

Mensuration of the circle, cylinder, pyramid, cone and sphere, with appropriate geometry.

Percentages with applications to interest, insurances, etc. Compound Interest.

Indices, Logarithms.

Investments. Foreign currencies and methods of exchange. True discount and present worth.*

This syllabus is intended to indicate a course of mathematics which may be considered suitable for a four-year course in a non-selective Modern school for boys in an urban area, though modifications would often be made necessary by local conditions and special difficulties. Whether or not is it advisable in any given school to adopt the whole of the course or to add to it

^{*} Mr. Abbott objects to the inclusion of true discount and present worth in the course.

depends upon the time available, the special circumstances of the school and the bias which any particular teacher may give to the subject. In most girls' schools the course would probably need to be shortened owing to the fact that there is less time available for the subject. In rural schools there would also be omissions, and it would be adapted to the requirements of their special conditions by modifications in the treatment and changes in the emphasis on different parts of the curriculum. Modern schools of the selective type, taking this as a basis, would make such additions, especially in algebra and geometry, as would be required by the character of the school, its objective and the length of its course.

It is very desirable that the course of elementary mathematics in all types of school should be approximately the same. For the first two years of the course the work will be mainly fundamental and will not vary materially whether in a Grammar School or a Modern School. The rate of progress will of course vary with different types of pupils, though in the better Modern Schools the course will be comparable with that in the Grammar Schools. There will be probably greater divergencies in the later years, but if the foundations laid in the first two years are similar, transference to the Grammar School at later ages will be facilitated.

SCIENCE.

There are two obvious difficulties in the way of teaching science to older pupils in Public Elementary Schools between the ages of 11 + and 14 + or 15 +. One is the comparatively low leaving age, and the other is the lack of equipment. All is unusual to find science taught formally in "Secondary" schools under the Board's present Regulations before the age of 13, and if a course in science is intended to develop logical powers at least three years are required. The obstacle might, to some extent, be surmounted by beginning the science course in Modern schools and Senior classes on entrance into the school.

The special equipment required for the teaching of science hardly exists in many schools at the present time. This lack of equipment is largely due to the peculiar history of science teaching in elementary schools during the last five decades. When in the early seventies a systematic attempt was first made to introduce the study of science into elementary schools, the

SCIENCE

teaching largely took the form of "object" and observation lessons, designed to link up certain scientific truths with everyday life. Courses in physiography, or the science of every-day life, were much in vogue, and experimental demonstrations were frequently given in the class-room. Later, from 1887 onwards. the theory was developed that no science was worth teaching unless it were based on the student's own experimental work. and demonstration was regarded as positively harmful. Ås however the method of experimental demonstration was the only way in which science could satisfactorily be taught in most primary schools, the science lessons gradually disappeared or were replaced by lessons on nature study, which were supposed to lend themselves to heuristic teaching. Unfortunately, during this period, any science apparatus that had been provided in these schools was gradually broken up and was not replaced. The process was accelerated owing to the diminution in the number of evening classes held in the ordinary elementary schools. as under former Regulations science apparatus could often be requisitioned for evening classes, though not for the elementary day schools.

The period just before the war was marked by a series of attempts to co-ordinate handwork of all kinds with science. The pupils' knowledge of elementary science was to be applied to the affairs of every-day life through "experiments in various types of machines and instruments, e.g., electric motors, lamps, simple forms of the camera." This view was developed and advocated in several official publications. Attempts were made to develop this method by providing in a number of public elementary schools a practical workroom which served both for manual instruction and the teaching of elementary science. the underlying idea being that the pupils should receive as much as possible of their practical instruction in the school itself. Steps have also been taken to organise summer courses on the methods of science teaching specially suited for teachers in rural areas. Furthermore, some of the training colleges have developed courses in biology designed to assist students to understand the development of social hygiene.

We cannot, of course, attempt to indicate, except in the broadest outline, what should be included in the Science Syllabus for Modern schools or Senior classes. It is, however, safe to say that most schemes for courses in elementary science in Modern schools and Senior classes might be grouped round a simple syllabus consisting of :---

(i) The chemical and physical properties of air, water and some of the commoner elements and their compounds, the elements of meteorology and astronomy, based on simple observations, and the extraction of metals from their ores.

(ii) A carefully graduated course of instruction in elementary physics and simple mechanics, abundantly illustrated by means of easy experiments in light, heat, sound, and the various methods for the production and application of electricity.

(iii) A broad outline of the fundamental principles of biology, describing the properties of living matter, including food, the processes of reproduction and respiration, methods of assimilation in plants, the action of bacterial organisms and the like.

(iv) Instruction in elementary physiology and hygiene based on lessons in biology.

The science course should be carefully graded from year to year, and should not comprise work which can properly be studied in the course of instruction in practical mathematics, e.g., physical measurements, the metric system, mass and weight. It is most important that the pupils should take their full share in the work of every lesson and make their own records of observations and results, which should include clear outline sketches drawn for a specific purpose, as well as written descriptions. Here the science teacher might with advantage keep in close touch with the teacher of drawing. It is of great importance that the older pupils should learn to appreciate the value of scientific study for its own sake, and in order to foster this habit of mind the syllabus should be planned on broad lines. The latter part of a full four years' course, both for boys and girls, might with advantage include lessons designed to illustrate the work which science has done for the service of man, and to inculcate respect for disinterested scientific research. In order, however, to bring home to the children the practical application of science to every-day life, the lessons should be freely illustrated at every possible point by reference to the environment (e.g., gardens, or local industries, or local geology and geography), or by a course in housecraft for girls.

SCIENCE -

The lines and development of the syllabus would vary according to the type of school and the facilities afforded. Where a laboratory or a well equipped practical room, or both, are available, the pupils could work on a scheme involving the use of simple apparatus. They might also be encouraged to devise other equipment for themselves. Some of the simpler apparatus used, especially for demonstrations in elementary physics, might be made by the pupils as part of the course in woodwork and metalwork.

In Senior classes where it may be impracticable, owing to financial reasons, to provide special or separate laboratories, a practical room should be made available, which should be a spacious room with flat tables, some of which should be easily moveable, fitted with cupboards and shelves on the walls for simple apparatus and reagents, and equipped with several sinks, a supply of water, and, where possible, gas and electric light. Such a room in rural senior schools might be and often is also used for manual instruction and cookery.

7. In Modern schools or Senior classes situated in districts with one industry or group of industries, special attention might be devoted to elementary physics and mechanics, and the lessons might be based upon machinery and equipment in use in the local industry. Thus the course in elementary physics and mechanics might aim generally at throwing light upon interesting phenomena of industrial life, explaining, e.g., how a steam engine, internal combustion engine, electric motor, or dynamo works, or how iron is obtained from its ores, care being taken that the study of these concrete objects leads to a real, if necessarily elementary, insight into scientific principles. The course in science might include some study of elementary geology, illustrated largely by the geology of the district.

In schools in agricultural districts the course in elementary physics and mechanics might be illustrated, in part at least, from reapers, binders, elevators, tractors and other examples of agricultural machinery, or again from mechanical churns, separators, honey extractors and the like. As a general rule, however, in country schools the science syllabus both for boys and girls might be largely based on biological interests, the study of elementary physics and chemistry being subsidiary, but arranged so as to supply the indispensable foundation for a course in elementary biology with special reference to its bearing on horticulture and agriculture. We are disposed to think that in many schools in rural areas a large part of the science course might, with advantage, be planned on the general lines indicated in Sir Edward Russell's Lessons on Soil, with appropriate examples drawn largely from the local environment.

We suggest that science courses for girls in Modern schools and Senior classes should in their later stages frequently have a biological trend, though occasion should be taken to impart to the work much of the exactness and discipline of the experimental sciences and to train the girls in habits of careful observation and clear thinking. The work should not be confined to botany, as the study of simple forms of animal life can under a wise and skilful teacher be made an admirable means of widening and disciplining the pupil's sympathies, and giving her broad hygienic ideals and a knowledge of nature which may increase her happiness and her efficiency as a human being. The courses in science for girls should be brought into connection with the instruction in hygiene and in domestic subjects, more particularly housecraft. The teachers of science and domestic subjects should keep closely in touch and collaborate in drawing up their syllabuses in these subjects.

We regard it as especially important that instruction in elementary physiology and hygiene, developing out of the lessons in elementary biology, should be given to all boys and girls in Modern schools and Senior classes. Such instruction should be largely the practical outcome of a study of elementary biology, treated not as a series of classifications but as the study of the development of form and function in suitable types of plant and animal life, leading up to a study of how the human body is. built up and how it works. Such instruction in biology and elementary physiology, if properly carried out, might well provide the basis for a right attitude to many social problems.

(a) Personal Hygiene.—How to keep the human organism fit, with subsidiary lessons on the importance of fresh air, sunlight, exercise, rest and cleanliness.

(b) The Hygiene of the Home.—With special reference to light, ventilation, sanitation, the proper care of food, and so forth.

(c) General Hygiene---which would include a brief account of the public health service, and the measures taken by public authorities to safeguard the health of the community.

The course in hygiene for girls should also include a certain amount of mothercraft teaching, which might be planned as a fairly intensive course on the lines indicated in the Board's Circular 1353¹, and would complete the training in hygiene given as part of the general curriculum.

Science courses for boys and girls who have been unable to keep pace with the more forward children, and have been placed in separate classes in non-selective Modern schools and within Senior classes, might be largely confined to elementary physics, with abundant illustrations showing the practical applications of the simple principles involved. It would seem on the whole inadvisable to teach more than the bare elements of chemistry to such children, as they would not probably, as a rule, have much aptitude for abstract thought. We think, however, that, with the general science course as a basis, the science teaching for such children should include a considerable element of elementary biology, which should be linked up with instruction in elementary physiology and hygiene on the lines indicated above. Incidentally, we desire to state that in our view the instruction in nature study and elements of science given in primary schools to the children below the age of 11 should not stop, as is often the case, at the age of 8 +. Instruction in these subjects should proceed continuously up to the age of 11+, so that when children pass to a Modern school or Senior class they will be in a better position to benefit by the course in science there given. The preparatory work done by the children up to the age of 11+ will best consist of nature study in the widest sense of that expression. The methods of study should be observational, and nothing should be included which could not be examined by the children themselves.

In general in Modern schools and Senior classes for boys the part of the science course which deals with elementary physics and chemistry should be brought into close relation with the courses in mathematics and handwork. Such correlation might well follow the lines indicated in Educational Pamphlet

¹ The Teaching of Infant Care and Management to schoolgirls, (1985).
No. 36,¹ issued by the Board of Education. In the same way any lessons in the Science course which deal with elementary biology and geology should be handled in such a way as to show their bearing on gardening, and, in schools with an agricultural bias, on agriculture generally.

The scientific section of the school library should contain some suitable publications, adapted for the use of young students. on the various branches of elementary science taught in the school. The pupils might be encouraged to use these publications as works of reference. It might also include some suitable books on the geology of the British Isles and on local geology, together with a few works on the local flora and fauna, if such exist, and a geological map of the district. In schools on or near the sea-board, a few marine charts might be added, together with some elementary works on such subjects as sea-fisheries. The collection might also include a few well-chosen works of a simple character on other branches of pure and applied science, e.g., astronomy, optics, wireless apparatus, the construction of motor cars, and so forth. In rural areas a few simple books on the application of science in agriculture might be added, together with some of the pamphlets on insect and vegetable pests published by the Board of Agriculture. The collection should also contain a few well-chosen biographies of great men of science. Use might be made of the collections of scientific works and periodicals in municipal and county libraries.

DRAWING AND APPLIED ART.

In no subject has there been in the last half century a greater advance in the methods of teaching than in those of Drawing and Art. The greater respect now given to the subject is due in part to improved methods of teaching and in part to a realisation of its value in the study of other subjects. A further reason is a greater recognition of the importance to the whole community of a finer taste, not only or even chiefly in pictures and sculpture, but in architecture, in furniture, in household crafts. In the formation of such taste drawing must be one of the chief means.

¹ Some Experiments in the teaching of Science and Handwork in certain Elementary Schools in London. (1920.) H.M. Stationery Office.

DRAWING AND APPLIED ART

The above general remarks apply to all teaching, but they have a special application to the type of post-primary school which is the main subject of this Report. Such schools, while not neglecting other sides, will be particularly concerned with the practical application of theoretical teaching. We cordially recognise that teachers are fully alive to the newer methods, but in view of the great development of Modern Schools which we hope and expect in the near future, we feel that suggestions as to the teaching of the subject in such schools will not be out of place.

Experience has shown that simple drawing is a subject in which almost every normal child, if properly taught, may attain a certain degree of proficiency. We therefore take it for granted that at the age of 11, when they enter Modern Schools of the type we have in mind, boys and girls will have acquired a reasonable proficiency in the use of pencil, brush, and possibly crayon, for the delineation of simple objects and the drawing of simple diagrams. The further development of this proficiency and experience in the Modern School will present two distinct aspects :-the artistic and the utilitarian. On the artistic side, drawing and painting may be studied wholly for their own sake, as affording to the pupil a mode of self-expression and a means of interpreting his appreciation of what he sees in the world around him. The lines along which this development should take place are well established, and we think well understood, and a detailed consideration of them is hardly necessary in this Report. While, therefore, we fully appreciate the great importance of this aspect of the study of art, we propose to confine our remarks rather to the application of drawing to those branches of the work of a Modern School which in our view should be characteristic of such a school. From this point of view, some practical skill in drawing forms a valuable and indeed an indispensable adjunct to the study of various branches of the curriculum, such as woodwork and metalwork, elementary geometry, elementary science, particularly nature study, biology and mechanics, geography and history. In such subjects, drawing is of value, not only as a means of recording what is seen and in so doing strengthening the pupil's powers of accurate observation of detail, but also as a means of training the pupil to appreciate the significance of diagrams, pictures, maps and plans in the text-books and works of reference which he uses for the various branches of the curriculum.

The main divisions into which the teaching of drawing falls are as follows :---

(i) Object drawing, including the drawing not only of artificial objects but also of natural objects in monochrome and colour, with various media, e.g., pencil, pastel, paint;

(ii) Memory drawing: illustrative and imaginative work;

(iii) Geometrical and mechanical drawing;

(iv) Design.

The emphasis to be laid on the various divisions of the course will depend upon many considerations, such as the standard of attainment of the pupils on entry, the knowledge, capabilities and personal interests of the individual teacher, the school environment, the chief industries of the district, and the bias, if any, in the last two years of the course.

Object drawing must be included in any course. It is in fact the foundation on which the other divisions of the course of drawing rest. The scheme in object drawing should be based on a carefully graded sequence, and its general aim should be to obtain, first, correct form, and then fuller representation of the object, by means of light and shade. The course, as was mentioned above, will include the representation, not only of natural objects such as are likely to be studied in the lessons on nature study, biology, etc., but also objects such as those which will be met with by the pupils in their science and handicraft lessons. In this connection special emphasis should be laid on accurate and detailed delineation, sometimes in diagrammatic form.

All these exercises will afford opportunities for memory drawing, the value of which can hardly be over-estimated, and will lead naturally to the beginnings of imaginative drawing and of illustrative drawing in connection with such subjects as history. Many pupils quickly shew a taste for and develop skill in this particular type of work. Such taste should be encouraged, and much work of this kind will often be done voluntarily out of school hours in connection with school art clubs. The common sense and experience of the teacher will be the best guide as to how far and in what directions this part of the teaching in drawing should be developed.

At the same time as the pupils are gathering in their power of more or less accurate representation of objects placed before them, they will need to be trained in the use of drawing as a means of guiding construction in the handicraft lessons. Freehand dimensioned sketches to shew the method of construction of simple objects will be used as the basis for making proper scale drawings, and the pupil will learn to use mathematical instruments for the production of the drawings to be used by him in his handicraft work. In schools with an industrial bias in the last two years, or other schools in which considerable prominence is given to craft work, geometrical and mechanical drawing will naturally take a prominent place, and it is hardly necessary to add that this part of the work will be closely associated with the scheme of handicraft which is in force.

The fourth division of drawing is in a sense a combination of the last two referred to above. Successful design involves not only imagination in adapting known forms to the particular purpose, whether it be by way of embellishment or of construction, for which the design is intended, but also precision and accuracy in setting out the design in the manner in which it can best be reproduced in the article to be decorated or constructed. It is clear that only a teacher who himself possesses a practical knowledge of some branch of artistic craft can properly teach principles of design, and he will naturally frame his course according to his own knowledge. The crafts in connection with which design can be taught are far too numerous for detailed mention, but we may by way of illustration say that very successful work has been done in designing for flat surface, decoration for lamp shades, wall papers, printed fabrics; in title pages of books, embroidery, posters; in lettering and book decoration; and, on the constructional side, in designing simple articles for use in the home which can be made in the woodwork or metalwork rooms and centres. Teachers who are familiar with such crafts as wood-carving or repoussé work will naturally introduce plastic work in clay, etc., in evolving designs for such crafts. We wish to emphasise the value of the study of books, as well as of the study of examples in museums and art galleries, in connection particularly with the course of design. The best originals are usually out of reach of pupils, but for the most part illustrations in books are a very satisfactory substitute. Such a course should improve the taste of students in matters of art, and generally help them to attain a better standard of artistic appreciation. especially in regard to the decoration of the home.

We have space only for the briefest reference to the importance of school art clubs, sketching expeditions, and the like, which will be arranged by teachers where circumstances are suitable. Experienced teachers will realise that the suggestions made in preceding paragraphs by no means exhaust the possibility of this subject, both for its own sake and in its application to other branches of the curriculum. We wish, however, to suggest that in our view the art room should be regarded as a workshop, sometimes used for class instruction, at other times for groups of pupils doing different kinds of work according to their tastes and abilities, but always as a place where under the inspiration and guidance of the teachers the pupils may acquire manipulative skill and learn to apply that skill in the direction which appeals to each individual student.

THE VARIOUS FORMS OF PRACTICAL INSTRUCTION.

The consideration of the application of the art teaching to other subjects of the curriculum leads naturally to a discussion of the type of practical instruction¹ which is likely to be found useful in Modern Schools and Senior Classes. We desire to link this subject closely to drawing and applied art, because in all its branches there is or might be a close connection with art. We are anxious, moreover, to break down the notion still widely prevalent that art is a mere embellishment rather than one of the necessary foundations of sound craftsmanship.

¹ The Education Act, 1918, § 2 (1) (a), as re-enacted in the Education Act, 1921, § 20, imposes on Local Education Authorities the obligation to include in the curriculum of Public Elementary Schools at appropriate stages "practical instruction" suitable to the ages, abilities, and requirements of the children. The importance of manual activities has long been recognised, and as we have shewn in Chapter I, practical work of various kinds formed an integral part of the courses of study in "schools of industry," and in some of the elementary schools modelled on them.

The expression "practical instruction" is defined in Section 170 (4) of the Education Act, 1921, as meaning instruction in cookery, laundrywork, housewifery, dairywork, handicrafts and gardening, and such other subjects as the Board of Education declare to be subjects of practical instruction. In particular most Central schools established up to the present time have made provision for instruction in woodwork and in some cases also in metalwork for boys, and in domestic subjects for girls. In addition to this, a large number of schools, particularly those in rural and suburban areas, have made arrangements for instruction in gardening. A few schools giving " courses of advanced instruction " have provided some training in artistic crafts for the girls, usually in needlework or leatherwork.

The importance of practical instruction for older children is now generally recognised. It has often been pointed out, and with considerable reason, that many children benefit from handicraft lessons who have not hitherto made any very noticeable progress in the ordinary school work, and it has been found that the added self-respect due to ability in handicraft has led to more interest and effort in other branches of the school work. Again, it is beyond doubt that pupils who are nearing the time when they are to leave school and go out into the world of commerce or industry take much keener interest in those parts of their work which appeal to them as having a close and immediate connection with real life than in the more academic subjects of the curriculum. Finally, the various branches of practical instruction, both for boys and girls, afford abundant opportunities for training in self-help and for co-operation and team work. One of our witnesses gave us an interesting description of the work done in some recently established rural central schools, where admirable results had been achieved by supplying raw material and allowing the pupils to make some of the apparatus and equipment required for the schools. The boys, for example, not only produced vegetables and fruit, but made garden tools and sheds, while the girls on their part cooked the mid-day meal and made some of the clothing worn for games. These activities were, so far as possible, linked up with other subjects of the curriculum, such as science, elementary mathematics, and drawing. It was pointed out that co-operative activities of this character had brought the children to realise that the school-work was well worth doing for its own sake, and that education was real. We believe, accordingly, that practical instruction will naturally take a prominent place in Modern Schools and Senior Classes, both because the pupils in those schools are likely in the nature of things to be predominantly of a practical rather than of a literary bent, and because the work in the last years of the course is intended to lead naturally to the entry of the pupils into the world of business and industry.

In Modern Schools and, when possible, also in Senior Classes for pupils above the age of 11 +, special rooms for practical instruction should be provided—woodwork and, where possible, metalwork rooms for boys, and housecraft rooms for girls. We recognise, however, that for financial and other reasons, it will be necessary for some time in many cases to give a large part of the practical instruction in centres. In rural schools and in urban schools where gardens are provided, practical instruction should be associated with the work in gardening, and in many post-primary schools provision might also be made for instruction in crafts of different types. The equipment need not be elaborate, but should be good enough to enable the pupils to produce specimens of simple but sound craftsmanship. It is disheartening and unsatisfactory for them to try to make things which they cannot make well, or for which they have not adequate tools.

With regard to teaching staff, we would only say here that the provision of a sufficient number of teachers with the craftsman's outlook and the craftsman's interest is, to our mind, one of the most difficult problems which will have to be faced in the development of schools of the type we have in mind. We discuss in the chapter on Staffing the steps which might be taken to meet this obvious need.

HANDICRAFTS FOR BOYS.

Courses in woodwork and metalwork are, as a rule, designed primarily for boys, while housecraft and needlework are regarded as the most important branches of practical instruction for girls. While this is a natural distinction to make, we feel that it is important for girls as well as boys to learn something of the use of tools and to be able to do small repairs in the home, and any girls who displayed special taste and aptitude for woodwork and metalwork might, with advantage, be allowed to take a short course in these branches of handicraft.

Up to the present, the handicraft instruction in public elementary schools has been chiefly carried out in wood. There is now, however, a tendency to teach boys to handle other materials, particularly metal, and separate courses in metalwork as well as combined courses of woodwork and metalwork have in many cases been developed to a high degree of interest and efficiency. Such courses, especially in schools with a slight industrial bias, might include the making of electrical and other scientific apparatus, mechanical working models, and scale models and illustrative models of simple machines used in the various staple industries.

In country areas, the handicraft might be related to agriculture and its ancillary industries. The woodwork might be simpler in type than that which is attempted in urban schools, and articles such as hen-coops, trap-nests and bee-skeps, garden frames, seed and fruit storage boxes, as well as smaller articles for use in the school garden, might well be made. The metalwork might be concerned largely with the making and repair of the simple tools of husbandry, and particularly with the repair of the numerous metal appliances (hinges, catches, and so forth) used in gardens and farms. In connection with the nature study and rural science lessons such things as collecting boxes, aquaria, and measuring and calculating devices, would form suitable models for the handicraft course.

In all such courses, both in urban and rural schools, emphasis should be laid on the artistic aspect of the work, which should be closely linked up with the courses in drawing and applied art. Numerous opportunities will offer themselves for shewing the pupils that articles in common use, such as household furniture, need not necessarily be ugly because they are designed for practical purposes. In this way, much might be done gradually to raise the level of taste in matters of household decoration throughout the country.

NEEDLECRAFT AND HANDWORK FOR GIRLS.

We have already pointed out that too rigid a distinction should not necessarily be made between the type of handicraft suitable for boys and that suitable for girls. Much of the time assigned to handwork will necessarily, however, be spent by the girls on needlecraft of different kinds—the designing, cutting out and making of garments, mending, and embroidery. In addition, they should be given opportunities for practicing some of the various artistic crafts, such as leather-work, book-binding, basketry, the staining and painting of white wood, stencilling, and where conditions are suitable pottery, enamelling, and weaving. It is important for girls, as well as boys, to develop while at school tastes for occupations that they can practice in their leisure time in later life.

There is one further aspect of the handicraft teaching of which we would make passing mention. In the rapid development of industry from handwork to repetitive machine work, workmen are in some danger of losing their training as craftsmen except in one particular and narrow field. Concurrent with this tendency is the lessening of the hours of labour and the consequent increase of the hours of leisure. The school training in handwork should, to some extent, counteract this loss of interest in craftsmanship by suggesting to the pupils interesting and profitable hobbies for their spare time after they leave school. Their work in the art room will, we hope, have awakened their interest in various artistic crafts, which, even if they are of no immediate value as a means of livelihood, might still be developed as hobbies and in the handicraft rooms they should have opportunities of learning the processes involved in these crafts.

HOUSECRAFT.

Instruction in housecraft possesses a definite educational value, not unlike that of the various forms of handicraft for boys. but more important in its practical bearing. We consider that courses in housecraft should be planned so as to render girls fit on leaving school to undertake intelligently the various household. duties which devolve on most women. The courses should be arranged in such a way as to make the girls realise clearly that due thought for themselves and their homes is essential to health, and that an ordered knowledge of home management will increase the general well-being and comfort of themselves and of every member of the household. They should also be shown that on efficient care and management of the home depend the health, happiness and prosperity of the nation. Distaste for the work of the home has arisen, in great measure, from the fact that housecraft has not been generally regarded as a skilled occupation for which definite training is essential, and it has too often been practised by those who, through lack of training or through undeveloped intelligence, have been incapable of performing it efficiently and of commanding the respect of their fellows. Greater efficiency in the housewife would go far to raise her status in the estimation of the community. Trained intelligence combined with technical skill would develop in her a sense of proportion and enable her to economise time ; it would prevent her from sinking into the domestic drudge, without leisure for the discharge of civic responsibilities and for social intercourse, or taste for any form of literature, music and art. The housecraft work should form an integral part of the whole school organisation and life, and the pupils and their teacher should take an active share, so far as they are able, in conserving and adding to the amenities of the school. The daily conduct of the school should bear out and illustrate what is taught in the housecraft lessons. Several

234

witnesses pointed out that it is a mistake to suppose that housecraft subjects appeal to every girl. In point of fact, a teacher of real power, sympathy and skill is required to arouse the interest of many girls of thirteen to fifteen in domestic subjects. This is largely due to the fact that the girls sometimes come from homes where they have to do so much household work with inadequate equipment and materials that the subject has lost its freshness and interest. It is, therefore, essential to present it to such girls in an attractive manner. To associate it, especially in rural schools, with definite instruction in activities carried on outside but near the home, such as vegetable and fruit-growing, bee and poultry-keeping, dairying, etc., would lend it new freshness and interest.

We agree with most of our witnesses in holding that courses in housecraft should, as a rule, comprise cookery, laundrywork and housewifery, together with some instruction in the use of tools and repairs to household equipment and furniture, and should aim at providing a thorough all-round training in domestic duties. Attention might, with advantage, be paid to aesthetic as well as to purely practical considerations in regard to household fittings, equipment and furniture. The courses should include instruction in first aid, home nursing, and the care of young children. Any such teaching should be brought into close connection with the lessons in elementary science (especially biology) and hygiene.

In the several branches of the subject the equipment and fittings used should be similar to those likely to be found in the girls' own homes, but they should include some of the less costly labour-saving devices which are from time to time available. In cookery, the general aim should be to provide practical instruction in the choice and preparation of the food required for a simple wholesome diet, with due regard to home conditions and the need for economy. Sound teaching on food values is therefore essential. Lessons might also be given on such subjects as the best means of preserving fruit and vegetables.

The time assigned to housecraft in the three or four years' course in post-primary schools and the distribution of the time must necessarily vary according to the environment and the special trend, if any, in the curriculum for pupils over the age of thirteen. In some schools, for example, it may be found advantageous to concentrate the lessons in two or three years of the course. In such cases the exact years in which housecraft is taught may well be left to the discretion of the headmistress of the school.

We consider that in Modern Schools with a bias towards home-management it should easily be possible to plan valuable courses in housecraft and handwork for girls, which could be losely linked up with the lessons in science and hygiene. Preliminary courses in housecraft might be arranged for the first two years of the course, and in the third and fourth years the lessons could be planned so as to include many matters which have a bearing on house management, such as the methods for the supply of water, gas and electricity, the disposal of refuse, the usual arrangement of rooms in smaller houses and the best way of making use of limited accommodation. In some schools it might be found practicable for the girls to take in their fourth year an intensive course in household management for a month or six weeks in a small house or flat provided by the school authorities for the purpose.

In Modern Schools for girls with an "industrial" bent in the direction of dressmaking, millinery, artistic embroidery and the like, needlecraft of various kinds would form the most important element in the course. The other housecraft subjects would not be neglected, but less time would necessarily be given to them. This would be the case, also, in schools with a "commercial" bias.

In a large number of Senior Classes the instruction in housecraft would be given, not in the school itself, but in a centre for combined domestic subjects. We think that in many such instances the work in housecraft might be arranged, as is often done at present, on a whole day basis with, perhaps, an intensive course taken in the last year at a house or flat for combined domestic subjects.

In connection with housecraft, as with other forms of handicraft, girls should be encouraged to consult books. Some books of reference both for the teacher and the girls should be provided, as well as text-books and recipe-books in the different branches of the subject.

Housecraft is a wide, ever-growing subject, and the full need for instruction in it is realised only when girls are faced with the responsibility of keeping house. The attention of girls who are leaving school might therefore with advantage be called to any courses in Cookery and other domestic subjects provided in local technical institutes and classes, or in rural areas, and to similar classes organised by the local Women's Institutes.

GARDENING.

There has been a tendency in the past to regard gardening as particularly appropriate to rural schools, and handicraft as suited mainly for urban schools-a fallacious distinction resting only on expediency. We realise indeed that in many neighbourhoods it is difficult to provide school gardens, and that in some towns the difficulties are insuperable ; but we regard gardening as an important branch of practical instruction, and we hope that wherever possible, school gardens will be provided, and that urban education authorities will realise more and more the importance of providing suitable spaces which might be used for the purpose by post-primary schools in towns. In this connection, we think that consideration might be given to the desirability of utilising portions of public open spaces for school gardens. We regard it as most desirable that, where possible, all pupils in post-primary schools between the ages of 11 + and 14 + or 15 +, whether in town or country, should have opportunities for gardening, and we observe that, in a recent Circular on Rural Education (Circular No. 1365), the Board stated that gardening should be taught, if possible, to all senior children. It is particularly important that gardening should be included in the curriculum of a Modern School or Senior Class which may be actually situated in a town but draws a considerable proportion of its pupils from contributory elementary schools in surrounding country districts.

The teaching of gardening has been discussed very fully in several recent official publications, particularly in the revised edition of the Board's "Suggestions for the consideration of teachers and others concerned in the work of Public Elementary Schools." We will, therefore, confine ourselves to making a few recommendations bearing on this branch of practical work which have emerged in the course of our present inquiry. In the first place, we consider that the courses in gardening should be associated with the lessons in elementary biology, in the same way as courses in handwork should be correlated with the instruction in elementary physics and mechanics. Throughout the gardening course, the principles which regulate the various practical operations should be fully discussed by the teacher with the classes as the work proceeds, and pupils should be encouraged to record conclusions arrived at in their note-books. The teacher might spend part of each gardening lesson in hearing the pupils express their views about some portion of the work in hand, and for this reason it is not desirable that the classes should be burdened with an excessive amount of practical work in a very large garden. On the other hand, the work done in the school garden, though connected with the lessons in elementary biology. should also have a local colour which would stimulate the interest of the pupils. For example, some of the vegetables grown might be those which are usually cultivated in local allotments, and any instruction given regarding insect and vegetable pests, diseases of crops, and the like, should have some bearing on local conditions. In post-primary schools in rural areas where it is desired to give a slight agricultural bent to the curriculum, special attention might be devoted during the last two years of the course to horticulture, in association with the lessons in elementary science bearing on agriculture.

We would urge that in mixed Modern Schools and Senior Classes any girls who desire to take the course in gardening should be afforded full facilities for doing so, as is indeed already done in many schools.

· MUSIC.

The aim of music teaching considered as part of a school curriculum should be rather the cultivation of a taste than the acquirement of a proficiency; it should lay the foundation for intelligent study and enjoyment of music in after life. Solo singing should not be taught, because among other reasons it puts too heavy a strain on the adolescent voice; solo playing should be restricted to those cases where there is evidence of real keenness and aptitude. Music should be made a corporate activity in which, so far as possible, the whole school may share.

It is certainly advisable that the teaching should be in the hands of one expert instructor, with such assistance as may be necessary in the case of a big school. It is most desirable that this instructor should be not a visiting teacher but a member of the permanent staff, who would share to the full the position and responsibilities of his colleagues. This does not necessarily

MUSIC

mean that he should teach music alone (in a large majority of cases this would be impracticable) but rather that among the qualifications of at least one class teacher should be included a knowledge of music and a capacity for teaching it.

We may assume that the children come on from the elementary school having already had some experience of chorus singing, some practice in voice production and some opportunities of hearing good music. In many cities, children's concerts have been organised with excellent effect; in many schools it has been found possible to set aside some short period of time every week at which the children should have the opportunity of listening to music-pianoforte or gramophone-with a few words of explanation on the structure of the pieces. It cannot be too strongly emphasised, both here and through the rest of the musical curriculum, (i) that no music should be admitted which is not first-rate of its kind ; and (ii) that the kind should be determined in close relation to the age and inexperience of the listeners. Children, for example, find it difficult to keep their attention fixed on a long and abstract piece of instrumental music, and it should be remembered that as soon as the attention flags the meaning evaporates. If, in addition to this, the children can be taught in the elementary schools the first rudiments of notation, sight-reading, etc., so much the better ; if not, these must be undertaken in the lower forms of the post-primary school.

The first suggestion which may be made is that on every day of school attendance there should be ten minutes' choral singing, either by classes or preferably by the whole school together. If possible, it should take place at the beginning of the morning session, but the actual time might be determined so as to fit in with the general convenience of the school. The time expended will be far more than repaid by the better sense of discipline and the greater alertness of mind which will be developed and encouraged. "The chief advantage of singing," an eminent Prima Donna once said, " is that you cannot be out of temper while you are doing it "; and although this may be considered an accessory rather than an essential of the art, it is one which all who have to do with discipline might very well bear in mind. For the lower forms of the school the songs should be chosen principally out of good national song books ; in the upper forms other anthologies might be used, such as Dr. Arthur Somervell's "Golden Treasury "; care should be exercised throughout that the songs should be of the highest quality and that they should appeal to the melodic and especially to the rhythmic sense of the children Recent experience has shown that this can be effected without difficulty and with admirable results. Schools which, a few years ago, were singing deplorable little ditties, written, apparently, for the purpose of being introduced into school books and equally devoid of melody and of meaning, are now singing "The Vicar of Bray" and Cecil Sharp's folk songs and Parry's "Jerusalem" to their great and lasting advantage. They sang the bad music, not because they preferred it, but because they knew no other. In every field of art, and perhaps more in music than in any other, the reverse of Gresham's law prevails and the good drives out the bad.

In addition to the choral singing there should be, if possible, two periods a week devoted to musical instruction. One of these should deal with sight-reading and particularly with musical dictation, with such developments and expansions of this as the teacher may find time or opportunity to pursue. Every child who passes through a post-primary school should be able to read staff notation; the earlier he begins the better, for the less chance will he have had of hearing that it is a difficult and recondite process. To read a single line of melody is in no way more difficult than to read a single line of verse; the notation has to be learnt in each case, and that is all. To read a passage in four-part harmony requires a little more practice, and so the task may increase in complexity until, as in the case of some modern orchestral scores, it is as hard as Browning's "Sordello," or Lycophron's "Alexandra." But all the early stages of sight reading lie well within the attainment of normal children.' The examples of musical dictation which one may see now in many schools of the country are in themselves sufficiently encouraging. In the lower forms of the school this lesson should probably be confined to sight reading and to points of notation and other rudiments ; further up the school the reading lesson will become more elaborate, and the children may be tuaght to write a little without dictation. Sir Walford Davies has discovered an astonishing capacity for melody among the children of the Welsh schools, and those pupils who have any desire or aptitude may well be started on a very elementary course of harmonisation. In any case this period should be devoted to the technical side of music, humanised as much as possible, and where possible

MUSIC

related to the poetic forms which are studied in the literature lesson.

The other period should be devoted to the child as listener, to lectures on the nature and construction of music, in which the explanations should be brief and the illustrations abundant, These could be given by teachers in the school who could sing or play the pianoforte or violin, or in place of these, or at any rate in supplement to them, by gramophones with carefully selected records. Here, again, the teacher will need a great deal of tact and judgment in the selection of pieces. Emerson's rule, " Never read anything that you do not enjoy," is very applicable to school music, and tastes can be met without any danger of tampering with the standard of excellence. National songs of all countries, melodies of Handel and Bach, of Beethoven and Schubert, the lyric of Schumann, the best of Mendelssohn's "Songs without Words "; all these might serve at the beginning and be succeeded in due course by movements of sonatas, symphonies, guartets, classical songs, excerpts from oratorios and cantatas, and scenes from operas. There should be, in short, the same latitude in the choice of music as in the choice of poetry and the same adherence to the very best. It is hardly necessary to add that the lectures and explanations should deal with the inherent structure and style of the music, not, as is sometimes done, with fancied analogies between it and some outside fact of nature or experience. Attempts to translate music into any medium other than itself may sometimes be fanciful and amusing, but they are mostly misleading and always inadequate. At the same time, a good deal of interest may be roused by some account of the composer and especially of his relation to his contemporaries and his predecessors. In supplement to this there should be a music section in each school library containing not only such compositions as may be needed for purposes of study, but at least one general reference book, and some short and simple work on musical history and biography which the children can read for themselves or which can be made on occasion the subject of more formal study. Parry's "Studies of the Great Composers," which was written for a girls' school, is an excellent instance, and other works have been written since on the same lines.

When possible, school orchestras, string and pianoforte, might well be instituted. They are excellent forms of musical activity, and there is plenty of first-rate music, original or adapted, for them to play. Some centres have, with good results, established combined orchestras of players selected from different schools, but in many districts this may have to be deferred until the more fundamental work indicated above has been accomplished.

A valuable co-ordination of music with physical exercises is afforded by the study of eurythmics, which not only cultivates brain and muscle, but develops new possibilities of rhythmic movement. Indeed, it is probable that all forms of massed gymnastic exercises gain by association with music properly selected and adapted for the purpose; for although musical rhythm can be far more varied and complicated than any kind of muscular activity, yet within limits they may be made exactly to correspond, and under the influence of eurythmics and similar studies, these limits are continually widening.

Within the next few years there is likely to be a considerable development of broadcasting, especially in its educational work; and this, if proper use be made of it, will greatly facilitate the study of music in schools. Already there are educational lectures on the rudiments of musical style and construction given by men of acknowledged pre-eminence, illustrated by appropriate examples and circulated throughout the country. There is every hope that in course of time a considerable number of schools will avail themselves of this opportunity.

The technical aspect of music should by no means be neglected; there can be no understanding of any subject without some knowledge of its technique. But it should at this age be subordinated to the human delight in beautiful sound, which is the basis and foundation of all music. If the children leave school with their memories full of fine tunes and their ambitions roused for further study and exploration, then the school will have done a great deal for their musical training. If, in addition to this, they carry away, as is quite possible, some intelligent knowledge of musical history and some apprehension of the principles of musical structure, then the place of music in a school education will be amply vindicated.

PHYSICAL TRAINING AND GAMES.

The purpose and object of physical education is not merely to improve the physical condition of the children and to secure the full development of their health and strength, but also to

PHYSICAL TRAINING AND GAMES

aid in the development of their mental powers and in the formation of character. Physical education, therefore, has a physical effect on the body and an educational effect on the mind. The physical result includes the influence on the general physique and nutrition of the body, the prevention or correction of faulty action or attitude of the body or of any part of it, and the development of the neuro-muscular system. The educational result should be the acquisition of habits of discipline, obedience, ready response and self-control.

The phrase "physical education" includes systematic physical exercises such as are described in the Board's "Syllabus of Physical Training for Elementary Schools," games and athletic sports, folk dancing, swimming, and indeed all physical activities which help to produce a sound and healthy constitution. No one form is wholly sufficient in itself to produce the desired result ; each is useful for its own peculiar effects, but needs to be supplemented and completed by the others. The systematic physical exercises are used for the purpose of securing certain definite effects, and these effects can be more or less exactly controlled. The physical results of games and sports cannot be thus controlled; and indeed most games and sports, while contributing largely towards general health and fitness, tend to produce a rather ill-balanced development of the body, and require to be supplemented by systematic physical exercises. Games, however, hold a pre-eminent place in physical education as a means to the development of character and of the social virtues.

Systematic physical exercises, again, by establishing the coordinations required for ease and grace of movement and posture, lay a foundation for folk dancing, the artistic value of which enriches and completes the results of physical training. It is here that physical movement and music come together in an art which is of service to both.

The results obtainable from systematic physical training can be achieved only by the appropriate application of a graded system of exercises based on the principles of physiology and designed to suit the age, capacity and physical needs of each pupil. The Board's "Syllabus of Physical Training for Elementary Schools" is designed for children between the ages of 5 and 14. As Elementary schools do not possess gymnasia or employ teachers expertly trained in this subject, the system is limited to free exercises, group games, etc., which do not require special apparatus and can be carried out in the school playground or assembly hall. These exercises are arranged in "tables" or lesson-programmes which the teachers are expected to follow, and wherein the principles governing the selection and arrangement of the exercises have already been applied for them. We understand that the exercises included in this Syllabus have been chosen so as to ensure that they will be well within the capacity of all normally healthy children of the ages for which they are designed. Suitability for physical education will depend on the stage of physiological development. and particularly of neuro-muscular development, attained by the children. It is rather in the application of the exercises, i.e. in the degree of force expected in their performance, their duration, etc., that the training is differentiated in accordance with the special needs of any particular type of children; and this is a matter for the teacher, who alone can determine the pupil's needs from direct observation.

The Board intends shortly to publish a reference book of Gymnastic Training for Boys' Schools other than Elementary, in which provision has been made equally for schools with gymnasia and schools without gymnasia, so that whatever apparatus is available may be employed to full advantage; or a course depending on free exercises alone may be followed if there be no apparatus. The book does not give definite courses of training similar to the "tables" of the Syllabus, but sets out the material suitable for the successive stages of the Boys' development, and gives full directions for the selection and arrangement of exercises to suit any particular set of conditions. Courses are arranged as a continuation of the elementary school course from the point which the boys have reached when they leave the elementary school, and, in order to cover all possible future requirements, they provide for a continuously progressive training up to the age of 18. Boys going to Modern schools which possess gymnasia will be able to start immediately with the free and apparatus exercises appropriate to their age-group; or if no apparatus is available and it is preferred to continue with the Board's Elementary School Syllabus until the boys reach the age of 14, the subsequent training can be based on the material provided for the further training of boys who have completed the elementary school course.

PHYSICAL TRAINING AND GAMES

The physical training of girls in schools other than primary schools is a rather different problem from that of boys, because it is comparatively easy to obtain the services of a trained woman teacher, whereas there are few men in the country who have had a complete training in the subject. It has not, therefore, been necessary for the Board to provide a general reference book for the girls' schools, but we understand that the Board will shortly issue a scheme of training in continuation of the Elementary school course for older girls up to the age of 16, in which provision is made for the use of simple apparatus if such be available. This scheme, together with the Board's Syllabus, would appear to meet the needs of post-primary schools for girls. From 11+onwards, boys should if possible be taught by men and girls by women.

The art of teaching physical exercises cannot be learnt from books alone, and the Board's Syllabus presupposes a measure of training on the part of the teachers who are to use them. The teacher requires to have a sufficient knowledge of the general principles of physical training and of its practical conduct to be able to apply the exercises in accordance with the children's needs. Training in the Board's Syllabus is provided for Elementary School teachers in their Training Colleges and by means of sessional and vacation courses.

We consider it desirable that teachers of Physical Exercises should have undergone some course of training. It is much to be hoped that more adequate provision (similar to that which now exists for women teachers) will soon be made for the full training of male teachers of Physical Exercises.

It is generally admitted that games have an educational as well as a recreative use. They encourage and develop self-reliance, team work, loyalty, self-restraint, and resourcefulness. The weak point in games is that they often benefit most the strongest and healthiest pupils, who require them least. The others are apt to take no part and become mere spectators. If therefore the full benefit is to be obtained from games, they demand constant watchfulness and supervision. This, however, does not mean that the teacher should organise and manage the games. In fact, we would strongly deprecate this. It is far better that the organisation of the games should be carried out by the pupils themselves, who will thus appreciate them more and derive more spontaneous pleasure and more educational value from them. Nevertheless, the teacher should on occasion be present so as to be in a position to give general advice. Members of the ordinary staff who have an interest in their pupils and a belief in the value of games can render most valuable service as indeed they often do in many Central Schools at the present time. Indeed, one of the chief advantages of games lies in the intermingling of members of the staff and pupils under less formal conditions than prevail in the classroom, and the observation of pupils from a different angle. It is of the first importance that playing-fields should be available. Where possible, every modern school should have a playing field of its own, especially in large towns, but we think that in crowded areas a playing-field should be provided for a group of several schools in a district, each having the right to the use of the ground on stated days or at stated times.

CORPORATE ACTIVITIES.

There is one element in the school life that cannot be represented in any suggestions made as to curricula. No matter how cunningly and how thoroughly schemes for teaching mathematics, science, modern languages, English, or any other subject, be devised, the effect on the school as a whole will be a failure unless thought is given to the life of the pupils outside the actual lessons.

The boys and girls should be encouraged to control and inspire one another in all the subtle ways that suggest themselves to sympathetic teachers, and means should be devised for creating a specific and close relationship between the interests of the younger and those of the older pupils. From the younger pupils too much must not be expected in the matter of responsibility, but there may be a beginning, even with the youngest, and towards the end of a child's career opportunities should be increased. In this way much of the discipline of the form room, passages, playground, entertainments, can be left to the pupils themselves. Games, plays, concerts, every form of social activity, call for organisation, and this organisation should not be done, even though it can be most easily done, by the staff of the school. A boy or girl will have missed much of the value of school life unless he or she has had many opportunities of making mistakes. It is far better that a cricket match should

be lost, or a concert have a hitch in it, than that the overzealous watchfulness of the teachers should leave nothing to the initiative of the taught. It is far easier for the teacher to interfere too much than to stand aside and watch, only taking a hand himself to avert serious catastrophe. There should be small catastrophes if the proper training is to be given.

This warning does not mean that teachers will not have to be unselfish in giving up time to the out-of-school activities; it does mean that they should be advisers rather than organisers, and never save themselves trouble by doing themselves what might be done by the pupils. The extent to which the pupils can organise things themselves and can assume responsibility will depend upon a number of circumstances; two of the most important being the type of child and age of the older scholars. But in every case the aim of the teacher should be to help the pupils to organise as many of their out-of-school activities as possible and to carry as much responsibility as is compatible with (heir age and experience.

It is also most important to enlist the sympathy of the parents in all out-of-school activities. These are sure to encroach upon the free time of the pupil, possibly to disturb his domestic arrangements, and for this considerable allowance needs to be made in any organisation. Without the parents' sympathy they will wither; with the parents' encouragements they will cease to be irksome. No attempt should be made to create an unwholesome public interest in such activities; too much cannot be done to enlist parental interest.

It is not wise to attempt to define the future development of all corporate activities; this may well transcend our present experience. But there will be no future for them at all unless from the first the necessity of adequate playing fields be recognised, and the premises of the school be available out of school hours for meetings of socielies and concerts, and for the reunion of past members of the school. To use the premises of the day school for evening school work seems an economical device; in reality, if it involves the sacrifice of any profitable activities of the day school, it is very extravagant.

APPENDIX I.

(A.)-LIST OF WITNESSES.

(i) Government Departments.

Board of Education,

- Mr. A. Abbott, C.B.E., H.M. Chief Inspector of Technical and Continuation Schools.
- Mr. H. E. Boothroyd, H.M. Inspector, Technical Schools Branch.
- Mr. A. S. Bright, H.M. Inspector of Handicraft.
- Miss B. M. Cunnington, H.M. Staff Inspector for Trade and Domestic Courses for Girls.
- Mr. H. J. Dean, H.M. Divisional Inspector, Elementary Schools Branch.
- Mr. A. H. Dunn, H.M. Inspector, Elementary Schools Branch.
- Mr. W. C. Fletcher, C.B., late Chief Inspector of Secondary Schools and Pupil Teacher Centres.
- Mr. H. T. Holmes, O.B.E., H.M. Divisional Inspector, Technical Schools Branch.
- Mr. F. T. Howard, H.M. Divisional Inspector, Elementary Schools Branch.
- Mr. A. T. Kerslake, O.B.E., H.M. Inspector, Elementary Schools Branch.
- Miss K. Manley, O.B.E., H.M. Staff Inspector for Domestic Subjects Schools and Classes.
- Mr. C. J. Phillips, H.M. Divisional Inspector, Elementary Schools Branch.
- Mr. T. W. Phillips, H.M. Divisional Inspector, Secondary Schools Branch.
- Mr. H. M. Richards, C.B., H.M. Chief Inspector of Public Elementary Schools.

Welsh Department-

Mr. J. Elias Jones, H.M. Inspector of Schools.

Mr. W. J. Williams, H.M. Inspector of Schools.

Scottish Education Department.

Mr. J. C. Smith, C.B.E., H.M. Chief Inspector.

Mr. J. H. Wattie, LL.D., H.M. Chief Inspector.

(ii) Directors of Education and Members of Local Education Authorities.

- Sir Graham Balfour, LL.D., late Director of Education for Staffordshire.
- Mr. J. W. Baron, Chairman of the Scholarships Sub-Committee of the Lancashire Education Committee.

- Sir Robert Blair, LL.D., late Education Officer to the London County Council.
- Mr. E. Salter Davies, Director of Education for Kent.
- Mr. A. J. Dawson, C.B.E., LL.D., Director of Education for the County of Durham.
- Mr. J. H. Hallam, Chief Officer for Higher Education (Secondary) in the West Riding of Yorkshire.
- Mr. Spurley Hey, Director of Education for Manchester.
- Mr. H. W. Household, Secretary of Education for Gloucestershire.
- Mr. J. James, Ph.D., Chief Education Official for Glamorganshire.
- Mr. Bolton King, Director of Education for Warwickshire.
- Miss Margaret C. D. Law, Chairman of the Elementary Education Sub-Committee of the Bradford Education Committee.
- Mr. H. Morris, Secretary for Education in Cambridgeshire.
- Mr. W. O. Lester Smith, Director of Education for Essex.
- Mr. David Thomas, Director of Education for Carnarvonshire.

(iii) Associations representing Local Education Authorities.

Association of Directors and Secretaries for Education-

Sir Benjamin Gott, F.C.S., Secretary to the Middlesex Education Committee.

Mr. P. D. Innes, D.Sc., Chief Education Officer for Birmingham. Mr. F. H. Toyne, Secretary to the Brighton Education Committee. Association of Municipal Corporations—

Mr. F. P. Armitage, Director of Education for Leicester.

Mr. A. H. Whipple, Director of Education for Nottingham,

(iv) Organisations Representing Teachers.

Association of Assistant Mistresses-

Miss E. M. Mace, County Secondary Schools for Girls, Putney. Miss M. Muncaster, County High School for Girls, Leytonstone, Miss Pearson, Newland High School, Hull.

Association of Teachers in Technical Institutions-

Mr. F. C. Clarke, Municipal Technical College, West Ham,

Mr. J. Wickham-Murray, Secretary to the Association.

Association of Technical Institutions-

Mr. Charles Coles, Principal of Cardiff Technical College.

Mr. S. C. Laws, Principal of Northampton Polytechnic Institute, London.

Incorporated Association of Assistant Masters in Secondary Schools-Mr. J. H. Arnold, St. Dunstan's College, Catford, London.

Mr. G. R. Parker, Roan School for Boys, Greenwich London, Incorporated Association of Head Masters-

Mr. R. F. Cholmeley, Dame Alice Owen's Boys' School, Islington, London.

Mr. J. I. Scott, Kettering Grammar School,

Incorporated Association of Head Mistresses-

Miss D. L. Sandford, Rochester Grammar School for Girls. Miss L. E. Savill, Lincoln High School for Girls.

London Association of Head Teachers of Central Schools-

Mrs. L. Court, Brixton Central School for Girls.

Mr. J. Litt, Tollington Park Central School or Boys.

Mrs. M. Millington, Haverstock Central School for Girls.

Mr. R. J. Wood, late Head Teacher of Greenwich Central School for Boys.

National Association of Head Teachers-

Miss J. W. Gibb, Clint Road Council School, Liverpool.

Mr. H. J. Jackson, Ropewalk Senior School, Nottingham.

Mr. J. Lord, Manley Park Council School, Manchester.

National Union of Teachers-

Mr. F. Barraclough, Chairman of the Education Committee of the Executive.

Sir Ernest Gray, Secretary to the Education Committees of the Union.

Mrs. L. Manning, J.P., Member of the Executive.

Mr. H. T. Morgan, Chairman of the Primary Education Section of the Executive.

(v) Other Organisations.

The Co-operative Union, Mr. W. R. Rae, J.P., Chairman of the Education Committee of the Union.

The Federation of British Industries-

Mr. A. E. Berriman.

Mr. A. P. M. Fleming, C.B.E.

Mr. F. H. Livens, J.P., Acting Chairman of the Education Committee of Federation.

Mr. W. Prescott.

The Trades Union Congress General Council-Mr. George Hicks. Alderman W. Jenkins, M.P.

Mr. R. Richardson, M.P.

(vii) Religious Bodies.

Church of England-

Mr. R. Holland, Secretary to the National Society.

Rev. Canon A. W. Maplesden, LL.D., Director of Religious Education for the Dioceses of London and Southwark.

Ven. Thomas R. Sale, Archdeacon of Rochdale.

National Free Church Council-

Rev. J. Scott Lidgett, D.D.

EDUCATION OF THE ADOLESCENT

- Catholic Education Council-
 - The Rt. Rev. The Bishop of Pella.
 - The Rt. Rev. Monsignor Canon Pinnington.
 - Sir John Gilbert, K.B.E.
- Board of Deputies of British Jews-
 - Mr. H. M. Adler, Director of Jewish Education.
 - Mr. L. G. Bowman, Headmaster of the Jews Free School, Bell Lane, London, E.
 - Rev. Dr. A. Cohen, Minister of the Birmingham Hebrew Congregation and Chairman of the Foundation Managers of the Birmingham Hebrew Schools.

(viil) Individual Witnesses.

- Mr. J. E. Bispham, O.B.E., Principal of the Borough Polytechnic, London.
- Mr. W. Easterby, Headmaster of Kettering Central School.
- Mr. R. W. Ferguson, Superintendent of Education for Messrs. Cadbury Bros., and Hon. Secretary to the Association for Education in Industry and Commerce.
- Mr. W. L. Galbraith, on behalf of the Gas, Light and Coke Company, Ltd., Westminster, London.
- Mr. R. G. Hewitt, F.G.S., Headmaster of Retford Central School, late Headmaster of Oakham Central School.
- Mr. P. I. Kitchen, Headmaster of Rugby Day Continuation School, and organiser of Further Education at Rugby under the Warwickshire Education Committee.
- Mr. T. Knowles, on behalf of Messrs. Boots Pure Drug Company.
- Mr. J. Knox, on behalf of Messrs. Lever Bros.
- Mr. J. W. Headlam-Morley, C.B.E., Historical Adviser to the Foreign Office and late Staff Inspector of Secondary Schools.
- Mr. T. Percy Nunn, D.Sc., Principal of London Day Training College, and Professor of Education in the University of London.
- Mr. Alexander Paterson, M.C., H.M. Commissioner of Prisons and Director of Convict Prisons.
- Mr. J. L. Paton, President of Newfoundland Memorial College and Normal School, St. Johns N.F. (late High Master of Manchester Grammar School).
- Rev. Canon J. St. J. P. Pughe,
- Mr. H. Schofield, M.B.E., Ph.D., Principal of Loughborough College, and Hon. Secretary to the Association of Technical Institutions.
- Mr. H. J. Spenser, I.L.D., Headmaster of High Pavement Secondary School, Nottingham.
- Mr. Christopher H. Turnor.

(B.) LIST OF ORGANISATIONS AND PERSONS WHO SENI MEMORANDA, STATISTICS AND OTHER DATA FOR THE USE OF THE COMMITTEE.

- -Mr. H. G. Abel, Headmaster of St. Olave's and St. Saviour's Grammar School, Tower Bridge, London.
- The Rt. Hon. F. D. Acland, P.C., Kilverton, Devon.
- Acton, The Education Committee for the Borough of.
- Miss C. Adams, Headmistress of Eastbourne Girls' Secondary School,
- Mr. J. W. B. Adams, Headmaster of Christchurch Council School, Hampshire.
- Mr. A. E. Adkins, Headmaster of Watford Central School.
- The Ministry of Agriculture and Fisheries.
- Mr. J. E. Allen, A.R.C.A., St. Martin's School of Art, Charing Cross Road, London.
- Mr. Alfred Amos, Wye, Kent.
- Mr. E. J. Andrews, Headmaster of the George Palmer Central School, Reading.
- Mr. A. B. Archer, Headmaster of Oldershaw School for Boys, Wallasey, Cheshire.
- Mr. R. L. Archer, Professor of Education, University College of North Wales, Bangor.
- Miss E. Archibald, Headmistress of St. Albans High School.
- Mr. F. Ash, Headmaster of Willowfield Central School, Eastbourne,
- The Association for Education in Industry and Commerce.
- The Association of Teachers of Domestic Subjects.

Australia, Commonwealth of-

New South Wales, The Department of Education for.

Queensland, The Department of Public Instruction for. South Australia, The Department of Education for. Victoria, The Department of Education for.

- Mr. G. Auty, Headmaster of Kimberworth Road Central Boys' School, Rotherham.
- Mr. C. W. Bailey, Headmaster of Holt Secondary School, Liverpool.
- Mr. S. Ball, Headmaster of Gorse Hill Central School, Stretford."
- Mr. F. Bannister, Headmaster of Barrowford Central School, Nelson, Lance.
- Barnsley, The Education Committee for the County Borough of.
- Miss K. Barratt, D.Sc., Principal of the Swanley Horticultural College, Kent.
- Barrow-in-Furness, The Education Committee for the County Borough of.
- Barry, The Education Committee for the Urban District of,
- Batley, The Education Committee for the Borough of,

Beckenham, The Education Committee for the Urban District of,

- Miss E. M. Bence, Headmistress of Devonport Central School for Girls.
- Sir Walter Berry, K.B.E., Gushmere Court, Faversham, Kent.
- Mr. C. J. Blackburn, Headmaster of Eastbourne Boys' Secondary School.
- Mr. E. F. D. Bloom, H.M. Inspector, Elementary Schools Branch. Boots Pure Drug Company Ltd., Nottingham.
- Mr. C. W. Bracken, Headmaster of Plymouth Corporation Grammar School.
- Bradford, The Education Committee for the County Borough of. Mr. Benchara Branford.
- Brighton, The Education Committee for the County Borough of.
- Bristol, The Education Committee for the County Borough of.
- The British Social Hygiene Council, Inc.
- Miss M. D. Brock, Litt.D., Headmistress of the Mary Datchelor Girls' School, Camberwell, London.
- Mr. W. A. Brockington, O.B.E., Director of Education for Leicestershire.
- Bromley, The Education Committee for the Borough of.
- Mr. Samuel Brook, formerly Headmaster of the Westminster Wesleyan Practising Schools, London.
- Sir Edward Brotherton, Bart., LLD., Kirkham Abbey, Yorkshire.
- Mr. C. E. Browne, Christ's Hospital, Horsham, Sussex.
- Messrs. Brunner, Mond and Company Limited, Northwich.
- Mr. Cyril L. Burt, D.Sc., Psychologist to the London County Council and Professor of Education in the University of London.
- Messrs. Cadbury Brothers Ltd., Bournville, Birmingham.
- Canada—
 - British Columbia, The Department of Education for.
 - Nova Scotia, The Department of Education for.
 - Ontario, The Department of Education for.
- Saskatchewan, The Department of Education for,
- Cardiff, The Education Committee for the County Borough of.
- Carlisle, The Education Committee for the County Borough of,
- Carnarvonshire, The Education Committee for.
- Mr. E. H. Carter, O.B.E., H.M. Inspector, Elementary Schools, Branch.
- Miss N. Carter, Headmistress of Centaur Road Girls' School, Coventry.
- Miss E. E. Caulkin, Headmistress of Newarke Girls' School, Leicester.
- Miss L. Chadwick, Headmistress of the Central School for Girls, Oxford.
- Mr. F. Challoner, Headmaster of the Wimbledon Park Council. School, London.
- Mr. J. F. Chance.

- Messrs. Chance Bros., Company Ltd., Glass Works, Smethwick, Staffs.
- Cheshire, The Education Committee for.
- Messrs. C. & J. Clark, Ltd., Boot and Shoe Manufacturers, Street, Somerset.
- Mr. G. H. Clark, Headmaster of Acton County School, Middlesex.
- Mr. R. S. Clay, D.Sc., Principal of Northern Polytechnic Institute, Holloway, London.
- Ven. H. J. Cody, D.D., late Minister of Education, Ontario.
- Mr. P. B. Coles, H.M. Inspector, Elementary Schools Branch.
- Mr. H. G. Cooke, Lecturer in Education and Master of Method, University College, Reading.
- Mr. A. G. Coombe, D.S.O., Headmaster of the North Eastern County School, Barnard Castle, Co. Durham.
- Cornwall, The Education Committee for the County of.
- Mr. H. W. Cousins, Headmaster of Brampton County Secondary School, Cumberland.
- Coventry, The Education Committee for the County Borough of.
- Miss D. G. Coward, Headmistress of Broughton High School, Salford.
- Mr. J. H. Cowham, D.Litt., late Master of Method, Westminster Training College, London.
- Miss E. E. Cox, Barrett Street Trade School for Girls, Oxford Street, London.
- Miss A. Crawley, Bloomsbury Trade School for Girls, London.
- Miss L. E. Croome, Headmistress of Gloucester Road Central School, Cheltenham.
- Miss W. M. Crosthwaite, Headmistress of Colchester County High School for Girls.
- Croydon, The Education Committee for the County Borough of.
- Rev. Dr. E. Dale, Headmaster of Latymer Upper School, Hammersmith, London,
- Major W. H. Davis, D.S.O., Headmaster of William Ellis School, St. Pancras, London.
- Deal. The Education Committee for the Borough of.
- Denmark, Undervisningsministeriet, Copenhagen.
- Derby, The Education Committee for the County Borough of.
- Dewsbury, The Education Committee for the County Borough of.
- Miss D. E. de Zouche, Headmistress of Wolverhampton High School for Girls.
- Mr. F. W.-Dickinson, Headmaster of Cheltenham Central School for Boys.
- Messrs. John Dickinson and Company Ltd., Stationery Manufacturers, Hemel Hempsted, Herts.
- Mr. L. T. Dimes, Headmaster of the Foundation School, Whitechapel, London.

- Mr. R. J. Done, Headmaster of the "Wakefield" Central School, East Ham.
- Dorset, The Education Committee for the County of.
- Dover, The Education Committee for the Borough of.
- Mr. B. Dumville, Headmaster of the St. Mark's Road Central School, North Kensington, London.
- Durham, The Education Committee for the County of.
- Mr. E. M. Eagles, Headmaster of Enfield Grammar School, Middlesex. The Educational Handwork Association.
- Lieut.-Col. D. R. Edwards-Ker, O.B.E., Principal of Seale Hayne Agricultural College, Newton Abbot, Devon.
- Mr. S. Elford, Headmaster of Coopers' Company's School, Bow London.
- Enfield, The Education Committee for the Urban District of.
- Erith, The Education Committee for the Urban District of.
- Essex, The Education Committee for the County of.
- Mr. P. W. Evetts, Headmaster of Bolton Municipal Secondary School.
- Miss E. Felvus, Headmistress of Tottenham High School for Girls, Middlesex.
- Mr. F. W. Field, Headmaster of Rotherham Grammar School.
- Finchley, The Education Committee for the Urban District of.
- Mr. J. J. Findlay, Ph.D., late Professor of Education in the University of Manchester.
- Miss A. Fleming, Headmistress of Thoresby High School, Leeds.
- Mr. H. J. Fleure, D.Sc., Professor of Geography and Anthropology, University College of Wales.
- Miss H. M. Footman, Headmistress of City and County School for Girls, Chester.
- Rev. F. G. Forder, Headmaster of St. Dunstan's College, Catford, London.
- Messrs. J. S. Fry and Sons Ltd., Bristol.
- The Gas, Light and Coke Company, Westminster, London.
- The Geographical Association.
- Mr. N. M. Gibbins, Headmaster of the Central Foundation School, Finsbury, London.
- Gillingham, The Education Committee for the Borough of.
- Glamorganshire, The Education Committee for.
- Gloucestershire, The Education Committee for.
- Mr. James Graham, Director of Education for Leeds.
- Miss F. E. D. Green.
- Capt. F. H. Grenfell, D.S.O., H.M. Staff Inspector of Physical Exercises.
- Mr. S. R. Gurner, M.C., Headmaster of King Edward VII Secondary School, Sheffield (late Headmaster of the Strand School, London).
- Miss Grace Hadow.

- Mr. J. E. Hales, H.M. Staff Inspector, Elementary Schools Branch. Sir Daniel Hall, K.C.B., LL.D., F.R.S., Chief Scientific Adviser and
- Director-General of Intelligence Dept., Ministry of Agriculture.
- Miss J. Harding, Headmistress of Rotherham Municipal High School for Girls.
- Mr. J. R. Hurlestone-Jones, Headmaster of Holloway County School, London.
- Rev. E. C. Harries, Headmaster of West Buckland School, Barnstaple, Devon.
- Miss A. L. Harrison, Headmistress of Darlington High School.
- Messrs. Harrods, Ltd., Knightsbridge, London.
- Harrogate, The Education Committee for the Borough of.
- Hebburn, The Education Committee for the Urban District of.
- Mr. R. B. Henderson, Headmaster of Alleyn's School, Dulwich, London.
- Mr. S. Hicks, Principal of the Shoreditch Technical Institute and Training College, London.
- Miss A. Hill, Headmistress of Greenhead High School, Huddersfield.
- Mr. H. A. Hinton, H.M. Inspector, Elementary Schools Branch.
- Mr. W. F. Hiscock, Headmaster of the Boys' Central School, Margate.
- The Historical Association.
- Mr. N. Hodgson, Headmaster of Merrywood Secondary School, Bristol.
- Mr. A. F. Hogg, F.C.S., Principal of the Woolwich Polytechnic, London.
- Mr. E. W. Holman, Headmaster of Bury Municipal Secondary School.
- Mr. F. C. Holmes, Headmaster of Bath City Secondary School for Boys.
- The Home Office.
- Mr. A. H. Hope, Headmaster of the Roan School for Boys, Greenwich, London.
- Mr. E. E. Houseley, Headmaster of Cheetham Central School, Manchester.
- Mr. E. Howarth, Headmaster of South Grove Central Boys' School, Rotherham.
- Hull, The Education Committee for the County Borough of.
- The Incorporated Association of Retail Distributors.
- The Incorporated British Association for Physical Training.
- The Institute of Handicraft Teachers.
- Jarrow, The Education Committee for the Borough of.
- Mr. T. Johnson, H.M. Inspector of Elementary Schools and Rural Subjects.
- Mr. D. B. Johnstone-Wallace, Principal of East Anglian Institute of Agriculture, Chelmsford, Essex.
- Mr. H. L. Joseland, Headmaster of Burnley Grammar School.

- Lt.-Col. W. L. Julyan, Warden of the Lord Wandsworth Agricultural College, Long Sutton, Hants.
- Miss M. J. Keay, Headmistress of Parkfields Cedars Secondary School, Derby.
- Mr. E. Keey, Principal of Aston Commercial School, Birmingham. Keighley, The Education Committee for the Borough of.
- Kent, The Education Committee for the County of.
- Mr. W. T. Kenwood, Headmaster of Isleworth County School, Middlesex.
- Kettering, The Education Committee for the Urban District of.
- Mr. W. A. Knight, J.P., Headmaster of Sexey's School, Bruton, Somerset.
- The Ministry of Labour.
- Lancashire, The Education Committee for.
- Mr. T. A. Lawrenson, Headmaster of Westoe Secondary School, South Shields.
- Mr. John Lea, Registrar of the Board for the Extension of University Teaching, University of London Offices, Imperial Institute, London.
- The League of Nations Union.

Leeds, The Education Committee for the County Borough of.

Leicester, The Education Committee for the County Borough of.

Leicestershire, The Education Committee for.

Messrs. Lever Brothers Ltd., Port Sunlight, Cheshire.

- Mr. J. M. Lowis, Headmaster of Rastrick Grammar School, Brighouse. Lincoln, The Education Committee for the County Borough of.
- The Ling Association of Trained Teachers of Swedish Gymnastics.

Liverpool, The Education Committee for the County Borough of.

Mr. W. A. Lofthouse, Headmaster of Sale Central School, Cheshire. London, The Education Committee for the County of.

The London Head Teachers' Association.

Mr. W. T. Lucas, Headmaster of South Shields High School.

- Mr. R. McArthur, Headmaster of Lowestoft Secondary School.
- Mr. W. A. Macfarlane, Headmaster of Derby Municipal Secondary School.
- Mr. C. F. Markham, H.M. Inspector, Elementary Schools Branch.
- Mr. R. E. Marsden, H.M. Assistant Inspector of Elementary Schools, and Inspector of Handicraft,
- Miss K. M. Mason, Headmistress of Sale County High School for Girls, Cheshire,
- The Mathematical Association.
- Messrs. Mather and Platt Ltd., Engineers, Park Works, Manchester,
- Pan J. Mauer, Comenius Educational Institute, Prague.
- Mr. W. Mny, Headmaster of Uppingham Central School, Rutland.
- Mr. A. B. Mayne, Headmaster of Cambridge and County High School for Boys.

- Miss M. H. Meade, Headmistress of Bolton School.
- Mr. P. E. Meadon, Director of Education for Lancashire.
- Middlesbrough, The Education Committee for the County Borough of.
- Middlesex, The Education Committee for the County of.
- Mr. T. Milburn, Ph.D., Principal of the Midland Agricultural and Dairy College, Sutton Bonington, Loughborough.
- Miss A. N. Miles, Headmistress of Pate's Grammar School for Girls, Cheltenham.
- Monmouthshire, The Education Committee for.
- Miss D. Moore, Headmistress of Devonport Secondary School for Girls.
- Morley, The Education Committee for the Borough of.
- Mr. F. D. Mosscrop, Scottowe House, Great Ayton, Yorks.
- Mountain Ash, The Education Committee for the Urban District of.
- Mr. R. H. Myers, Headmaster of St. Matthew's Central School, Rugby.
- The National Association of Head Teachers.
- The National Association of Inspectors of Schools and Educational Organisers.
- The National Farmers' Union.
- The National Federation of Class Teachers.
- The National Organisation of Girls' Clubs.
- The National Society of Art Masters.
- The National Union of School Teachers.
- Miss N. Neild, Headmistress of Bury Grammar School for Girls.
- Northampton, The Education Committee for the County Borough of. Northumberland, The Education Committeee for the County of.
- Norwich, The Education Committee for the County Borough of.
- Nottingham, The Education Committee for the County Borough of. Nottinghamshire, The Education Committee for.
- The National Union of Women Teachers,
- Miss A. R. Nuttall, Headmistress of Barnsley High School for Girls.
- Oldham, The Education Committee for the County Borough of.
- Mr. G. W. Olive, Headmaster of Dauntsey School, West Lavington, Wilts.
- Mr. R. E. Owen, Headmaster of Welshpool County School for Boys, Mont.
- Oxford, The Education Committee for the County Borough of.
- Oxfordshire, The Education Committee for.
- Mr. C. F. C. Padel, Headmaster of Carlisle Grammar School.
- Mr. E. F. Partridge, Headmaster of West Central School, Bath.
- Messrs. James Pascall, Ltd., Confectionery Manufacturers, London.
- Mr. J. G. Paterson, Industrial Welfare Society.
- Penge, The Education Committee for the Urban District of.
- Mr. C. H. Peters, Headmaster of Tottenham County School, Middlesex.

Mr. F. O. Pinchbeck, Headmaster of Downhills Central School, Tottenham, Middlesex.

The Rt. Hon. Sir Horace Plunkett, K.C.V.O., F.R.S.

Plymouth, The Education Committee for the County Borough of. Pontypridd, The Education Committee for the Urban District of.

- Miss M. B. Potter, Headmistress of Plymouth High School for Girls.
- Mr. A. T. Powell, Headmaster of Nantwich and Acton Grammar School, Cheshire.

Miss D. Prebble, Headmistress of Kendrick Girls' School, Reading.

Mr. W. St. J. Pym, H.M. Inspector, Elementary Schools Branch.

Ramsgate, The Education Committee for the Borough of.

Miss E. Ransford, Headmistress of Croydon High School for Girls. Messrs. Reckitt & Sons, Ltd., Hull.

- Messrs. Hans Renold, Ltd., Chain Manufacturers and Engineers, Didsbury, Manchester.
- Mr. R. L. Robb, Headmaster of the Cumberland and Westmorland Farm School, Newton Rigg, Penrith.
- Mr. A. S. Robinson, Headmaster of Knaresborough Rural Secondary School.
- Mr. R. T. Robinson, Headmaster of Burton-on-Trent Grammar School.
- Miss D. M. Rowell, Headmistress of St. George's Intermediate School, Northampton.
- Messrs. Rowntree and Company Ltd., York.
- Sir Edward John Russell, O.B.E., D.Sc., F.R.S., Rothamsted Experimental Station, Harpenden, Herts.
- Sir Michael Sadler, K.C.S.I., C.B., Litt.D., Master of University College, Oxford.
- Mr. A. Sage, M.B.E., Principal of the London County Council School of Building, Clapham, London.

Salford, The Education Committee for the County Borough of.

- Miss' R. A. M. Salt, Headmistress of Hastings Street Central Girls' School, Derby.
- Mr. W. L. Sargant, J.P., Headmaster of Oakham School, and Chairman of the Rutland Education Committee.
- Mr. A. J. Schooling, Headmaster of Holgate Grammar School, Barnsley.
- The Scottish Education Department.
- Mr. Hubert Secretan, Warden of the Oxford and Bermondsey Club, London.

Messrs. Selfridge and Company Ltd., Oxford Street, London.

- Mr. W. J. Sharples, Headmaster of Parmiter's School, Bethnal Green, London.
- Mr. G. T. Shaw, H.M. Inspector of Music in Elementary Schools and Training Colleges.

- Sheffield, The Education Committee for the County Borough of. Shipley, The Education Committee for the Urban District of.
- Mr. C. R. Skrimshire. Headmaster of Retford Grammar School,
- Notts.
- Mr. L. S. M. Skyrm, Headmaster of Beaminster Grammar School, Dorset.
- Mr. J. Slater, Headmaster of Hastings Street Central Boys' School, Derby.
- Mr. A. Smith, Headmaster of Battersea County School, London.

Mr. A. Smith, Headmaster of Fairfield Secondary School, Bristol, Messrs. Smith's Dock Company Ltd., North Shields.

Mr. A. Somervell, Mus. Doc., Principal Inspector of Music under the Board of Education.

South Africa, Union of-

Cape of Good Hope, The Department of Public Education for.

The Province of the Transvaal, The Department of Education for.

- Southampton, The Education Committee for the County Borough of.
- Mr. W. K. Spencer, D.Sc., H.M. Inspector of Elementary Schools, and of Science in Training Colleges.
- Spirella Company of Great Britain, Letchworth, Herts.
- Miss G. Stafford, Headmistress of Queen Mary's High School, Walsall.
- Mr. A. R. Stevens, Headmaster of Jarrow County School, Co. Durham.
- Mr. E. H. Stevens, Ph.D., Headmaster of Westminster City School, London.
- Stockport, The Education Committee for the County Borough of.
- Stockton-on-Tees, The Education Committee for the Borough of.
- Stoke-on-Trent, The Education Committee for the County Borough of.
- Mr. F. C. Stone, H.M. Inspector of Schools of Art, Art Classes, &c.
- Mr. A. L. Strachan, Headmaster of Devonport Central School for Boys.
- Rev. C. Strange, Headmaster of Kirkham Grammar School, Lancashire.
- Suffolk (East), The Education Committee for the County of.
- Mr. G. K. Sutherland, H.M. Inspector of Elementary Schools, and of Rural Subjects.
- Swansea, The Education Committee for the County Borough of.
- Mr. A. Tasker, Headmaster of the Reay Central School, Stockwell, London.
- Mr. C. W. Taylor, Headmaster of the Victoria Central School, Brighouse, Yorks.
- Messrs. John I. Thornycroft and Company Ltd., Engineers, Basingstoke, Hants.

- Messrs. Tootal Broadhurst Lee Company Ltd., Manchester.
- Tottenham, The Education Committee for the Urban District of.
- Mr. A. F. Treseder, Headmaster of Devonport High School for Boys.
- Mr. A. E. Twentyman, late Librarian to the Board of Education.
- Mr. M. J. Truscott, Headmaster of Malmeebury and District Secondary School, Wilts.*
- Tunbridge Wells, The Education Committee for the Borough of.
- Mr. J. Turral, Headmaster of Blackpool Municipal Secondary School.
- Mr. H. E. Vipan, Headmaster of Wallasey Grammar School, Cheshire.
- Miss M. A. Vivian, Headmistress of the High School for Girls, Newport, Mon.
- Miss C. von Wyss, Lecturer in Theory and Practice of Education at the London Day Training College, Southampton Row, London.
- Mr. A. Walker, Headmaster of the Blackburn C.E. Central School for Boys.
- Walthamstow, The Education Committee for the Urban District of.
- Miss A. E. Wark, Chief Woman Inspector under the Board of Education.
- Warwickshire, The Education Committee for.
- Mr. J. Weaver, Headmaster of the Kettering Road Intermediate School, Northampton.
- Mr. W. B. Welch, Headmaster of Shepton Mallet Grammar School, Somerset.
- The Welsh Secondary Schools Association.
- Mr. G. W. Whalley, Headmaster of Barnsley Central School.
- Mr. C. Wheeler, D.S.O., Headmaster of The Lower School of Lawrence Sheriff, Rugby.
- Miss' J. Whyte, Headmistress of Kettering High School for Girls.
- Miss H. G. Williams, Headmistress of Kesteven and Grantham Girls' School.
- Miss F. Woodward, Headmistress of the Fulham Central School for Girls, London.

Worcester, The Education Committee for the County Borough of. The Workers' Educational Association,

- Rev. H. B. Workman, D.D., D.Lit., Principal of Westminster Training College, Horseferry Road, London.
- Miss E. Yates, Headmistress of the West Central Girls' School, Rugby,
- York, The Education Committee for the County Borough of.

Yorkshire (West Riding), The Education Committee for.
APPENDIX II.

NOTES ON EDUCATIONAL NOMENCLATURE.

- A. Terms which have some statutory authority, having been partially defined, or employed in Acts of Parliament which are still in operation.
 - (1) Elementary Education, Elementary School, and Public Elementary School.
 - (2) Central School, or Class.
 - (3) Higher Education.
 - (4) Secondary School, and Secondary Education.
 - (5) Grammar School.
 - (6) Intermediate School (in Wales only).
 - (7) Continuation School.
- B. Terms which now, or in the past have been defined for administrative purposes by the Board of Education or by the Department of Science and Art (up to 1900).
 - (1) Higher Elementary School.
 - (2) Junior Technical School.
 - (3) School of Science or Organised Science School.
 - (4) Preparatory School.
- C. Terms of art used by the Board of Education, the Charity Commission (up to 1900), Local Education Authorities, Governors of Endowed Schools, teachers, and other persons interested in education.
 - (1) Primary School and Primary Education.
 - (2) Higher Grade School.
 - (3) Higher Top.
 - (4) Senior School.
 - (5) Preparatory Department.
 - (6) High School.
 - (7) Middle School.
 - (8) Commercial School.
 - (9) Junior Commercial School (or Course).
 - (10) Full-Time Day Technical Classes for Junior Pupils.
 - (11) Trade School.
 - (12) Full-Time Junior Art Department.
 - (13) Private School.
- A. Terms which have some statutory authority, having been partially defined, or at any rate employed in Acts of Parliament which are still in operation.

EDUCATION OF THE ADOLESCENT

(1) ELEMENTARY EDUCATION, ELEMENTARY SCHOOL, AND PUBLIC ELEMENTARY SCHOOL.

The Elementary Education Act, 1870, defined "Elementary School" but not" Elementary Education." That statute apparently assumed that "Elementary Education" was an expression the meaning of which was well understood, inasmuch as it embodied a reference thereto in its definition of an Elementary School in Section 8, which runs as follows :--

"The term "Elementary School" means a school or department of a school at which elementary education is the principal part of the education there given, and does not include any school or department of a school at which the ordinary payments in respect of the instruction from each scholar exceed ninepence a week."

The expression "Elementary School" is seldom used in the Education Act, 1870, except in association with the word "public." The expression "Public Elementary School" was defined in Section 7 of the Education Act, 1870, re-enacted in Section 27 (1) of the Education Act, 1921, which runs as follows :---

"Every elementary school which is conducted in accordance with the following regulations shall be a public elementary school within the meaning of this Act; and every public elementary school shall be conducted in accordance with the following regulations (a copy of which regulations shall be conspicuously put up in every such school); namely :---

(a) It shall not be required, as a condition of any child being admitted into or continuing in the School, that he shall attend or abstain from attending any Sunday School, or any place of religious observance or any instruction in religious subjects in the school or elsewhere, from which observance or instruction he may be withdrawn by his parent, or that he shall, if withdrawn by his parent, attend the school on any day exclusively set apart for religious observance by the religious body to which his parent belongs.

(b) The time or times during which any religious observance is practised or instruction in religious subjects is given at anymeeting of the school shall be either at the beginning or at the end or at the beginning and the end of such meeting, and shall be inserted in a time-table to be approved by the Board of Education, and to be kept permanently and conspicuoulsy affixed in every schoolroom; and any scholar may be withdrawn by his parent from such observance or instruction without forfeiting any of the other benefits of the school. (c) The school shall be open at all times to the inspection of any of His Majesty's Inspectors, so, however, that it shall be no part of the duties of such inspector to inquire into any instruction in religious subjects given at such school, or to examine any scholar therein in religious knowledge or in any religious subject or book.

(d) The school shall be conducted in accordance with the conditions required to be fulfilled by an elementary school in order to obtain an annual parliamentary grant."

Section 2 of the Education Act, 1918, as re-enacted in Section 20 of the Education Act, 1921, made it clear—if it was not clear before that "education other than elementary" could be given in public elementary schools.

(2) CENTRAL SCHOOL, OR CLASS.

Central Schools¹ and Central or special classes which are by statute Public Elementary Schools, forming an integral part of the system of Public Elementary Education, are described in Section 20 of the Education Act, 1921 (which repeats Section 2 (1) (a) of the Education Act, 1913) as follows :---

"It shall be the duty of a Local Education Authority so to exercise their powers under this Part as to make, or otherwise to secure, adequate and suitable provision by means of Central Schools, Central or special classes, or otherwise—

- (i) for including in the curriculum of Public Elementary Schools, at appropriate stages, practical instruction suitable to the ages, abilities, and requirements of the children; and
- (ii) for organising in Public Elementary Schools courses of advanced instruction for the older or more intelligent children in attendance at such Schools, including children who stay at such Schools beyond the age of fourteen."

It seldom matters for any legal purpose whether a Public Elementary School is a Central School or not, but Section 30 (5)(c) and Section 36(5) of the Education Act, 1921, though they do not expressly mention Central Schools, are obviously designed to meet the case of these Schools.

¹ A "Central School" was established by the London County Council Education Committee about 1905, and the London County Council Regulations for the existing Central Elementary Schools in London, which have been in operation since 1911, are headed "Central and Higher Grade Schools" (L.C.C. Elementary Schools Handbook, No. 2276, Chapter XV). The term "Central" was probably used to emphasise the fact that such schools, though post-primary, were not being conducted under the Board's Regulations for Higher Elementary Schools which at that time (1911) were still in force.

In some of the Board's official Forms these Central Schools are described as "Central Elementary Schools." It would appear from Section 20 of the Education Act, 1921, that the Legislature desired to give Local Education Authorities extensive discretion in the development of these various forms of advanced and practical instruction, and the Board has accordingly given Local Education Authorities very wide scope in this matter.¹ The result is that the expression "Central School" or "Central Elementary School" has a rather vague connotation. It may mean selective Central Schools, such as those in London and Manchester, which admit only children drawn from contributory Public Elementary Schools on the result of a Junior Scholarship Examination or other selective admission test, or Schools such as those in many rural and urban areas throughout England and Wales, which take all or most of the pupils over 11 years of age from several contributory Public Elementary Schools.

(3) HIGHER EDUCATION.

The expression "Higher Education" was used as the heading of Part II of the Education Act, 1902. The sub-title of Section 2 of that Act is "Power to Aid Higher Education." In Section 2 (1) Higher Education is described as "Education other than Elementary." The phrase "higher education" appears only in the text of Sections 2 (2) and 22 (2) of that Act.

The Act itself however refers to "education other than elementary," but in the Education Act of 1921 the phrase "higher education," defined in Section 170 (3) as meaning "Education other than elementary" is used as the heading of Part VI, and in Section 70 of the Act. Section 170 (3) of the Act states that the expression "Higher Education" means education other than elementary education.

This definition should be read in connection with Section 71 of the Act, which runs as follows :---

"The power of a local education authority to supply or aid the supply of higher education under this Act includes :----

(a) the power to train teachers and to supply or aid the supply of any education, other than education in a public elementary school or other school of a class which a local education authority for elementary education have power under this Act to provide; and

* cf. Section 22 (3) of the Act.

(\$6647)

¹cl. Report of the Board of Education for the School Year 1924-5, (Cmd. 2695), p. 83:---" No attempt has been made by the Board to auggest, still less prescribe, the lines upon which courses of advanced instruction should be organised, and Local Education Authorities have been free to Jevelop the methods which they consider most suited to their local circumstances and needs."

(b) the power to make provision for the purpose outside their area in cases where they consider it expedient to do se in the interests of their area; and

(c) the power to provide or assist in providing scholarships (which term includes allowances for the maintenance) for, and to pay or assist in paying the fees of, students at schools or colleges or hostels within or without that area."

There is no statutory definition of "Elementary Education" and in consequence the statutory definition of "Higher Education" in Section 170(3) of the Education Act, 1921, is merely negative The fact is, however, that this definition does not claim to be a definition of what constitutes "Higher Education" or "Elementary Education." It is a strictly statutory definition designed for a particular purpose, and not a dictionary definition. The purpose which it fulfils nearly but not quite completely, is to show what an Authority for "Higher Education" only may do. A dictionary definition would have been misleading, since it is quite certain that an Authority for "Elementary Education" can give much education which could not properly be described as "elementary" within the meaning assigned to that word in any dictionary.

(4) SECONDARY SCHOOL, AND SECONDARY EDUCATION,

The expression "Secondary School" was borrowed from the French " école secondaire," which was used apparently for the first time in the "Rapport et projet de décret sur l'organisation générale de l'instruction publique," submitted to the Legislative Assembly by Condorcet in April, 1792. His proposal, which never became law, provided for a fivefold classification of education, (1) écoles primaires, for every village of 400 inhabitants, (2) écoles secondaires, to be provided by each Department, (3) Institutes which correspond to what are now called Lyceus and Collèges. It will thus be seen that the term as originally used by Condorcet was intended to describe what would now be called higher primary, or higher elementary Schools.1. The expression was first employed to describe schools which would now be regarded as "Secondary " in Title 3, articles 6 and following of the Education Law^{*} passed under the Consulate in 1802. R. L. Edgworth, who was in touch with the contemporary French educationalists, uses the expression "Secondary School" in his Essays on Professional Education (1812).*

¹ Buisson, Nouveau Dictionnaire de Pédagogie et d'Instruction primaire (1911) s.vv. Condorcet and Assemblée Legislative.

^{*}See text of law in Buisson, op. cit. I. 371.

^{*} Essays on Professional Education (1812) p. 43.

EDUCATION OF THE ADOLESCENT

The phrase "Secondary Education" is used by Dr. Thomas Arnold in letters which he wrote to the Sheffield Courant in 1831.¹ It did not, however, come into general use until the fifties and sixties of the last century, when it was frequently employed by Matthew Arnold and other writers.² The expression is employed in the Reports of several Royal Commissions on Education, e.g., the Report of the Schools Inquiry Commission (1868) and the Final Report of the Commissioners appointed to inquire into the Elementary Education Acts England and Wales, 1888. It was first used officially in the Commission dated March 2nd, 1894, constituting the Royal Commission on Secondary Education, and was employed again in Section 3 of the Board of Education Act, 1899, incorporated in Section 134(1) of the Education Act, 1921, which runs as follows :---

"Inspection of Secondary Schools, etc.

The Board of Education may, by their officers, or after taking the advice of the consultative committee hereinbefore mentioned, by any university or other organisation, inspect any school supplying secondary education and desiring to be so inspected."

No attempt, however, was made to give a statutory definition of Secondary Education.⁸

* The expression "Secondary School" is used in a rather vague sense, (as meaning what the Schools Inquiry Commissioners of 1868 called "Third grade Schools") in an official letter of the Education Department, dated 13th June, 1856, explaining that the Education Grant was not applicable to "schools for the Middle Classes."

"The Lord President thinks that a system of secondary schools might with great advantage be added to the present system of primary schools, in all those localities where schools of the latter kind are sufficiently large, or sufficiently numerous to afford a supply of children who have mastered the common elements of instruction, and are prepared to proceed with more specific studies. Schools of this secondary kind are beginning to be established in different parts of the country under the name of Trr de Schools, the instruction being generally directed towards the application of science to productive industry."

Minutes of the Committee of Council on Education, 1856-7, p. 42,

The expression "Secondary Day School" is used in the Directory of the Science and Art Department for 1872, Regulation LXXIX.

The Report of the Royal Commission on Secondary Education (1895), §§ 38 to 40, discusses at some length what Secondary Education is, and concludes that secondary comprehends technical education. "Secondary Education, therefore, as inclusive of technical, may be described as education conducted in view of the special life that has to be lived with the express purpose of forming a person fit to live it." [§ 40, p. 136]. This definition however was never generally accepted.

¹ T. Arnold, Miscellaneous Works, p. 229.

The expression "Secondary School" is used in Section 18(1) of the Education Act, 1918, incorporated in Section 80(2) of the Education Act, 1921, which runs as follows :--

"A Local Education Authority for Higher Education with respect to children and young persons attending—

(i) Secondary Schools provided by them ;

shall have the duty to provide for the medical inspection of such children, etc."

The Board of Education has issued annually since 1902-3 Regulations for Secondary Schools. In Paragraph III of the Prefatory Memorandum to those Regulations for 1904-5, the Board pointed out that at that time Parliament in recent legislation had refrained from employing the term " Secondary " at all. The Board itself did not consider that any precise definition of the term "Secondary Education " was immediately practicable, but a definit tion of the term "Secondary School " had become indispensable in order to give to Secondary Schools a definite place in the wide and vague scheme of education other than Elementary with the provision of which Local Authorities had been charged in Part II of the Education Act, 1902. In paragraph V of the Memorandum, the Board stated that for the purpose of the Secondary School Regulations the term "Secondary School" would be held to include any day or boarding school which offered to each of the scholars, up to and beyond the age of 16, a general education, physical, mental and moral, given through a come plete graded course of instruction of wider scope and more advanced degree than that given in the Elementary Schools. In Article I of successive issues of the Regulations for Secondary Schools (England) up to 1925, it was stated that in order to be recognised as a Secondary School within the meaning of those Regulations, "a school must offer to each of its pupils a progressive course of general education as defined in Chapter II below (with the requisite organisation, curriculum, teaching staff, and equipment) of a kind and amount suitable for pupils of an age-range at least as wide as from 12 to 17.",

The expression "Public Secondary School " has been regularly employed in the schemes made by the Board during the last 20 years for Endowed Secondary Schools under the Charitable Trusts Acts and the Endowed Schools Acts (except in schemes for the municipalisation of such schools).

(5) GRAMMAR SCHOOL.

The term Grammar School, which had been in common use since the 14th century,¹ was defined in trust deeds and school statutes of

¹ e.g., Early English Wills (1882) p. 133. "For to fynde to gramer scole my cosyn, his son William " (will dated 1454). cf. the Latin document of 1329 about six grammar schools "scolae grammaticales" in Lincolnshire quoted in A. F. Leach, Educational Charters, pp. 280-282.

the 16th and 17th century as meaning a school in which Latin, or Greek and Latin, and occasionally Hebrew were taught. Dr. Johnson's Dictionary defined Grammar School as a school in which the learned languages are grammatically taught, and Lord Eldon by his famous judgment in the case of Leeds Grammar School, 1805,1 gave this definition legal validity from 1805 to the passing of the Grammar School Act. 1840.

Section 25 of the Act provides that the words "Grammar School" shall mean and include all Endowed Schools, whether of Royal or other foundation, founded, endowed or maintained for the purpose of teaching Latin or Greek, or either of such languages, whether Latin or Greek shall be expressly described, or shall be described by the word "Grammar" or any other form of expression which is or may be construed as intending Greek or Latin, whether such instruction be limited exclusively to one of these languages or extended to both or to any other branch or branches of Literature or Science in addition to them, or either of them, and that the words " Grammar School " shall not include schools not endowed, but shall mean and include all Endowed Schools which may be "Grammar Schools" by reputation.

In schemes for endowed Grammar Schools made by the Board during the last twenty years a common-form clause has been regularly inserted to the effect that the school of the foundation shall be conducted as a " public secondary school,"

The expression "Grammar School" is sometimes applied at present to Secondary Schools which are almost wholly maintained by the Local Education Authority.

(6) INTERMEDIATE SCHOOL.

The term "Intermediate School " has a quasi-statutory basis in Wales, as a School providing "intermediate education,"² which is defined in Section 17 of the Welsh Intermediate Education Act, 1889, as follows :---

"The expression Intermediate Education means a course of education which does not consist chiefly of elementary instruction in reading, writing and arithmetic, but which includes instruction in Latin, Greek, Welsh and English language and Literature, Modern Languages, Mathematics, Natural and Applied Sciences, or in some of such studies and generally in the higher branches of knowledge."

In Wales an Intermediate School is a School governed by a Scheme under the Welsh Intermediate Education Act, 1889, and in other respects it is not distinguishable from an ordinary Secondary

¹ Attorney-General v. Whitley 11 Vesey, 241. ¹ The phrase "intermediate education" is used, but not defined in the Intermodiate Education (Ireland) Act, 1878 [41 and 42 Vict. Ch. 66].

School. There are, however, Secondary Schools in Wales which are not governed by schemes under that Act, and in the last two decades there has been a tendency to drop the title "Intermediate School" as applied to Schools conducted under the Act, and to substitute the term "County School." The broad fact remains, however, that in Wales "Intermediate School" means a Secondary School, which is subject to special certain legal provisions. In the last few years some Local Education Authorities in England, have been applying the term "Intermediate School" to some of their Central Elementary Schools supplying "advanced instruction" as described in Section 20 of the Education Act, 1921 (i.e., Section 2 (i) (a) (ii) of the Education Act, 1918).

(7) CONTINUATION SCHOOL.

The expression "Continuation School" is employed in Sections 13, 75, 76, 77 and 80 of the Education Act, 1921, re-enacting the corresponding Sections in the Education Act, 1918. Section 75, subsection (1) of the Education Act, 1921, runs as follows :---

" It shall be the duty of the Local Education Authority for Higher Education, either separately or in co-operation with other Local Education Authorities, to establish and maintain, or secure the establishment and maintenance under their control and direction of a sufficient supply of Continuation Schools in which suitable courses of study, instruction and physical training are provided without payment of fees for all young persons resident in their area who are under this Act under an obligation to attend such Schools."

It appears from Section 76 that the statutory Continuation School was intended in normal circumstances to be a *Day* Continuation School for young persons between the ages of 14 and 18, as Section 76(2) expressly provides that such Continuation Schools are not normally to be held between the hours of 7 in the evening and 8 in the morning. Section 170(4) of the Act defines "young person" as a person under eighteen years of age who is no longer a child.

The ordinary connotation of the term "Continuation School" before the passing of the Education Act, 1918, had varied very considerably. On 18th May, 1893, the Committee of Privy Council on Education had established a Code of Regulations for Evening Continuation Schools which were, of course, part-time schools. On the other hand, in the Report of the Consultative Committee on Higher Elementary Schools, published in 1906, the expression "Day Continuation School" on the analogy of "Evening Continuation School" is suggested as an alternative name for "Higher Elementary School." Nothing came of this suggestion, but had the term been employed in this sense it would have meant full-time schools, unlike the Day Continuation Schools contemplated by Sections 75 to 79 of the Education Act, 1921, which were intended to be part-time Schools for young persons already in employment.

B. Terms which are now, or in the past have been, defined for administrative purposes by the Board of Education, or by the former Department of Science and Art.

(1) HIGHER ELEMENTARY SCHOOL.

The phrase "Higher Elementary School" was sometimes popularly used to describe the "Higher Grade " Schools established by some of the School Boards between 1871 and 1900. The expression which seems to have been modelled on the French " lcole primaire supérieure," was first used as an official term in the Board's Minute of April 6th, 1900, which provided for a special class of Public Elementary Schools to be known as Higher Elementary Schools, receiving grant on certain conditions set out in the Code for 1901. Only a few schools were recognised under these Regulations, which laid stress on a predominantly scientific curriculum. In Chapter VI of the Code for 1905, the Board modified extensively its earlier Regulations for Higher Elementary Schools. This Chapter continued to appear in successive issues of the Code up to 1918, but the number of Schools recognised under it was never large. In view of Section 2 of the Education Act, 1918, the Board withdrew the Regulations for Higher Elementary Schools in 1919 and so the term ceased to have any official significance, though it is still employed by some Local Education Authorities to describe schools formerly recognised officially as Higher Elementary Schools under the Code up to 1918.

(2) JUNIOR TECHNICAL SCHOOL.

This term is used to describe Day Schools recognised under the Regulations for Junior Technical Schools, first drawn up in 1913 and included in the Board's general Regulations for Technical Schools, etc., providing courses for boys and girls during the two or three years after leaving public elementary schools in which a continued general education is combined with definite preparation for some industrial employment. These schools were definitely not intended to provide courses furnishing a preparation for the professions, the Universities, or higher full-time technical work, or again for commercial life;

¹ cl. Report on the French system of Higher Primary Schools by Mr. R. L. Morant (atterwards Sir Robert Morant) in Special Reports on Educational Subjects, 1896-7, pp. 285-374 (C.-.8447). H.M. Stationery Office.

they were meant to prepare their pupils either for artisan or other industrial occupations or for domestic employment.¹ Under the Regulations in force up to 1925, the minimum admission age is 13+. and the courses ordinarily last two or three years. The courses must be planned as a preparation for employment on completion of the course, and not as a preparation for further full-time instruction. The schools hitherto recognised under these Regulations fall into two classes :--- (a) those in which the practical work is intended to develop a substantial measure of personal craftsmanship; (most schools of this type are popularly known as "Trade Schools"),² (b) those in which practical work is less definitely directed to the attainment of manual skill,

(3) SCHOOL OF SCIENCE OR ORGANISED SCIENCE SCHOOL.

The Science and Art Department, with a view to encouraging the establishment of Schools giving methodical and systematic instruction in Science, offered attendance grants in 1872, to such Schools and Institutions as adopted one or other of the special Courses formulated in the Science and Art Directory. These Organised Science Schools as they were called, increased steadily till 1894, when they numbered 112. In order to check the natural tendency for the curriculum of these schools to become unduly developed on the scientific side, the rules in the Science and Art Directory for 1894 required that the Time Tables of such Schools should provide " for instruction in those literary subjects which were essential for a good general education."⁹ In 1895 both the curriculum and the method of payment in schools of Science were modified. New special courses of instruction were laid down, and manual work and instruction in literary and commercial subjects became an integral part of the regular work of the School of Science, to which a certain time had to be devoted, and on which the grants in part depended. There were 187 of these Schools of Science in 1900.4

In the Regulations for Secondary Day Schools for 1902-3 and 1903-4, issued by the then newly established Board of Education, the Schools of Science were classed as "Secondary Day Schools, (Division A),"⁵ and the Grammar Schools were described as "Secondary Day Schools (Division B)."

¹ Report of Board of Education for 1912-1913, pp. 135-136, and Report of Board of Education for 1913-4, p. 115. * In the fifties "Trade School " meant a Middle, or Commercial School.

Minutes of Committee of Council on Education, 1856-7, p. 42. * Directory of the Department of Science and Art, 1894, p. 33, § 22. cf.

[§] LIX on p. 47 of the Directory for 1901-2.

Calendar, History and General Summary of the Regulations of the Department of Science and Art, 1900 (C.-9429), p. XVII.
Regulations for Secondary Day Schools 1902-3 (Cd. 1102), pp. 7 and foll.

and Regulations for Secondary Day Schools 1903-4 (Cd. 1668), pp. 4 and foll,

EDUCATION OF THE ADOLESCENT

The distinction between Division A and Division B Schools disappeared in the Regulations for Secondary Schools for 1904-5, which are the archetype of those in operation at the present time.

It will thus be seen that the existing Regulations for Secondary Schools have grown up round the old provisions of the Science and Art Directory.

The sporadic Science Classes, which had been formed, were gradually built up into Schools of Science, and after 1901 these Schools of Science were expanded into Schools of the so-called "Division A" type.

(4) PREPARATORY SCHOOL.

(a) Preparatory School.¹ This expression is generally understood as meaning a boarding school or a day school which prepares boys for entrance to the Public Schools and the Navy, and girls for admission to the larger endowed and proprietary schools for girls. The first preparatory school for boys was founded in 1837.⁸ They are for the most part private schools, and the expression "Private School" is sometimes used as equivalent to "Preparatory School" in contra-distinction to Public School. From 1917 to 1925 the Board of Education defined preparatory school in Chapter IX of their Regulations for Secondary Schools as "A school which provides an education of the same kind and quality as that contemplated by Article 1 (of the Regulations), for pupils of an age range at least as wide as from 9 to 13, and from which pupils normally proceed to continue their education at some Secondary School or other similar institution."³

C. Terms of Art used by the Board of Education, the Charity Commission (up to 1900), the Local Education Authorities, Governors of Endowed Schools, teachers and other persons interested in education.

(I) PRIMARY SCHOOL AND PRIMARY EDUCATION.

The term "Primary School" has never had any statutory authority in England and was borrowed directly by writers on education from the French "*école primaire*," an expression which was first used in the schemes of national education presented to the

¹ See Report of Schools Inquiry Commission (1868), pp. 88-92, which shows that "preparatory school " was a well known term of art at that time, as meaning a school which prepared boys for entrance to the Public Schools.

⁴ The first Preparatory School was founded in 1837 by Lieut. C. R. Malden, R.N. Board of Education Special Reports on Educational Subjects Vol. 6 (Cd. 418), pp. 1-3.

^{*} cl. Report of the Board of Education for 1924-25 [Cmd. 2695], p. 98.

Constituent Assembly by Talleyrand-Périgord in September, 1791, and to the Legislative Assembly by Condorcet in April, 1792.¹ The phrase first became statutory in France in 1802, when it was used in the Education law of that year to describe the lowest grade of schools in contradistinction to the *écoles secondaires*.⁴ This term and the expression " primary education " derived from it gradually came into use in England and are employed in the Reports of several of the Royal Commissions on Education, e.g., the Final Report of the Cross Commission (1888).

(2) HIGHER GRADE SCHOOL.

"Higher Grade School " was a name which gradually came to be applied to certain schools established between 1871 and 1900 by some of the School Boards, especially those in large towns such as Bradford. Sheffield, Birmingham and Huddersfield. Such Schools aimed at continuing the education given in the ordinary Elementary Schools to children able to assimilate more advanced instruction. These schools often took the form of Organised Science Classes or Schools working under the regulations devised for such Science Schools by the Science and Art Department in 1872. That Department provided an additional source for obtaining State aid, and further was able to make grants at a higher rate than the Education Department in Whitehall. As a result higher elementary education, so far as it was provided by these Higher Grade Schools, tended to assume a predominantly scientific character, though this tendency was to some extent corrected by the Science and Art Department in its Directory, issued in 1894, which stated that in preparing the time-table "provision should be made for instruction in those literary subjects which were essential for a good general education.¹ In the case of Rex v. Cockerton, C.A. (1901), I K.B. 726, it was decided that it was not "within the powers of a (School) Board as a statutory corporation to provide science and art schools or classes (of the kind referred to in this case) either in the day schools or in evening continuation schools out of the school board rate or school fund," The schools or classes referred to were schools or classes which provided education of the nature prescribed by the Directory of the Science and Art Department. Pending the coming into operation of the Education Act, 1902, School Boards, which had in fact provided such schools and classes, were allowed to continue to do so by the Education Act, 1901, on

¹ Buisson, Nouveau Dictionnairs de Pédagogie et d'Instruction primairs, s.v.v. Talleyrand-Périgord, Condorcet, Lavoisier, Assemblée Constituants, Assemblée Législative.

^{*} Buisson, op. cit. s.v. Consulat.

^{*}See note on School of Science, B (3), and Directory for Science and Art Schools and Classes (1894), p. 33, § 22.

the terms therein prescribed. When the Board of Education, under the Minute of April, 1900, issued special Regulations for Higher Elementary Schools, some of the Higher Grade Schools were converted into Higher Elementary Schools.

Others, after the passing of the Education Act, 1902, became Secondary Schools. The term "Higher Grade "still survives in the local names of a few Public Elementary Schools. The name was derived from the six (and after 1882 seven) standards or grades, which were described in successive Codes of the Education Department from 1861 to 1892. Other names given to such schools between 1871 and 1900 were "higher board school," "advanced elementary school," "higher standard" or "seventh standard school," "higher elementary school," "higher central school."

(3) HIGHER TOP.

This term was employed colloquially to describe the higher classes which developed at the top of some of the Elementary Schools. It was used unofficially in some parts of England during the period from 1900 to 1918, when the Regulations for Higher Elementary Schools were in operation, in order to describe Post-Primary Classes, which were not working under those Regulations. Since 1918 many "higher tops" have been organised in the Elementary Schools in Durham County.¹

(4) SENIOR SCHOOL.

The phrase "Senior School" is employed by some Local Education Authorities as a term of art to describe schools for children between the ages of 11 + and 14 + who have not obtained free places for secondary schools, nor secured admission to a selective Central Elementary School. In current educational parlance "Senior School" is frequently used to describe the Senior Department of an ordinary Public Elementary School.

(5) PREPARATORY DEPARTMENT.

Schemes for Endowed Schools for Boys and for Girls made by the Charity Commission, and after 1900 by the Board of Education. frequently provide that the Governors may, if they think fit, maintain in the School a Preparatory Department or Kindergarten, for the education of children, whether boys or girls, under the age of 7 or 8 or 10 years. The age limit varies in different schemes. The term "Preparatory Department" is not explicitly mentioned in the

¹ Mr. A. J. Dawson, Director of Education for Durham County, published in 1917 a pamphlet entitled "*Higher Tops*."

• 1

Board's Regulations for Secondary Schools, but was implicitly recognised up to 1925 in Article 1 of those Regulations, which stated that provision made for pupils below the age of 12 must be similarly suitable and in proper relation to the work done in the main portion of the School.

(6) HIGH SCHOOL.

In Scotland the term High School has been used since the 15th century to describe certain ancient Endowed Secondary Schools, e.g., the High Schools of Edinburgh¹ and Glasgow.

In England the expression was occasionally used for Boys' Schools, e.g., Thomas Hersley, Mayor of Newcastle-upon-Tyne in 1526 and 1533, bequeathed certain property for the endowment of a "Hye School." The School in question, however, was generally known as the ancient Free Grammar School.

More modern examples of the use of the name in England for Boys' Secondary Schools are the Nottingham High School² and the Newcastle-under-Lyme High School. The term did not come into general use till after 1869, when, as a result of the movement for providing higher education for girls, which received a great impetus from the recommendations on the subject in the Report of the Schools Inquiry Commission (1868), numerous Secondary Schools for Girls, known as High Schools³ were established, especially in the large towns, partly by local organisations and partly by corporations such as the Girls' Public Day School Company founded in 1872. When by the Education Act, 1902, Counties and County Boroughs were vested with powers to provide Secondary Schools, a number of these new County and Municipal Secondary Schools for Girls were named County High Schools. . . • 1

(7) MIDDLE SCHOOL,

The continental usage of this term varies very considerably. In some of the German States, e.g., Prussia, "Mittelschule" means a School intermediate in type between the Elementary School (Volkschule) and the Secondary School (Höhere Schule).⁴ In Czechoslovakia

"Stredna Skola," i.e., Middle School, means a Secondary School.

⁴cf. Appendix IV.

¹ The High School of Edinburgh, founded in 1519, is described in 1531 as "the hie schule" or "the principal gramer schule." Edinburgh Town Council Records, 19th March, 1531, I. 38 (a).

^{*} Up to 1868 the School was called Nottingham Grammar School.

⁸ Possibly copied from the High Schools for girls in the United States, e.g., Boston High School, established in 1824. cf. Bishop Fraser's *Report* on the Common School system of U.S.A. (1866) (Schools Enquiry Commission), pp. 19, 168 and 192.

In England the term appears to have first come into use about 1840 to describe a type of school intermediate between the ancient Grammar Schools, with their predominantly classical curriculum, and the Elementary Schools, which had been established in large numbers during the preceding decades by the National Society, the British and Foreign School Society, and other organisations and individuals. For example, about 1845, the National Society established some superior "Middle" Schools attached to their existing Normal Schools ; e.g., a Middle School was founded at York, attached to the Training College, which included in its curriculum Latin and also subjects of practical value, such as Mensuration. Such Schools, which were often called Middle-class schools, or Trade schools,¹ were established in increasing numbers after the publication of the Report of the Schools Inquiry Commission (1868), which recommended that three grades of secondary schools were required :-- (a) First Grade Schools, with a leaving age of 18 or 19, closely associated with the Universities, which would teach Greek as well as Latin; (b) Secondary Schools with a leaving age of 16 or 17, which would teach two modern languages, besides Latin; (c) Third Grade Schools, with a leaving age of 13 or 14, which would teach the elements of French and Latin. In order to facilitate the provision of such third Grade Schools, the Endowed Schools Commission (1869-1874), and later the Charity Commission, in which the powers of the former Commission were merged in 1874, sometimes included in their Schemes for Endowed Schools clauses authorising the Governors to establish a Middle,¹ sometimes called a Modern or Commercial or Trade School, which should occupy an intermediate position between the ordinary primary schools and the ancient School of the Foundation.

The number of schools, which are still termed Middle Schools,³ is not large. Some local authorities established Middle Schools which were converted into Municipal Secondary Schools after 1902. In the last few years, the expression "Middle School" has been brought into use in the areas of some Education Authorities, e.g., the West Riding of Yorkshire, as a name for Central Schools.

¹ It is probable that at the time the term "Middle" School may also have connoted "middle class school." For example, the Report of the Schools Inquiry Commission (1868) frequently refers to "middle-class" schools, and in the early seventies a number of such "middle-class" schools were established. *cf. Minutes of Committee of Council on Education*, 1856-7, p. 42, in which an official letter of the Education Department explaining that the education grant was not applicable for "schools for the middle class," is headed "*Middle Schools.*" *cf.* also T. D. Acland, *The new Oxford Examinations for the tille of Associate in Arts* (1858), pp. vii, ix, 7, 12 and passim.

^ae.g., Boys' Middle School, Tiverton. Whitgift Middle School, Croydon,

(8) COMMERCIAL SCHOOL.

Many of the private schools established in the eighteenth and nineteenth centuries, more especially those in towns, were known as commercial schools or academies. The curriculum of the better schools of this type was quasi-secondary in character, including French, book-keeping, and commercial arithmetic.

About 1845, it was realised in some quarters that there was a need for a type of school intermediate between the Grammar Schools with their predominantly classical curriculum, and the primark schools which had been established in large numbers by the National Society, the British and Foreign Schools Society, and other organisa For example, a Commercial School was established at tions. Manchester by the Manchester Church Education Society in 1846. which provided a modern curriculum including French, German and Drawing, Such " Commercial " or " Middle " Schools fell within the category of Third Grade Schools with a leaving age of 14 or 15 described in the Report of the Schools Enquiry Commission (1868) The Schemes for Endowed Schools made by the Endowed Schools Commission (1869-1874), and subsequently by the Charity Commission, in which the former Commission was merged in 1874, sometimes authorised the Governors of Endowed Schools to establish a "Come mercial School " or " Middle School ", which would provide a more modern and utilitarian curriculum than that of the ancient School of the Foundation.

(9) JUNIOR COMMERCIAL SCHOOL (OR COURSE).

A few Schools of this type are recognised under the Board's Regulations for Further Education,¹ but such Schools, or Lower Commerce Courses, though in a sense parallel to Junior Technical Schools as they afford provision for continued general education, have been hitherto regarded as having a provisional rather than an established place in the public system of education, inasmuch as they can hardly be viewed as supplying an educational need which could not be substantially met, as the system of Secondary Schools and Central Schools and Classes is fully developed, particularly as there is ample provision for part-time instruction in the technicalities of office work of various kinds in the Evening School system in every large town.

These schools, which were often described unofficially as "Junior Commercial Schools", are now in the Schedule to the Board's *Regular tions for Further Education*, 1926, included under the category of Junior Technical Schools.

¹ See No. 10. Note on Full-Time Day Technical Classes.

(10) FULL-TIME DAY TECHNICAL CLASSES FOR JUNIOR PUPILS, HELD IN THE PREMISES OF TECHNICAL SCHOOLS AND TECHNICAL INSTITUTES.

In the Board's Regulations for Technical Schools for 1905-6, grants were offered in aid of organised courses of instruction designed for students devoting a large part of their time to studies in preparation for their life work. Among the arrangements fostered by those grants were full-time schools offering courses that could be completed about the age of 16, some industrial in outlook, some commercial, and some domestic. From 1913 onwards full-time courses for junior pupils having special reference to artizan occupations or to employment in domestic service were recognised as Junior Technical Schools. The full-time Schools in the other groups, which may be conveniently described as Junior Commercial Schools and Domestic Economy Schools, though these terms were not used in any official Regulations, were administered up to 1925 under the general power of the Board to recognise organised Day Courses "adapted to the technical requirements of the students" (Article 42 of the Regulations for Technical Schools, 1925). In the Schedule to the Board's Regulations for Further Education, 1926, the Domestic Economy Schools are described as "Junior Housewifery Schools" providing domestic and (at least for those under exemption age) general instruction in full-time courses extending at least to the exemption age. Short full-time Courses, both vocational and domestic, are provided in Technical Day Classes for pupils over the exemption age.

(11) TRADE SCHOOL.

The more specialised Junior Technical Schools, in which the practical work is intended to develop a substantial measure of personal craftsmanship, especially those in the London area, are popularly known as Trade Schools, e.g., the L.C.C. Shoreditch Junior Technical School for Boys, specialising in Cabinet-making and Woodwork trades; the Holborn L.C.C. Trade School for Girls, Queen's Square, W.C.1, specialising in Dressmaking, Millinery, Photography.

(12) FULL-TIME JUNIOR ART DEPARTMENTS, HELD IN SCHOOLS OF ART.

Provision was first made for the payment of grant to Junior Art Departments, which at that time were called Preparatory Departments, in the Regulations for Technical Schools for 1913, but no Junior Art Departments were in fact recognised until 1916. Up to the

present, 29 such Departments have been recognised. The courses in these Departments conducted in the premises of Schools of Art include as a rule at least 12 hours' general education per week.

(13) PRIVATE SCHOOL.

" Private School " is generally used as meaning a school, whether elementary or secondary in character, which is conducted for private profit.

The expression has been in use since the seventeenth century and was employed in some of the Acts of the Restoration Parliament.⁴ The term has not, however, been used by the Legislature in recent Education Acts, though it is evident that private schools are included within the purview of Section 155 of the Education Act, 1921 (re-enacting section 28 of the Education Act, 1918), which provides for the collection of information⁸ respecting "schools or educational institutions not in receipt of grants from the Board of Education."

^{&#}x27; The Schools of Art (now called Art Schools) which date from about 1849, are described in the Schedule to the Board's Regulations for Further Education, 1926, as institutions giving instruction (for students over the exemption age) in "Drawing, Artistic Handicraft, and Design (and in special circumstances literary and pedagogic subjects) in full-time or parttime courses planned for students who have already received at least elementary instruction in drawing." ² e.g., 14 Car. II, C. 4, § 6: "Every school master keeping any publics or private otherabe."

publique or private schoole.

^{*} See the digest of Returns from Private Schools given on page 79 of the Report of the Board of Education for 1921-22. [Cmd. 1896].

APPENDIX III.

STATISTICS ILLUSTRATING CHAPTER II, PART (ii).

*

TABLE I.

Distribution of School Population 11-16.

(Statistics of Public Education tor 1922-3-England and Wales-Table 2).

	(i)	(ii)	(111)	(iv)	(v)	(vi)	(vii)	(viii)
A	ge.	Population (Census 1921).	Elementary Schools (Public Elementary Schools, Certified Efficient Schools and Certified Special Schools.)	Secondary Schools.	Junior Technical Schools.	Pupil- Teacher Centres.	Rural Pupil Teachers.	Total Preceding.
	11-12	729,133	640,688 (88 %)	27,028 (3·7 %)	94	10		667,820 (92.%)
	12-13	742,026	616,871 (83 %)	51,687	1,258	28		669,844 (90.%)
	1314	744,768	587,950 (79 %)	66,014 (8-9 %)	4,034	90	-	658,088 (88 %)
	14–15	727,895	155,362	66,108 (9 %)	4,511	342	169	226,492
	15–16	718,798	13,737	54,101 (7.5 %)	2,236	315	400 ·	70,789 (9+9 %)
Total	11–16	3,662,620	2,014,608 (55 %)	264,938 (7 • 2 %)	12,133 (·3 %)	785	569	2,293,033 (63 %)

.

TABLE	II.	
-------	-----	--

Figures supplied by the Board of Education as to the subsequent careers of children leaving Public Elementary Schools in England and Wales in 1923-24.

(i) Number of children leaving Public	Nu k	(ii) nber and percent of such children eaving to enter :	tage -	(iii) Total number and percen- tage leaving to continue full-time education.	(iv) Number and percentage leaving to	(v) Number and percentage	OF THE AD
Elementary Schools.	(a) Secondary Schools.	(b) Junior Tech- nical and Commercial Schools.	(c) Other full-time Institutions for Higher education.		take up em- ployment.	leaving for other reasons.	OLESCENT
668,749	55,541 (8·3 %)	7,244 (1 · 1 %)	19,267 (2 · 9 %)	82,052 (12·3 %)	497,894 (74 · 4 %)	88,803 (13·3 %)	

and the start shart shart the st	TA	BLI	3 I 3	I.	
----------------------------------	----	-----	-------	----	--

4

Figures supplied by the Board of Education as to the subsequent careers of children leaving Public Elementary Schools in England and Wales in 1923-24.

(i) Number of children leaving	``Nw Id	(ii) mber and percen of such children eaving to enter :-	tage 	(iii) Total number and percen- tage leaving	(iv) Number and percentage	(v) Number and percentage	OF THE AD
Elementary Schools.	(a) Secondary Schools.	(b) Junior Tech- nical and Commercial Schools.	(c) Other full-time Institutions for Higher education.	- to continue full-time e education.	take up em- ployment.	leaving for other reasons.	OLESCENT
668,749	55,541 (8·3 %)	7,244 (1 · 1 %)	19,267 (2 · 9 %)	82,052 (12·3 %)	497,894 (74 • 4 %)	88,803 (13+3 %)	

APPENDICES TO REPORT ON THE EDUCATION OF THE ADOLESCENT

NOTES ON TABLE III.

Note 1.—The phrase "advanced instruction" is described in section 20 of the Education Act of 1921 as follows :--

"It shall be the duty of a local education authority so to exercise their powers under this Part as to make, or otherwise to secure, adequate and suitable provision by means of central schools, central or special classes, or otherwise—

(ii) for organising in public elementary schools courses of advanced instruction for the older or more intelligent children in attendance at such schools, including children who stay at such schools beyond the age of fourteen."

The expression "course of advanced instruction" has not up to the present been the subject of official definition, nor has the Board ever prescribed any special conditions for "courses of advanced instruction" for children between the ages of 11 + and 14 + or 15 +, (see Education in England and Walss, being the Report of the Board of Education for the school year 1924-25 (Cmd. 2695) page 83, § 155).

Note 2 .- In April, 1925 the Board desired to obtain certain information regarding those public elementary schools in which the Local Education Authority aimed at providing "advanced instruction" of the kind contemplated in section 20 (2) of the Education Act of 1921. The Board accordingly sent to all Local Education Authorities a series of questions which might be answered by the authority in respect of any school to which the questions were applicable. The main object of these questions was to ascertain in what way the school was "specifically organised for the purpose of giving a progressive course of instruction in advance of that ordinarily given in a Public Elementary School." The questions dealt only with the main facts of school organisation and not with the degree of efficiency which the "advanced instruction " might have attained. 198 Local Education Authorities sent answers to the questions. Many authorities were doubtful about including their schools and replied to the enquiry only in order to let the Board decide whether the teaching given to the older pupils in such schools might properly be regarded as "advanced instruction." After consulting H.M. Inspectors upon the individual schools in question, the Board decided to tabulate the returns from 158 authorities in respect of 682 departments. The Board has given the Consultative Committee permission to publish these returns, which throw considerable light on the progress made up to 1925 by local education authorities in organising "courses of advanced instruction." It should, however, be borne in mind that

APPENDICES TO REPORT ON THE

departments of Public Elementary Schools offering "courses of advanced instruction" are to be found not only in schools bearing the names of Central School, Middle School, Intermediate School or the like, but also in a number of Senior Schools or Senior Departments which provide organised courses for children from the age of 11 upwards. In addition to these there are also schools in more than one area which though not included in the Board's return on the ground that they were not specially organised for the purpose of providing what could properly be termed "courses of advanced instruction" are nevertheless held by the local education authority to be giving, or aiming at giving, instruction suitable to the needs of older children.¹

286

TABLE IV.

Pupils over 14 years of age in Elementary Schools in England and Wales.

٠

	Age-Group 10-11.	Age-Group 14–15.	Percentage of Age-Group 10-11.	Age-Group 15–16.	Percentage of Age-Group 10–11.	Total over 14.	Percentage of Age-Group 10-11.
1913-14	672.818	41.229	6.1	5.587	·	47.066	7.0
1919-20	665,836	115.912	17.4	8,521	1.3	125,292	18.8
1920-21	657,952	120,158	18.3	9,940	1.5	131,377	20.0
1921-22	651,339	146,256	22.5	12,637	1.9	160,371	24-6
1922-23	654,802	155,362	23-7	13,737	2-1	170,893	26.1

TABLE V.

Percentage to total leavers borne by pupils who had remained at School.	Boys.	Girls.	Total.
	per cent.	per cent.	per cent.
(a) until end of statutory term (= age of 14).	45.33	35.76	41-01
(b) for less than 4 terms after end of statutory term.	21-49	24.00	22.62
(c) for 4 but less than 5 terms (= age of 15).	7 • 21	7 • 43	7-31
(d) for 5 but less than 8 terms	17.96	18•48	18.19
(e) for 8 but less than 9 terms \dots (= age of 16).	5.03	7.76	6.27
(f) for 9 or more terms	2.98	6•57	4.60
,	,	f	•

Age of Pupils leaving London Central Schools in 1923-24.

APPENDIX IV.

Notes on the Provision for Post-Primary Education in some States and Provinces of the British Dominions and in Various European Countries.

A. BRITISH EMPIRE.

DOMINION OF NEW ZEALAND.

Attendance at primary schools is obligatory for children between the ages of 7 and 14. Facilities for free post-primary education are provided in the following distinct types of institution :—

(1) Secondary Schools. In 1923 there were 37 of these Schools, containing 12,500 children in all, of whom about 10,500 were holders of free places. They provide a course of 4 years and upwards, aiming at matriculation.

(2) Technical High Schools. There were 14 schools of this type in 1923 with about 5,000 pupils. In the larger towns much of the work done in such Schools is practical or technical in character and is organised in industrial, commercial, or domestic courses of various kinds, though even in these schools a class can usually be found studying for Matriculation. In the smaller places where a Technical High School largely serves the purpose of a secondary school, the course only deviates slightly from the secondary school type, though an attempt is made to emphasise the agricultural side.

(3) District High Schools. There were 68 of these schools in 1923 with about 3,000 pupils. They are secondary departments superimposed on a primary department and under the control of its headmaster. They are usually established in places that cannot support a secondary school or a technical high school, and they take children from all the neighbouring primary schools. The pupils, as a rule, do not remain longer than 3 years, but are often able to pass the matriculation examination within that time.

(4) Technical Schools. The technical schools, in addition to maintaining technical high schools, also provide facilities for part-time education of which qualified children from primary schools can take advantage free of cost. It is possible for a child in one of the larger towns who has qualified for free post-primary education to choose whether he will attend at the secondary school, at the technical high school or at the district high school, or whether, in case he desires to go to work at once, he should accept a free place for the part-time courses at the technical school.

A child from a primary school qualifies for a free place at any of the institutions for post-primary work mentioned above if, being under the age of 15---

(a) he wins a Junior National Scholarship (of the value of ± 5 a year for 3 years); about 250 of these scholarships are awarded annually, tenable at secondary schools or at district high schools only, with some preference for children from small country Schools; or

(b) he either qualifies for a free place at the Junior National Scholarship Examination, or else passes the Standard Six proficiency examination. Approximately 49 per cent. of the children leaving primary schools entered on some full-time course of further education at the beginning of 1923.

DOMINION OF CANADA

Province of Ontario.

The Adolescent School Attendance Act of 1919 provides that adolescents in the Province shall attend school full-time between the ages of 14 and 16 unless released by the attendance officer on the ground that the child's services are required in the home or in profitable employment. In these cases the adolescent is required to attend a day school for at least 400 hours in the course of the school year. The courses of study for part-time adolescents must be chosen by local authorities from those laid down for Public Schools and Separate (i.e. denominational (primary)) Schools, and for Higner Collegiate, Technical, Art, Industrial and Commercial Schools. In most urban municipalities of the Province the Act has resulted in the full-time attendance of all adolescents up to the age of 16.

These pupils are often provided for in the ordinary full-time day schools (i.e. Public (Primary) Schools and High Schools), in some of which special courses of instruction with an agricultural, commercial or industrial bias are organised. In Ontar o, as in the United States, a section of educational opinion favours the development of Junior High Schools.

The Ontario Department of Education gives liberal grants to the local School Boards, which make provision for auxiliary classes, i.e. special classes for children who are backward, or physically unfit to pursue the regular courses.

UNION OF SOUTH AFRICA.

Transvaal Province.

(All figures are for 1924 and for Europeans only, unless otherwise stated.)

This note deals with the education of Europeans only. Besides the European population of 583,500 there is also a non-European population of 1,642,000.

There are two "mother" tongues among the European population, English and Afrikaans. Both are taught to every primary school child.

The European primary school child in the Transvaal is older than the elementary school child in England. No child is admitted to school before the age of $6\frac{1}{2}$, but attendance is compulsory from the seventh birthday and continues until the passing of the Primary School Examination, which is taken at the conclusion of Standard VI. (The average age of pupils in Standard VI is 14.6 years.)

The following table sets out the schools administered by the Transvaal Education Department. No fees are charged in any of them, and state bursaries provide liberally for the travelling or boarding expenses of pupils who live at a distance.

Type of Sc	hool.		•	No. of Schools,	Pupils.	Teachers.
Primary*	••	• •		1,101	107,185	4,150
High Schools*	••	• •		49	12,746	686
Industrial Schools	••	• •	• •	2	209	9
Trade Schools	••	••	• •	3	617	48
Domestic Science S	School	5	••	1	263	13
Normal Colleges	· • •	• •	• •	5	695	46

• The division between Primary and High Schools is not rigid. Primary Schools provide, where possible, High School or Intermediate courses, and High Schools make provision for primary education. In the above figures are included 1,051 children above Standard VI in Primary Schools and 1,945 children below Standard VI in the Preparatory Departments of High Schools.

EDUCATION OF THE ADOLESCENT

Pupils are admitted to the High Schools in some cases at the end of Standard V, and such pupils have the opportunity of taking a five years' High School course. Others enter at the end of Standard VI on passing the Primary School Certificate Examination.

The general High School course leads to the Transvaal Secondary School Certificate, awarded partly on the school record and partly on examinations taken at the end of Form IV (Stage I) and Form V (Stage II). Under certain conditions this certificate admits to the universities.

Three of the High Schools (accommodating about 1,000 pupils) offer a four years' commercial course beginning after Standard VI, which includes book-keeping, commercial arithmetic and geography, and in the last two years, shorthand and typewriting.

There are also commercial departments in a few of the High Schools in the smaller urban centres. A number of pupils, increasing every year, pass on, after taking the commercial course and the Transvaal Secondary School Certificate, to the universities, with the degree of B. Com. or B. Econ. as the goal.

One High School at Johannesburg, called the Technical High School, provides a Matriculation course in which emphasis is laid on acience and mathematics rather than on the literary side. Much stress is laid in the three lower forms on manual work in wood and metal with the related drawing. The vocations kept in view are those offered by the technical departments of the mines, railways and municipal and industrial undertakings. Intermediate Schools.

At the end of 1922 certain centrally situated schools in urban areas were selected, and in them courses were established to meet the needs of pupils who did not intend to take a High School course, but were able to remain at school beyond Standard VI. It was intended that these Intermediate Schools should have three special features :--

(i) The subjects of instruction were to be limited in number and content so as to allow of a thorough and intensive treatment.

(ii) As much of the work as possible was to be of a practical character.

(iii) A special effort was to be made to develop initiative and self-reliance by working as far as possible on the lines of the Dalton System. The pupils were not to enter for any external examinations.

These Intermediate Schools are not considered to have been very successful and their number has decreased.

Trade Schools.

Three schools have been in existence for some years, and are very popular with pupils and parents, but have not escaped criticism by employers. They are designed to provide a two years' course, end on to Standard VI, for boys going on to apprenticeship. As, however, older boys, who have not reached Standard VI, are admitted, it is necessary to provide a four years' course, of which the first two years are introductory, continuing the general education up to the Primary School Examination, but giving some workshop practice.

In the two years' trades course proper (i.e. the last two years, which alone are taken by ex-standard VI boys) the course comprises technical mathematics, office practice and essay writing, technical mechanics, heat or electricity, descriptive geometrical drawing and practical trade subjects.

The evidence of employers before the South African Education Administration Commission in 1923 was to the effect that a more general type of vocational school would be equally effective, and that Trade Schools were unduly expensive.

DOMESTIC SCIENCE SCHOOL.

The Domestic Science School offers a two years' course in housewifery, leading to a certificate issued by the Union of South Africa, which has recently taken over from the Provincial Education Departments all schools for vocational instruction. There is no sign that this type of school is likely to spread, and the one school of the kind in existence is largely occupied in training teachers of domestic science for the Primary Schools.

COMMONWEALTH OF AUSTRALIA.

State of Victoria.

(All figures are for the year ending 31 December, 1924.)

School attendance is compulsory between the ages of 6 and 14. Between those ages there are 192,000 children in State Elementary Schools and 64,000 in schools outside the State system. Above the age of 14 there are 11,985 young people in schools outside the state system, 12,460 in State Elementary schools, and 10,488 in full time attendance at State High Schools and Intermediate Schools, of the types described below.

All children in State Elementary Schools take, at about the age of 12, the Qualifying Examination. It is the policy of the State Education Department to move towards a scheme (not yet realised) in which the passing of this examination will mark the end of primary education, as such, and the beginning of new courses, or entry into new schools, designed to meet the needs of the several groups of pupils.

EDUCATION OF THE ADOLESCENT

Туре	Number of	Earo (all a	lment Iges).	Average Attend- ance (all ages).	
	Schools.	Boys.	Girla.	Boys.	Giris.
1. High Schools 2. Higher Elementary Schools	33 45	3,920 2,108	3,799 1,925	3,262 1,552	3,160 1,449
3. Central Schools*	23	1,681	1,755	1,308	1,375
4. Junior Technical Schools t	24	4,828	569	3,857	476
5. Domestic Art Schools	6	<u>.</u>	1,611	-	1,609

At present, the qualifying examination marks the standard of entry to any of the state schools shown in the following table :---

All attached to Elementary Schools.

Ali attached to Technical Schools.

Some attempt is made to provide, in the Elementary School, advanced general, agricultural, domestic, commercial, or industrial courses for the older pupils. The "Central Schools" are the upper departments of those Elementary Schools in which the older pupils are sufficiently numerous to justify the name "Central School" as defined in the Regulations of the Education Department.

Schools of the first three types offer "High School Courses," which may be general, agricultural or commercial, and lead to the Intermediate (4th year), Leaving Pass (5th year) and Leaving Honours (6th year) certificates. The length of the school life may be deduced from the following table :—

	Number of pupils attending High School Courses.									
тура от эспоот.	lst year.	2nd year.	Srd year.	4th year.	5th year.	6th year.				
High Schools	1,589	1,852	1,994	1,303	651	220				
Higher Elementary Schools.	1,526	1,209	742	517	38	1				
Central Schools	1,734	1,568	67	8		-				

In sparsely populated districts, it is necessary for a single school to serve as many ends as possible. Where the only provision in a district lies in the High School or Central School, that school endeavours to provide, in addition to the three types of High School Course, Industrial and Domestic Arts Courses worthy of recognition as such by the Education Department. These courses are, so far as possible, similar to those provided in Junior Technical Schools and Domestic Arts Schools, respectively. The extent of this arrangement is not at present great, as the following table shows, but there are signs of growth.

		Number of Pupils.							
Type of School	Course.	Under 12.	12 to 13.	13 to 14.	14 to 15.	15 to 16.	Total.		
High Schools	Industrial	1	10	16	6	1	34		
	Arts.	1	10	32	7	3	53		
Central Schools	Industrial	6	25	20	7	1	59		

The Junior Technical Schools offer a two years' course of a less specialised character than that given in an English Trade School, with a specialised third year for those few pupils who remain. The following is a specimen (boys') curriculum, showing the number of periods per week devoted to each subject.

1st year.	2nd year.	3rd	year.			
-	-	Builders.	Engineers.			
English 5	English 5	· Engli	sh 4			
Civics 1	Civics 1	Econo	omics I			
Algebra 3	Algebra 3	Algeb	ra 2			
Arithmetic 3	Mensuration 3	Trig.	2			
Mensuration 2	Theo. Geom. 1	Theo. Geom. 1				
	•	Quant	tities 2			
Science 4	Science 5	Science	xe 6			
Geography 1	Modelling 2	Building \6 M Drawing (I	fech. \6 Fawing (
Modelling 2	Freehand 2	Carpentry 6 S	cience 6			
Freehand 2	Mech. Draw. 4	Sheet Metal 4 S	mithy 4			
Woodwork 4	Woodwork 4	Solid	Geom. 2			
Sheet Metal 4	Smithy 4					
Geometry 5	Solid Geom. 2	Phys.	Drill 4			
Phys. Drill 4	Phys. Drill 4	-				

The girls take, in the first two years, English, civics, geography, commercial arithmetic, hygiene, physical training, singing, art, needlecraft. In the third year one course includes Dressmaking, millinery, decoration, needlecraft, ladies' tailoring, costume drawing and design. Another covers ticket writing, lettering and illumination, drawing for reproduction.

EDUCATION OF THE ADOLESCENT

These schools differ from English Junior Technical Schools in that they aim at preparing their pupils for further full-time study. A large number of the pupils, however, enter employment before even completing the third year of the course. These are given every inducement to attend the part-time technical courses in the Senior Technical School and the Junior Technical School course is regarded as being incomplete in itself.

Of those who do not enter employment, some proceed to the senior technical school (3 years full-time course), others to the High Schools, where they appear to be able to hold their own with the High School pupils.

Domestic Arts Schools were first opened in 1915 and are growing rapidly. They offer a thoroughly practical 3 years' course in Housewifery, Laundry, Needlework and Cookery (including marketing). Each school provides a public dinner daily and the girls look after the residential quarters of the staff. About half the time of the pupils is spent on these domestic subjects, the rest being given to general education. The general subjects are carefully linked up with the Domestic work.

Those pupils who do not leave school at the end of the course proceed to High Schools (where they can, if they so desire, take a course with a domestic bias), or to the Domestic Economy College.

B. EUROPEAN COUNTRIES.

AUSTRIA.

Before the war the Austrian elementary school child at the age of ten or eleven had three courses open to him. Either he might remain at the elementary school till the completion of the primary school course at the age of 14 or in some places earlier, or he might enter a higher elementary school with a 3 years' course (*Bürgerschule*) where such existed, or he might go to a secondary school with an 8 years' course. Since the establishment of the Republic in November, 1918, this system has been gradually replaced by one in which all children from the age of ten or eleven are to receive instruction in one kind of school (*Ailgemeine Mittelschule*).

The principle of the new organisation is briefly that for all children there shall be one common school (*Einheitsschule*) for the first eight years (6 to 14) of school life. The first four years constitute the *Grundschule*; the second four constitute the *Aligemeine Mittel*schule, which replaces the *Bürgerschulen* and the lower division of the *Realschulen* and *Gymnasien*.

Grundschulen are operative everywhere, but Allgemeine Mittelschulen have been established in a few places only and in experimental forms of three main types. The first of these types is known specially as the Deutsche Mittelschule, the second by the general name of Allgemeine Mittelschule, and the third as the Grazer Typus, which, however, exists in four schools only, and is really outside the scope of post-primary education.

By a law of November 28th, 1919, six schools formerly used for educating cadets, were transformed into residential secondary schools of a new type (*Bundeserziehungsanstalten*), four for boys, and two for girls, with an eight years' course (10 to 18). The first four years constitute the *Deutsche Mittelschule*, and work on a programme first issued by the Reform Department of the Ministry of Education on September 15th, 1919, and after two years' experience slightly altered so as to reduce the number of hours of instruction.¹

These six schools are intended for gifted children of all classes whose parents are unable to educate them without assistance from the state. The fees vary with the parents' income. The special feature of the curriculum is the emphasis laid to "ideals of German culture." Foreign languages are not begun until the third year (age 12 to 13), when the pupil has the choice of three courses, containing respectively :--

- (i) Latin and a modern language.
- (ii) A modern language.
- (iii) No foreign language.

In the case of courses (i) and (ii) the necessary time for the language study is obtained by reducing that assigned to the mother tongue, drawing and manual training. In the fourth year civics is taught in association with history. Manual training, which is taken by both boys and girls in all four years includes paper work, cardboard modelling, wood and metal work, gardening and poultry keeping, and, for the girls, needlework.

In 1922 after its experience of the Deutsche Mittelschulen the Reform Department of the Ministry of Education issued a provisional curriculum for the four classes of the Allgemeine Mittelschule. The subjects of instruction are the same as in the Deutsche Mittelschule, but the hours of instruction in some cases are fewer.

The Allgemeine Mittelschule has two divisions, the first for pupils of normal or super-normal intelligence; the second for sub-normal pupils. The classification of the pupils is determined not by examination, but by the judgment of the teachers of the *Grundschule* at the end of the four years' course in that school. Though organised in two divisions, the school remains a unity by reason of its common life, common instruction in certain subjects (religious instruction, singing, physical training, manual training, etc.) and by the fact that all teachers must teach in both divisions.

³ See Decree of July 30th, 1921, Lehrplan für die vier klassen der Deutschen Mittelschule.

BELGIUM.

A law of 1914 provided for the establishment of instruction of the fourth stage (*Enssignement du quatrième degré primaire*) in Belgian Primary Schools, i.e. instruction for children from the age of 12 to that of 14. Some schools and classes of this type were established before the war, others during the war, and many, particularly in the industrial parts of Belgium, since 1918. If a commune is too small to organise a class of the fourth stage satisfactorily by itself, it may combine with a neighbouring community. The instruction of the fourth stage is of a more practical and vocational character than those of the first, second and third stages. The standard weekly timetable is as follows :---

Religious Instruction, 3 hours. Moral Education and Civics, 1 hour, Mother Tongue, 4 hours. Arithmetic, the Metric System, and Algebra, 2 hours. Geography, 1 hour. History, 1 hour. Geometry and Geometrical Drawing, 2 hours for boys, 1 hour for girls. Drawing, 2 hours for boys, 4 hour for girls. Manual Work for boys, Needlework for girls, 4 hours. Natural Science, or Agriculture, and Hygiene, 3 hours for boys and 2 hours for girls. Domestic Subjects, 21 hours for girls. Writing and Commercial Instruction, 1 hour. Singing, 1 hour. Physical Exercises, 2 hours.

In addition, instruction in a second language may be given for 2 hours a week. The instruction in the second language is generally begun at the age of 10, at the beginning of the third stage.

The timetable contemplates additional lessons in "Technology," i.e. elementary scientific and economic facts regarding the local industries, their materials, processes and organisation.

The instruction in morals and citizenship includes lessons on the administration of the country, freedom of thought and of the press, etc., the position of the worker in the social organisation, his duties; the right of workers to combine; contracts.

The instruction in geography and history deals specially with Belgium and the Belgian Congo, but also includes a general survey of other countries, and particularly the history of the 19th century.

Attached to each of the provincial training colleges in the Province of Hainaut is a model elementary school, providing instruction in all four stages. Special courses are given in the training colleges in preparation for fourth stage work; in these courses particular emphasis is laid on social economy, the technology of industries, shorthand and commercial subjects.

CZECHOSLOVAKIA.

The laws relating to education provide that in Bohemia, Moravia and Czechoslovak-Silesia, at least one higher elementary school (obcanska skola) must be provided in every administrative district. In fact, however, a considerable number of these schools over and above the legal minimum have been established not only in towns, but in the larger villages. In Slovakia the law prescribes that such schools must be provided in districts with more than 5,000 inhabitants. The higher elementary schools are intended for children between the ages of 12 and 14. Pupils from them are eligible for admission to the institutions for the training of elementary teachers and to vocational schools. These schools are, as a rule, arranged in three progressive classes, which are correlated to the fifth class in the ordinary elementary schools. A certain number of higher elementary schools have a fourth class for pupils who have passed through the third class with distinction and desire to pursue their studies further, with a view to entering a vocational school or a training college for teachers. The obligatory subjects of instruction in higher elementary schools are religion, civics, the language of instruction (i.e. Czech, German, Magyar or Polish with practice in writing it), geography, history, nature study, and elementary science, arithmetic and simple book-keeping, geometry and geometrical drawing, drawing, calligraphy, singing, handicrafts and physical training. In some schools the elements of agriculture are taught as a special subject. The following optional subjects are taught at some individual higher elementary schools :- French, the violin, shorthand, typewriting, and the like.
Pupils are admitted to the "Middle" (i.e. Secondary Schools) at the age of 10 on the results of an entrance examination (oral and written), in arithmetic and the language of instruction (i.e. Czech, German, Magyar or Polish).

FRANCE.

It is customary to date the existence of the French higher primary schools from the law of 1833, which was largely inspired by Guizot. At that date in the primary school, which every commune was expected to maintain, little was taught beyond reading, writing and arithmetic. The extended instruction given in the newly established Higher Primary School represented rather an enrichment of the Primary School curriculum similar to the addition of "specific" and "class" subjects in the English Codes of the period 1867–1890, than a real extension of primary education like that of the English Higher Grade Schools of the eighties. Whatever its character the new development did not enjoy any long prosperity, and when the Empire came to an end in 1870, comparatively few Higher Primary Schools remained.

The Third Republic was too occupied in its earliest years with securing its own safety to be able to develop its social services. It was not till the eighties that Jules Ferry was able to pass that series of laws which laid down the lines of the existing system. In the law of 1882 which established the principle of compulsory, free and secular education no mention is made of the École Primaire Supérisurs, but in the Décret Organique which elaborated the provision to be made under the Law a definite place was assigned to the Ecole Primairs Superiours. It was to be organised as separate institution, to which no pupil was to be admitted unless he or she were twelve years of age and possessed the certificat d'éludes primaires. The course was to be of at least two years' duration and was to have regard to the local requirements of agriculture, commerce and industry. The initiative in providing such schools rested with the locality. This type of instruction evidently met with considerable support for in 1893 it was found necessary to issue new regulations which remained in force till 1921. The purpose of these schools may be stated as follows :---

(i) A continuation and completion of the subjects learnt in the elementary schools.

(ii) A practical acquaintance with such branches of knowledge, literary, scientific, and general, as bear directly on the various occupations in life in some one of which the pupil will afterwards be engaged.

(26647)

(iii) Such general hand-and-eye training and workshop practice as will engender habits of manual industry, increase dexterity and develop taste, and at the same time both halve the labours and double the fruits of that necessary apprenticeship (in the true sense of the word) at the workshop, the warehouse, the shop counter, or the counting-house, for which it is meant to be not so much an alternative as a preparation.

The official programmes set out the requirements of the three years' courses. For the first year the course of study was the same for all pupils. It continued the work of the elementary schools and introduced a small amount of handwork. From the second year onwards, the pupils were divided into different groups; those following the general course formed the first group. The other groups were commercial, industrial and agricultural. For certain subjects e.g. moral instruction, history and French the pupils from the different sections continued to be taught together. The pupils of the professional sections had only two lessons a week in French (instead of five as in the general section). In the industrial and agricultural section a larger space was given to practical work, but less than in the *Écoles practiques de commerce et d'industrie*, which worked under the supervision of the Ministry of Commerce and Industry.

The teachers were for the most part nominated by the Minister or by the *Recteur de l'Académie* on his behalf and had to pass the special examination for the *Professorat des Écoles Normales* and *Écoles Primaires Supérieures*. This qualification was considerably higher than that of the average elementary school teachers, but many of the latter were "delegated" to give instruction in these higher schools. They were however forced to return to the ordinary primary schools if they did not pass the examination within three years.

The fact that the bulk of the teachers in these schools had had a literary training and that the manual training instructors were of inferior status may have justified the complaints which began to be made about 1903 that the work of the higher primary schools was too academic and was not fulfilling the purpose for which the schools were organised. The lack of agreement between the Ministry of Public Instruction and the Ministries of Commerce and of Labour¹ made the former anxious to retain its schools and to adapt them to the needs of industry and commerce. New programmes were issued

¹ From 1889 to 1906 the Ministry of Commerce was styled Ministère du Commerce, de l'Industrie et du Travail. On 25 October, 1906, a separate Ministry of Labour was established, and the Ministry of Commerce was known henceforth as Ministère du Commerce et de l'Industrie (Annuaire du Ministère du Commerce et de l'Industrie, 1911, p. 10).

in 1909 which emphasised the professional purpose by dividing the curriculum into two parts—the first containing the subjects common to all sections and, the second the subjects peculiar to a particular branch. At the same time it was thought desirable to extend the functions of the Local "Comites de Patronage" on which the local industries were to be represented by giving them power slightly to modify the courses to suit the needs of particular areas.

The schools continued to increase in number and size, but it would seem that the general section still secured the larger number of pupils.

In certain districts with a large industrial population the industrial section was considerable but in many cases the work was directed largely to the preparation of boys for the competitive entrance examination for the *Écoles des Arts et Metiers* rather than for immediate entry into industry. This was not the purpose for which the schools were established, but it was easier to recognise this misuse than to secure its correction.

After the close of the war the programmes were again remodelled, but the consideration which led to these modifications affected the relation of the *Ecoles Primaires Supérieures* to the Training Colleges rather than its professional curriculum.

The specific function of these schools which is to train young people for practical pursuits is being attacked from two sides. For reasons of economy in the employment of staff, many of these schools are being combined with the "Collèges" (i.e. the Secondary Schools in the smaller towns). It is stated that about 20 Écoles Primaires Supérieures have been treated in this way. This arrangement must inevitably tend to emphasise the non-professional character of the instruction given, and this tendency is increased by the concurrent transfer of the industrial section of the École Primaire Supérieure to the École Professionelle in the same town. About 10 schools were transferred in 1922, and 20 more in the following year and it is said that the Direction de l'Enseignément Technique proposes to effect the transfer of about 120 schools in all.

At the present time, the rigid organisation of the French educational system seems to be breaking down. The barrier between the primary and secondary schools was almost complete, and the number who passed from one system to the other was inconsiderable. As a result of the war, a movement arose for the establishment of the "*École Unique*." This has not been realised, but changes of great significance have been made since 1918. The courses of study in the *Classes primaires* of the *lycles* have been made identical with those of the ordinary primary school, and candidates for scholarships from both types of school are examined by the same body. The inspection of the elementary classes of the *bycles* has also been transferred to the inspecteur primaire. It still remains to be seen how far these adjustments will increase the number of pupils passing direct from the elementary to the secondary school.

To hasten the assimilation the classes élementaires have been made free, and as it would not be possible to require the parents of the Lycée pupils to send their children to the ordinary elementary school, the authorities of the lycées have been instructed to admit to their classes pupils who would normally have gone to the elementary schools. Whether this fusion will really be effected time will show, but a competent observer, by no means radical in outlook, recently remarked that whereas the line of demarcation had hitherto been drawn vertically, in time it would be drawn horizontally.

This possibility has been increased by certain other readjustments to local conditions which have been recently introduced. At Montluçon the Lycée has been combined with a Technical School; at Nantes the École Normale has been amalgamated with the Lycée. It has been proposed to make this combination the normal arrangement. Under this scheme the future elementary school teacher would first go to the École Primaire Supérieure and after the completion of the three years' course would go for two years to the Lycée for further general education and this would be followed by a single year of professional training.

The partisans of the *École Normale* are opposed to this, regarding this institution as the main safeguard of republican principles for elementary school teachers. It is also felt that if these candidates for the teaching profession once go the Lycée they will not come back to the elementary schools. However this may be, it is certain that the effect on the *École primaire supérieure* would be to emphasise the literary side of the instruction and to favour the conversion of these schools into Modern Secondary Schools, as has been suggested. There are various possibilities for the present *école primaire supérieure* but this, as things are, seems the most likely development.

These combinations have alone been made possible by the fact that the *écoles primaines supérieures* have been staffed in a different manner from the ordinary elementary schools. This differentiation was first introduced in 1887 when the right of nomination to permanent positions in these schools was transferred from the Prefect to the Minister of Public Instruction. Candidates for posts in the higher primary schools had to possess the *Certificat d'aptitude au professorat des écoles normales*. This qualification was obtainable either by examination or by taking a course at the *école normale primaire supérieure* at St. Cloud (for men) or at Fontenay-aux Roses (for women). Ordinary elementary teachers might be appointed to these schools, but if they did not obtain within a specified time (maximum now five years) the certificat d'aptitude they were relegated to the ordinary elementary schools.

The course of study at St. Cloud and Fontenay-aux-Roses is similar to the university course in standard and there is more affinity between the teachers at the Secondary Schools and those at the *Écoles Primaires Supérieures* than between the latter and the ordinary elementary school teachers.

The *écoles primaires supérieures* vary considerably in attainment. In Paris, where admission is always selective and at times keenly competitive, the standard is high and is not uncommon for boys to remain at these schools to the age of 18 and sit for the *Baccalauréat* examination. The weakest side has been the practical work. Much less time was given to workshop practice than in the *écoles pratiques d'industrie* and in addition the status of the instructors is inferior to that of the ordinary teachers, who are given the title of "*professeurs*"—as are their colleagues of the secondary schools. The following figures for 1924, the latest available, show how large is the *Section Générale* :—

Boys,				39,304
Industrial Section	* *		• •	4,838
Commercial Section	* *		• •	1,940
Maritime Section	••	••	••	214
Miscellaneous	* *		• •	1,038
Agricultural and Hotel S	ection		• •	656
Total Professional Section	1	• •		8,686
General Section	• •		• •	30,236
Girls.				34,091
Industrial Section	* 1		••	127
Commercial Section			• •	3,346
Administrative Section				345
Domestic Arts Section	• •	* *	• •	511
Total Professional Section	۵., ۵	* 1	••	4,329
General Section	••	••		31,391
N.B. The figures do not	t tally :	they ar	e give	a as comm

cated by the French Government.]

The noticeable feature is the small size of the agricultural section, whereas three-fifths of the population of France is rural. The explanation is that these schools are urban institutions and that in the rural areas undeveloped schools, called *Cours Complementaires*, are common,

(26647)

In 1923 the Écoles Pratiques de Commerce et d'Industrie had 28,479 pupils, nearly three times as many as in the corresponding sections of the écoles primaires supérieures.

École Primaire Supérieure.

							*		
	Common Course.	Gen Cou	eral rse.	Ágri tu Cou	icul- ral Irse.	Indu Cou	strial rse.	Com ci Cor	mer- al Irse.
	lst yr.	2nd yr.	3rd yr.	2nd yr.	3rd yr.	2nd yr.	3rd yr,	2nd yr.	3rd yr.
Moral Instruc- tion, Civics, Everyday Law, Economics,	1	1	1	1	1	1	1	1	1
French Modern Langu-	4 3	4	4 4	3 -	3	3 -	3 -	4 4	4 4
History Geography Mathematics Mechanics Physics and Che-	1 1 3 - 2	1 1 3 - 2	1 1 3 - 2	1 3 1 3	1 3 1 3	1 1 3 1 3	1 3 2 3	1 1 3 - 2	$\frac{1}{3}$
mistry. Natural Sciences : and Hygiene.	1	1	1	1	1	1	1	1	1.
Technology Agriculture Artistic Design		- 2	- 2	1 2 -	1 2 -	$\frac{1}{2}$	$\frac{1}{2}$	1 - -	1
Geometrical De-	1	1	1	1	1	3	3		-
Writing Stenography and Typewriting	11 31	. <u> </u> -	-	-	 	.=		3	3.
Bookkeeping Singing (1 hour	2	2	2	1 2	2	2	$\overline{2}$	3 2	3 2
optional). Gymnastics Shopwork, La- boratory, Agri- culture, Horti- culture.	2 4	2 4	2 4	24 9	21 9	2 ¹ 12	21 12	2 1	2 1
Total Compulsory Optional	31 26 5	28 27 1	28 27 1	32 29 3	31 28 3	36 33 3	37 34 3	29 30 1	30 30 1

COURSES FOR BOYS.

² Optional.

École Primaire Supérieure.

	Common Course.	General Course.		Com ci Cou	mer- al rse.	Domestic Arts Course.	
	lst	2nd	3rd	2nd	3rd	2nd	3rd
	yr.	yr.	yr,	yr.	yr.	yr.	yr.
Moral Instruction, Civics, Everyday Law, Economics. French Modern Languages History Geography Mathematics Physics and Chemistry Natural Sciences and Hygiene Technology Artistic Design and Modelling Geometrical Design Writing Stenography and Typewriting Bookkeeping Domestic Economy Singing (1 hour optional) Gymnastics Lingerie, Clothing, Fashlons, Cookery, Household, Man- agoment, Garden, Farm, Infant Care.	1 4 3 1 3 2 1 -2 1 1 3 1 -2 2 6	$ \begin{array}{c} 1 \\ 4 \\ 4 \\ 1 \\ 3 \\ 2 \\ 1 \\ - 2 \\ 1 \\ 1 \\ 2 \\ 6 \\ \end{array} $		$ \begin{array}{r} 1 \\ 4 \\ 4 \\ 1 \\ 3 \\ 2 \\ 1 \\ 1 \\ 4 \\ 2 \\ - 2 \\ 2 \\ - 2 $	1 4 1 3 2 1 1 4 2 - 2 2 -	$ \begin{array}{r} 1 \\ 3 \\ -1 \\ 1 \\ 2 \\ 1 \\ -2 \\ 1 \\ -2 \\ 1 \\ -2 \\ 1 \\ -2 \\ 1 \\ 1 \\ 1 \\ 2 \\ 1 \\$	$ \frac{1}{3} - 1 + 1 + 2 + 2 + 1 - 2 + 1 + 2 + 2 + 1 + 2 + 2 + 1 + 2 + 2 +$
Total	33	31	91	30	31	31	31
Compulsory	28	30	30	30	30	30	30
Optional	5	1	1	1	1	1	1

COURSES FOR GIRLS.

¹Optional.

PRUSSIA.

The Millelschule in Prussia occupies much the same position in the educational system as the École Primairs Superisure in France, but its history, despite certain resemblances shows many contrasts. Elementary schools were fostered by the Prussian government almost continuously from the Reformation. Frederich the Great tried to establish compulsory attendance in the rural districts, but the curriculum was very limited. After the disaster of Jena in 1806 Stein realised that a free state made larger demands upon the intelligence and character of its citizens. The reorganisation of the elementary schools was a national necessity, and to accomplish this a reformed corps of teachers was required. A number of young teachers were sent to study Pestolozzi's work in Switzerland and training colleges which were to propagate his ideas were established in various parts of Prussia. At the same time the higher or secondary schools were reoganised by von Humbolt. At that date there were a number of schools—especially in the smaller towns, offering a course of instruction superior to that of the elementary schools, but not reaching the level of the higher schools. No attempt was made to give these schools a definite organisation, they were deliberately left out of the scheme in order to secure the establishment of a sufficient number of higher schools.

It is true that the establishment at Berlin of a training college for urban teachers (*Stadtschullehrer*) seemed to indicate a desire to provide these intermediate schools with teachers of wider qualifications, but the attempt did not last long. The generous impulses of the revolutionary era were gradually weakened; the Berlin college trained teachers only for the ordinary elementary schools and the ministerial rescripts of 1854 reduced this training to a mere mechanical preparation for imparting a limited amount of information.

With the establishment of the Empire the period of restraint ended. In 1872 Falk, the Prussian Minister for Education, produced a new code for the conduct of elementary schools in Prussia which reduced the amount of mechanical repetition and allowed the teacher to develop his instruction on more liberal lines. He also published a separate course of study for *Mittelschulen*, recognising the need for a type of school which went beyond the limits possible in a school bound to accept all those children liable to compulsory attendance, and at the same time offered a curriculum better adapted to the needs of commerce, trade and industry than the higher school (i.e. secondary) school.

The *Mittelschule* was only one type of the many intermediate schools which lay between the *Volkschule* and the Higher Schools. It was differentiated from the ordinary elementary school by its curriculum and the length of its course. The normal type had nine classes—each of a year's duration and so retained its pupils till the age of 15, while the statutory obligation to attend the elementary school ceased at the age of 14. It also included at least one foreign language in its course and a larger measure of elementary science and mathematics.

No special encouragement was given by the State to the development of these schools. After 1878 a period of social legislation was begun in Germany. The elementary schools benefited. State funds were provided to assist the poorer communities and the salaries and pensions of the elementary school teachers were regulated by law. None of these benefits reached the *Mittelschulen*, which were wholly supported by the communes.

In 1910 the State intervened to establish new curricula and to define more closely the function of these schools. There are really three distinct groups of schools. First the *Mittelschule* proper, then the other boys' schools, which are really preparatory for the higher (i.e. Secondary) schools, and lastly a large number of girls' schools which give a course of a secondary school type, but not sufficiently advanced to be regarded as a full secondary school.

The regulations of 1910 were more precise than the instructions of 1872. They provided for alternative courses of studies, whereas in 1872 only one course was suggested of a general character amplifying the curriculum of the elementary schools by the introduction of a modern foreign language and a certain measure of science.

There is no convenient detailed description of the various forms which these intermediate schools assumed, but they were very diverse in organisation and content. Some had a ten years' course ; a very few had only a single year : some taught one modern language, some two; some taught only Latin. Most of the larger towns preferred to establish *Realschulen* which were recognised as secondary schools and offered a six years' course from the age of 9. In Berlin a special type of Realschule was created in which the beginning of the modern language instruction was deferred till the third school year, with a view to facilitating the transfer of boys from the elementary schools at about the age of 12. Berlin being mainly a commercial city was able to dispense with the Millelschule, and there was the further inducement that the Leaving Certificate of the Realschule carried with it the right to serve for one year as a volunteer instead of the three years required of the ordinary recruit. This was a social privilege highly esteemed in Germany, and explains the lack of interest in the Millelschule.

Under the Regulations of 1910 there were five different types of curriculum prescribed. The first type was a general curriculum for boys, the second was devised to meet the needs of boys entering commerce and industry, the third was a curriculum for girls which had no bias towards practical ends, the fourth was for those schools preparing for the higher schools except the Gymnasium (the fully classical school), and the last provided a course for those schools which prepared for the Gymnasium.

After the revolution of 1918 the position of the Mittelschulen was called again into question. Their continued existence was opposed by the advocates of the elementary schools, who objected to the withdrawal of the better pupils from those schools, as this rendered more difficult the improvement of the elementary schools themselves. At the same time there was an expansion of the secondary school system and new types of schools were created, one of which was based on the completed elementary school course; between the two it was felt by some no place was left for the Mittelschule, but Herr Boelitz, a former Minister of Education, strongly urged their retention on the ground that in the interest of trade and industry and of the lower placed officials some more practical course than that provided by the secondary school was required.

It was felt that the academic teacher was not well suited to give the kind of instruction desired and as a matter of fact the bulk of the teachers in Mittelschulen are those holding the Mittelschullehrer diploma. The diploma is obtained under Regulations framed in 1901. No course of training has been established, but the qualification is acquired by passing an examination to which fully qualified elementary school teachers, candidates for secondary school teachers, certificate or for the certificate of theology are admissible. The bulk of the candidates are elementary school teachers. Elementary school teachers may be employed in the Mittelschule but must acquire the additional qualification or give up the work. Of the assistant staff in 1921 8.11 per cent. had academic qualifications, 62.53 held the Mittelschule diploma and 23.2 were elementary teachers not fully qualified for Mittelschulen. The rest (6.16) were assistant teachers without academic training. Of the head teachers 67.82 per cent, had the qualification of the Headship of an elementary school, 25.3 per cent. were qualified secondary school teachers.

In 1924 new programmes were issued by the Ministry for the *Mittelschule*. The changes since 1910 have all been in the direction of laying greater emphasis on the practical side of the instruction.

SWEDEN.

All children are under a legal obligation to attend school, as a rule on completion of their seventh year. All normal children must, unless they are receiving recognised instruction at home, or are attending a recognised secondary school, pass through the ordinary elementary school, comprising six classes, of which two form the infants' stage and four the elementary stage proper. The majority of the children leave between the ages of 13 and 14, so that school life, as a rule, lasts about six years. Children desiring to continue their education beyond the age of 13 or 14, in case they do not gain admission to a secondary school, can make a choice among the following forms of post-primary education :—

(i) Continuation Schools. These part-time schools in the main provide a general education, though many of them have a technical bias. They are distinct from the technical schools and schools for apprentices (established in connection with certain definite trades), attendance at which is voluntary. From 1927 onwards attendance at Continuation Schools will be compulsory for all young persons who are not undergoing some other form of further education. The subjects of instruction in the socalled "general continuation schools" are :---the mother tongue, civics and nature study. In continuation schools with a technical bias, nature study is replaced by housewifery for girls, and agriculture, forestry, or fishery for boys.

(ii) Elementary Schools with "Higher Tops." In some towns and large communities one or more extra classes have been added at the top of the elementary school. Such schools are called 7 or 8-year elementary schools. Admission is restricted to pupils who have gained a leaving certificate from the 6th class, and attendance is wholly voluntary.

(iii) Higher Elementary Schools. Children are admitted to these schools who have passed through the elementary school and have obtained the elementary leaving certificate. Attendance is voluntary. They contain from 1 to 4 classes and provide instruction which is either general in character or technical in cases where the schools have been established in connection with some specific occupation or group of trades. These schools can be converted into municipal or district intermediate schools. Towns and other large centres of population which prefer to have a municipal intermediate school often begin by establishing a higher elementary school which adds a class each year until it has four classes, when it can be converted into a municipal intermediate school.

(iv) Municipal Intermediate Schools.—These Schools invariably provide a 4 years' course. Most of the pupils are admitted at the age of 13 and must either have obtained the elementary leaving certificate after passing through the 6th class of the Elementary School, or shew as the result of an entrance examination that they have reached an equivalent standard of attainment. Attendance is entirely voluntary and fees may be remitted either wholly or in part. The four years' course of studies has, as its objective, the "Realskole" examination, which serves as the entrance test for situations in the Customs, Railways, etc.

(v) Technical Schools and Schools of Agriculture. Pupils from the elementary schools can, if they possess sufficient ability, gain admittance, usually at about the age of 13, into junior technical schools or junior schools of agriculture, and proceed later to the higher or senior schools of either type. It will be seen from this summary that the two main points of difference between Swedish and English practice in regard to post-primary education are that in Sweden the average age (12.9 years) at which children begin post-primary education is considerably higher than in England, and that the municipal intermediate schools, which most nearly correspond to the central schools of England and Wales, charge fees.

Note.—The Swedish system of education has undergone a number of changes since 1918. The most recent proposals, which bear mainly on the relations between Primary and Secondary Education, are embodied in the Report of the Royal Commission on Schools, published in March, 1926. [Utredning andgende det svenska skolvāsendets organisation, 1926.]

SWITZERLAND.

(i) Canton St. Gallen (St. Gall).

The obligation to attend school in the Canton of St. Gall lasts from the age of 6 to that of 15. The primary schools are classified according to the number of weeks during the year for which they are open and the number of hours of instruction in summer and winter. Housewifery for girls and handwork for boys are taught in most schools.

From the primary schools pupils have the opportunity of attending the Sekundarschulen (i.e., superior primary school). Entrants must be at least 12 years of age and not more than 14 and must have completed the first six years of the primary school course. They are admitted either on a qualifying examination or on probation for a month. Children who leave the Sekundarschulen before completing at least two years must return to primary schools (or in some cases to continuation schools) to complete their school attendance obligation. The Sekundarschulen, some of which charge fees, are open for 42 weeks a year. They must provide a course of at least two years' duration, but may have three or more.

The curriculum comprises religion, German and French (English, Italian, Latin optional), history and geography, arithmetic, practical geometry, science, singing, bookkeeping and writing. Shorthand, drawing, handwork for boys and girls, and domestic subjects for girls are optional.

e :— Subject.		•	j	Hour per We				
	-	• 1	Is	t year.	2nd year.			
Religion	••	••	••	2	2			
German		••		6	5			
French		••		5	5			
Arithmetic		• •	••	4	4			
Geometry	••			2	2			
History	••	• •	••	2	2			
Geography	••	••		2	2			
Science				3	3			
Singing	••	••	••	2	2			
Drawing			• •	2	2			
Writing		••	••	2	2			
Physical Ex	ercises			2	2			

Canton Vaud (Waadt).

In Vaud the child is under the obligation to attend school from the age of 6-7 to the age of 15-16.

The primary schools are divided into three stages :--

(a) degré inférieur (7 to 9).

(b) degré moyen (9 to 12),

(c) degré supérieur (12 to 15 or 16).

Handwork is optional for boys. Needlework is compulsory for girls in each of these stages and housewifery is compulsory in the last year.

A cantonal law of 1906 provided for the establishment of "classes primaires supérieures." These classes are intended to complete the primary education of those pupils who do not proceed to secondary schools "à base classique ou scientifique." The instruction is practical, i.e., is biassed towards the application as opposed to the theory of science. In addition to French and arithmetic, which are essential, the courses of instruction may include German, algebra, geometry, physical and economic geography, general history and science.

The " plan d'études " is as follows :---

Subjec	<i>t.</i>			Hours pe Boys.	r week. Girls.
French	••		••	6	6
German		••		5	5
Arithmetic,	Geome	etry a	nd		
Accounts			• •	6	4
Science	* •		* *	2	2
Geography	• •	• •	• •	2	2
History and	Civics		.,	2	ŀ
Drawing and	Manua	l work		4	2
Needlework					6
Writing	••			1	1
Singing		••	* 1	1	1
Physical Exe	rcises	••		2	1
Bible History	/ (optio	nal)	• •	1	1

The classes are mixed. Candidates for admission must be at least 12 years of age and must satisfy the authorities that they are capable of profiting by the courses (must have obtained a specified high standard in French and arithmetic). The instruction lasts for at least 42 weeks each year and the weekly hours must be not less than 18 in summer and 30 in winter.

(iii) Canton Zürich (Zurich).

In Zurich the primary schools provide for pupils from the age of 6 to the age of 14, in 8 classes. Attendance between these ages is compulsory.

From the 6th class (normal age 12) the primary school child has the opportunity to enter the Sekundarschule¹ (i.e., superior primary school); if he wishes to do so, he attends the Sekundarschule for a trial period of 4 weeks. At the end of that time a simultaneous examination is held in all the Sekundarschulen in the Canton and those candidates who do not either pass the examination or attain the proper standard of work during the trial period are relegated to the 7th class in the primary school. More than half of the primary school children secure admission to Sekundarschulen.

The Sekundarschule offers a 3 years' course, but not much more than one-third of the pupils remain for the full course.

It has two objects :---

(a) To complete the education of children who will leave school altogether at the completion of its course.

(b) To prepare pupils to proceed to higher educational institutions (i.e., gymnasien, training colleges for teachers and commercial schools).

This dual aim creates some confusion, and some local educationalists are of opinion that neither object can be properly attained so long as the two are confused.

Pupils can proceed at the end of the second year to the technical or commercial schools, and at the end of the third year to higher schools, teachers' training colleges, or to part-time or full-time continuation classes.

French, mathematics, physics, chemistry and domestic subjects (for girls) are compulsory. The optional subjects include English, Italian, physical exercises, manual instruction and a special cookery course for girls.

Languages are taught by the direct method.

Where there is a sufficient number of pupils to make it possible, the classification is *either*—

(i) By subject bias (pupils with a bias towards mathematics
 and science being separated from those with a bent for languages
 and humanistic studies). or

(ii) by capacity (the brighter pupils being separated from the less capable).

The latter classification is a recent innovation. In one or two schools, 3rd year pupils are classified according to intended future occupation. Vocational guidance is given.

Some of the schools are coeducational; some are for boys only and some for girls only.

¹ of. Matthew Arnold's description of these Sekundarschulen as they existed in 1866. Schools Inquiry Commission (1868). Vol. VI., pp. 613-614.

On 31st December, 1924, there were 98 Sekundarschulen in the Canton, of which 35 had only one teacher, 33 two teachers, 24 three to five teachers, and 6 more than five teachers. Out of 416 classes on 31 December, 1924, only one had over 40 children, and 395 classes had less than 30 children per class.

APPENDIX V.

SHORT LIST OF PUBLICATIONS BEARING ON FULL-TIME POST-PRIMARY EDUCATION IN ENGLAND AND WALES.

I. OFFICIAL.*

(A.) ROYAL COMMISSIONS.

- Education Commission (England), 1861-1864. (Duke of Newcastle, Chairman.) Report of the Commissioners appointed to inquire into the State of Popular Education in England. Vol. I. C. 2794.I. 1861.
- Schools Inquiry Commission, 1868. (Lord Taunton, Chairman.) Report, Vol. I. pp. 88–92 and 577–85, and passim. C. 3966. 1868.
- Commission on Scientific Instruction and the Advancement of Science. (1872-1876.) (Duke of Devonshire, Chairman.) Sixth Report (1875). C. 1279. p. 7, §§30-32, and passim.
- Technical Instruction Commission, 1882-84. Report of the Royal Commissioners on Technical Instruction. Second Report. Vol. I. C. 3171. 1884.
- Elementary Education Acts Commission, 1886-1888. (Viscount Cross, Chairman.) Final Report of the Royal Commission appointed to inquire into the working of the Elementary Education Acts, England and Wales. Part IV, Chapter V, and Part VII. C. 5485. 1888.
- Secondary Education Commission, 1895. (The Right Hon. James Bryce, Chairman.) Report of the Commission appointed to consider what are the best methods of establishing a well-organised system of Secondary Education in England. Vol. I. pp. 52-3, 130-6, 143-4, 289-90 and passim, and Vols. VI & VII. C. 7862. 7862-v and 7862-vi. 1895.

Official Reports are obtainable from the Sales Office of H.M. Stationery Office, Adastral House, Kingsway, London, W.C.2.

(B.) REPORTS AND REGULATIONS.

Education Department.

Minutes of the Committee of Council on Education. 1839-40 onwards. [Issued annually.] (After 1858-59 the Minutes appeared as the Report of the Committee of Council on Education, up to the year 1898-99).

Reports on Elementary Schools. 1852-1882. By Matthew Arnold. [New edition, with appendices and introduction, 1908.] Code of Regulations for Day Schools. 1860-1900. [Issued annually.]

Report of the Committee appointed to inquire into the condition of Intermediate and Higher Education in Wales. (See Appendix 7, p. cxiii. Letter from Mr. Hanson, Chairman of the School Management Committee of the School Board of Bradford in Yorkshire on the subject of Advanced Elementary Schools). 1881. C. 3047.

Special Reports on Educational Subjects. Vol. I. 1896–97. C. 8447. (See Paper on Public Elementary Education in England and Wales. 1870–95. By M. E. Sadler and J. W. Edwards).

Higher Grade Board Schools and Public Secondary Schools, (Statistics). Return, dated 28th June, 1898, for summary of Statistics concerning certain Higher Grade Board Schools and Public Secondary Schools, which was prepared for the use of a Conference between representatives of the Incorporated Association of Headmasters and of the Association of Headmasters of the Higher Grade Schools held at the Education Department in November last. 264. 1898.

Education (Primary and Secondary Schools). Return of the Joint Memorandum on the relations of primary and secondary schools to one another in a national system of Education, which was based on the statistics embodied in a Parliamentary Paper. No. 264 of Session 1898. 381. 1898.

Board of Education.

Report of the Board of Education. 1899–1900 onwards. [Issued annually.]

[The Reports from 1899–1900 to 1919–20 contain sections on Higher Elementary Schools; from 1912–13 onwards sections on Junior Technical Schools.]

Minute of the Board of Education, April 6th, 1900, establishing Higher Elementary Schools. Cd. 127.

Code of Regulations for Public Elementary Schools. 1901-1926. The latest issue of the Code is known as "Education Act, 1921. Grant Regulations No. 8 (1926). (S.R and O. 1926. No. 856)." The Code from 1900 to 1918 included Regulations for Higher Elementary Schools. These were revised in the 1905 issue and were withdrawn in the Provisional Code of 1919, in consequence of section 2 (1) (a) (ii) of the Education Act, 1918 (organisation of courses of advanced instruction in public elementary schools). See Report of Board of Education for 1918-19. pp. 12-13.

Higher Grade Schools, Return of statistics of certain Higher Grade Schools conducted by School Boards. 357. 1901.

Regulations for Secondary Schools. See 1902-3. p. 7 and 1903-4 p. 4. Cd. 1102 and 1668. (classification of "Schools of Science"); 1905-6, Cd. 2492 (Prefatory Memorandum pp. i-ix and articles 1-13 pp. 1-4 (definition of Secondary Education).

Report of the Consultative Committee upon questions affecting Higher Elementary Schools. 1906.

Regulations for Evening Schools, Technical Institutions, etc., 1905-06 Cd. 2574 (see Article 42, grants for full-time day technical classes for junior pupils), and 1913 Cd. 6925 (see Article 51 (c), grants for full-time junior art departments).

Regulations for Junior Technical Schools. In force from 1st August, 1913. [Afterwards included in the Regulations for Technical Schools.] Cd. 6919.

Regulations for Further Education, 1926. (Education Act, 1921. Grant Regulations, No. 6 (1926) (S.R. & O. 1926. No. 919).

Final Report of the Departmental Committee on Juvenile Education in relation to Employment after the War. Vol. I. Report. (See sections 17, 19, 20.) Cd. 8512. 1917.

•

Science and Art Department.

Directory with Regulations for establishing and conducting Science Schools and Classes, 1872 and following years up to 1900. [After the year 1886 the Directory included Regulations for Art Schools and Classes which had previously been issued separately].

See especially Directory with Regulations for establishing and conducting Science and Art Schools and Classes, 1894, p. 33; ditto for 1901-2, p. 47, § 22 of § lix. (The 1901-2 issue was published by the Board of Education, as the Science and Art Department had ceased to exist).

Calendar, History and General Summary of the Regulations of the Department of Science and Art, 1900, p. xvii (Schools of Science). C. 9429.

Scottisk Education Department.

Code of Regulations for Day Schools in Scotland, 1923. (S.R. & O. 1923. No. 928./S.58). [See Ch. III. Organisation and Curriculum.—Advanced Division for Scholars over 12; and Appendix No. 1. Courses for Advanced Divisions.] 1923.

II. REPORTS OF SOME LOCAL EDUCATION AUTHORITIES

Carlisle County Borough Education Committee.

Organisation and correlation of higher education. Repor of the Town Clerk, 25th June, 1923.

Durham County Council Education Committee.

"Higher Tops." A paper by Mr. A. J. Dawson. Prepared for the consideration of the Durham County Education Committee Durham : County Offices, Shire Hall, 1917.

Lancashire County Council Education Committee.

Report of the Director of Education on the Survey of the County with regard to the provision of Secondary Schools, Central Schools, Central Classes, etc., September, 1925. Preston: County Offices, 1925. pp. 16-41.

Leicestershire County Council Education Committee.

A short review of education in Leicestershire since the War. By W. A. Brockington. {Discusses Senior Departments of elementary schools and central schools.] Leicester: County Education Offices, 1925.

London County Council Education Committee.

Elementary Schools Handbook. Revised to 31st July, 1923. London: P. S. King & Son, 1923.

Development Memoranda :---

No. 5. Instruction of children over eleven years of age in ordinary elementary schools. Report of the Elementary Education Sub-Committee dated 30th March, 1920. 1923.

No. 6. Development of Education in public elementary schools. Instruction of children over 11 years of age. 1921.

No. 7. Development of Education in public elementary schools. Central Schools. 1921.

No. 10. The Final Year at an elementary school. 1923.

Manchester County Borough Council Education Committee.

General Survey. 1914-1924. (§ J. Central Schools. § K. Educational Facilities for Young Persons between 14 and 18 years of age). Manchester: Education Offices. 1926.

Newcastle-upon-Tyne County Borough Council Education Committee. Abstract of Minutes to be presented to the Education Committee on 8th October, 1924. pp. 436 foll. (Report of the Minor Sub-Committee appointed relative to the establishment of Central Schools). Newcastle-upon-Tyne: Education Offices, Town Hall.

Newport County Borough Council Education Committee.

A pamphlet on the Central School, its aims and functions. Newport, Mon.: Education Committee Offices, Charles Street. Northamptonshire County Council Education Committee.

Progress in the Upper Departments of Elementary Schools under the Education Act of 1918. By J. L. Holland, Director of Education. 1925. Northampton: County Education Offices.

Warrington County Borough Council Education Committee.

Memorandum on Elementary School Organisation and provision of Schools for Advanced Instruction. (Proceedings of the Education Committee 1924-5. Appendix). Warrington.

III. NON-OFFICIAL.

(A.) GENERAL.

Association of Directors and Secretaries for Education,

Summer Meeting at Oxford. Discussion on Intermediate Education. (Contained in the issues of the "School Government Chronicle" for July 22, 29, Aug. 5, 12, 19, 26, of 1922).

London: School Government Publishing Co., 1922.

Balfour (Sir Graham).

The educational systems of Great Britain and Ireland. Second edition. Oxford : Clarendon Press, 1903.

Binns (H, B.)

A Century of Education, being the Centenary History of the British and Foreign School Society, 1808-1908. London : J. M. Dent & Co., 1908.

Birchenough (C.)

History of Elementary Education in England and Wales. 2nd Edition. London: University Tutorial Press, 1925.

Brockington (W. A.)

Paper on "Re-organisation of Schools to meet the requirements of the Education Act, 1921." Read at a meeting of Local Education Committees at Scarborough, April 22, 1924.

De Montmorency (Professor J. E. G.)

State intervention in English education. Cambridge: University Press, 1902.

Dobbs (A. E.)

Education and Social Movements, 1700-1856. (See Part II. Ch. IV. Elementary Education). London: Longmans, Green & Co., 1919.

Dycha (W.)

Higher grade schools, their history. The nature, causes and limitations of their present efficiency, with some remarks on the attitude recently adopted towards them by the Education Department and the Science and Art Department. Halifax: Womersley, 1899, Education Reform Council.

Education Reform. Being the Report of the Education Reform Council. (Teachers' Guild of Great Britain and Ireland). (Report of Committee E.—Elementary and Further Education). London: P. S. King & Son, 1917.

Federal Council of Lancashire and Cheshire Teachers' Associations.

Resolutions consequent on the Report of a Committee appointed to consider the relation between Central and Secondary Schools. April 3rd, 1925. Cheetham : Manchester, 1925.

Forsyth (D.)

The Higher Grade School Movement. (Article in the Teacher's Encyclopaedia, edited by A. P. Laurie, Vol. V). London : Caxton Publishing Co., 1912.

Gregory (R.) Dean of St. Pauls.

Elementary Education. Its rise and progress in England. London: National Society, 1895.

Hey (Spurley).

The Central School. Manchester: Co-operative Wholesale Society, 1924. [See also articles in the "School Government Chronicle" on November 1, 8, and 29, 1924, commenting on the above pamphlet.]

Central and similar Schools. (Article in the Journal of Education, March, 1926). London: W. Rice, 3, Ludgate Broadway, E.C.4.

Holman (H.)

English National Education. A sketch of the rise of public elementary schools in England. London: Blackie & Son, 1898. Incorporated Association of Headmasters.

Resolutions of the Council of the Association on the relations between Central and Secondary Schools. (Times Educational Supplement, 28 June, 1924, p. 285).

Jones (G. Edwardes) and J. C. G. Sykes.

The Law of Public Education in England and Wales. A practical guide to its administration. Second Edition. London: Rivingtons, 1904.

Kay-Shuttleworth (Sir James P.)

Four periods of public Education as reviewed in 1832-39-46-62. London: Longman, Green, 1862.

Labour Party.

Boys and Girls. Their education and employment. Report and Resolution presented by the Standing Joint Committee of Industrial Women's Organisations to the National Conference of Labour Women held in London, May 13 and 14, 1924. (Discussion on Central Schools, etc.). London: Offices of the Labour Party, 1924. The Education Act, 1921, with other acts relating to education and notes on the statutory provisions. First twenty editions by Sir Hugh Owen. 21st and 22nd Editions by Sir John Lithiby. 22nd Edition. London: C. Knight & Co., 1923.

Manchester Conference of School Boards.

Manchester Conference of School Boards. Secondary and Higher Education. March, 1893. Return relating to Higher Grade Schools and Technical Instruction. Manchester, 1893. Morris (H.)

The Village College. Being a Memorandum on the provision of educational and social facilities for the countryside, with special references to Cambridgeshire. Cambridge: University Press, 1924.

National Association for the Promotion of Technical and Secondary Education.

Technical Education in England and Wales. A report on the existing facilities for technical and scientific instruction in England and Wales. (Contains information about Higher Elementary Schools and Day Technical Schools.) London: Co-operative Printing Society, 1889.

National Union of Teachers.

Educational Reconstruction—Supplementary Courses (Higher Tops) and Central Schools. London: Offices of the National Union of Teachers. [1919.]

Newton (A. W.)

The English Elementary School. (pp. 165-175. Central Schools). London : Longmans, Green & Co., 1919.

Quich (J.)

 Central Schools and their part in the preparation of Scholars for Higher Technical and Junior Technical Schools (Articles in "Education" Aug. 18 and Sept. 1, 1922). London: Councils and Education Press, 1922.

Sadler (Sir M. E.)

Report on Secondary and Higher Education in Derbyshire. (Administrative County of Derby Education Committee) (pp. 12-21. Higher Grade Elementary Schools.) Derby: Bemrose & Sons, 1905.

Report on Secondary and Higher Education in Essex. (pp. 62 ff. The need for Higher Departments to public elementary schools and for higher elementary schools.) Chelmsford: Essex Education Committee Offices, 1906.

Our Public Elementary Schools. London: Thornton Butterworth, 1926. [Contains specimen curricula for higher standards of Elementary Schools.]

Lithiby (Sir John).

۰.

School Board Chronicle.

Article on "Higher Education under School Boards and in the Public Elementary School System generally," contained in the issue of October 29, 1898. London: School Government Publishing Co.

Scott (R. P.) (Editor).

What is Secondary Education? And other short essays. [The relations of secondary to elementary education. Papers by Sir Joshua Fitch, H. L. Withers and Mary W. Page.] London; Rivingtons, 1899.

Scottish Education Reform Committee.

Reform in Scottish Education, being the Report of the Scottish Education Reform Committee. (p. 39. The intermediate school.) Edinburgh : Scottish Education Reform Committee, 34, North Bridge, 1917.

Smith (F.)

The Life and Work of Sir James Kay-Shuttleworth, London: John Murray, 1923.

Taumey (R. H.)

Secondary Education for all. A policy for labour. Edited for the Education Advisory Committee of the Labour Party by R. H. Tawney. London: The Labour Party, 1922.

Taylor (R. L.)

The present position of Higher Grade Schools and their relation to Technical Schools. Presidential Address delivered at the Annual Meeting of the Association of Headmasters of Higher Grade Schools and Schools of Science, Nov. 4th, 1898 Manchester : "Guardian" Printing Works, 1898.

Thornton (John).

Higher Grade Schools and their position: with some remarks on organised Science Schools, under the new rules. Presidential Address delivered at the Annual Meeting of the Association of Headmasters of Higher Grade Schools and Schools of Science, Nov. 20, 1896. Bolton: "Evening News" Office, 1896.

Yoxall (Sir J. H.)

Secondary Education. (Ch. VI. The connection between primary and secondary schools). London: A. Brown & Sons, 1898.

(B.) Trade Schools.

Association of Technical Institutions.

Reports, various. To be obtained from the Hon. Secretary of the Association, Loughborough College, Leicestershire.

Trade Schools and Trade Preparatory Schools. A Report prepared by the Council of the Association of Technical Institutions. 1909.

Discussion of above Report. (Contained in Report of Proceedings at the Glasgow Summer Meeting, June 23 and 24, 1909.)

Trade School Inquiry. A further Report issued by the Council of the Association of Technical Institutions. June, 1910.

Discussion of above Report. (Contained in Report of Proceedings at the Manchester Summer Meeting, July, 1910.)

Paper read at the Summer Meeting, July, 1913, on "What type of School should be established for Boys who propose to enter into Commercial and Industrial Pursuits at 15 or 16 years of age. By Principal Luxton. 1913.

Paper read at the Annual General Meeting, March, 1921, on Junior Technical Schools: their status and position by C T. Millis. 1921.

Paper read at the Summer Meeting held at Brighton, July 1924, on a Junior Technical School for the Woodwork and Furniture Trades. By Shadrach Hicks. 1924.

Paper read at the Annual General Meeting, February and March, 1924, on Technical Education for the Building Trades. By A. R. Sage. (L.C.C. School of Building.) 1924.

Blair (Sir Robert).

• Trade Schools. (Paper in the Report of the Imperial Education Conference, 1911.) London : H.M. Stationery Office, 1911.

Board of Education.

[For a short account of the London Trade Schools, see Section I B above. Report of the Board of Education, 1913-14, pp. 112-14.]

Davies (E. Salter).

Technical Institutes and Schools and Junior Technical Schools. (Article in Journal of Education, September, 1926.) London: W. Rice, 3, Ludgate Broadway, 1926.

Industrial Training, with special reference to the conditions prevailing in London. (Chap. XII. The school and the shop; Chap. XIII. Trade and Technical Schools in London.) London; P. S. King & Son, 1914.

Dearle (N. B.)

322 APPENDICES TO REPORT ON THE EDUCATION OF THE ADOLESCENT

Durham (Miss F. H.)

Girls' Trade Schools and Technical Classes for Women, (Article in the Teacher's Encyclopaedia, edited by A. P. Laurie. 'Vol. V.) London: Caxton Publishing Co., 1912.

London County Council Education Committee.

Report on Eight Years of Technical Education and Continuation Schools. December, 1912. [Sec. XVI. Trade Schools.] London: P. S. King & Son, 1912.

Millis (C. T.)

Problems connected with Trade Schools. An Address given at Cardiff, 30th March, 1909. London: South London Printing Works, 1909.

Technical Education, its development and aims. (Chapter VII. Junior Technical Schools). London : Edward Arnold, 1925.

INDEX,

						PAGES
ACADEMIC BIAS						
ACCOMMODATION. Provisio	m of					56, 69, 91
See also BUILDINGS		••		• •	••	,,
ACCURACY				••		104
Аста.—						
Peel's Factory Act. 180	2					
Grammar Schools Act.	1840		• •			269
Elementary Education	Act.	1870		14.	18.	38. 140. 263
Education (Scotland) A	ct. 18	372				38
Elementary Education	Act.	1876				
Elementary Education	Act.	1880				17. 141
Intermediate Education	Act	(Wales).	1889			20, 269
Technical Instruction A	ct. 1/	889				20, 157, 160
Elementary Education	Act.	1891				23
Technical Instruction A	ct. 1	891				157, 160
Board of Education Ac	t. 189	9				25. 157. 267
Elementary Education	Áct.	1900				
Education Act, 1902			. 26.	27, 15	6-7.	160-1, 265
Education (Administrat	tive F	rovision	s) Act.	1907	• •	147, 159
Education Act. 1918		33. 41. 5	0. 75.	141-2.	156	-7. 161. 164
Education (Scotland) A	ct. 19	918				39
Education Act, 1921			48, 50-	3, 75,	142,	147, 160-3,
			100		000	4 007 070
			100-0	5, 169,	200-	-4,207,270
Administrative			100-0	5, 169,	203-	-4,207,270
Administrative	• •			5, 169, 	263-	-4, 267, 270
ADMINISTRATIVE Action Problems	••	••		 		-4, 267, 270 72 153
ADMINISTRATIVE.— Action Problems Recommendations	•••	••		5, 169, 		-4, 267, 270 72 153 164-5
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.—	•••	•••		5, 169, 		-4, 267, 270 72 153 164–5
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc	 ent P	 ?opulation	 	5, 169, 		-4, 267, 270 72 153 164-5 46, 51
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide	ent P	 opulation suitable c	105-0 n oducati	on dur	263-	-4, 267, 270 72 153 164–5 46, 51 4
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter	ent P for s	 opulation suitable on and pa	n n oducati ssing t	on dur	263- ing	-4, 267, 270 72 153 164-5 46, 51 4 3, 71, 76, 94
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during	ent P for s ing o	opulation suitable on and pa	n oducati ssing t	on dur brough	263- ing 36	-4, 267, 270
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headted	ent P for s ing of	opulation suitable e n and pa	n oducati ssing t	on dur hrough	263-	-4, 267, 270 72 153 164-5 46, 51 4 3, 71, 76, 94 146, 149 91
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headted Transition from childho	ent P for s ing of	Copulation suitable on and pa	n oducati ssing t	on dur hrough	263- ing 30	-4, 267, 270 72 153 164-5 46, 51 4 3, 71, 76, 94 146, 149 91 75
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headtes Transition from childho Views of witnesses on e	ent P for s ing of achen od in duca	Copulation suitable on and pa s during sto tion duri	105-4	on dur hrough	263-	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headtes Transition from childho Views of witnesses on e ADVANCED DIVISIONS (Sci	ent P for s ing of achen od in ducat	Copulation suitable on and pa s during sto tion duri: d)	n oducati ssing t	on dur hrough	263-	-4, 267, 270 72 153 164-5 46, 51 4 3, 71, 76, 94 146, 149 91 75 72-3 40
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headtes Transition from childho Views of witnesses on e ADVANCED DIVISIONS (Sc ADVANCED INSTRUCTION,	ent P of for s ing of achers od in ducat otland Court	Copulation suitable on and pa s during sto tion duri: d) ses of.—	n oducati ssing t	on dur hrough	263-	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headtes Transition from childho Views of witnesses on e ADVANCED DIVISIONS (Sc ADVANCED INSTRUCTION, Accommodation for	ent P of for s ing of achers od in ducat otland Court	Copulation suitable of n and pa s during sto tion duri d) ses of.—	n oducati ssing t	on dur brough	263-	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headtes Transition from childho Views of witnesses on e ADVANCED DIVISIONS (Sc ADVANCED INSTRUCTION, Accommodation for Development of	ent P for s ing of achers od in ducat otland Cour	Copulation suitable of n and pa s during sto tion duri d) ses of.—	n oducati ssing t	on dur brough	263- ing 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headtes Transition from childho Views of witnesses on e ADVANCED DIVISIONS (Sc ADVANCED INSTRUCTION, Accommodation for Development of Provision for in Educat	ent P for s ing of achen od in ducat otlan Cour	opulation mitable on and pa s during sto tion duri d) ses of.— i i	n oducati ssing t	on dur hrough	263- ing 36	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headtes Transition from childho Views of witnesses on e ADVANCED DIVISIONS (Sc ADVANCED INSTRUCTION, Accommodation for Development of Provision for in Educat Organisation and Provi	ent P ofor s ing of chers oducat otland Court inn A sion	opulation suitable on and pa s during sto tion during d) ses of.— Act, 1918 of	n bducati ssing t	s, 169, on dur hrough	203- ing 36 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
ADMINISTRATIVE.— Action Problems Recommendations ADOLESCENCE.— Distribution of Adolesc Early efforts to provide Needs of children enter Protection during Supervision by Headtes Transition from childho Views of witnesses on e ADVANCED DIVISIONS (Sc ADVANCED INSTRUCTION, Accommodation for Development of Provision for in Educat Organisation and Provi	ent P of for s ing of achers od in ducat otland Court ing ision f ision	opulation suitable en and pa s during sto tion durit d) ses of.— Act, 1918 of	n bducati ssing t	on dur hrough	203- ing 3 36	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

nge.—						PA	GES
Mental and Chronolo	prical	••					71
Of entry to Junior I	echnical	School	s				66
AGRICULTURAL COLLEG	ES		·			130.	153
AGRICULTURALISTS. Vie	ews of						116
AGRICULTURE				1	09.119	121	125
ALGEBRA						215	217
APPARATUS AND FOUL	MENT	••	••	••	••	210;	# **
Encouragement to p	upils in d	levisin	σ.			218	223
General	-p		6 · ·		**	210,	131
Geographical		••	••	* *	• •	- 20	15-6
Historical	••	••	••	* •	* •	• • 44	903
See also FOILIBAR	A here Tu	•• •••	••• FT18	••	* •	* •	200
ADDITED ADT See Dr		FFARA			•		
A DITUNETIC							
See also Martines	** ~*			•			010
A DYOLD MATHEMA	iics	••	••	••	••	•••	210
ARNOLD, Matulew	••	••	••	••	••	/	, 10
ART							000
Caubs, School		••	• •	• •	• •		Z28
Courses in appreciaci	OIL OI	••	۰.	••	* •	114,	ZZ9
Schools		• •	* *	* *	••	* •	128
ARTISTIC INDUSTRIES	• • • •	• -	••		••	• •	69
ASSOCIATION OF ASSIST	ANT MIS	TRESSI	is	* * *	• •	••	74
ASSOCIATION OF DIREC	TORS ANI	D SECR	ETARII	es of E	DUCATI	ON	~-
· · ·	•					73, 84	, 95
Association of Head	MISTRESS.	ËS	• •	• •		•••	.74
Association of MUNIC	IPAL COF	PORAT	IONS	••	8	1, 92,	163
Account STON OF TRACE	TODC 711						
ASSOCIATION OF TEACH	LEKS IN I	ECHNI	CAL IN	STITUT	IONS	••	66
Association of Teach	IERS IN I	ECHNI HYSIC	cal In al Tr <i>i</i>	STITUT MINING	lons ••	••	66 189
Association of Teach Association of Teach Association of Techn	iers of F fical Ins	ECHNI HYSIC TITUTI	cal In al Tr <i>i</i> ons	STITUT MINING	10NS ••• ••	• • • • • •	66 189 66
Association of Teach Association of Teach Association of Techn Astronomy	iers of F fical Ins	ECHNI HYSIC TITUTI	CAL IN AL TRA ONS	STITUT MINING	10NS ••• ••	• • • • • •	66 189 66 222
Association of Teach Association of Teach Association of Techn Astronomy	IERS IN I IERS OF F IICAL INS	ECHNI HYSIC TITUTI	CAL IN AL TRA ONS	STITUT NINING	lons 	* * * * * * * *	66 189 66 222 205
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.—	IERS IN I IERS OF H IICAL INS	ECHNI HYSIC TITUTI	CAL IN AL TRA ONS	STITUT MINING	lons 	* * * * * * * *	66 189 66 222 205
Association of Teach Association of Teach Astronomy Atlases Attainment Advance in	IERS IN I IERS OF H IICAL INS	ECHNI HYSIC TITUTI	cal In al Tr/ ons	STITUT MINING	ions	** ** ** **	66 189 66 222 205 106
Association of Teach Association of Teach Astronomy Atlases Attainment Advance in Consolidation of	LERS IN I LERS OF H LICAL INS	ECHNI HYSIC TITUTI	CAL IN AL TRA ONS	STITUT MINING	IONS ••• ••• ••• •••	* * * * * * * *	66 189 66 222 205 106 124
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a	it age of	ECHNI HYSIC TITUTI	CAL IN AL TRI ONS	STITUT MINING 	IONS 	* * * * * * * * * * * *	66 189 66 222 205 106 124 74
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a	t age of s'" hall-i	ECHNI HYSIC TITUTI 11 or 1 nark "	CAL IN AL TRA ONS	STITUT: MINING 	LONS 	· · · · · · · · ·	66 189 66 222 205 106 124 74 151
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci	it age of s'" hall-i	ECHNI HYSIC TITUTI 11 or 1 nark " E.	CAL IN AL TRA ONS		IONS 	· · · · · · · · · · · · ·	66 189 66 222 205 106 124 74 151
Association of Teach Association of Teach Association of Teach Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwe	it age of s' hall-i Hool Lif- ealth of	ECHNI HYSIC TITUTI 11 or 1 nark " E. —See V	CAL IN AL TRA ONS 	STITUT: MINING 	IONS	· · · · · · · · · · · · ·	66 189 66 222 205 106 124 74 151
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonw Austria	it age of s " hall-1 HOOL LIF.	ECHNI PHYSIC TITUTI 	CAL IN AL TRA ONS 12 of VICTOR	STITUT: LINING IA.		··· ··· ··· ··· ···	66 189 66 222 205 106 124 74 151 295
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwo Austria	it age of s " hall-1 HOOL LIF. calth of	ECHNI PHYSIC TITUTI 	CAL IN AL TRA ONS 12 of Victor	STITUT. IINING IA.	IONS	38,	66 189 66 222 205 106 124 74 151 295
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwe Austria Backward Children	it age of s" hall-i Hool Lif- ealth of-	ECHNI PHYSIC TITUTI 11 or 1 nark " E. —See 1	CAL IN AL TRA ONS [2 of VICTOR: D BACE	STITUT. MINING	IONS	 	66 189 66 222 205 106 124 74 151 295
Association of Teach Association of Teach Association of Teach Astronomy Atlases Attainment Advance in Consolidation of Differences marked a Leaving Certificate a AttendanceSee Sci Australia, Commonwe Australa Backward Children Belgium	t age of s' hall-i hool Life ealth of	ECHNI PHYSIC TITUTI 11 of 1 nark " E. -See V	CAL IN AL TRI ONS 	STITUT.	IONS		66 189 66 222 205 106 124 74 151 295
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment Advance in Consolidation of Differences marked a Leaving Certificate a AttendanceSee Sci Australia, Commonwa Austria Backward Children Belgium Courses in Rural Stu	t age of s'" hall-1 HOOL LIF ealth of -See SLO dies in	ECHNI PHYSIC TITUTI 11 or 1 nark " E. —See V	CAL IN AL TRA ONS 12 of 7ICTOR	STITUT. LINING 	IONS	38, EN.	66 189 66 222 205 106 124 74 151 295
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwa Austria Backward Children Belgium.— Courses in Rural Stu Post-Primary Educa	t age of s'" hall-r HOOL LIF ealth of -See SLO dies in tion in	ECHNI PHYSIC TITUTI 11 or 1 nark " E. —See V	CAL IN AL TRA ONS	IA.	IONS	38, EN.	66 189 66 222 205 106 124 74 151 295 130 297
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwa Austria Backward Children Belgium.— Courses in Rural Stu Post-Primary Educa Bellaire, Rev. H. W.	t age of s'" hall-r HOOL LIF ealth of -See SLO dies in tion in	ECHNI PHYSIC TITUTI 11 or 1 nark " E. —See V	CAL IN AL TRA ONS	IA.	Childr	38, 	666 189 666 2222 205 106 124 74 151 295 130 297 8–9
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwa Austria Backward Children Belgium.— Courses in Rural Stu Post-Primary Educa Bellairs, Rev. H. W. Bent	t age of s'" hall-i HOOL LIF ealth of -See Sic dies in tion in	ECHNI PHYSIC TITUTI 11 or 1 nark " E. -See Y	CAL IN AL TRA ONS	STITUT INING 	Childr	38, 	666 189 666 2222 205 106 124 74 151 295 130 297 8–9 106
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwa Austria Backward Children Belgium.— Courses in Rural Stu Post-Primary Educa Bellairs, Rev. H. W. Bent Lins.—	t age of s'" hall-i Hool Lif- ealth of -See Sic dies in tion in	ECHNI PHYSIC TITUTI 11 or 1 nark " E. -See V	CAL IN AL TRA ONS VICTOR	STITUT MINING 	Childr	38, EN.	666 1899 666 2222 205 1066 124 74 151 295 295 1300 297 8–9 106
Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwa Austria Backward Children Belgium.— Courses in Rural Stu Post-Primary Educa Bellairs, Rev. H. W. Bent Definition of Practice	t age of s'" hall-i iool Lif ealth of	ECHNI PHYSIC TITUTI 11 or 1 nark " E. —See V 	CAL IN AL TRA ONS 12 of Victor D Bace	STITUT MINING 	CHILDR	38, EN.	666 189 666 222 205 106 124 74 151 151 295 130 297 8–9 106 121
Association of Teach Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwa Austria Backward Children Belgium.— Courses in Rural Stu Post-Primary Educa Bellairs, Rev. H. W. Bent Definition of Practica Double	t age of s'" hall-i Hool Lif ealth of -See Sic dies in tion in	ECHNI PHYSIC TITUTI Il or 1 nark " E. —See V 	CAL IN AL TRA ONS (2 of VICTOR D BACH	STITUT: MINING 	Childr	38, EN.	666 189 666 222 205 106 124 74 151 295 130 297 8–9 106 121 114
Association of Teach Association of Teach Association of Teach Association of Techn Astronomy Atlases Attainment.— Advance in Consolidation of Differences marked a Leaving Certificate a Attendance.—See Sci Australia, Commonwa Austria Backward Children Belgium.— Courses in Rural Stu Post-Primary Educa Bellairs, Rev. H. W. Bent Definition of Practice Double Existing practice in :	t age of s'" hall-i Hool Lif ealth of -See Sic dies in tion in	ECHNI PHYSIC TITUTI 11 or 1 nark " E. —See 1	CAL IN AL TRA ONS (2 of VICTOR D BACH	STITUT	IONS	38, EN.	666 189 666 222 205 106 124 151 151 295 130 297 8–9 106 121 114 2–4

.

BIAS-cont.							PA	GES
Introduction of	••	<i>•</i> •		• •	86.	114, 117,	119,	121
Witnesses views	upon		• •	••	••	• •	1	14-9
See also Comm	ERCIAL	BIAS,	INDUS	STRIAL B	IAS	and RUR	AL	
BIAS.				*				
BIOLOGY					••		222,	224
BIRTH RATE							50.	144
BLAIR. Sir Robert								155
BOARD OF EDUCAT	ION			- •	- •		••	
Administrative I	Division	is of					155.	158
Enquiries in	connect	tion v	vith	Courses	of	Advan	ced	
Instruction							48	285
Establishment of	ť.					••		25
Initiation of Exa	ະ ເຫາ່າກ່າວ	Boand	le hv	••	••	••	* •	153
Inspectorate		,	~ - ;		* •	••	••	158
Ministry of Agrid	culture	and	••	• •	* *	* *	* *	130
Statistics of	curcure	unit.	••	••	••	• *	* •	47
BOOKKEEDING	•••	V	••	••	••		12 9	110
Booke	••	••	••	••	••	902	207	036
See alag Tappa	**	 			••	203,	207,	200
Donotious une II.	IRILS, d	au Ir.	AT DU	UKŞ.		50	157	100
DORUUGHS AND UN	(BAN DI	STRICT	5	• •	* *	30,	1944	100
DOIANY	••	• •	••	• *		* *	*•	224
DRADFORD			* *	**	* =	* *	<u>, '</u> ,	00
BRITISH AND FORE	UGN SC	HOOL 3	OCIET	Y	* *		Z, 5,	277
BRITISH BEE KEEL	PERS'A	SSOCIA	TION		* *	* =	* *	130
BRITISH HISTORY,-	388 H	LISTORY	ζ.					
BROADCASTING	* *	* *	••		••		•••	242
BUILDING TRADES	**	••	••	••		• •	66,	120
BUILDINGS		•						
Availability out	of Scho	iol Ho	113	• •	••	* *	••	247
 Cost and Simplif 	fication	of			••	••	••	91
Extension of Sch	1001 Lif	e and		• •	• •	••	144,	148
Necessity of Add	litional	••	••	••		• •	••	91
The Art Room				• •	• •		••	230
The Geography	Room	* •			• •			205
The Modern For	eign Ls	nguag	e Rooi	m	¥ •	* *		214
The Practical In	structio	n Roo	ms		4.3	103,	131,	231
The Science Lab	oratory	,			••			131
BÖRGERSCHULR	See PRI	JSSIA.						
CABINET MAKING		••					69,	120
CAMBRIDGE,	versity	of			:.		••	153
CANADA. Dominion	1 of.—S	A ONT	TARIO.		••			
CARNARVONSHIRE						51	. 58.	163
CENTRAL CLASSES	••	••	••	••	••	•••		
Sat also CENT	RAL SCI	1001				!	3-4	264
CENTRAL DEPARTM			••	••	• •			80
CENTRAL SCHOOLS		* *	••	• •	* •	* *	••	~~
Alleged affect on	Sacon	lary S	choole				81	162
Bias in		un an	54 A 19 A 19	••	•••	. 67-	.8.11	2.9
Development of	* •		••	• •	••		- v a a a 	44
Secondaries of	• •	••	••	• •	••	••	••	**

CENTRAL SCHOOLS-coni.					P.	AGES
For Girls		• •			••	112
In London and Manchester		• •	• •		31-2,	211
In Seaboard Towns	••			• •		113
 Non-Selective, Existing type 	xes		••		53	4, 57
Note on	••	••			••	264
 Provision of by Local Educ 	ation Au	thoritie	es		••	55
Selective, Existing Types	••	••		••	53-4	1 , 57
See also Non-Selective Ci	entral S	SCHOOLS	s and	SELECT	TIVE	
Central Schools.						
CERTIFICATED TEACHERS	• •	• •			* •	126
CERTIFICATES, Intermediate (Scottish)	• •	• •			39
See also Leaving Certification	ATES.					
CHARITY COMMISSION	• •	••	. .		25,	157
CHEMICAL and SOAP MANUFAC	TURERS	••				115
CHEMISTRY	••			••	118,	225
CHOLMELEY, Mr. R. F	••	••	••	••	73	3, 78
CHORAL SINGING			••			239
CHRESTOMATIC SCHEME			••	••		5
CINEMATOGRAPH	••	• •	••	• •	••	207
CIRCULARS, of Board of Educa	ation.—					
1350 (Organisation of Public	c Elemer	itary So	hools)			75
1353 (Infant Care and Mana	agement)	* *	••		۰.	225
1365 (Rural Education)	· · · ·			••	129,	237
CITIZENSHIP and CIVICS	••	* *	••		••	196
CLASSES PRIMAIRES See FRA	NCE.					
COCKERTON RULING, 1900, and	d Judga	ents, 1	901	••	26,	274
See also Higher Elementa	ry Scho	OLS.				
COCOA and CHOCOLATE MANUE	FACTURE	RS Í	• •		••	115
College of Preceptors			••	••	150,	152
Commerce			••	110	, 121,	125
Commercial Bias		••	••	68, J	12-3,	21 <u>0</u>
Commercial School		••		••	6,	278
COMMISSIONS AND COMMITTEES	s, Етс., I	Reports	of Of	ficial.	• •	
Royal Commission of 1858–6	51	••	••	* *		10
Schools Inquiry Commission	, 1864–6	8	• •	12, 1	3, 24,	267
Royal Commission on Techn	ical Inst	ruction	, 1882	-84	••	19
The "Cross "Commission, 1	1886-88		• •	1	7, 21,	267
 Royal Commission on Secon 	dary Ed	ucation	, 1894	-95	23	-25
Consultative Committee on 1	Higher E	lementa	ary Sci	hools, 1	906	29
Consultative Committee o	n Atter	dance	Com	oulsory	or	
otkerwise at Continuation	Schools,	1909		••	••	41
Poor Law Commission, 1905	-09	••	• •	• •	41,	143
Departmental Committee or	1 Juvenil	e Educ	ation	in rela	tion	
to Employment after the	War, 191	7	••	41	, 141,	143
Ministry of Reconstruction-	-Employ	yment	durin	g the N	War	
and after, 1918	••	•••		••	41,	143
Departmental Committee or	n Schola	rships a	und F	ree Pla	ces,	
1920	• •	• •	••		* •	7 9
. Consultative Committee's R	eport on	Psych	ologica	al Test	s of	

•

			_	_			På	GES
COMPETITION, between	Seconda	гу	and o	ther t	ypes c	of Po	st-	
Primary School		••	• •	•	• •	•		81
COMPLETION OF COURSE					• •	•	••	82
COMPOSITION				•				
English	* *	• •	• •			•		192
French (or other Mod	ern Fore	ign	Langu	lage)		•	••	213
CONSTRUCTIVE INTERES	TS	• •	••				• •	108
CONTINUATION SCHOOL	• •		• •			•	• •	270
CONTINUED EDUCATION	••				. 111,	114,	149,	237
COOKERY ,.	••					•	118,	235
CO-OPERATION								
Between Board of Ed	ucation a	ınd	Minist	ry of J	Agricul	ture	••	130
Between Local Educa	tion Aut	hor	ities	·		•	16	51-4
Between Local Ed	ucation	Au	ithoriti	ies ar	id Vo	lunta	агу	
Organisations	* •	••	• •			•	•••	170
Between Teachers and	d Emplo	ven	<u>ا</u>			•	• •	116
CO-OPERATIVE ACTIVITI	ES .	•				•		231
CORPORATE ACTIVITIES							125.	246
COUNTIES					50.	143.	157.	160
COUNTY BOROUGHS					50	. 56.	157.	160
COURSES OF ADVANCED	INSTRUC	тю	N			, ,		
In New Post-primary	Schools					. 8	36-7.	125
Initiation by Head T	eachers o	f						125
Period required for se	tisfactor	v			•	49.	140.	145
Witnesses' views prov	n	J						110
See also CURRICULI	nw and I	205	r-Prim	ARV S	CHOOLS		••	
CRARTS						110	229	233
CRAFTSMANSHIP	••		••			65	128	234
CRARTSMEN -See TRAC	uvbe	••	••	• •		φ υ ;		201
CRAMMING								137
	* =		• •		• •	•	••	10,
Development of a " F	Realistic '					85	101	118
Effect of Leaving Ev	ominatio		• • •	• •	•	ω,	87	150
In Junior Commercia	1 Schoole	u Vi	4	• •	• •	•	07,	68
In Junior Technical G	a Serious	••	••	• •	• •	•		60
To now Dost Drimon	Saboola	••	••	••	07_A	102	125	188
In Spottish Advanced		•••	••		04-1,	102,	120,	40
Local Colouring in	1 101 4 15101		••	• •		•	107	110
Oversending in	4 •	• :	• •	• •		•	1013	104
Specialization in	••	• •	• •	• •	• •	•	100	10
Spousisations on Teach	ina Vari	• •	Chiaa		• •	•	100	947
Junification of	ang vurie	105	Suolec		•		106	110
	* *	••	• •	• •		•	1041	110
CZECHOSLUVARIA	••	••	••		• •	•	••	2 30
DAVIDO ME SALTON					79	79	156	157
DAMPS Sir Warman	• •	••	••	• •		, .0,	1001	240
DAMEON ME & T	••	••	••	• •	• • •	•	••	975
Daw Songora IV-	• • • • •		· ·	• •	• •	•	••	41J 917
DAY SUBOULS, USE OF IC	or r venu	18 2	ALIOOIS	•	• •	•	••	<u></u>

DAY TECHNICAL CLASSES 33, 279 DAY TRADE SCHOOLS 32, 65-6, 79, 85, 272, 279 DEBATES 191 DEGREES, POSSESSION OF by Teachers 127 DESIGN 229 DEVONPORT 113 DIALECT 113 DISTRIBUTING FIRMS 113 DISTRIBUTION OF ADOLESCENT POPULATION 46 DOCKYARDS, ROYAL 113 DOMESTIC COURSES FOR GIRLS.— 113 In Day Technical Classes 279 In Urban Central Schools 113 Teachers in 279 DORSTIC ECONOMY SCHOOL 279 DORSETSHIRE 279 DUAL CONTROL 152 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>P</th><th>AGES</th></t<>								P	AGES
DAY TRADE SCHOOLS	DAY TECHNICAL C	LASSE	5	• •	• •	* •		33.	279
DEBATES	DAY TRADE SCHOOL	OLS	• •	••	32	, 65-6,	79, 85,	272.	279
DEGREES, Possession of by Teachers 127 DESIGN 229 DEVONPORT 113 DIALECT 113 DISTRIBUTING FIRMS 116 DISTRIBUTING FIRMS 116 DOCKYARDS, ROYAL 113 DOMESTIC COURSES FOR GIRLS.— 113 In Day Technical Classes 113 Domestric Courses FOR GIRLS.— 113 In Urban Central Schools 113 Teachers in 127 OBMESTIC ECONOMY SCHOOL 124 DOMESTIC ECONOMY SCHOOL 124 DOMESTIC WORK 127 DRAMATIC WORK 120 DRAWING AND APPLIED ART 222, 226 DRESS MAKING 120 DUAL CONTROL 120 DUAL CONTROL 120 DURHAM COUNTY 152 ÉCOLES PRIMAIRES SUPÉRIEURES.—See FRANCE. ECONOMIC CONDITIONS, Effect on School Life of 50–1, 82 ECONOMIC HISTORY 120 DUCATION.— 152 Of the Adolescent in Foreign Countries 37, 295–313 Progress of 70, 76, 94, 96, 140 Stages in <td>DEBATES</td> <td></td> <td>••</td> <td>••</td> <td>••</td> <td>••</td> <td></td> <td></td> <td>191</td>	DEBATES		••	••	••	••			191
DESIGN	DEGREES, Possessi	ion of	by Tea	chers					127
DEVONPORT	DESIGN	••	· · ·	••					229
DIALECT	DEVONPORT				• •				113
DISTRIBUTING FIRMS	DIALECT	••	••	••	••				191
DISTRIBUTION OF ADOLESCENT POPULATION	DISTRIBUTING FIR	MS		••					116
DOCKYARDS, ROYAL <td>DISTRIBUTION OF</td> <td>Adole</td> <td>SCENT</td> <td>POPUL</td> <td>ATION</td> <td></td> <td></td> <td></td> <td>46</td>	DISTRIBUTION OF	Adole	SCENT	POPUL	ATION				46
DOMESTIC COURSES FOR GIRLS.— In Day Technical Classes	DOCKYARDS, ROYA	AL		••	••				113
In Day Technical Classes	DOMESTIC COURSE	S FOR	GIRLS.				•••		
In Urban Central Schools	In Day Technica	al Clas	ses					÷.	279
Teachers in	In Urban Centra	al Scho	ols						113
DOMESTIC ECONOMY SCHOOL	Teachers in								124
DORSETSHIRE	DOMESTIC ECONOM	IY SCH	IOOL						279
DRAMATIC WORK	DORSETSHIRE								62
DRAWING AND APPLIED ART	DRAMATIC WORK								191
DRESS MAKING	DRAWING AND API	PLIED	ART					222	226
DUAL CONTROL	DRESS MAKING							,	120
DURHAM COUNTY	DUAL CONTROL							156.	166
EAST MIDLANDS EDUCATIONAL UNION 152 ÉCOLES PRIMAIRES SUPÉRIEURESSee FRANCE. ECONOMIC CONDITIONS, Effect on School Life of 50-1, 82 ECONOMIC HISTORY 1100000000000000000000000000000000000	DURHAN COUNTY	••	••	••	•••	••	••	61	275
EAST MIDLANDS EDUCATIONAL UNION 152 ÉCOLES PRIMAIRES SUPÉRIEURESSee FRANCE. ECONOMIC CONDITIONS, Effect on School Life of 50-1, 82 ECONOMIC HISTORY 201 EDUCATION 201 Of the Adolescent in Foreign Countries 37, 295-313 Progress of 42, 142 Regrading of 70, 76, 94, 96, 140 Stages in 36, 72, 74, 76, 92, 97-8 See also ELEMENTARY EDUCATION, HIGHER EDUCATION, DOCT PRIMARY EDUCATION, EDUCATION, DOCT		••	••	••	••	••	••	V.,	2.0
EAST MIDLANDS EDUCATIONAL UNION 152 ÉCOLES PRIMAIRES SUPÉRIEURESSee FRANCE. ECONOMIC CONDITIONS, Effect on School Life of 50-1, 82 ECONOMIC HISTORY 201 EDUCATION 06 the Adolescent in Foreign Countries 37, 295-313 Progress of 70, 76, 94, 96, 140 Stages in 36, 72, 74, 76, 92, 97-8 See also ELEMENTARY EDUCATION, HIGHER EDUCATION, DOCT PRUMARY EDUCATION, EDUCATION, DOCT									
EAST MIDLANDS EDUCATIONAL UNION 152 ÉCOLES PRIMAIRES SUPÉRIEURESSee FRANCE. ECONOMIC CONDITIONS, Effect on School Life of 50-1, 82 ECONOMIC HISTORY 201 EDUCATION 201 Of the Adolescent in Foreign Countries 37, 295-313 Progress of 70, 76, 94, 96, 140 Stages in 36, 72, 74, 76, 92, 97-8 See also ELEMENTARY EDUCATION, HIGHER EDUCATION, DOCT PRUMARY EDUCATION, EDUCATION, DOCT								•	
Ecoles Primaires Supérieures. See France. Economic Conditions, Effect on School Life of 50-1, 82 Economic History Of the Adolescent in Foreign Countries 37, 295-313 Progress of Stages in Stages in Dest Elementary Education, Higher Education, Dest Elementary Education, Educa	FAST MYDEANDS E	DIICAT	TONAT.	UNION					152
ECONOMIC CONDITIONS, Effect on School Life of 50-1, 82 ECONOMIC HISTORY	FOOTES PRIMATRES	STIPE	RIEURI	55 Sei	FRAN		••	••	202
Economic History	FCONOMIC CONDITI	IONS T	Sffect (m Scho	ol Life	of		50-1	82
EDUCATION.— Of the Adolescent in Foreign Countries Progress of	ECONOMIC HISTORY	v				~~	••	00-1	201
Of the Adolescent in Foreign Countries 37, 295–313 Progress of 42, 142 Regrading of 70, 76, 94, 96, 140 Stages in 36, 72, 74, 76, 92, 97–8 See also ELEMENTARY EDUCATION, HIGHER EDUCATION, DOCTOR PRUMARY EDUCATION, EDUCAT	EDUCATION -	-		••	••	••	••	••	101
Progress of	Of the Adolescer	ut in B	Areion	Conntr	ies		37	295	313
Regrading of 70, 76, 94, 96, 140 Stages in	Drogress of		010161	will d	103	••	<i>Vi</i> ,	49	149
Stages in	Regrading of	••	••	• • •	••		76 94	96	140
See also Elementary Education, Higher Education, Dost Primary Education, Primary Education,	Stame in	••			••	R 79	, 10, 07 74 76	,, 07 0	7_8
DOT DEPENDENT LOUGHION, HUMEN LOUGHION, DOT DEPENDE EDUCATION DEPENDENT EDUCATION	See also Fre	•• Menta	 Fr	• • 176 4 770	N HIG	70,72, HER FI	77,70, DRCATH	ວມ, ອ ານ	7-0
	POST PDIN	ildin i A I A D W	FDDC	TION		v Fi	DICATIO	747) 787	

A TOTAL TRANSPORT	* *			• •	~~, `	·~;	· • • • • • •	
Law	••	* •	• •		••	96	, 141,	155
Opinion	• •	••	••	••	••			72
Organisation	• •	••	• •	••	72, 7	4-5, 7	9, 89,	144
Terminology	••	••		••	••	••	••	94
Visits		••	••	••	• •		••	209
EDUCATIONAL HAN	DWOR	Asso	CIATIO	N, The	• •	• •	••	189
EDUCATION OTHER	THAN	Eleme	NTARY	.—See]	HIGHEI	r Edu	CATIO	N.
ELECTRICITY	* •		• •	••	••	••		222
ELEMENTARY EDU	CATION		36, 43,	72, 76,	95, 15	5, 165,	263,	266
ELEMENTARY EDU	CATION	-Prim	NRY GR	ADE	••	**	• •	96

				PA	GE8
Elementary Education—Seconda	ry Grad)Ē	••	••	96
ELEMENTARY SCHOOLS	16,	42, 48	, 80, 96,	. 147, 5	263
EMPLOYEES, Requirements looked for	rin	••	••	••	115
Employers					
And School Records	••	••	••		150
Evidence on Vocational Bias by	• •				115
EMPLOYMENT	• •	47, 1	41, 143,	, 145,	147
ENDORSEMENT of Leaving Certificate	э.,	* 4	* *		154
ENDOWED SCHOOLS COMMISSION		* 1	• •	••	277
ENGINEBRING ,	• •	(6-7, 11	3, 119	-20
ENGINEERING FIRMS	• •		• •		115
Engineers	• •			• •	128
ENGLISH, Treatment in Curriculum	••		• •	••	190
ENGLISH HISTORY,-See HISTORY,					
ENTRANCE TESTS to Post-Primary S	chools	• •	55	, 132	139
ENVIRONMENT, Curriculum and		••	109, 1	18-9,	222
EQUIPMENT AND APPARATUS			-	_	
For Practical Instruction	••	••	• •	232,	235
For Science	• •	÷ 1	* •	220,	223
General		* •			131
See also APPARATUS and EOUIPI	MENT.				
EURYTHMICS					242
EVENING CLASSES -					
Effect on of teaching modern forei	ien langu	age in	post-pr	imary	
Schools					211
Use of Day Schools for					247
Examinations	- /				
Academic				151.	153
Desirability of Compulsory Entra	nca				8-9
In Practical Subjects					154
Standardisation in marking in	••		••		134
Stimulus caused by	••				151
used for determining edmission to	Aviating	Post	Primarv	,	
Schools	0.0000000	1000			135
See also Figer Seroot Eve	A THE ATTO	NOF		ACR	
EXAMINATION TRAVING FYAN	413447103	а Мат		TION	
EXAMINATION OBAL EVA	MINATION	ve P	DRI IMIN	TARV	
EXAMINATIONS	2111A 1 101				
EVINIMANO BOADDE					153
EXAMINING DORRES	••	••	••	••	213
EXCANOL OF ILMORERS	• •	• •	••	••	
PARA INORMETERS C.A. A CREATER		FCRC			
PARM INSTITUTES, JOB AGRICULIU:	KAL COLI	2023. 02	197 130	150	1_2
PIRST SCHOOL EXAMINATION	• =	00,	147, 100	· 100-	81
FUSIONSK, MILW, U	Former	• • • • T • ••	NACP.	**	91
FOREIGN LANGUAGE JOS MODERN	TOKEIGN	a Lang	VAUE,	217	910
FURMULA, II MAUICINATICS	• •		• •	217, Q7	200
FRANCE IS IN I A	. of Man-		**	19	270
FRASER, MOV. J. (ALCOWARDS ENSNOP	O MARC	TICSICI,	75 100	10,	397
I'REE PLACE EXAMINATION	••	••	19, 199	4 10 0 ,	101

FREE PLAC	ES.—							P	AGE
System			••	••	¥ 4				44
To Secon	dary So	hools	from N	Iodem	Schools				13
FRENCH	••	••	••	••	••	••	85, 112,	211,	, 21
GAMES							125 213	243	24
See also	o Corpo	RATE	Activi	TIRG	••	••	120, 210,	210,	- A -TU
GARDENING				*****				99A	23
GARDENS S	CROOT.	•••	••	• •	••	••	••	20,	20,
GENERAL E	DIICATI	0 M	••	••	••	••	••	• •	20,
In New F	Post-Priv	marro (Schoole		-			4	0A 4
In Relati	on to B	iae		• • •	• •	e .		•••	110
CENEDAT H	VCIENE	103	* •	••		••		••	113
GENERAL II	TTONE	n Hini	tom To	 	•••	• •	• •	105	220
GENERALISZ GROCDADWY	ALIONS I		COLO TE	acning		••	• •	199*	202
CROOKAPHIC	LAL ASS	OCIAI	ION, II	18	••	••	••		195
GEUGRAPHY	·								~~
Importan	ce oi		••	••	• •	••	••	••	204
Quanneat	TOD OF 1	eache	is of	••	••	••	••	• •	204
Treatmen	IC OI	••	••	••	••	••	••	• •	205
GEOLOGY	**		* «		• •	• •	••	••	223
GEOMETRIC	AL AND	MECH	ANICAL	Draw	ING	••	••	217,	228
GEOMETRY	••	• •	••	••	••	••		215,	217
GERMAN	**	•••	* •	• •	••	••	* •	* *	211
GIRLS, Impo	ortance	of leas	rning to	o use I	ools	* *	* *	• •	232
GIRLS' PUBI	LIC DAY	• SCHO	ol Coy	IPANY		e =	• •	••	276
Gower Wai	lk Frei	e (Ind	USTRIA	l) Sch	00Ľ		• •	••	- 3
Graduate 7	TEACHE	RS	••	••	• •			12	26-7
Grammar	••	• •			• •	• •	••		194
Grammar S	CHOOLS.	—							
And the I	roposed	I Leav	ing Ex	amina	tion	• •		••	154
As Part of	f Recon	ımend	ed Nor	nencla	ure			95	, 9 9
Note on	**						• •		268
See also	SECON	DARY	SCHOOL	s.					
GRAMOPHON	ES			~ ~		<i></i>	214.	239.	241
GRANTS, Sta	te							3.11	. 23
GROUPING O	F OLDE	R Pup	IIS					-,,	43
GYMNASIA				••					244
GVMNASTIC '	TRAININ	ic for	Boys S	chools	other t	han i	Elementa	372	244
				1				- 5	
Hallam, Mr	. J. H.				••		• •	73,	. 84
HANDICRAFT	ເຮັ .		••				• •		232
HANDWORK		• •			• •			!	233
HARMONISAT	TON								240
HEAD TEACH	TERS					-		-	
Onalificati	ons des	irable		;	• •		• -		125
Recomme	ndation	of Pu	oils by						137
TERSLEY TI	HOMAS						· · ·		276
TRURISTIC	Viethod	of Te	sching						221
TIGH SCHOOL			<u>-</u>	••					276
ALGIA GURUU.	ar a	* * C	 # 			• • `	* *	- 8 - 4	

						P	GES
HIGHER EDUCATION	••	. 47,	155,	157,	160,	165,	265
HIGHER ELEMENTARY SCHOOLS	••	- 26, 2	28, 30), 54,	130,	156,	271
HIGHER GRADE ELEMENTARY S	CHOOLS	••	17, 2	2, 23	, 54,	271,	274
HIGHER GRADE SCHOOLSScot	FLAND		••		•	••	- 39
HIGHER (OR UPPER) TOPS		••		44, 5	3, 57	, 80,	275
HIGH SCHOOLS	• •				•	••	276
HISTORICAL ASSOCIATION, The		••	• •				189
HISTORY		• •		•	•	••	195
HOLBORN TRADE SCHOOL FOR G	IRLS		s =	*			279
Home Management			* =				236
HONOUR CERTIFICATES See Sc	HOLARS	HIPS /	AND E	REE	PLA	CES	
HORNSEY							62
HORTICULTURE				•			238
HOUSECRAFT					113.	234.	236
HOUSE OF COMMONS			72	. 74.	144.	148.	210
HOUSEWIFERY					,	,	235
HYGIENE		•••		-	118.	222.	224
	• •	• •	••				
Texterner					003	900	014
LUSIKATIONS	•••	• •	4 4		203,	200,	214
IMPERIAL FIISTORY	Ŗ¥						40
INDIVIDUAL I EACHING	••	5 4	••	•	•		40
INDIVIDUAL WORK	• •	•• ,			100	92,	103
INDUSTRIAL BIAS	``~ ·	·	56, 11	2–3,	123,	ZZ9,	232
INDUSTRIAL CONDITIONS, Effect	on Scho	in Ti	e	•		• •	00
INDUSTRIAL DISTRICTS, Science	Courses	in	• •	• •	,	••	223
INDUSTRIAL TRAINING, Rev. H.	W. Bel	lairs o	n	•		••	9
INDUSTRY							
Entry of Children into		* •	* *	• •		• •	145
Extension of School Life and	••	• •	• •	* *		* *	144
School and		•,•,			41,	121,	125
Specialist Teachers from	• •	• •		• •		••	128
INSTITUTE OF MECHANICAL ENG	INEERS	• •					67
INTELLECTUAL DEVELOPMENT	•. •.	••	• •				136
INTERAST							
Creation and Development of	••			104,	106,	118,	204
Practical Instruction and	••		••			••	117
INTERMEDIATE SCHOOLS	••			39), 53,	, 57,	269
JOURNEYS, SCHOOL.—See EDUCA JUNIOR ART DEPARTMENTS JUNIOR COMMERCIAL SCHOOLS AN JUNIOR SECONDARY EDUCATION JUNIOR TECHNICAL SCHOOLS 3	ND CLAS	VISI1 55ES 4, 66,	rs. 79, 8	 5. 12	69, 0-1,	120, 68, 271,	279 278 96 279
KAY SHUTTLEWORTH, SIT JAMES	••	• •	••	* • ·			8

_							
LABORATORIESSee Bu	ILDING	5			-	Pź	GES
LANCASHIRE		••			••	63,	160
LANCASTER NATIONAL S	CHOOL	••	• •	• •			15
LANTERN SLIDES	٠.	••		••		••	206
See also CINEMATOGRA	PH.						
LATE DEVELOPMENT	• •		••		••		93
LAUNDRYWORK			• •	* •		118,	235
LEAGUE OF NATIONS		••	••			• •	203
LEAVING AGESee SCH	OOL LI	FE	•		•		
LEAVING CERTIFICATES	••		• •			150.	154
LEAVING EXAMINATIONS	.—					•	
Effect on Curricula						87.	150
Recommendations in	connect	ion wi	th.,			1	519
Types of			• •	• •	• •	••	152
Witnesses' views upon	t	••	• •		••		150
LEEDS	••	••	• •	••	••	••	63
LEICESTER	••	••		• •		61, 9	90-1
LEISURE						110.	114
LETTER-WRITING							192
LIBRARIES, School					194 214	226	241
See also MUNICIPAL an	d Cour	ITY LI	BRARIE	s		,	
LIGHT, HEAT and SOUND)				• •		222
LING ASSOCIATION. The							189
LITERATURE		••		••	¥ 1	••	192
LOCAL EDUCATION AUTO	• • • • • •		•• ,	••	* *	1.4	202
Administration by		J				96	157
Arrangements for Co	nductio	e Ent	Tance	Exan	ninations	to.	207
Post-Primary Schoo	la						139
Arrangements for Trai	nsfer of	Child	en at	11			90
Consultative Committe	ees of	••					159
Co-operation between	••	۰	••		• • •	••	161
Duties in Respect of A	ldvance	d Inst	ruction	3	••	••	75
Extension of Leaving	Age in .	Areas	of Cert	ain	••	•••	143
Leaving Examinations	and	••	• •		• •	••	153
Provision of Courses o	f Advar	nced I	istruct	ion by	7		
		·~ •		47, 4	9-50, 52,	54-5	, 94
Provision of Junior Te	Cnnical	SCDOC	1S.,	s *	* 3	••	50
Kegrading of Schools	oy of Ealar	ייי הוד:נ		• •	• •		23
Views on "Marling Ti	or acht			• •	* *		42
T COLL TYPE TO MAINING-1			• •	* *	CC 114	110	110
LOCAL INDUSTRIES AND		TIONS	••		00, 114,	110,	102
LOCAL ORGANISATIONS A	ND CLU	BS ,		FO F	···	110	1407
LONDON			51, 49,	30, 50	o, ov, co,	112,	127
JES GISU UKNIRAL SU	HUULS						ב 0
LUNDON CENTRAL SCHOO	L OF AI	CIS AN		FT9	••	150	150
LONDON CHAMBER OF CO	MMERCI	6	• •	••	* •	130,	132
LOWESTOFT	* *	••	••	• •	• •	* *	113
LYCÉE. — See FRANCE.							

							P	IGES
MACHINERY, Occu	pations i	involv	ing	* •	.,			65
M'KENNA, The Ri	ght Hon	. R.		• •				135
MAINTENANCE ALI	OWANCI	ts.					••	147
MANAGERS			• •				169,	170
MANCHESTER								- 31
MANCHESTER CHU	RCH EDI	ICATIO	N SOCT	RTY				6
MANUAL INSTRUCT	1012			~~~				20
MANORE INSTRUCT	1014	••	••	••	••	203 2	05 208	214
MARTINA TIM	••		• • 、		* •	42	00, 200, -3 181	119
MARNING LIME	•••	**		••	••	74	-0, 101	915
WATHEMATICAL N	NOWLED	6E, 18	ed for	* *	÷ •		117	01A
MATHEMATICS	**	**	**	* T	< =	*#	117,	1214
MATRICULATION E.	XAMINA	TION	••	••	* *	• •		101
MECHANICS	• •		• •	* •	4 4	• •	ZZZ-	-223
MEDICI SOCIETY	• •	• •	• •		* •	* •	• •	203
MEMORY DRAWING	3	• •	••	• •				228
MENSURATION	•• •		• •			• •	215,	218
MERIT CERTIFICAT	E.—See	SCOTL	AND					
MRTALLURGY		• •	••	••		• •	••	22 2
Metalwork	• •	* -			••	• •	117,	232
METROROLOGY			• •					222
MIDDLE SCHOOLS							5, 64.	276
MILLINERY	••						·• - •	120
MINING APPAR	••	••	••		••		109.	119
MINISTRY OF ACRI	יי מוזד דודסי	•• •••		5100	• •		128	130
MIEWITS			P. 1939101	~14:5	* 4	••	,	139
MISTIN	* :	• •		* •	••			24A
MISIALES	e e Sea Doore		••	• •	• •	~ +		240
MILLECTULE,	DEE FRUS	31 A.						01
MIXED SCHOOLS AN		583	••	••	• •		••	910
MODELS, CONSTRUCT		• •	••	••	* *	• •	••	210
MODERN FOREIGN	LANGUA	GH						07
in junior lechn	ucal Sch	BOIS	••	••	• •		• •	107
In London Cent	ral Scho	ols	••	••	••			112
In New Post-Pri	imary So	:hoola		• •		85,	88, 210,	213
Teachers of	••	••		••	••	1	23, 129,	212
MODERN SCHOOLS								
and the First Sc	hool Ex	aminat	tion	• •		* *	••	154
Bias in			• •				112-	-121
Curriculum in	* •				•••	• • •	101-	-111
Definition of		• 4					95-6,	100
Use of Term in S	Schemes	of Ch	arity C	ommis	sion	••	••	277
MODERN SOCIAL AN	ND ECON	OMIC	LIFR					125
MOTHERCRAFT								225
MUNICIPAL AND CO	NINTY I.	 IRDADI	185				• •	194
MUCHTIMS AND APT	CATTE	otwo		••	•••		203.	229
Minero		N.I 1243	• •	••	•••	•••	114.	238
110310	••	• •	••	••	• •	••	,	
NATIONAL POULTR	y Assoc	IATION	4				••	130
NATIONAL SOCIETY	SCHOOL	S				1.	2, 5.	277
NATIONAL UNION		HRPS					73, 90.	184

							P	AGES
NATURE STUDY		••	••	• •				221
NEEDLECRAFT,							118.	233
NEWCASTLE-UNDE	r-Lyme	HIGH	I Sc	HOOL				276
NEW ZEALAND, DO	minion	of						288
NEWSPAPERS, FOR	ign							214
NOMENCLATURE	ž.					93.	155.	262
NON-GRADUATE TH	CACHER	5						127
NON-PROVIDED SCI	HOOLS					15	166.	169
See also DUAL	. Contr	OL.						
NON-SELECTIVE CE	NTRAL	Schoo	LS					
Existing types	• •							53-4
Nomenclature of	f			•				96
Type recommen	ded							79
NORMAL SCHOOLS.	-See N	liddli	SC.	HOOLS.				
NOTTINGEAM HIGH	I SCHOO)L						276
NUNN, Professor T	. Percv	-					72	2. 76
		- •	•••		•••	••		-,
OBJECT DRAWING								228
OBSERVATION								227
OCCUPATIONS		42	83	107, 109,	113.	119, 121.	125	146
OFFICE ROUTINE						,		112
ONTARIO, Province	e of							289
ORAL EXAMINATIO	NS					133.	136.	139
ORCHESTRAS, Scho	ol							241
ORGANISED SCIENC	E SCHO	or —	See :	SCHOOL O	F SCI	INCE.		
OSWESTRY NATION	AL SCH	OOL		••				15
OXFORD Universit	vof							153
,	· · ·	••••	• •		•••			
DADATTEL FORME								
T VERFEE LOKUS								88
PARENTS	•••	••	•••	•••		•••	••	88
PARENTS.— and Commercial	•• Trainir	 19	•••			•••	••	88 68
PARENTS.— and Commercial and Corporate A	Trainir Ctivitie	 1g S	••• • • •	•••	••	•••	•• • • •	88 68 247
PARENTS.— and Commercial and Corporate A and Education	Trainir ctivitie	ng s	••• •• ••	•••		 1. 77. 94.	··· ··· 109.	88 68 247 142
PARENTS.— and Commercial and Corporate A and Education and Extension o	Trainir ctivitie	ng s l Life	· · · · · · · · · · · · · · · · · · ·	•••	42, 5	 1, 77, 94, 51	109, 145-	88 68 247 142 6-7
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA	Trainin ctivitie f Schoe TION.—	ng s l Life See Ce			42, 5	 1, 77, 94, 51,	 109, 145-	88 68 247 142 6-7
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY. Lord Eustr	Trainin ctivitie f Schoo TION.— ace.—S	ng s l Life See Ca se PRF	 	NUED ED	42, 5	 1, 77, 94, 51, ION, OF EDUC	109, 145-	88 68 247 142 6-7
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, LOID EUSTE PERSONAL HYGIEN	Trainin ctivitie f Schoo TION.— ace.—Sa	ng s l Life See Ca ce PRE	ONTI ISIDI	 NUED ED ENT OF B	42, 5 00CATI	 1, 77, 94, 51, of Educ	109, 145-	88 68 247 142 6-7 N. 224
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, Lord Eustz PERSONAL HYGIEN PHONETICS	Trainin ctivitie f Schoo TION.— Sce.—So E	ng s l Life See Ca ce PRE	 SID:	 NUED ED ENT OF B	42, 5	 1, 77, 94, 51, of Educ	109, 145-	88 68 247 142 6-7 N. 224 191
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, Lord Eustz PERSONAL HYGIEN PHONETICS PHYSICAL EDUCATI	Trainin ctivitie f Schoo TION.— ace.—Sa E	ig s l Life See Ca ce PRE		NUED ED ENT OF B	42, 5	 1, 77, 94, 51, of Educ	109, 145-	88 68 247 142 6-7 224 191 243
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, LOID EUST PERSONAL HYGIEN PHONETICS PHYSICAL EDUCATI PHYSICIAL TRAININ	Trainin activitie f Schoo TION.— ace.—Sa E	Ig S L Life See Ca ce PRF	 ISIDI	NUED ED ENT OF BO	42, 5	 1, 77, 94, 51, of Educ	109, 145- ATIO	88 68 247 142 6-7 224 191 243 242
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, LOID EUST PERSONAL HYGIEN PHONETICS PHYSICAL EDUCATI PHYSICS	Trainin ctivitie f Schoe TION.— ace.—Si E 	Ig s Llife See Ca ce PRF	 	NUED ED ENT OF BO	42, 5	 1, 77, 94, 51, of Educ	109, 145-	88 68 247 142 6-7 N. 224 191 243 242 221
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, Lord Eustr PERSONAL HYGIEN PHONETICS PHYSICAL EDUCATI PHYSICS PHYSICGRAPHY	Trainin cctivitie f Schoo TION.— ace.—So E NG	ig s l Life See Ca ee PRE	 	NUED ED ENT OF BO	42, 5	 1, 77, 94, 51, of Educ	109, 145- ATIO	88 68 247 142 6-7 224 191 243 242 221 221
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, Lord Eustr PERSONAL HYGIEN PHONETICS PHYSICAL EDUCATI PHYSICIAL TRAININ PHYSICS PHYSIOGRAPHY PHYSIOLOGY	Trainin Activitie Schoo TION.— Acc.—Sa TE NON NG	ig s l Life See Ca ee PRE	 	NUED ED ENT OF BO	42, 5	 1, 77, 94, 51, 	109, 145- ATIO 	88 68 247 142 6-7 224 191 243 242 221 221 221
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, Lord Eustr PERSONAL HYGIEN PHONETICS PHYSICAL EDUCATI PHYSICAL TRAININ PHYSICS PHYSICGRAPHY PHYSIOLOGY PICTURES.—See It:	Trainin Letivitie f Schoe TION.— Sce.—Si E NG LUSTRA	I Life See Ca ee Pre	· · · · · · · · · · · · · · · · · · ·	NUED ED ENT OF BO	42, 5 0UCATI 0ARD	 1, 77, 94, 51, of Educ 	109, 145- ATIO 2222,	88 247 142 6-7 N. 224 191 243 242 221 221 224
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, Lord Eusta PERSONAL HYGIEN PHONETICS PHYSICAL EDUCATI PHYSICIAL TRAININ PHYSICIAL TRAININ PHYSICIAL TRAININ PHYSIOLOGY PICTURES.—See IL: PLAYING FIELDS	Trainin Letivitie f Schoe TION.— ace.—Si E NG LUSTRA	I Life See Ca ee Pre	··· ··· ··· ···	NUED ED ENT OF BO	42, 5 0UCATI 0ARD	 1, 77, 94, 51, of Educ 	109, 145- ATIO 222, 246.	88 247 142 6-7 N. 224 191 243 242 221 221 221 224 247
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, Lord EUSTA PERSONAL HYGIEN PHONETICS PHYSICAL EDUCATI PHYSICAL EDUCATI PHYSICAL TRAININ PHYSICS PHYSIOGRAPHY PHYSIOGRAPHY PHYSIOGRAPHY PHYSIOLOGY PICTURES.—See ILI PLAYING FIELDS PLYMOUTH	Trainin cctivitie f Schoe TION.— ace.—Si E NG LUSTRA	ILIFE See Ca ee PRE	··· ··· ··· ···	NUED ED ENT OF BO	42, 5 00CATI 00ARD	 1, 77, 94, 51, of Educ 	109, 145- ATIO 222, 246,	88 68 247 142 6-7 224 191 243 242 221 224 221 224 247 113
PARENTS.— and Commercial and Corporate A and Education and Extension o PART-TIME EDUCA PERCY, Lord EUSTA PERSONAL HYGIEN PHONETICS PHYSICAL EDUCATI PHYSICAL EDUCATI PHYSICAL EDUCATI PHYSICAL TRAININ PHYSICS PHYSIOGRAPHY PHYSIOGRAPHY PHYSIOGRAPHY PHYSIOLOGY PICTURES.—See ILI PLAVING FIELDS PLYMOUTH POETRY	Trainin Letivitie TION.— Sce.—Si E NG NG LUSTRA	I Life See Ca ee PRE	· · · · · · · · · · · · · · · · · · ·	NUED ED ENT OF BO	42, 5 00CATI 00ARD	 1, 77, 94, 51, of Educ 	109, 145- ATIO 222, 246,	88 68 247 142 6-7 224 191 243 242 221 224 221 224 247 113 192
EDUCATION OF THE ADOLESCENT

POST-PRIMARY EDU	CATION	۲. —						PA	GES
Definition of the	term	••	• •		••		•	•	71
Foreign and Colo	nial de	velopm	ients in			• •	•		37
Historical data r	egardin	g		• •	••	• •		. 6	-35
Problem of		**			36, 4	0, 4	5, 47,	52	, 57
Proportion of Ch	ildren o	apable	of pro	fiting b	Y .	•••		•	44
Provision of by I	local E	ducatio	on Âutl	horities	-		47,	54	. 98
Public Demand f	or							•	44
Recommendation	us in co	nnectic	n with					70	. 77
Types of School	require	1							78
Witnesses' views	upon					• •		72-	3-4
See also ADVAL	NCED II	STRUC	TION.						
POST. PRIMARY SCH	001 C -	-							
Aim of	00143.	_							123
As Training Cros	nd for	Entury	Teach	ere	* 1	• •	•	•	126
Courses in	100 101	T. Arait	o reach		••	••	86	.7	125
Curriculum in	**	* *	* •	••	• •	• •	83	87	198
Tavioment in		••	• •	••	• •	• •	00, 1	57,	131
Tetablishment of	* *	••	••	••	• •	* =	•	°07	22
Non Drouided	••	••	••	••	••	••		04	167
Non-Flovided	••	••	••	••	• •	•••			107
PRACTICAL BIAS	••	• •	••	••	••		85, Ľ	61,	128
PRACTICAL INSTRUC	CTION								
 Appeal and Signi 	ficance	of	••					84,	117
As Defined in the	e Educa	ation A	.ct, 192	1	• •	••	4	34,	230
Co-ordination wi	th Cour	ses in	Science	• •	22	1, 2	25, 2	35,	237
Encouragement of	of		••		• •			92,	218
Examination in t	he vari	ious br	anches	of	• •			•	154
In New Post-Pri	mary S	chools	••	83-4,	88-9 ,	103	-4 , 1	08,	231
PRACTICAL WORK I	ROOMS.		Buildi	NGS.					
PRELIMINARY "WI	EDING	OUT "	EXAMI	NATION	IS		133	-4.	139
PREPARATORY DEP	ARTME	٩T							275
PREPARATORY SCH	DOL					•••		•	273
PRESIDENT OF BOA	RDOF	EDUCA	TION				1	44.	168
PRIMARY EDUCATIO)N			42.	44. 71	. 74	. 95. 9	96.	273
PRIMARY SCHOOLS						• • •		4	
Adjustment of w	ork of	with P	ost-Pri	mary S	chools			41	. 89
Geography in							_		207
Historical data n	•• eganlin	••	••	••	• •	••	-		1_6
History in	-8a.am	8	••	••	• •	••	•	•	197
Mathematics in	••	••	••	••	••	•••	•		217
Music in	••	••	••	••	••	••			239
Nomenclature re	•• manling	* * F	••	••	••	••	•	•	05
Note of	Rerums	•	••	••	• •	•••	•	•	273
11010-00	••	• •		••	••• •••	•••	•	•	200
PRIVATE COMMERCI	AL SCH	OOLS A	ND BU	SINESS	COLLI	GE.	· ·	•	100
PRIVATE READING	4 2	••	•••	* *	* •		•	•	129
PRIVATE SCHOOLS	••	••	••	••	••	* •	19		250
PRUSSIA	**	• •	**	••	3 2	•••	13,	00, 07	190
PSYCHOLOGICAL TE	STS OF	INTEL	LIGENC	6	••	1	53, I 57 1	01. 69	100
PUBLIC ELEMENTA	RY SCH	OOLS	••	* *	13	1 , GI	57. 1	00.	140
FUBLIC UPINION			• •		* *		3	5 3,	142

335

•								P	GES
QUALIFYING	EXAM	INATIO	ns.—S	ee Pr	ELIMINA	RY I	Exami	NATIONS.	
READING			• •	• •		•		. 110.	203
REALISTIC]	Educat	ION AN	D BIAS	S .			•	85.	101
REALSCHUL	EN	. .		••	••				100
See also I	RUSSIA	•							
RECORDS, S	chool	••	• •					138, 150,	154
REGULATION	NS.—							,	
The "Lo	we"Co	de, 18	62						11
 For Furth 	her Edu	cation	••		••	• •		66, 67,	278
For Secon	idary S	chools		22.	66. 71.	131.	133.	159. 268.	273
For Tech	nical Sc	hools	• •				,	67. 271.	279
For Train	ing of T	Feache	rs						129
RELIGIOUS	KNOWL	EDGE	ND IN	STRUC	TION			168	189
RETARDED	Develo	PMENT	ſ					,	71
ROYAL HOR	TICULT	URAL S	SOCIETY	, ,					130
ROYAL SOCI	ETY OF	ARTS		•		**	••	150	152
RURAL BIAS	3				••		116	119 128	210
RURAL SCH	- 007.5		• •		••	* *	110,		M 10
Courses fo	or Teacl	ners in						129 130	221
Imparting	T "Tors	al Colo	ar"to	Curri	ienl nm i			120, 100,	107
" Marking	Time '	" in		- Quin				••	43
Organicat	ion of	211			••	• •	• •		101
Practical	Toetme	tion in	••	••	• •	* •	• •	220	5 01 925
Science C	ontees i	aon ni	•	• •	••	* *	••	2024,	200
Snecialiet	teachin	ur in	••	• •		• *	••		07
Teachar	in'	5 m	* *	••	••		* •	103	190
DIVELL STU	mille Cr		n Bola	•••		••	* •	120,	120
DITT AND	oirs, o	101203	m neig	ann i	11	••	••	50.00	100
ROILAND	• •	* *	• •	••	••	• •	* *	<i>93,</i> 30	, 91
									• }
								۰.	-)
ST GATIEN	Canto	Se	Switz		ND				
SALAPIRS OF	TEACH	1, - 000 1295 13	POST.	PRIM	ARV SCI	unor.	\$	127	130
SCAPROPOUC	- i linun 19							,	113
Sevent Ros	PDC			••	••	••	* *	14 53	140
SCHOOL LUN	R		••	••	• •	**	* 1	12, 00,	\$1U
· Effect of a	hise n	n	,						118
Effect of a	່ມໂຄວນກ່າ	no Fra	minati	· · ·	••	* *	+ 5		151
Effects of	ovictin	TO TOTO	icion fo	r A Av	anced 1	netri		07	50
Historical	data re	mandin			anoca		action	14	പ്
TISCORCAL		J Scho	18	••	• •	••	• •		51
Reasons for				••	COTT EN	e.e rtana	ion of	140 14	5 6
Reasons 10	or Reco	mmen	ung o	յաբա	SOLA E	creas		140, 14	3-0 1/1
Trademon		÷ilus Of #hon	1	• •	••	• •	49 20	. 77 69.	141
Lendency	to Len	scnen	••	••	••	••	44, 30	11,00,	144
SCHOOL OF S	CIENCE	~~~~~		5 r	• • •	**	• •	10,	414
SCHOOLS INC	JUIRY U	OMMIS	510N,	-368 L dono-	AMMISS	uons	•	f 10	51
SCHOOLS, Sta	uusuicai Taasaa	uata 0	a arten	uance		ous t	ypes o	1 40	, 31 : 9
SCHOOLS OF	INDUST	KΥ	* *	* *	2 4	b 2 f	• •	117	000 I
SCIENCE	* *	* *	* *	••	* *	4.5	*,*	. 11/4	220

336

							50.64	* T C
SCIENCE AND ART]	DRPART	MENT			14, 24,	25. 157	. 272.	274 ⁻
SCOLA GRAMMATICA	LIS				,,	,,	,	268
SCOTI AND							28	38
SCOTTIEN EDUCATIO	יי זער Des	 ADTWE	NT	•••		•••		39
SECOND EVANINAT	10W	See Fo		***	ETAMI	NATION		00.
SPECIND SOLAND F	F THE RM	TADV A		TON			19	22
SECONDARY AND L.	TTON .	IARIA	DOCKI	1014	••	••	13,	, 22
Common Use of	Torm			`			05	07
Espansion and L	term term	<i>.</i>	••	a , 9,	• •		55,	. 37 A A
Expansion and f	meer o	1	* •	.,	* *	• • •	* *	920
Decomposited D			JINA AF		, , ,	* *	771	200
Recommended L	enmue		OSE OI	1 en	ц	• •	11	, 30
SECONDARY SCHOOL	LS.—		4 D	6	2-11-			
Differentiation w	nn oth	er Pos	t-Prim	ary :	SCHOOIS	••.	00	-00
Alleged enect on	by Cer	atrai S	cnoois	••		••	50,00	102
Need for Develop	pment	01	• •	* *	• •	T_{i}	79, 80	, 8Z
Nomenclature re	comme	nded	••	• •	• •	••	••	95
Note on			• •	••	• •	* •	••	266
Proportion of Ch	ildren	to be t	ransier	Ted 1	to	••	**-	80
School Life in	••	••	••		••		83,	147
Statistical data	••	••	••	••	* •		48	, 81
SEKUNDARSCHULE.	-See S	Switzb	RLAND	•	÷			
SELECTIVE CENTRA	L SCHO	OLS.—						
Courses in						• •	• •	77
Existing types		**	• •	* •	••		• •	53
Nomenclature re	comme	nded	* *					95
Type required						••		79
Use of Free Place	Exam	inatio	n in De	term	ining E	ntrants	to	135
SENIOR CLASSES								
Definition of		••					96.	100
Development of							88	. 92
Type required							80	91
SENIOR SCHOOLS							13. 55.	275
SENIOR STANDARD	SCHOO	15	•••	•••			22.54	57
SHIPBUILDING			••	• •	••	•••		66
SHOPPDITCH INNIC	D Trei	INTO AT	Scroo	 .т			12 69	279
SHORTHAND			001100		••	112 11	3 114	118
SICK NUPPING	••	* *		••			• • • •	118
SIGHT READING	* •	**	••	• •	4 9	• •	220	240
SITE OF CLASSES	* 1	••	••	••			LG 07	214
Skilt Attainment	5	••	* *	* *	• •	** 1	<i>N</i> , 72,	108
Stow AND BLORN		**	* *	••	**	* *	••	200
SHITH MA T C				* *	••	••	••	20
Social Approximate	· · ·	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	••	•••	•••	••	••	90
Social Manager	,	CORPO	KAIK A	CHIV	11185.		100	901
SOCIAL HISTORY	• •	••	••	• •	••	* *	199,	100
Solo Decomo	••	••	••	••	••	••	••	120
SOLU PLAVING		••	• •	••	** *	* *	• •	430
SOLO SINGING	* •		• •	••	••	•••		230
	• • •	· ·	••	••	**	21), ZJŸ,	Z 41
SOUTH AFRICA, Un	ion of.		I RANS	/AAL	•			A++
OPANISH	• •	* *		* *		. .	1	211

-

337

							P	GES
Specialisation	••	• •	••	• •	• •	84, 103	, 110,	120
SPECIALIST TEAC	HERS			••	* *	103	. 126.	128
SPEECH TRAINING	G	••	••	••	••	* *		190
Staff.—								
Appointment a	und Selea	ction	of	••	• •	92	, 124,	171
Assistant Teac	hers	••	••	••			124,	126
Extension of S	chool Le	aving	g Age ai	nd			144,	148
Head Teachers		•• `		••				124
In Modern Sch	ools and	Seni	or Class	es	• •		103,	131
Note on Existi	ng Arrai	ngeme	ents	• •		• •	1	23-4
Specialist Teac	hers	••	••			• •	126,	128
STIMULUS caused	by Leav	ving l	Examina	ation				151
SUPPLEMENTARY	Course	S FOR	TEACH	ERS	* *	* *		129
SURVEY WORK	••	• •	••	••			••	208
Sweden		. .	••	••	••	••	• •	308
Switzerland	••	••	••	••	• •	••	13,	310
								*
Terra on Duran	- T):#		:_					100
TASTES OF PUPIL	s, Differ	ences	111	• •	••	••	••	100
LEACHERS.—	A							040
And Corporate	Acavia	65	* *	• •		• •	* *	240 100
Assistant .	* *		••	**	* •	••	••	120
Certificated	* :	••	4.6	* *	* *	* *	* •	102
Conferences be	tween	* *	**	• •	* *	3 *	* *	100
Exchange of	• •	••	••	* *	••	* *	* •	140
Exchange of	* *	* •	• •		••	** *	 00 10	213
Graduate	• /•	•••	••	• •	* *		<i>44</i> , 17	104
Man Craduata	••	· • •	••	• •	••	••		107
Of Domostic S	**	• •	••	••	••	••	••	147
Of Domestic Si	ubjects	• •	••	••	••	••	••	124
Of Geography	••	••	• ••	••	* *	• • • 1	••	404
Of History	** 	* *	• • •	••	••	20 109	100	202
	eign rai	uguag	8	• •	• •	00 , 123,	, 143,	020
Of Department Co		••	••	• •	÷ •	**	120	010
Of Dismissi Te	IDjects	• • •	• •	F 4		* *	100,	-945
Drahatianaria	ammg		++ Inoto Ni		**	* *	• •	107
Probationary p	Lorn Doot				щеч	• •	197	190
Salaries of III IV	iew rusi	<u></u> пш	uary ou	10015	• •	1	147, 96_7	219
Sources of Sup	piy - Course		••	••	• •	• • • •	20-7,	120
Supplementary	Courses	s ior		••		4 1	••	199
Visiting	د ه م د د د	••	••	••	••	••	••	199
Wittlesses rega	noung		•••	••	••	• ,•	••	150
TEACHERS REGIS	TRATION		NGIL	••	• •	* •	128	153
TECHNICAL COLL	EGES Con Mon	* *	••	••	••	••	120,	100
LEXMINULUGY,	ON THOM	LENCL C	AIVKS.					115
TEATLE MARUEA	YCI O KEK	3	••	* •	* •	* *	••	100
TRADES	**	* *	• •		* *	**	128	212
THERE THAN OU	12322	••	• •	••	**	**		208
TIME CHART	_See Th		ADP CA	••	* *	* *		- 1
A RAUG OCHOOLS		ZE TH	יוב שתשי	11VUL3,				

EDUCATION OF THE ADOLESCENT

							PA	GES
TRADES UNION CONGRES	SS		• •				••	-74
TRAINING COLLEGES ANI	DEPAR	TMENT	s.,	* 4	123,	126,	128,	129
TRANSFER								
Between Different Pos	st-Prima	ry Sch	ools			. 89,	93,	139
Of Children at 11+					55,	75, 80), 89	. 90
Of Children Remainin	g Bevon	d 15+			-		83	i. 93
TRANSPORT						E.	91,	109
TRANSVAAL, Province of								290
TRICONOMETRY					-			215
TYPEWRITING	••				112.	113. 1	114.	118
	••	••	••••	••	,	,	,	
UNION OF LANCASHIRE	AND CHE	SHIRE	Institu	JTES		. 1	(50,	152
UNITED STATES OF AME	RICA							37
UNIVERSITIES. Departm	ents of /	ericult	ture in					129
UNIVERSITY EXAMINING	BODIES	-0				. 1	150.	152
UNIVERSITY TRAINING I)RDA DTM	RNTS	••				,	127
IPPERP (OP HICUPP) To	7 34 ANN 24		••	••	•			53
ILOBAN DISTRICTS	Ronom	• • • • •	TIDDAN	. n.	• • 51010	Te	••	••
UBBAN SOUGOTE	DOKOV		UKDAP		SIRIC	1.04		43
URBAN SCHOOLS	* *	* •	• •		•	•	* •	-10
							~~	0 4 F
VACATION COURSES	••	• •	* •	* *		129-	-30,	245
VAUD, CantonSee Sw.	ITZERLA	ND.						
VICTORIA, State of	* *	••					• •	292
VISITING TEACHERS			••	* *			* *	123
VOCATIONAL EDUCATION	i, Definit	tion of				•		120
VOCATIONAL INSTRUCTION)N							
Committee's views up	on		• •			. 67,	88,	101
Employer's views upo	n		••	• •		. 1	115,	120
Historical data				••		•	• •	- 4
In Day Technical Clas	ises			••	•			-66
VOLUNTARY BODIES S	66 DUAL	CONTR	ROL.					
VOLUNTARY SCHOOLS	See Non	-PROVI	DED SC	ноо	els.			
•								
WARWICKSUIDE								59
WATTIR De I M	••	••	••	••	• •	•	••	38
WEELEWAN CONCOLO	••	••	• •	••	•	•	••	7
Woodwaar	• •	••	••	••	• •		117	999
WORD DIRECTOR	* •	• •	• •	* *	• •		117,	202
WORLD MISTORY	* •	• •	••	••		•	• •	200
¥								
I BOMAN SCHOOL AT YOU	RK	• •	••	••		•	•••	5
YORKSHIRE (WEST RIDI	NG).	••	* •	••			64,	277
	•							

ZORICH, Canton .- See SWITZERLAND.

Printed by H.M.S.O. Press, Harrow.

Selected Official Publications on

The Theory and Practice of Education.

MODERN STUDIES. Report of the Committee on the Position of Modern Languages in the Educational System of Great Britain. 1918. Cr. 8vo. pp. xxiii.+257. 1s. 6d. (1s. 8¹/₄d.)

CLASSICS. Report of the Committee on the Position of Classics in the Education System of the United Kingdom.

1921. Demy 8vo. pp. 308. 2s. (2s. 3d.)

"The report is in the main a vindication of the Classics.....and an almost passionale plea for their preservation in our educational life."-DAILY TELECRAPH.

DIFFERENTIATION OF CURRICULA BETWEEN THE SEXES IN SECONDARY SCHOOLS.

1923. Royal 800. pp. xvi. +193. 2s. 9d. (2s. 114d.)

HUMANISM. Humanism in the Continuation School. With a Bibliography of suitable books covering 27 pages.

1921. Demy 8vo. pp. 135. 1s. 6d. (1s. 71d.)

FRENCH. The position of French in Grant-aided Secondary Schools in England.

Royal 8vo. 9d. (10d.)

HISTORY. The Teaching of History. Educational Pamphlet No. 37.

1923. 6d. (7d.)

EDUCATION AND INDUSTRY. Report of the Committee on Education and Industry (England and Wales) First Part 1s. 6d. (1s. 74d.)

All prices are not and those in parentheses include postage.

HIS MAJESTY'S STATIONERY OFFICE,

LONDON, EDINBURGH, MANCHESTER, CARDIFF, BELFAST