Session II.

1912

NEW ZEALAND.

## EDUCATION:

# MANUAL AND TECHNICAL INSTRUCTION.

[In continuation of E.-5, 1911.]

Presented to both Houses of the General Assembly by Command of His Excellency.

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#### No. 1.

# EXTRACT FROM THE THIRTY-FIFTH ANNUAL REPORT OF THE MINISTER OF EDUCATION.

## MANUAL AND TECHNICAL INSTRUCTION.

## MANUAL INSTRUCTION IN PUBLIC AND SECONDARY SCHOOLS.

During the year manual instruction, in accordance with the regulations, was given in 66 per cent. of the public schools, an increase of 2.5 per cent. The percentages for the various Education districts were as follows:—

District.						Per at w	hich Ins give	of Schools truction was n.
							1910.	1911.
Auckland				• • • •			43	51
Taranaki							72	68
Wanganui							93	95
Wellington							74	71
Hawke's Bay							80	76
Marlborough						•••	32	70
Nelson							57	$5\widetilde{2}$
Grev							26	22
Westland		•••	•••				37	39
North Canterbury					• • •	•••	68	
	•••	• • •	•••	•••	• • • •			68
South Canterbury	• • •		• • •		• • •		61	57
Otago							63	64
Southland	• • •		•••	• • •			97	98

TABLE J.—SUBJECTS OF AND NUMBER OF CLASSES FOR MANUAL INSTRUCTION IN PUBLIC SCHOOLS.

Subject	s of Instruct	ion.			Number of	of Classes. 1911.
Elementary hand	lwork			 	 3,489	3,530
$oxt{Woodwork}^{}$				 	 273	315
Ironwork				 	 8	6
Agriculture and	dairy-work			 	 666	832
Elementary scien	ce			 	 109	76
Physical measure	ments		• •	 	 118	122
Cookery				 	 308	342
Laundry-work	• • .			 	 63	69
Dressmaking				 	 90	91
Swimming and li				 	 165	200
Physiology and fi	irst aid	• •		 	 78	75
	Total	S		 	 5,367	5,658

The number of public schools in which recognized classes for manual instruction were held was 1,436.

The number of pupils in attendance at recognized classes for cookery was 6,110. The number of pupils in attendance at recognized classes for woodwork was 6.742.

The number of pupils in attendance at recognized classes for agriculture was about 15,000.

The number of pupils receiving instruction in other branches of manual instruction was 118,026.

The payments by way of capitation and subsidies on voluntary contributions were £20,892 10s.

The average rate of payment per class was £3.7.

Special grants for buildings and equipment totalled £4,745.

It is gratifying to note an increasing tendency on the part of teachers to regard handwork as a method rather than as an isolated subject of instruction, and to provide for training in handwork under the headings of other school subjects.

Subjects such as woodwork and cookery continue to be taught on the central system, and by special instructors. There are now over sixty well-equipped manual-training schools in operation. In the larger towns special buildings separate from

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the technical college or school have been provided. In the smaller towns the manual-training centre is usually attached to the district high school, the secondary school, or the technical school, as the case may be. While the central system cannot be regarded as an ideal one from many points of view, yet for reasons of economy it appears at present to be the only practicable means of providing instruction. The work is, unfortunately, too often treated as an isolated subject in which the school staff takes little interest, and has little or no connection with other school subjects. These defects, which cannot be regarded as other than serious, would, it is considered, be less pronounced if the course of work were arranged after consultations between the head teachers of the schools served by the centre and the special instructors. The time spent by pupils in travelling to the centre, and the consequent break in the school-day, are also to be regarded as drawbacks to the system. In the case of schools at some distance from the centre these are met, to some extent, by increasing the duration of the lesson, thus allowing the course to be completed in a shorter time.

It is a matter for regret that very few public-school teachers have given instruction to their classes in either woodwork or cookery, in spite of the fact that during recent years special classes in these subjects have been established by Education Boards with the view, presumably, of giving their teachers the requisite training.

Elementary instruction in subjects bearing on agriculture was given in 832 schools as compared with 666 for the previous year. Instruction in this branch of manual training is, in the case of ten of the thirteen Education districts, supervised by special itinerant instructors. Experimental and observational work—the results of which, in some cases, have proved of no little value locally—is a feature of the course of instruction in most districts. Considerable attention is also being given to instruction, of an elementary character, in dairying, especially in the North Island. Local interest in the school-gardens and experimental plots continues to be well maintained, valuable assistance being forthcoming from agricultural and pastoral associations, School Committees, and members of the farming community generally. In addition to prizes, which, as in previous years, have been freely offered, contributions in money and kind to the value of over £300 have been received by Edu-These contributions carry a Government subsidy cation Boards during the year. of £1 for £1.

During 1911 regular courses of instruction having a direct bearing on rural pursuits were carried out in connection with the secondary departments of district high schools in five education districts, as follows:—

	Distri	et.				nber of shools.	Number of Pupils.
Taranaki	 			• •		1	53
Wanganui	 					5	128
Wellington	 					6	206
Hawke's Bay	 					3	55
South Canterbury	 			٠.		<b>2</b>	57
· ·					-		
Totals	 .,		• • •			17	499

Capitation payments on account of rural courses carried out during the year at these schools amounted to £3,349 2s. 8d., equivalent to a rate of £6.7 per pupil.

Arrangements are in progress for the establishment of similar courses in connection with district high schools in Auckland, North Canterbury, and Otago. These courses, which were inaugurated in 1909, appear from reports received to have fully justified their establishment. The opposition to which reference was made last year appears to have largely disappeared, an indication, it is hoped, that many who saw serious objections to the introduction of what was regarded as an uncalled-for innovation are discovering that a course of instruction that is definitely related to the pupils' environment affords opportunities for training that compare not unfavourably with those provided by a course based on what may be termed grammar-school lines.

The significant subjects of the rural course continue to be taught, for the most part, by visiting instructors. This arrangement, which is unsatisfactory from many points of view, appears at present to be unavoidable in view of the scarcity of trained

teachers qualified to undertake the work. It is a matter for surprise and regret that, with the facilities now available for training, the proportion of trained teachers able and qualified to give instruction on modern lines to secondary classes in the various branches of natural and physical science continues to remain quite inadequate.

More than half of the district high schools of the Dominion (fifty-nine in number) are now provided with laboratories equipped for individual practical work in elementary physics or chemistry. Where special science-rooms are not available, as in the case of most public schools, a course in elementary physical measurements is being taken up in a small but increasing number of schools. The number of recognized classes for this subject last year was 122, as against 118 for the previous year.

Though there has been an increase from 165 to 200 in the number of classes for swimming and life-saving recognized under the regulations for manual and technical instruction, the provision made for instruction in this useful branch of knowledge still leaves something to be desired. Recognized public-school classes were held in ten of the thirteen education districts.

New buildings or additions to buildings for manual instruction in connection with public schools have been erected during the year, or are in course of erection at Devonport, Pukekohe, Helensville, Waihi, Pahiatua, Motueka, Sydenham, Lincoln, Temuka, Mosgiel, Balclutha, Milton, Lawrence, Invercargill, and Riverton, while necessary equipment has been provided for classes at Cambridge, Inglewood, Carterton, Masterton, Greytown, Levin, Wellington, Pahiatua, Pleasant Point, Dunedin, and Riverton.

Table Ja.—Capitation received and Expenditure by Education Boards in connection with Manual Instruction in Public Schools during the Year ending 31st December, 1911 (exclusive of Expenditure out of Grants for Buildings and Equipment).

Edu	ation	District			Capit	atio	n.	Expen	ditu	re.
Edd	Cacion	District		×	£	s.	d.	£	8.	d.
Auckland					3,484	13	<b>2</b>	4,698	4	11
Taranaki					1,064	1	9	932	9	6
Wanganui					2,940	18	6	3,324	10	$^{3}$
Wellington .					3,658	3	6	3,879	7	10
Hawke's Bay					1,792	16	5	2,320	13	10
Marlborough					340	12	0	295	10	10
Nelson			• •		406	13	<b>2</b>	910	4	10
Grey					78	3	9	60	17	9
Westland					42	. 1	9	12	1	11
North Canterbury					2,138	13	5	3,088	1	4
South Canterbury					1,153	13	5	1,604	0	7
Otago					1,998	<b>2</b>	10	2,125	14	6
Southland					850	1	<b>2</b>	1,536	9	4
Tota	ls for	1911			19,948	14	10	${24.788}$	7	5
		1910			18,103		4	19,935	7	3

Recognized classes for manual instruction were also carried on during the year in connection with twenty-eight of the secondary schools (thirty in number) in receipt of Government grants. The chief branches taken up and the total average attendance at classes were as follows:—

•		Subjects of l	Instructio	n.		Average A 1910.	ttendance. 1911.
Physics and chen	nistry					940	1,463
Natural science						1,325	1,335
${f Woodwork}$						361	460
Cookery						512	638
Dressmaking	• •				٠	278	3 <b>3</b> 8

Some further particulars relating to the classes are as follows:—

			1910.	1911
The number of recognized classes was			227	 274
The capitation payments on attendance amounted	$\mathbf{to}$		£929	£1,147
The average rate of payment per class was			$£4 \cdot 1$	£4·2
Special grants for buildings and equipment totalled	ł		£ $912$	£ $2,073$

It is gratifying to note that in the case of most of the rural secondary schools steps are being taken to bring the curricula into closer touch with the pupils' environment. Many of them now provide opportunities for instruction in subjects bearing on rural pursuits. Improved facilities for instruction in subjects relating to the home are also being provided in several secondary schools.

New buildings or additions to buildings for manual-instruction purposes have been erected during the year or are in course of erection in connection with Wellington Girls' College, Marlborough High School, and Gore High School; while necessary equipment for manual instruction has been provided at Palmerston North High School, Wellington Boys' College, Christchurch Boys' and Girls' High Schools, and Rangiora High School.

### TECHNICAL INSTRUCTION.

Satisfactory progress continues to be made by controlling authorities and managers throughout the Dominion in the matter of providing, improving, and extending facilities for technical instruction. The schools and classes, with few exceptions, continue to receive satisfactory support at the hands of those for whose direct benefit they exist. The interest taken by local bodies and various industrial and trade organizations in the schools has not only strengthened the hands of those responsible for the conduct of the classes, but has also assisted very materially the finances of the controlling bodies. During the year nearly £5,000 in the way of voluntary contributions was received by these bodies. These contributions carry a Government subsidy of £1 for £1. The Government has, as in previous years, favourably considered applications for new buildings or additions, and for necessary equipment for technical instruction. New or additional buildings have been erected or are in course of erection at Woodville, Nelson, Christchurch, Kaiapoi, and Ashburton, while necessary equipment has been provided for technical classes at Auckland (the School of Mines), Wanganui, Palmerston North, Napier, Nelson, Christchurch (the Technical College and the Schools of Engineering and Art, Canterbury College) and Dunedin (the Technical School). During the year grants, totalling £11,495, were distributed to controlling authorities in aid of buildings and equipment for technical classes.

There are now about fifty well-equipped buildings available for the accommodation and instruction of technical classes. As in previous years, classes in the smaller and more remote centres where buildings specially adapted for the purpose have not yet been provided have been carried on in the local schools or in suitable rented buildings. Thus, in the Wanganui district classes were held at twenty-three such centres, in the Hawke's Bay district at ten, in the Taranaki and North Canterbury districts at nine, and in the Wellington and Southland districts at seven. These classes are for the most part conducted by itinerant instructors.

Following are some particulars regarding technical classes (including day technical schools) in operation during the year:—

The number	of places	at which	sh recogn	ized cla	asses were	e held	1910.	1911.
was							115	130
The number	of day ted	hnical so	chools wa	8			8	8
The number	of other cl	asses wa	s				1,828	1,467
The number	of individ	ual <mark>st</mark> ude	ents at da	y techn	ical schoo	ls was	1,216	1,341
The number	of individ	ual stude	ents atten	ding ot	her classe	es was	13,252	13,632

## The status of the classes was as follows:-

Status.			Number of Centres.	Number of Day Technical Schools.	Number of other Classes.	Number of Students.
"Special" classes	• •	•• !	$\begin{array}{c} 112 \\ 27 \\ 3 \end{array}$	4 4 	837 472 158	7,777 6,547 649
Totals			142	8	1.467	14,973

NOTE.—It will be noticed that the number of centres is greater than the number of places at which classes were held. This is accounted for by the fact that in the larger towns there are two or more schools providing technical instruction.

- Note.—Prior to 1911 what are now known as "day technical schools" were treated as aggregations of classes, whereas they are now regarded as organized schools. This will explain the apparent decrease in the number of classes in operation in 1911.

"Special" classes—i.e., classes conducted by an Education Board or by the governing body of a secondary school—continue to be the most numerous and the most widely distributed. Most of the classes in the smaller places come under this heading. "Associated" classes, or classes conducted by managers representing bodies contributing to the funds of the classes, were held at twenty-seven centres, as against twenty-three in 1910. In only a few cases does a technical classes association conduct classes at more than one centre. "College" classes or classes controlled

by a University college have remained practically stationary.

Day technical schools, providing courses of instruction occupying not less than twenty hours a week, were in operation during the year in connection with the technical schools at Auckland (317 pupils), Wanganui (90 pupils), Wellington (268 pupils), Napier (83 pupils), Nelson (10 pupils), Westport (14 pupils), Christchurch (349 pupils), and Dunedin (210 pupils). These schools, which provide fairly full courses in science and technology, domestic economy, agriculture, and commercial instruction, continue to be well attended, and appear to attract a number of young people who probably would not for one reason or another proceed in the absence of such schools to secondary schools. The number of pupils on the rolls of day technical schools was 1,341, of whom 598 were males. Free places were held by 1,260 pupils, including 552 males.

The following table gives the school age and sex of free pupils at day technical schools:—

S. 1.4		1910.			1911.	·
School Age.	Males.	Females.	Total.	Males.	Females.	Total.
Junior free pupils (First Secon	year . 355	381 175	736 287	328 176	422 203	750 379
(First)	year 26	64	90	36	70	106
Senior free pupils Secon Third	d year 12	15 4	$\begin{array}{c} 27 \\ 6 \end{array}$	9 <b>3</b>	12 1	21 4
Totals	507	639	1,146	552	708	1,260

The number of pupils holding Junior Free Places tenable for two years was 1,129, the number holding Senior Free Places tenable for three years being 131. Fifty-one per cent. of the pupils who entered on Junior Free Places in 1910 continued to attend during 1911, while about 30 per cent. of the pupils who completed the second year of their Junior Free Places at the end of 1910 qualified for and were awarded Senior Free Places in 1911.

The courses of instruction taken up by students at day technical schools were as follows:—

				Males.	Females.	Totals.
Industrial		 	 	362	0	362
Commercial		 • •	 	193	499	692
Domestic		 	 	0	237	237
Agricultural		 	 	41	0	41
Art		 	 • •	<b>2</b>	7	9
η	l'otals		 	598	743	1,341

Over 50 per cent. of the pupils on the roll of day technical schools attended commercial courses, industrial courses being taken by 27 per cent. and domestic courses by 17 per cent. of the pupils. Courses of agricultural instruction were provided at two of the schools, and were attended by forty-one pupils, or about 9 per cent. of the total roll.

The capitation payments made during the year on account of day technical schools amounted to £9,477.

The following remarks relate to technical classes other than classes at day technical schools:—

The number of individual students in attendance during 1911 was 13,632, representing an increase of about 3 per cent. Some particulars as to the age and sex of students are as follows:—

	<del></del>		Under Twenty-one Years of Age.	Twenty-one Years of Age and over.	Totals.
[ales	 	 	4,156	2,816	6,972
emales	 • •	 ••	3,644	3,016	6,660
	Totals	 	7,800	5,832	13,632

The occupations of students may be summarized as follows:—

					Number of Students.	Percentage of Totals.
Clerical pursuits				 	1,678	12.3
Professional pursuits				 	2,308	16.9
Students				 	1,062	7.8
Domestic pursuits				 	3,136	23.0
Agricultural pursuits			·	 	1,130	8.3
Various trades				 	3,966	$29 \cdot 1$
Other occupations not	include	ed in above		 	352	$2 \cdot 6$
					13,632	100.0

These figures appear to indicate that the instruction provided by the technical schools as a whole is meeting in a satisfactory way the needs of the districts in which they are located.

Table Jb.—Number of Classes for, and Capitation on Attendances during 1911 in respect of, certain Subjects of Technical Instruction.

	Subjects	of Instruc	tion.		 Number of Classes.	Capitati	on.
					000		s. d.
Commercial subjects			• •		 229	3,129 1	
Mathematics and scien	nce				 86	798 1	0 11
Mathematics and scien	ice appl	ied to tra	ades and i	ndustries	 430	4,408	8 1
Domestic science					 275	2,748	3 10
Art and art-crafts					 289	4.679	2 4
Continuation classes					 158	824	6 0
	Tc	tals		• •	 1,467	16,588	3 3

Classes for subjects relating to the various branches of engineering—civil, mechanical, and electrical—continue to be well attended. Most of the larger schools are provided with facilities for practical work, enabling students to take up fairly full courses in engineering. Instruction in art and art-crafts is also well provided for, and well arranged courses—both elementary and advanced—have been carried out in the schools, six in number, in which special attention is given to these branches of technical education.

Instruction in one or more branches of domestic science was given at eighty-two centres as compared with seventy-three in 1910. Now that the special courses in home-science and domestic arts arranged for by the Council of the Otago University are in operation it is hoped that increased attention will in the near future be given to instruction bearing directly on the home.

The demand for commercial instruction continues to be maintained. Classes were held at forty-three centres. Though the number of what are known as

"continuation" classes in operation during the year appears to be small, it must not be thought that adequate provision is not made by the schools as a whole for instruction on subjects of general education. Where, as in an increasing number of schools, the subject taken in a continuation class forms part of a grouped course of instruction, the class is regarded as ranking with technical classes, and capitation is paid thereon at the rate for the course to which it belongs. The continuation classes, 158 in number, included in the above table were classes attended mainly by students not taking grouped courses.

A considerable increase has again to be recorded in the number of centres in which instruction in subjects relating to rural pursuits was provided. Classes were held at sixty-one centres in 1910 and at sixty-seven in 1911. The subjects of instruction included wool sorting and classing, sheep-shearing, dairying, veterinary science, agriculture, horticulture, bee-keeping, and poultry-keeping. It would thus appear that the continued efforts of controlling authorities to provide facilities for instruction in subjects bearing on rural pursuits are at last meeting with fairly satisfactory response at the hands of the farming community. That a good deal is being done by the bodies charged with the administration of primary, secondary, and technical education to create an intelligent interest in rural pursuits is shown by the fact that recognized classes for subjects related to agricultural and pastoral pursuits were attended during the year by some 15,000 pupils on the rolls of primary schools, by about 650 pupils on the rolls of secondary schools and district high schools, and by about 1,600 students of technical schools.

TABLE JC.—Number of Students taking Grouped Courses of Instruction occupying not less than Four Hours a Week and Eighty Hours a Year.

	Course	e of Instruct	ion.			Numb	er of Students	
Elementary comme	rcial					 	1,033	
Higher commercial						 	208	
Practical mathema							117	
Mathematics and s	cience	applied to	trades a	and indus	tries	 	1,037	
Domestic science						 	268	
Art and art-crafts							541	
		Total				 	3.204	

Reference was made in last year's report to the provision made in 1910 for capitation payments at higher rates in respect of attendances of students taking up definite courses of technical instruction. During 1911 capitation on the attendances of such students was earned by twenty-six schools in nine of the thirteen education districts. The total number of students taking grouped courses was 3,204, representing 25 per cent. of the total roll. This must be regarded as satisfactory in view of the comparatively short time the regulations governing grouped courses in technical schools have been in operation. It is probable that the current year will see a considerable increase both in the number of schools offering grouped courses and in the number of students taking such courses.

The number of students who voluntarily attend evening classes, particularly in the larger centres, is distinctly encouraging, as also is the increase in the proportion of those who find it worth while to attend on several evenings a week. Following are the roll numbers for 1911 of some of the larger schools (exclusive of the day technical schools that are carried on in connection with some of them):—

School.				Roll N	umber.
, Soliton.				1910.	1911.
Auckland Technical College				 1,060	941
"Elam" School of Art				 360	446
Wanganui Technical College				 636	487
Palmerston North Technical Sch	ıool			 498	530
Wellington Technical School				 1,110	1,131
Napier Technical College				 225	231
Christchurch Technical College	• •			 910	984
Canterbury College—School of A	Art			 357	365
Timaru Technical School				 256	<b>3</b> 59
Dunedin Technical School				 896	857
Dunedin School of Art				 180	289
Southland Technical College	4.4	4 .	t s	 344	369

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As stated last year, there is a movement in certain education districts in the direction of the establishment of compulsory continuation and technical classes under section 18 of the Education Amendment Act, 1910. Regulations requiring the attendance of young persons between the ages of fourteen and seventeen who are not otherwise receiving a suitable education, or who are not specially exempted from attendance have now been approved for certain school districts in Taranaki, Wanganui, and Hawke's Bay. The operation of these regulations, which it is expected will shortly be put into force, will be watched with much interest in view of the attention now being given to the question of the further education of adolescents in other parts of the world.

Free places at classes other than classes at day technical schools were held by 2,308 students. The following table gives the school age and sex of free pupils attending such classes:—

0.1.1.4		1910.			1911.	
School Age.	Males.	Females.	Total.	Males.	Females.	Total.
Junior free pupils (First year Second year First year Senior free pupils (Second year Third year Third year Second year Sec	. 257 . 189 . 104	406 184 116 73 24	1,094 441 305 177 81	670 356 223 130 81	341 200 140 99 68	1,011 556 363 229 149
	1,295	803	2,098	1,460	848	2,308

In 1911 the number of pupils holding Junior Free Places tenable for two years was 1,567, the number holding Senior Free Places tenable for three years being 741. About 51 per cent. of the pupils who entered on Junior Free Places in 1910 continued to attend in 1911. Of the total number of senior free pupils in their first year about 45 per cent. had previously been in attendance as junior free pupils. The remainder were either admitted on transfer from day technical schools, district high schools, or secondary schools, or had qualified by examination for Senior Free Places. Of the total number (2,308) of students admitted to free places 2,016, or 87 per cent., qualified for capitation. Capitation payments on account of free places amounted for 1911 to £5,900 15s. 10d., being at the rate of £2.9 per free place.

The following is a summary of the chief sources of income and items of expenditure for 1911 in respect of "Special" and "Associated" classes for technical instruction (including day technical schools):—

I	ASSOCIATE:	d Classes.			
Receipts.	£	Expendit	ure.		£
Capitation on attendances and free places	16,699	Administration, &c			5,413
Voluntary contributions and subsidies	,	Salaries of instructors			18,453
thereon	6,155	Buildings and equipment			7,145
Grants for buildings and equipment	4,164	Rent and material			2,619
Grants for rent and material	1,090				
Students' fees	4,316				
Other receipts	2,686				
_					
Totals	£35,110				£33,630
				•	
	0	0		•	
	SPECIAL				
$Receipts_ullet$	£	Expendite	ure.	•	
Capitation on attendances and free places		Expendite Administration	ure.	•	6,215
	$^{\mathfrak{L}}_{14,547}$	Expendite Administration Salaries of instructors	ure. 		15,416
Capitation on attendances and free places Voluntary contributions and subsidies thereon	14,547 $2,436$	Expendite Administration Salaries of instructors Buildings and equipment			15,416 $16,724$
Capitation on attendances and free places Voluntary contributions and subsidies	$\begin{array}{c} {\mathfrak L} \\ 14,547 \\ 2,436 \\ 6,032 \end{array}$	Expendite Administration Salaries of instructors		••	15,416
Capitation on attendances and free places Voluntary contributions and subsidies thereon Grants for buildings and equipment Grants for rent and material	£ 14,547 2,436 6,032 1,025	Expendite Administration Salaries of instructors Buildings and equipment	• •		15,416 $16,724$
Capitation on attendances and free places Voluntary contributions and subsidies thereon	$\overset{\pounds}{14,547}$ $\overset{2,436}{6,032}$ $\overset{1,025}{4,528}$	Expendite Administration Salaries of instructors Buildings and equipment	• •		15,416 $16,724$
Capitation on attendances and free places Voluntary contributions and subsidies thereon Grants for buildings and equipment Grants for rent and material	£ 14,547 2,436 6,032 1,025	Expendite Administration Salaries of instructors Buildings and equipment	• •		15,416 $16,724$
Capitation on attendances and free places Voluntary contributions and subsidies thereon	£ 14,547 2,436 6,032 1,025 4,528 1,799	Expendite Administration Salaries of instructors Buildings and equipment	• •		15,416 16,724 2,043
Capitation on attendances and free places Voluntary contributions and subsidies thereon	$\overset{\pounds}{14,547}$ $\overset{2,436}{6,032}$ $\overset{1,025}{4,528}$	Expendite Administration Salaries of instructors Buildings and equipment	• •	••	15,416 $16,724$

Special grants totalling £2,115 for the maintenance of training classes for teachers in subjects of manual instruction taken up in public schools were distributed

to Education Boards during the year.

The Science and Art Examinations of the Board of Education, London, and the Technological Examinations of the City and Guilds of London Institute were held as usual, the former at twelve and the latter at sixteen centres. The number of entries for the Science and Art Examinations was 918, the number of passes being 609; while for the Technological Examinations the number of entries was 484, and the number of passes 291. The proportion of entries to passes was 66 and 60 per cent. respectively.

The expenditure by the Government on manual and technical instruction

during 1911 may be summarized as follows:—

Manual instruction—			£	8.	d.	£	s.	d.
Capitation on classes			21,095		2			
Subsidies on voluntary contributions		·	1,014	17	8			
Grants for buildings, equipment, &c.			6,857	16	8			
						28,968	5	6
Technical instruction—								
Capitation—								
Day technical schools			9,477	U	0			
Other classes (including free places)			21,819	6	5			
Subsidies on voluntary contributions			4,552	1	11			
Grants for buildings, equipment, material	, &c.		<b>13,43</b> 3	6	9			
and the second s						49,281	15	. 1
Manual and technical instruction—								
Railway fares, etc., of instructors and stu	$\operatorname{dents}$		• •			5,725		9
Examinations						683		
Inspection and other expenses		44.4				1,014	9	3
			•			£85,673	17	11
								_

This total includes £6,550 from National Endowment revenue. The total expenditure by the Government by way of capitation, subsidies, and grants during 1910 was, for manual instruction, £24,008 7s. 7d., and for technical instruction £46,418 11s. 7d.

### No. 2.

## REPORT OF THE INSPECTORS OF MANUAL AND TECHNICAL INSTRUCTION.

We have the honour to submit the following report on manual and technical instruction in the Dominion for the year ending 31st December, 1911.

#### A. MANUAL INSTRUCTION.

Recognized classes were held at about sixty-six per cent. of the public schools during the year. In the lower classes the most popular branches are paper-work, brush drawing, modelling, and blackboard drawing. The number of schools in which handwork is regarded as a method rather than as a subject of instruction continues to increase. The marked improvement in the literature dealing with handwork, together with the systematic instruction given in the training colleges, have no doubt contributed very materially to this change of view, and it may be expected that, as a result of the increased facilities for the study and practice of the concrete method that the training colleges provide, a continued improvement in the teaching of handwork may be looked for.

Speaking generally, the most marked improvements in methods of teaching are to be found in classes for the more specialized forms of manual instruction such as woodwork, elementary physical measurements, elementary agriculture, cookery, laundry-work, and dressmaking.

It has been deemed necessary to call attention repeatedly to the general lack of instruction in the elementary principles underlying cookery. It is therefore gratifying to be able to report that the courses provided at the various cookery centres now include some instruction in principles, and that many of the instructors are endeavouring to increase and widen their knowledge with the view of making the course in cookery more educative than has been the case in the past. It is worthy of note that in certain districts a lively interest is taken in the cookery classes by parents and others. The number of cookery classes in operation during the year was 342, as against 308 in 1910.

Fairly full courses of domestic instruction are now provided in some districts, the girls receiving instruction in laundry-work and dressmaking in addition to cookery. As a preparation for and an introduction to home-life and its duties the value of such courses to the community cannot be overestimated. Sufficient theoretical instruction is given to enable pupils to take up the work in an intelligent manner, and to add an element of interest and dignity to what is too often regarded as menial drudgery.

It would appear that certain hints thrown out in last year's report regarding methods of instruction in woodwork have not been altogether without result. Very earnest attempts have been made in some centres to improve the methods of instruction in both the drawing and the practical work at the bench. A more extensive use is being made of models, and pupils' notebooks show that freehand sketching preparatory to drawing with instruments is not altogether neglected. It is necessary again to draw attention to the need of more suitable timbers for preparatory exercises than are commonly in use. Little improvement in the work of first-year pupils can be looked for until some better timber is substituted for rimu and white-pine. It is recognized that the question of expense has to be considered, but if, as previously suggested, steps were taken to import in bulk a timber such as American basswood, it would probably be found that the cost would not greatly exceed that charged for inferior local timbers. The number of woodwork classes in operation during the year was 321, as compared with 281 last year.

The number of public schools in which instruction in what is termed "elementary agriculture" is given continues to increase. In 1910 recognized classes were carried on in connection with 666 schools, while in 1911 the number was 832. The course of instruction which is carried out partly in the class-room and partly in the school garden is not intended as a preparation for the practical work of farming, though the utilitarian aspect is not altogether neglected. The object in view is rather the creation of an intelligent interest in rural life, and it is hoped that the work done in the school garden may play a part, if only a small one, in checking the ever-increasing tendency on the part of young people to drift townwards. Special courses of rural instruction occupying not less than twenty hours a week throughout the year are being taken up in an increasing number of district high schools. The significant subjects of these courses which are confined to the secondary departments are for the most part taken by specially qualified visiting instructors who also supervise classes for elementary agriculture in the primary schools. It is to be hoped that it will be found possible in the near future for the regular staff in charge of the secondary departments of the district high schools to undertake this work. At present, however, the supply of trained teachers having the necessary qualifications is quite inadequate.

Agriculture, some one has said, affords a primary educational course for the development of the race. Thus, the principal object of the rural course should be to bring about a closer correlation between life and school by utilizing environment for educational and cultural purposes. At the same time the special bias given to the course of study will naturally supply elements of interest to pupils having a predilection for outdoor pursuits, and may on this account lead such ultimately to take up farming as a profession and put them in the way of attacking its problems in a scientific way. In either case the course should have the effect of inducing more of our young people to become producers instead of distributors.

Speaking generally, it may be said of these rural courses that a solid foundation of elementary knowledge is being laid over which a superstructure of specialized knowledge may be built. It is a matter for regret that the available facilities for obtaining this knowledge are at present insufficient.

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There are, however, indications of a movement in various quarters in the direction of providing opportunities for further study for those who intend to follow rural pursuits. There would appear to be no reason why suitable courses in continuation of the district high school course should not be provided at the rural secondary schools. In any case the number of students offering would probably not be sufficient to warrant the establishment of a special type of school, even if such a course were desirable.

One very interesting feature of the rural course is the excellent practical course in woodwork provided in some cases. All the exercises have a more or less direct relation to farm buildings and implements, and things in daily use on the farm. In one district a course in metal-work is also taken. The utility and practical value of these courses are beyond question. It is hoped that as opportunities permit instruction in metal-work will become more general, as a knowledge of it and of its practical application is perhaps of even more value on a farm than skill in the use of woodworking tools.

The number of recognized public-school classes receiving instruction in elementary physical measurements was 122, as against 118 for the previous year. It is gratifying to note that teachers generally are no longer attempting to carry out each year a large number of experiments covering a wide field. The result is less ambitious but more thorough work. The conditions under which the instruction in most cases is given may not be ideal, nor the apparatus used all that could be desired; nevertheless, a good deal of systematic practical work has been accomplished. We should, however, like to see a closer connection between the work of the senior classes in woodwork and the classes in physical measurements. It should, it is thought, be possible for some of the more elementary apparatus to be made by pupils as part of the course in woodwork. The educative value of such exercises is obvious; pupils would obtain a much clearer insight into the meaning and nature of apparatus made by them than can be gathered from seeing and using the more elaborate and better-finished apparatus figured in the catalogues of scientific-instrument makers. It may be mentioned that some suggestive exercises on the making of apparatus are to be found in Bailey and Pollitt's little book on woodwork published by Murray.

There has been a considerable increase in the number of recognized classes for instruction in various branches of natural and physical science in connection with the secondary schools and the secondary departments of district high schools, most of which are now provided with well-equipped laboratories.

Some particulars relating to manual instruction in primary and secondary schools will be found in Tables J1 to J6 inclusive, on pages 15 to 18.

#### B. TECHNICAL INSTRUCTION.

Details of the work of the various technical schools and classes for the year 1911 will be found in the reports of the controlling authorities or of the managers, as the case may be, in the appendix to this report. Various particulars relating to technical instruction are given in Tables J7 to J18 inclusive, on pages 19 to 32. The following remarks have reference chiefly to the more important branches of art, science, and technology in which instruction is provided in the technical schools of the Dominion.

Art.—Marked improvements are noticeable in the majority of the classes for pure and applied art. The average quality of the general work must be regarded as encouraging. A pleasing feature is an increase in the number of students taking properly graded courses of instruction, and a corresponding decrease in the number of students whose sole aim is to learn this or that branch of art without going through the preliminary elementary stages. Speaking generally, more attention is being given to drawing, with the result that the draughtsmanship is stronger and more intelligent. particularly in the still-life classes, have latterly shown a falling-off: it is therefore gratifying to be able to report an improvement in the colour-work generally. Many of the studies reveal a better understanding on the part of the student of the medium in which he is working. Quite a number of students who have attended the day classes in art for three or four years give evidence of the possession of a good deal of artistic ability. The methods of instruction followed in the case of some for wood-carving and so-called metal-work cannot be regarded as altogether satisfactory. The methods of instruction followed in the case of some of the classes in too many cases is for the instructor to prepare the designs, which are then transferred by the pupils to the wood or metal, as the case may be. While a certain amount of the rough carving or beating is done by the pupils, most of the finishing touches reveal the hand of the instructor. At the end of the course the pupil is the proud possessor of one or more pieces of "art furniture" or repoussé work, and that is all. Classes conducted on these lines may serve a useful purpose, but they are certainly not classes for "technical instruction" as defined in the Education Act. It is to be hoped that the low rate of capitation prescribed for classes in which the instruction is not based upon studies and designs made by the pupils themselves and applied and carried out by the pupils themselves will have the desired effect. Students without the necessary knowledge of drawing, modelling, and design should be allowed to attend classes for practical wood-carving and metal-work only on the condition that they also attend classes for one or more of the first-named subjects.

Building Trades.—Classes for building-construction and drawing, architecture, &c., are on the whole fairly well attended, and the character and standard of work generally are satisfactory. The graduated scale of payments introduced in 1911 appears to have had the effect of increasing the number of students taking two or more related subjects. While the instruction in drawing leaves little to be desired, it should be borne in mind that drawing is a means to an end and not the end itself. An intelligent knowledge of the thing drawn is of more importance to the student than the drawing of it; hence the course in drawing should embrace all matters directly connected with the building and its construction. The importance of freehand sketchi g of details from the student's own measure-

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ments and observation is again emphasized, as it is considered that the ability to make a dimensioned sketch from which a complete working drawing can be made is of more value to the carpenter and joiner and to the foreman of works than the ability to produce a finished drawing, particularly if the sketch is made with full knowledge of the material of which the structure is to be made, and the purpose for which it is to be used. Skill in making an intelligent freehand sketch of an existing or a proposed building, or of details of it, is a valuable acquirement, and should be encouraged.

Most of the schools have by means of grants been able to acquire sets of modern models of building-construction, and although some of these models may not be fully adapted to colonial requirements, most of them are constructed on lines that render them very useful for sketching purposes and for illustrating details not otherwise available. A feature of the instruction is the increase in the number of visits paid by members of the classes to typical buildings in course of erection. Such visits with the instructor in charge should prove of great value to advanced students, particularly if full use is made of the opportunities of studying structural principles, and of inspecting working drawings, which in many instances by the courtesy of contractors are placed at the disposal of students.

In connection with the course in building-construction at the day technical schools, improvements in the direction of making the course more specific and vocational are noted, and the hope is expressed that as employers realize the value of the elementary training received before entering the workshops some recognition will be given to the time spent in the schools. It is felt that if employers visited these schools, say, towards the end of the session, and saw for themselves what was being done, a very much more correct impression of the value of the instruction would result than at present prevails.

Carpentry and Joinery.—Classes in these subjects in the larger centres are for the most part working on satisfactory lines. The exigencies of the trade, however, largely influence the attendance. A falling-off in the classes for advanced carpentry and staircase-work is noted; but speaking generally the attendance of those ambitious to excel in their trade is satisfactory. The number of young apprentices in attendance is, however, not as large as could be desired. In the smaller centres especially tradesmen and apprentice carpenters are conspicuous by their absence, the classes for the most part consisting of amateurs and others desirous of making additions to their household furniture at a cheap rate. The value of these classes may be questioned, especially as it is the exception to find drawing taught in conjunction with the practical work. It is a matter for consideration whether classes conducted on such lines should rank as technical classes for the purposes of capitation. To earn the higher rate it is necessary that a class should be something more than technical in name only.

Painting, Decorating, and Signwriting.—Classes in these subjects are practically confined to four centres only. So far as the practical work is concerned there is little left to be desired. In a small community such as ours it may not be easy under present conditions to draw a hard-and-fast line between technical classes in which principles are taught and practical classes in which trades are taught; the best we can look for for some time to come appears to be a combination of the two. But the question naturally arises, Is it the function of the State to teach trades? The ideal condition would be to give instruction in principles and arrange for sufficient practical work to illustrate them. So far as the classes under review are concerned, such ideal conditions have not yet been reached, inasmuch as the instruction given therein is for the most part entirely practical. No attempt appears to be made in the case of any of them to correlate the work with a suitable branch of drawing, nor to deal with the principles underlying the work in other than a perfunctory way. As suggested in the case of some of the art-craft classes, attendance at a practical class should be subject to the condition that a class for instruction in suitable branches of drawing is also attended. It is hoped, that this matter will receive attention at the hands of those responsible for the classes.

Commercial Subjects.—The number of pupils at both day and evening classes for commercial instruction indicates that the demand for young persons having a general knowledge of office work and business routine is not decreasing—indeed, directors find it increasingly difficult to meet the numerous inquiries of employers for young persons trained in their schools. The courses of instruction, both elementary and advanced, are generally speaking well adapted for the purpose, and it is understood that employers have little fault to find with the product of the classes. Increased attention is being given to the higher branches of commercial education not only at the larger technical schools, but also by the university colleges, at some of which higher commercial classes have recently been established.

Domestic Science.—Instruction is now being given in a wider range of subjects bearing on domestic matters than formerly. Hitherto practical cookery and dressmaking, with the addition in some cases of millinery, have as a rule comprised the domestic courses where these have been established. The courses at the day technical schools now include, in addition to the practical subjects, instruction in physiology, hygiene, elementary science bearing on daily life, and, in some cases, home nursing. The movement in the direction of establishing hostels in connection with the day technical schools for the purposes of the domestic course has much to commend it, as it is only by some such means that the effect of the application of scientific method to household affairs can be fully and forcibly demonstrated.

Engineering.—Evidence of the demand for facilities for practical work is to be seen in the equipment of the engineering workshops of the schools, and the number of students in attendance. The equipment, provided out of the public funds, in some cases partly out of the school funds also, is in most cases such as might be found in the workshop of an engineering establishment engaged in work calling for a high degree of accuracy, and affords opportunities for students for practice in operations requiring technical knowledge and manipulative skill. The standard of accuracy attained is fairly high. After the preliminary stage has been passed the practical work undertaken includes the making of tools, small internal-combustion engines, motors, dynamos, and electrical apparatus. The opinion is expressed that

a youth who has completed a two-years course in engineering at a technical school should at once become directly useful and more remunerative to his employer than the lad who has not had this training. It is suggested that, if employers cannot see their way at present to allow the time spent at a technical school to count as part of the apprenticeship period, they might at least adopt the principle of giving preference, when apprentices are taken on, to those who are able to produce evidence of having satisfactorily completed an approved course at a technical school. The character and quality of the instruction is such that when a youth who has been through the course provided takes his place at the vice or at the machine he has nothing to unlearn. If employers generally, or their representatives, could see their way to pay periodical visits to the schools with the view not only of becoming acquainted with what was being done, but also of making suggestions, the results would, we feel sure, be mutually We are glad in this connection to be able to report that in some of the larger centres a very live interest is being taken in the work of the schools by industrial associations and organizations representing specific trades and industries. The facilities provided for practical work and the prominence given to it have not resulted in any sacrifice as regards instruction in principles which forms so important a part of an engineer's training. Adequate provision is in most cases made for instruction in mathematics, theoretical and applied mechanics, geometry and drawing. A good deal of attention is being given in the larger schools to electrical engineering. Though the facilities for practical as distinguished from experimental work are not so complete as for mechanical engineering, the importance of the practical application of principles has not been overlooked, and a good deal of useful work has been accomplished within the limits prescribed by existing conditions.

The increased attendance at classes for subjects of general education, more pronounced in some districts than in others, indicates that these classes are meeting a real need. It is to be hoped that the near future will witness a further increase not only in the attendance but also in the number of centres at which these useful classes are held. The larger schools are now fairly well organized, so that it should be possible for some attention to be given to the establishment of branch classes in localities adjacent to the central school. It is thought that more use could be made than is at present the case of publicschool buildings for evening continuation classes. In this connection it is gratifying to note that a movement in this direction has already been made in one or two districts with encouraging results. In a number of centres evening classes for pupils who have left the primary schools without certificates of proficiency, and who are therefore unable to avail themselves of the benefits of the free-place system. have been established and are largely taken advantage of by young people anxious to obtain the certificate which will admit them to the technical school without payment of fee. In all probability regulations under the Education Amendment Act of 1910 requiring the attendance at continuation or technical classes of young persons who are not otherwise receiving a suitable education will be put into operation in one or more education districts during the current year (1912). In view of the exemptions provided it is not anticipated that the enforcement of the regulations in question will entail any undue hardship. Judging from the inquiries that have been made in some districts, the number of young people to whom the regulations will apply is not likely to be very large. In any case the result of the first year's working of the regulations will be awaited with interest.

M. H. Browne, Inspectors of Technical E. C. Isaac, Instruction.

The Inspector-General of Schools, Wellington.

No. 3.

DETAILS RELATING TO MANUAL AND TECHNICAL INSTRUCTION.

TABLE J1.—MANUAL INSTRUCTION, 1911.—Public School Classes.

			St	bject	s of I		ction ch Su			er of	Class	es in		Pupils at Dis-			
Controlling Authority.	Total Number of Schools.	Elementary Handwork.	Cookery and Domestic Economy.	Dressmaking.	Needlework.	Laundry-work.	Woodwork and Ironwork.	Elementary Science.	Elementary Physiology, Health, and First-aid.	Swimming and Life- saving.	Agriculture, Dairying, &c.	Elementary Physical Measurements.	Totals.	Number of Secondary Putaking Rural Courses at trict High Schools.	31st De	men g Ya ling	its ear
															£	s.	d.
Education Board, Auckland	294	769	64	1	73	54	69	2	••	19	143	•••	1,194		3,484	13	2
Education Board, Taranaki	65	135	14	6	10	••	14	9	21	5	39	5	258	53	1,064	1	9
Education Board, Wanganui	191	671	34	10	34	1	33	8	3	38	161	18	1,011	128	2,940	18	6
Education Board, Wellington	125	412	47	6	18		48	32	23	18	66	19	689	206	3,658	3	6
Education Board, Hawke's Bay	97	188	21	21	15		20	2	1	25	83	4	380	55	1,792	16	5
Education Board, Marlborough	62	75		٠.	6				٠.		16	1	98		340	12	0
Education Board, Nelson	65	94	18		5	١	18		12	12	37	5	201		406	13	2
Education Board, Grey	7	14	3		1				1		2	1	22		78	3	9
Education Board, Westland	14	25				١					5		30		42	1	9.
Education Board, North Canterbury	145	362	42	1	17	14	39	9		54	112		650		2,138	13	5
Education Board, South Canterbury	48	90	17	2	16		16	10	2	10	38	2	203	57	1,153	13	5
Education Board, Otago	152	317	50	4	23		32	3	8	14	89	31	571		1,998	2	10
Education Board, Southland	171	378	32	40	25	١	32	1	4	5	41	36	594		850	1	2
	<u> </u>																
Totals, 1911	1,436	3,530	342	91	243	69	321	76	75	200	832	122	5,901	499	19,948	14	10
Totals, 1910	1,330	3,489	308	90	228	63	281	109	78	165	666	118	5,595	450	18,103	10	4

Table J2.—Receipts (by way of Capitation) of Education Boards as Controlling Authorities of Public School Classes during the Year ending 31st December, 1911.

Education District.	Elementary Handwork.	Needlework.	Woodwork and Ironwork.	Cookery.	Laundry- work.	Dressmaking.	Elementary Physiology.	Swimming and Life-saving.	Elementary Physical Measurements.	Elementary Science.	Agriculture and Dairy-work.	Rural Courses.	Totals.
	σź	જ	જ વ્ય	υź	ક. ક. વે.	£ s. d.	8. G.	si.	ક. જ. વ.	s,	70.	£ s. d.	
ckland	12	319 18	8 869	67	197 5	:	:	15	:	ю	10	:	3.484 13
Taranaki	138 14 9	57 17 9	151 9 3	133 15 0	:	15	_	13 19 0	12 18	12 9 4	142 15 1	10	1,064
nganni	15	129 0	482 7	Π	:	ıo	15	17	71 6	0	က	14	940
Wellington	Ξ	144 5	666 13	16	:	6 1 3	40 6 7	14	70 13	18	18	1,383 5 0	
wke's Bav	<u>-</u>	92 12	376 15	0	;	15	ī.	-	36	16	10		792
Marlborough	19	26 14	104 5	67	:	;		15	2 5	:	Π	:	
Nelson	19	89 7	118 16	4	;	:	14 9 8	9	1 0	:	œ	:	
A6	15	0 9	:	10	;	:	10	;		:		:	
Westland	-	:			:	;	:		23 14 0	:	:	•	
North Canterbury	10	86	409 8 8	457 10 9	55 15 0	5 12 4	0 01 9	16	;	က	9	:	
South Canterbury	9	103 13		ĭ.C	:	1 13 0	:	29 1 6	63	11 1 2	$142 \ 17 \ 10$	282 14 0	
Otago	13	141		0	:		19 2 6	17	118 15 6	07	<u></u>	:	
Southland	16	144 4	:	•	:	œ	-	<u>-</u> -	0	10	12	:	
Totals for 1911	3,954 9 11	3,954 9 11 1,353 11 6 3,567 3 9	3,567 3 9	3,167 19 5	253 0 0	278 17 0	119 2 0	531 18 3	501 18 4	136 5 11	3,188 6 8	2,896 2 1	19,948 14
Totals for 1910	4,653 17 8	Totals for 1910 4,653 17 8 1,120 11 10 3,534 2 11 3,302 2	3,534 2 11	3,302 2 5	346 6 6	259 8 11	186 11 5	485 16 1	464 4 9	130 10 6	2,129 5 9	1,490 11 7	18,103 10
_			-			_	_		_	-	٠		_

TABLE J3.—Expenditure by Education Boards as Controlling Authorities of Public School Classes during the Year ending 31st December, 1911

Education District.	Elementary Handwork.	Needlework.	Woodwork and Ironwork.	Cookery.	Laundry- work.	Dressmaking.	Elementary Physiology.	Swimming and Life-saving.	Elementary Physical Measurements.	Elementary Science.	Agriculture and Dairy-work.	Rural Courses.	Totale.
									و				
	υż	±3	só +ì	H3	'n	e e e e	; ; ;	ń	£ s. a.	તું જે	ż	છે કે મ	'n
Anckland	17	319 18	1,434 16	1,124	164 1 9	:	:	က	:	:	10	:	4
Taranaki	G	65 7	195 10	162	:	0	5 0	13	5 0	6		7	
Wanganui	15	197 13	581 5	558	:	14 15 5	3 0 9	17	25 8 6	0 4 1	6	621 14 3	324 10
Wellington	-	156 7	576 18	401 0	:	4	57 9	Ō	20	œ	18	18	<u>r</u> -
Hawke's Bav	18	130 8		195 8	:		:	23 7 6	1 0	12	559 12 2	17	320 13
Marlborough	14	32 7	91 7	. 111	:	:	:	18		•:	4	:	10
Nelson	19	13 18 0	294 17	249 19 11	:	:	4 17 0	19	1 16 4	:		:	910 + 10
Grev	1	12 19			:	:	:	:	:	:	:	:	17
Westland	0	:	;		:	:	:	:	:	_	0	:	_
North Canterbury	16		872 4 6		:	5 12 4	5 0 0	207 18 3	;	21 5 7	$805 \ 12 \ 1$	:	_
South Canterbury	ro	133 0	304 5	<del>+</del> 00	:	:	:	9	:	19	9	511 9 6	1,604 0 7
Otago	81		531	670	:	23 17 5	12 6 6	14	104 2 1		Ξ	:	14
Southland	186 10 2	183 4	586 5	480	•	က	0 17	17		•	10	:	6
Totals for 1911	3,236 3 4	1,485 1 10	1,485 1 10 5,882 1 10	5,150 1 5	164 1 9	236 4 1	88 10 3	459 0 5	227 1 2	145 10 2	4,397 4 0	3,317 7 2	24,788 7 5
Totals for 1910 3,304 3 6 1,215 2 1 4,648 1 6 4,147 12 11	3,304 3 6	1,215 2 1	4,648 1 6	4,147 12 11	140 6 4	169 9 4	50 9 9	336 5 5	253 7 6	103 3 3	3,314 0 10	2,253 4 10	19,935 7 3
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TABLE J4.—MANUAL INSTRUCTION, 1911.—SECONDARY SCHOOL CLASSES.

***		8	Subjects	of Instru	ction an	d Numb	er of Cla	sses in e	ach Sub	ject.	
Secondary Schools.		Drawing in Light and Shade, Perspective Drawing and Design.	Cookery.	Dressmaking.	Woodwork.	Experimental and Natural Science.	Swimmingland Life-saving.	Elementary Agriculture and Dairy-work.	Elementary Physical Measurements.	Totals.	Capitation Payments during the Year ending 31st December 1911.
Thames High School	••			1		2			1	4	£ s. d.
Whangarei High School		2	8		2					7	39 12 6
Hamilton High School			2	2	2			1		7	28 10 0
New Plymouth High School	• •	4	2		4	6		1	1	18	104 12 6
Wanganui Girls' College	• •		4	4		3	8			19	151 4 6
Palmerston North High Sch	ool	4	1		1	8		3	4	21	69 9 2
Wellington Girls' College		5				8		ļ 		13	
Wellington Boys' College						23				23	19 12 6
Dannevirke High School			1	1	1	3		1		7	43 0 0
Napier Girls' High School			2	l 		4				6	28 2 6
Napier Boys' High School	••					1			3	4	15 12 6
Gisborne High School			4.	2	3	1		2	- 4	16	108 5 0
Marlborough High School			1		1	5		1	3	11	50 7 6
Nelson Girls' College		1	4	2		6			••	13	68 17 6
Nelson Boys' College					. 2	2		1	2	7	15 15 0
Christchurch Girls' High Sch	hool	5	3	4		11	1		2	26	92 2 11
Christchurch Boys' High Sch	iool				2	6				8	24 10 0
Rangiora High School				1		4		1	3	9	27 10 0
Ashburton High School			2		2					4	64 7 6
Timaru Girls' High School			1	2		4	1		ļ 	8	32 10 0
Timaru Boys' High School	••				1	3 .	. 1	1		6	47 17 6
Waitaki Girls' High School	• •		2			4				6	8 10 0
Waitaki Boys' High School	• •					3		1		4	16 2 1
Otago Girls' High School	••	سبر ،،					3			3	12 12 6
Otago Boys' High School	••				,.				••	4	28 12 6
Southland Girls' High Schoo	l	5	1		١	9				15	29 7 8
Southland Boys' High Schoo	l				1					1	
Gore High School	••		2		2			• • •		4	
Totals, 1911		26	35	19	24	116	18	13	23	274	1,146 16 4
Totals, 1910	••	26	27	18	20	98	17	4	17	227	929 11 8

Table J5.—Receipts (by way of Capitation) of Governing Bodies of certain Secondary Schools, as Controlling Authorities of Secondary School Classes, during the Year ending 31st December, 1911.

•							Su	bje	cts o	f In	stru	ction											
Secondary Schools.		Drawing and Painting.		Science, Ex- perimental	and Natural.		Swimming and Life-saving.			Woodwork.			Cookery.			Dressmaking.			Agriculture.		То	tals.	,
Whangarei High School	2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	18 13 11	0 6 8 8 9 9 1	22 16 18 16 19 17 18 16 18 16 18 16 18 16 18 16 18 18 18 18 18 18 18 18 18 18 18 18 18	2 6 6 6 7 6 6 6 7 6 6 6 7 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 6 7 6 6 6 7 6 6 6 7 6 6 6 7 6 7 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 7 6 7 6 7	19 7 12 28	s	d. 6	18 15 50 11 15 13 31 33	i0 0 	d. 0 0 0 0 0 0 8 0 0 0	14	15 5 7  2 2 0 0  12 7 	6 6 6 6	5 8 15 2 10	5 0 	d. 4 0 0 0 0 0 0	3 2 5	s	d. 0 4 6 0	104 151 699 199 433 288 155 1088 500 688 155 922 244 277 644 322 477 8 166 122 289	12 10 12 4 9 12 0 2 12 5 7 7 15 2 10 10 7 10 10 10 10 10 10 10 10 10 10 10 10 10	1
Totals for 1911	28	10	1 32	25 19	, 8	71	8		<b>25</b> 0	13	-8 	363	10		82 —	8	4	24	-5 	10	1,146	16	_
Totals for 1910	42	2	4 29	9 18	3 7	56	0	0	241	14	3	218	10	10	46	0	8	25	5	0	929	11	

Table J6.—Expenditure by Governing Bodies of Certain Secondary Schools, as Controlling Authorities of School Classes, on Maintenance of Classes during the Year ending 31st December, 1911 (exclusive of Expenditure out of Special Grants for Building and Equipment).

								Su	bje	ets c	of In	str	ıctio	n.										
Secondary Schools.	Drawing and	Painting.		Aciance Ex.	perimental and Natural			wimming and Life-saving.	>		Woodwork.			Cookery.			Dressmaking.			Agriculture.		Tot	tals.	
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	8.	d.	£	8.	d.	£	s.	d.	£	s.	đ.
Thames High School				33	17	5													-			33		5
Whangarei High School	0	18	0							23	2	0	15	12	6							39	12	6
Hamilton High School					٠.					30	0	0	20	0	0	20	0	0	6	0	0	76	0	Ö
Wanganui Girls' College			- !	لہ	7	0	40	0	0				65	9	9				1			106	16	9
Palmerston North High School	-50	0	0	6	3	7				19	18	9	30	18	7		٠.		i	٠.		107	0	11
Wellington Girls' College	60	0	0								٠.				- 1							60	0	0
Wellington Boys' College				2	15	2				!					- 1							2	15	2
Napier Girls' High School	ļ									i			19	13	11							19	13	11
Napier Boys' High School	ĺ		i	1	10	1	ļ								- 1				!			1	10	1
Dannevirke High School			i							18	O	0		0		10	0	0	10	. 0	, 0	50	0	0
Gisborne High School	İ									45	0	0	22	10	0	22	10	0				90	0	0
Marlborough High School			[	24	17	4								٠.	1				17	14	8	42	12	0
Nelson Girls' College							ĺ			i			50	0	0							50	0	0
Nelson Boys' College			- [							15	15	0		٠.	- 1				50	0	0	65	15	0
Christchurch Girls' High School				0	16	$^{2}$							34	12	6	1	19	6				37	8	2
Christehurch Boys' High School				7	4	0				8	0	4			- 1		٠.					15	4	4
Rangiora High School				4	11	11									- 1	16	9	9				21	1	8
Ashburton High School			ļ							31	10	0	30	12	6	2	5	0				64	7	6
Timaru Girls' High School	1		i	8	2	-6							15	0	0							23	2	6
Timaru Boys' High School				7	0	0	7	17	6	30	13	5			- 1				82	6	$\Pi$	127	17	10
Waitaki Girls' High School	1		1	- 8	()	0									- 1							8	0	0
Waitaki Boys' High School	l		Ì					٠.							į				2	10	0	2	10	0
Otago Girls' High School	İ		İ		٠.		13	0	9						1							13	0	9
Otago Boys' High School			ł				28	12	6					• •			• •			٠.		28	12	6
Totals for 1911	110	18	0	106	5	2	89	10	9	221	19	6	316	9	9	73	4	3	168	11	7	1,086	19	0
Totals for 1910	67	16	0	171	8	5	61	4	10	221	15	4	350	1	6	34	17	0	37	1	6	944	4	7

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	on at the part of	is 1	oy a a	:	: :	:	: :	:	$^{\mathrm{the}}$			:	:	:	: :	do	₹ 11.	þ	n a	:	: :	e Da				:	:			•	: :	:	the		:	he		; ;	:	:	:	:
,	iatic iatic rool.	istic Sali	ea iatio	Ö	- '		•					•	•	•		cted	12001	ted	Ξį		•	y th	1001	by t		•	•	•	•	•		•	· va	•	•	by t	•	•	. Ic	•	•	•
30.0	sociated classes conducted by the Technical Classes Association at-Wellington Technical School. ssociated classes conducted by	Petone Technical School	Technical Classes Association at	Masterton Technical School Bideford					conducted by	L						neight classes conducted by	9800	conducted	Technical Classes Association at Weiner Technical School	о <b>п</b> о		žď bý	Dannevirke Technical School	Special classes conducted by the	Gisborne Technical School								ted	Ţ		, eq	100	1001	Westport Technical School			
,	es A ical	Sch	cont	Carl	•	•	•	•	duc	Education Board at		. :	٠	•	. :	8	8 C	con	es A	ē.	. :	acte	lical	duot	L Sc		•	. :	:	٠	. :	•	conducted	Education Board at	•	duct	Sch	Sch	al S	٠	•	•
	lassi schn	ical	ses lass	chni					con	Soar						classes	ical	ses	lassu	unic		sial classes condu Sebool Boond of	echr	sial classes cond	n ar									Soar		COD	at cal	nical	hnic			
ماموم	classes al Class n Techn classes	ohn Sh	class al C	Tet.	:	: :	: :	: c3	ses	uo:	: :	:	:	:	: :	clas.	oh o	classes	is O	: :	a,u	Ses c	re Ti	Ses	Pech	:	:	: :	:	:	: :	; p	ses	lon ]	: 5	ses	tion Board at— elson Technical	echr	Tecl	er	:	:
		e Te	hnic	rton	tone	hara		rek.	clas	Cate	eviti	sgu	H	raka	ville	ed	r Ta	. eg	hnic	ino	ıkur	class	oor svirk	clas		vai	., 2	ari Iroa	ai ,	rakt	ata	atut	class	cati	sfor	clas	ı Te	n T	ort	twat	Da.	K Si
Aggregated	Techni Weltingt	Petone Technical School	Tec	Masterto Rideford	Gladstone	Te Wharan	Tinui	Waikaraka	Special classes		Dannevirke Gisborne	Hastings	Napier	Makaraka Weineme	Woodville	Associated	Lecunical Classes Assoc Napier Technical College	Associated	Tec.	Tikokino	Waipukurau	Sial Popular	anne.	Sial	isboı	Matawai	Motu Potutoki	гарціані Вакапгоа	Te Arai	Te Karaka Waingaba	Waimata	Whatatutu	Special classes	Educati	Dienneim Canvastown	Special classes conducted	tion Board at— Nelson Technical School	eefton Technical School	Pestr	Brightwater	Cable Bay	Stobe
Ą	ASSI ASSI	P.	ABS	2 A	10	Ē	Ĥ	×	Spe	4	ر ا	Ħ	z	<b>3</b> 3	×	Assc	Z	Assc	β	Ħ	≯	Spe	Ā	Spe	Ġ	Z	Zρ	ıά	Ĕ	Ĕβ	<b>×</b>	<b>&gt;</b>	Spe	ũ	٦Ö	Spe	Z		1	μć	ة ك ا	Z Ž
																																	-									

Table J7.—Technical Instruction, 1911.—Classes other than Classes at Day Technical Schools-continued.

Second of Chanter,   1794		Num	Number of Students.	den ús.		-	Subject	is of lust	ruction,	Subjects of Instruction, and Number of Classes.	ber of (	Jasses.				Capitation	
Part   Part							991,	Lac	pu	sə		-q1	-u				
19   10   10   10   10   10   10   10	School or Classes.	Free Pupils.		Total.	Pure Art.		struments: Tra Drawing. Civil, Mechanic	and Electric Engineering. Wood, Iron, a	Lead Working Rxperimental a Seiter	sand Mathemati	Domestic Instri		Education (Co	'l'otala,	On Atteudances.		Total.
18   18   18   18   18   18   18   18	Special classes conducted by the Grey Education				•							-					
32         333         365         47         7         4         7         6         15           32         333         365         47         7         4         7         7         6         15         7         6         15           32         333         365         47         7         4         7         7         6         19         10         1675         0         1         6         15         15         15         15         15         16	Green Behnical School	:	99	99	<b>C4</b>	:	-	:  :	:	:	. —		:	70	<b>∞</b> ∞	vi	w ∞
39         30         41         7         4         7         4         7         4         7         4         7         4         7         4         7         4         7         4         7         7         4         99         1         6         15         9         16         16         19         9         1         6         15         9         11         1         9         1         6         19         9         1         6         19         9         1         6         19         9         1         6         19         9         1         6         19         9         1         9         1         9         1         9         1         9         9         1         9	Special classes conducted by the Westland Educa-	:	27	77	:	:	:	: :	:	:	:	:		-	:	:	:
32         383         386         47         7         4            20         1,675         0.11         1,691         8         1,884         17           296         688         984          20              4091         9	tion Board at— Hokitika College classes conducted by the Canterbury College, Board of Governors at—	:	30	30	F	•	:	:	:	:	•	•	:	Ħ	15		15
296         688         984 <td>The School of Art The School of Engineering</td> <td>35</td> <td>333 158</td> <td>365 158</td> <td>47</td> <td><i>L</i> :</td> <td>7 7 7 8</td> <td></td> <td></td> <td>::</td> <td>: :</td> <td>: :</td> <td>61</td> <td>59</td> <td>0</td> <td></td> <td>17</td>	The School of Art The School of Engineering	35	333 158	365 158	47	<i>L</i> :	7 7 7 8			::	: :	: :	61	59	0		17
296         688         984          3         4          20         7         6         13         17         14         84         1,950         0         872 18         1         2,822 18            13         13         1	Canterbury College Associated classes conducted by the Christohurch	:	53	53	:	:	:	:	:	:	::	16	::	10	Ħ	::	11
27         289         286         1 <td>Technical Classes Association at— Christchurch Technical College Associated classes conducted by the Ashburton</td> <td>296</td> <td>889</td> <td>786</td> <td></td> <td>ന</td> <td>44</td> <td></td> <td></td> <td></td> <td>13</td> <td>17</td> <td>14</td> <td>84</td> <td>0</td> <td>18</td> <td></td>	Technical Classes Association at— Christchurch Technical College Associated classes conducted by the Ashburton	296	889	786		ന	44				13	17	14	84	0	18	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Technical Classes Association at—Ashburton Technical School	27	259	286	H	<del></del>		:	:	<b>C</b> 7	10	9	:	22	4	:	4
5         181         186         1          1          1          1          1          1          1         1         8         1          1         1         8         1          1         1         8         1          1         1         8         9          1         1         8         1         1         8         1         1         8         1         1         8         1         1         8         1         1         8         1         1         8         1         1         8         1         1         8         1         1         8         1         1         8         1         1         1         8         1 <td>Dunsandel Associated classes conducted by the Rangiora</td> <td>:</td> <td>TS</td> <td><u> </u></td> <td>:</td> <td>:</td> <td>:</td> <td>:</td> <td>:</td> <td>:</td> <td><del></del></td> <td>:</td> <td>:</td> <td>-1</td> <td>9</td> <td>•</td> <td>9</td>	Dunsandel Associated classes conducted by the Rangiora	:	TS	<u> </u>	:	:	:	:	:	:	<del></del>	:	:	-1	9	•	9
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Technical Classes Association at— Rangiora Technical School	. 5	181	186	<b>-</b> :	::	:::	::::	::		ത⊣	° :	::	6 1	<b>⊢</b> ∞		11 8
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Oxford Associated classes conducted by the Akaroa Tach- nical Classes Association at—	:	80	20	:	:	:	•	:	:	<b>C2</b>	:	:	63	00	:	× ∞
33       33       33       33       37       13       6       37       13       6       37       13       6       37       13       8       37       13       8       37       13       8       37       13       8       13       13       13       13       13       13       13       13       13       13       13       13       14       16       0        0       0       0       0       0       0       0       0       0       0       0       <	Akaroa Technical School Little Biver	: :	54	54	::	:	:	: :	:	:	හ	:	:	4-	Ξ.	:	11
ey	Special classes conducted by the North Canterbury Education Board at-	:		•	:	•	•		:	·	:	:	:	<del></del>	•	:	:
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Amberley	:	93 95	85 e	•	:	:	: -		:	<b>C1</b>	:	:	C/1 C	13	•	13
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Cheviot	: :	51	51	: :	: :	::	: :	: :		: ~	: :	::	၀ က	4 00	: :	4H 00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Christohurch Doeseld	:	132	132	:	:	:	:			H	:	П	6	19	:	19
and Doyleston     136	Hawarden	: :	3.53	25	::	: :	::	: :	_	:	::	: :	:	<del>-</del> -	9 6	: :	9 1
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Kajapoi	:	136	136	:	П	•	:	:	:	410	-	: :	L	17	:	17
idge	Lincoln and Doyleston Lincoln	::	ညီထ	န္	::	::	::	:	. : :	::	N -	: :	:	₩	C4 7	: :	22 ¥
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Southbridge	:	H	T	:	: :		<u> </u>	:	: :	, <del>, ,</del>	::	::	1	16	::	19 10
	Spye	:	15	15	:	:	:	:	:		:	:	:	<del>-</del>	0	•	0

Associated classes conducted		the Tim	Timaru		-				_		_						.s.	d. £ s.	d.  કદ ક. ે	d.
ical Classe Technical	ī		:	7.1	288	359	63	-			- 2	2 3	t-	11	20	33	235 9	3 131 12	0 367 1	
Associated classes conducted by Technical Classes Association at	ĺ	the Fa	Fairlie	-																
Fairlie Technical School Associated classes conducted by the Pleasant Point	 y the Ple	 asant P	· · · · · · · · · · · · · · · · · · ·		75	75	:	•	•	:	:	-	ന 	:	:	4	24 7 (	:	24, 7	
Technical Classes Association at- Pleasant Point Technical School	tion at-	:	;	:	19	19	<del>·</del>	:	:	: 	:	7		:	:	63	9 4 6	:	9 46	9
Associated classes conducted by Technical Classes Association at		the Temuka	ıuka			<del></del>	<del></del> -												rady.	
Temuka Technical School Associated classes conducted by	d by the		nate	:	148	148	-		•	:	:	C4	70		:	11	:	:	•	
Technical Classes Association at— Waimate Technical School Special classes conducted by the South Canter-	the Sou	.: Can		:	138	138		· · · · · · · · · · · · · · · · · · ·	· ·	: 	-	<del></del>	9	:	:	6	61 19	:	61 19 0	0
bury Education Board at- Hannaton	, :	:	:	:	10	017	· :			:		: '			:					
Wilman College classes conducted by the Otago University	  the Otage	 Univer	rsity	::	23 4 7	23 23		· ·	::	: : 	::		:	::	::	37	14 0 3 12 10 0	::	14 0 3 12 10 0	~ O
Council at— Otago University Associated classes conducted by the Dunedin	d. by th	 1e Dune	edin	:	33		:	· ·	:	· :	5.4	:	4	•	•	33	:	:	:	
	tion at-	:	<u></u>	239	618	857	:		C1	zo.	9 11	-	15		22	83		642 15		
O C	: :'		::	::	13 14	13 14	- ::		::	: :  : :	::	::	: 67	::	::	<del></del> 63	4 15 7	::	4 15 7	2
Associated classes conducted by Technical Classes Association at-	d by the	the Oamaru	narn													=====				
Oamaru Technical School Special classes conducted by the Otago Education	the Otago	.: Educa		13	139	152	:	-	· 	:	:	:	4	9	က	15	61 7 (	0 12 16	6 74 3 6	£C
Dunedin School of Art	:	:	:	93	269	289	27	4	12 .	; 	:	:	:	:	:	43	434 12 3	28 1	6 462 13 9	œ
Clinton	: :	: :	::	: :	99 18	99 18	::				: :	-	~~	63	:	٠.	:	:	:	
Dunedin	: :	:	•:	:	205	205	:	· 		: : 			. 4+ C	::	:01	1004	121 10 9	::	121 10 9	•
Milton	:	: :	: :	: :	124	124	: :	· ·	· ·	: : 	: :	: "		ന	::'	) <b>-</b> :	3 10 0	::	3 10 0	
Owaka	: :	::	::	::	24.2	2 <del>4</del> 2	::	· ·		: :	::	::		::	ᢇ :	o	ဘ	::		20
Stirling	:	:	:	:	E 2	133	·  :	· :	· •	: -		:		:	:	, ,	:	:	:	
Special classes conducted	by the	Southland	land	:	9	6	:		· :	:	:	:	<del>-</del>	:	:	-	:	:	:	
Invercargill Technical School	2]	:	:	59	310	969		13	61		5	#	4	751	11	62		:		_
Dipton	:	:	:	:	19	61	· :°	•	· ·	:	:		:	:	:	(	8 9	:	8 8 9 5	20.0
Nightcaps	: <b>:</b>	: :	: :	: :	- 51 - 51	19	 o ;	· ·		: :			<b>-</b>	:	o O	23 -		:		₩.
Otautau	:	:	:	::	17	17	::	· ·		: : 	::	-	::	: :	::		: :	::	::	
Kiverton Winton	:	:	:	:	52	57	:	•	· -		:	:	C3	:	:	က	:	:	:	
Wyndham	: :	; :	: :	::	27	27	: :			: :	: :		:	: :	:		:	:	:	
Queenstown	:	:	:	:	10	10	•		-	:	: :	' : 	:	: :	: =	, ,, ,	: :	::	::	
ses conducted	by the	Gore H	High	;	) o	90		•	·	: 	:	:	:	:	;	₹	:	:	:	
	:		;	70	62	19	:	-	:	:		. :	.03	-	621	7	8 11 3	3 11	6 12 2 9	•
Totals	:	:	:	2,308 11,	11,324 13,	13,632	221	89	68	97 133	.98	6 111	275	229	158	1,467	15,918 10 7	5,900 15 10	21,819 6	120
			-	_	-	=	_	-	-		_					_				1

TABLE J8.—TRCHNICAL INSTRUCTION.—CLASSES OTHER THAN CLASSES AT DAY TECHNICAL SCHOOLS.—CAPITATION PAYMENTS ON ACCOUNT OF CLASSES FOR CERTAIN

က Totals. 16,588 0 4 7 7 6 9 9 9 9 7 7 8 9 Continuation Classes. s. d. 1 11 ∓ <u>2</u> 824 Art and Art-crafts. 120 18 11 17 1,636 9 41 4 32 11 36 13 536 3 123 4 626 15 21 8 57 18 147 10 £ s. 366 11 541 3 01 4,679Handicrafts and Domestic Science. 2 Subjects held during the Year ending 31st December, 1911.  $\begin{array}{c} \cdot \cdot \\ 547 & 7 \\ 237 & 10 \\ 316 & 0 \\ 26 & 6 \\ 60 & 0 \\ 9 & 2 \end{array}$ £ s. 354 12  $\begin{array}{cc} 267 & 11 \\ 6 & 0 \end{array}$ 49 8 436 8 116 3 139 18 25 3 156 11 2,748Applied Mathematics and Applied Science. 46 9 50 15 50 15 837 8 1 42 11 110 16 1 6 2 52 12 181 15 2 6 2 6 409 19 545 7 363 18 œ 8 4,408 10 11 Mathematics and Science. 18 5 20 5 17 12 332 12 48.2 32 13 75 8 12 15 4 8 46 3 o io : : 862 <del>3</del> 6 <del>ن</del> 9 6 0 0 0 4 6 4 Commercial Subjects. 228 16 :11 4 81 0 12 o လ 3,129258 81 83 83 Wanganui Education Board .. .. Board of Governors, Palmerston North High School Board of Governors, Dannevirke High School ... Board of Governors, Gisborne High School ... Managers of the Masterton Technical School Controlling Authorities Board of Governors, Canterbury College North Canterbury Education Board ... South Canterbury Education Board ... Soard of Governors, Gore High School Wellington Education Board Southland Education Board Otago University Council Nelson Education Board Otago Education Board Grey Education Board

Table 19.— Manual and Technical Instruction.—Grants in aid of Buildings, Equipment, Rent and Material, and Subsidies on Voluntary Contributions paid to Controlling Authorities of Classes for Manual Instruction (School Classes) and for Technical Instruction (Special, Associated, or Collège Classes) during the Year ending 31st December, 1911.

Controlling Authority.			Status of	of Classes.	Bu	Buildings.	Equipment.	Rent.	Material.	Voluntary Contributions.	Totals.
Auckland Education Board	:	:	School	:	:	£ s. d.	£ s. d.	. s.	ø :	£ s. d. 520 0 0	£ s. d. 1,293 3 0
Auckland University College Council	::	: :	Special College	::	 	0	138 0 0	253 19 0	23 15 10 20 0 0	77 1 6	1,294 16 4 $303 0 0$
anagers of the "Elam" School of Art	::		Associated	:	: :	:	=:	20 0 0	23 17 2	200 0 0	261 9 1
Laranaki Education Board	: :	•	Special	•	:	•	5 ×	91 6	23 .7 8	<b>)</b> 1-	104 13 11 185 9 6
Wanganui Education Board	::		School	::	: :	: :	72 18 8	: :		- 10	_
Dollar Mouth High Solution	:	:	Special	:	:	:		89 19 0	208 18 1	469 19 9	2,579 11 5
almerston North frigh School Doard	: :		Special	: :	: :	350 0 0	) [~	: :	76 5 5	. જ	203 U U 850 15 6
Wellington Education Board	: :		School	:			15		:	200 1 3	
	•	•	Special.	:	:	:	2	:	79 0 10	:	_
Mollington Collage Board of Corremons	:	; , ,	Associated	:	-	:	96 18 0	33 0 68	$\infty$	396 16 0	1,140 12 2
Wenniglon Conege Board of Governors Masterton Technical Classes Association	: :		Associated	: :	: :	: :		: ;	. 9	164 15 2	0 7 <del>20</del> 1 0 10 10 10 10 10 10 10 10 10 10 10 10
Hawke's Bay Education Board	::		School	: :		: :	4	::		0	4
	:	•	Special	:	:	580 0 0		:	10 19 4	186 10 0	830 13 9
Morries High Sohool Boand	•	•	Associated	:	•	:	2	:	54 5 1	271 6 6	825 17 6
Gisborne High School Board	: :			: :	: :	: :	200 10 0	::	:	:	
	::		Special	:	•	•	•	:	18	63 13 6	74.12
Dannevirke High School Board	:		α-1, · · · ·	;	:	:	:	0 01 2	0 15 8	19 1 6	27 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Marinos Lugar School Doard Nelson Education Board	:		School	:	:	0 0 001	. oc	•	:		197 8
	: :		Special	: :	: :	_	245 7 4		130 10 9	191 9 0	960 8 11
Grey Education Board	:	•	:,	:	:		:	:	3 0 0	;	3 0 0
Canterbury College Board of Governors	:	•	School	:	:	74 2 6	54 4 7 7 9 0	:	115.10	:	128 7 1
North Canterbury Education Board	: :		School	: :	: :	. 0	10	:0	13	•	851 6 3
,,			Special.	: :	: :	_	, :	102 9 0	: :	. <b>∞</b>	786 17 6
	:	•	Associated	:	3,1	0		18	339 4 2	) 16	4,924 11 7
Rangiora High School Board	:	•	School	•	:	:	112 10 0	•	:		12
outh Canterbury Education Board	:	•	Special	:	:	•	65 IV 7	:	: 61	83 14 3	149 11 10
"	:	•	Associated	:		:		:	6 7 61 7 01 96	9 13 6	208 10 2 306 18 8
Otago University Council"	: :		College	: :	. <u></u>	::	١:	: :	:	0	,
tago Education Board			School	:		:	-	:		6	335 10 7
	:	•	Special	:	:	:	131 11 10	•	5 19 6		143 12 4
Southland Education Doord	:	•	Associated	:	:	0 0 018	× =	:	2		682 16 9
Disor Horsepan Torrest	: :		Special		: :	٠.	184 18 9	2 10 0	27 . 5 0	26 5 0	7 61 400,1
Gore High School Board	: :		School	: :	1,000	0 0 00	:	:	· :	:	-
• • • • • • • • • • • • • • • • • • • •	:	•	Special	:	:	:	:	:	;	20 0 0	50 0 0
Totals	:			:	10.197	97 4 4	7,482 7 8	673 1 4	1,938 10 1	5.566 19 7	25,858 3 0

TABLE J10.-TECHNICAL INSTRUCTION.-RECEIPTS AND EXPENDITURE BY CONTROLLING AUTHORITIES OF SPECIAL CLASSES DURING THE YEAR ENDING 31ST DECEMBER, 1911.

Controlling Authority.  Capitation. Subsidies. Buildings Rent and Controlling Authority.  Capitation. Subsidies. Subsidie		** ***			Æ	Receipts.						Expenditure.		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Controlling Authority.	Capitation	ļ	Buildings and Equipment.	Rent and Material.	Fees.	Voluntary Contributions.	Other Receipts.	Total Receipts.	Administra- tion, &c.	Salaries of Instructors.	Buildings and Equipment.	Rent and Material.	Total Expenditure.
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,					1			İ						c
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Anoblond Education Board		d. £ s. d. o 77 - s.		si Z	si <del>v</del>	% ~ +} 1⁻	တ်ဝ	oi i	÷ 602	73.1× 73.1× 1.0×	£ 8.	- 050 - 050	£ 8.
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Taranaki Education Board	915	7 26 7	88 17 11	<del> </del>	=	81 12	ı.	2 1	61 661	501 19	272 15	100.1	978 7
tool Board         524         0         152         2         3         622         7         10         6         10         5         2,058         0         5         11         5         2,058         0         5         11         2         10         19         7         2,236         10         1         1         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         1         1         1         1         1         1         2         1	Wanganui Education Board	2,924 4		$\overline{}$	4	13	428 15	14	. 9	1.372 7	4,158 14	2.497 13	331 17	8.360 12
326         14         9         180         0         633         4         5         10         19         4         11         5         10         9         5         11         15         180         0         6         13         4         2         293         0         6         53         4         16         17         8         5         8         95         11         6         15         8         13         4         2         20         5         8         13         4         2         20         5         8         11         6         5         8         9         11         6         12         7         4         3         10         9         7         14         8         6         10         13         4         11         11         11         11         11         11         11         11         11         11         11         11         11         12         11         11         12         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11 <th< td=""><td>Palmerston North High School Board</td><td> 524 0</td><td></td><td>622 7</td><td>70</td><td>6</td><td>161 10</td><td>5</td><td>0</td><td>519 8</td><td>901 2</td><td>746 6</td><td>69</td><td>16</td></th<>	Palmerston North High School Board	524 0		622 7	70	6	161 10	5	0	519 8	901 2	746 6	69	16
and         57         8         0         19         1         6         20         5         8         5         11         0         10         8         6         20         5         8         13         18         1         1         1         1         1         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         2         1         1         1         2         1 <th< td=""><td>Hawke's Bay Education Board</td><td></td><td></td><td></td><td></td><td>15</td><td>180 0</td><td>:</td><td>13</td><td>63 14</td><td>293 0</td><td>659 9</td><td>8 16</td><td>1,024 19</td></th<>	Hawke's Bay Education Board					15	180 0	:	13	63 14	293 0	659 9	8 16	1,024 19
1.366         9         63         5         0         63         6         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366         9         0         1.366	Dannevirke High School Board	57 8		:		Ξ	18 11	œ	S	13 14	140 11	23	10 5	166 17
urd         1,365         9         0         636         2         119         18         3         102         8         3         6         727         7         4         3.230         17         3         658         6         10         1418         3         7         1,006         15         1         162         10         15         10         15         10         15         10         15         10         15         10         15         10         15         10         15         10         15         10         15         10         15         11         10         15         10         15         10         15         10         15         10         15         10         15         10         15         10         15         10         15         11         15         10         15         11         15         11         15         10         15         11         11         10         15         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11         11 <th< td=""><td>Gisborne High School Board</td><td> 63 5</td><td></td><td></td><td></td><td>14</td><td>55 0</td><td>10</td><td>_</td><td>133 18</td><td>207 2</td><td>21 12</td><td>72 12</td><td>435 5</td></th<>	Gisborne High School Board	63 5				14	55 0	10	_	133 18	207 2	21 12	72 12	435 5
urd       149       8       5        3       0       38       4       0       38       4       0       38       4       0       1211       3       166       18       6       93       18       3       6       9       93       18       3       6       9       9       18       3       6       1	Nelson Education Board	1,365 9				œ	က	<u>-</u>	17	658 6	1,418 3	1,00615	96 7	3,179 12
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Marlborough Education Board	149 8	<u>.</u> :	:	:	0	:		00	27 0	152 10	:		179 11
In Board       106 15 9       9       144 12 11       106 15 9       46 11 0       17 7 2       522 3 6       841 7 4       18 13 2       83 1         In Board       260 19 9       14 6 6 660 0       90 9 0       318 3 5       7 7 7 0       93 7 3 1,444 12 11       77 7 2 522 3 6       841 7 4 186 19 4 1,577 17       17 7 2 522 3 6       841 7 4 186 19 4 1,577 17       17 7 7 2 522 3 6       841 7 4 186 19 4 1,577 17       17 7 7 2 522 3 6       841 7 4 186 19 4 1,577 17       17 7 7 2 522 3 6       841 7 4 186 19 4 1,577 17       17 7 7 2 522 3 6       841 7 4 186 19 4 1,577 17       17 7 7 2 522 3 6       841 17 4 186 19 4 1,577 17       17 7 7 2 522 3 6       841 17 4 186 19 4 1,577 17       17 7 7 2 522 3 6       841 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Grey Education Board		9	;		4	:	=	ಣ	58 6	93 18	12 7	12 2	176 13
n Board 260 19 9 14 6 6 660 0 0 90 9 0 318 3 5 7 7 0 0 93 7 3 1,444 12 11 77 7 2 522 3 6 841 7 4 136 19 4 1,577 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Westland Education Board		6	:	;	.:	:	:	15	46 11	17 17	:	18 13	83 1
n Board   176   10   3     271   7   4   13   7   3   13   0   0     474   4   10   16   1   3   106   12   0   20   13   7   1   0   0   144   6   6   6   6   6   6   6   6   6	North Canterbury Education Board		14 6			ಣ	0 2 2	7	12	7 77	522 3	841 7	136 19	1,577 17
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	South Canterbury Education Board		: ന	271 7 4		0	:	•	4	16 1	106 12	20 13	1 0	144 6
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Otago Education Board	596 6	9 6 1 0			15	0	;	91	288 6	1,191 11	316 18	53 13	1,850 9
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Southland Education Board		9, 26 5 0	18		Π	:	1	_	110 12	0 668	2.849 8	149 15	$4,008\ 16$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Gore High School Board	12	9 20 0 0	0	:	15		:	17	28 19	79 18	1,006 7	12 11	1,127 16
	Totals	14,547 9	01,342 7 0	6,032 6 91	1	1,527 17 11	-	5 11	988.9	,215 3	415 12	i		9

TABLE J10a.—Technical Instruction.—Recripts and Expenditure by Managers of Associated Classes during the Year ending 31st December, 1911.

				Recei	pts.						Expenditure.		
School.	Capitation.	Subsidies.	Buildings and Equipment.	Rent and Material.	Fees.	Voluntary.	Other Receipts.	. Total Receipts.	Administra- tion, &c.	Salaries of Instructors.	Buildings and Equipment.	Rent and Material.	Total Expenditure.
	रते अ	° 34	£ s. d.		ος. (-)	- P	· ·	9	ø	æ	9	ø	· vá
" Elam " School of Art, Auckland		200 0		43 17 2	59 15 0	:	251 19 6	900 8	206 13 2	752 10 0	33 0 5	53 9 7	1,045 13 2
Wellington Technical School	5,527 15 9	304 11 0		18	,023 11		က	-	_	4	6	ಞ	84
Petone Technical School	212 16 4	92 5 0	56 18 0		152 15	93 10 6	13	12	15	18	14	1	<u></u>
Masterton Technical School	00		:		247 6	15	10	19	14	Ø.	<b>©</b> 3	œ	<u></u>
Napier Technical College	15 1		500 5 11	54 5 1	189 5		8	4	9	16	9	9	19
Waipawa Technical School	28 5 8	10		:	:	10	:	ũ	12	10	19	~	က
Christchurch Technical College	5,278 18 1	0	03,330 577	447 2 6	6	092 6		_	Ξ	17	က	тĊ	<u>8</u>
Rangiora Technical School	170 16 0	:	:		136 16 10	0 01	16	6	10	12	14	ಉ	0
Lyttelton Technical School	:	:	:	40 0 <del>0</del>			15		က	œ		15	<u></u>
Akaroa Technical School	56 11 0	;	:	:	19	9	10		:	0	_	ර	10
Ashburton Technical School	228 10 6	242 16 6	34 11 6	:	274 17 0	327 11 7	150 8 6	1,258 15 7	0		38 18 2	01	0
Timaru Technical School	367 1 3	86 11 0	9 10 0	18 4 10	16	13	12		4	4	12	15	16
Pleasant Point Technical School	9 4 6	6 2 6	:	:	17	17	χÇ		15	00	:		₩
Waimate Technical School	0 61 19 0	12 7 3	:	:	15	0	Ι		ıÇ	<b>67</b>	:	19	7
Fairlie Technical School	24 7 6	:	:	3 5 9	4	2	-	9	0	01	0	1-	18
Temuka Technical School	:	:	:		67	Ø	4	œ	17	œ	12 13 0	17	15
Dunedin Technical School	2,710 17 9	331 5 0	184 8 11	115 17 6		Ξ	18		ಣ		12	206 19 0	16
Oamaru Technical School	74 3 6	50 10 3	:	0 15 1	13			6		18	:		17
Totals	16.698 16 2	2 2 589 15 44	4 163 11 10 1,089 19	089 19 64	316 9	013 564 16 49	49 685 19 = 35	109	7 5 419 17 9	9 18 453 2 5	7 144 11 02	618 19 10 33	33.629 10 5
					010		3	201	;	207	;		

TABLE J11.—Number of Students in Attendance at Technical Classes other than those at Day Technical Schools during the Year ending 31st December, 1911

m.a	ucation D			Special	Classes.	Associate	d Classes.	College	Classes.	То	tals.	Grand
	ucanon D	istrięt.		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Totals.
-Auckland				716	600	182	264	40	1	938	864	1,80
Taranaki	***			232	225	١			1	232	225	45
Wanganui	• •			910	1,149					910	1,149	2,059
Wellington				61	148	1,131	497			1,192	645	1,83
Hawke's Ba		• •		284	136	169	62			453	198	65
Marlborough	i		••	17	42				1 /	17	42	5
Nelson				245	332			• •	!	245	332	57
Grey	• •			52	26					52	26	78
Westland				2	28					<b>2</b>	28	30
North Cante				250	281	761	796	316	260	1,327	1,337	2,66
South Cante	rbury	٠,		12	67	208	531			220	598	818
Otago			• •	341	509	621	415		33	962	957	1,919
Southland	••	••	••	422	259	••		• •		422	259	68
	Totals			3,544	3,802	3,072	2,565	356	293	6,972	6,660	13,632

TABLE J12.—OCCUPATIONS OF STUDENTS IN ATTENDANCE AT TECHNICAL CLASSES OTHER THAN CLASSES AT DAY TECHNICAL SCHOOLS DURING THE YEAR ENDING 31ST DECEMBER, 1911.

	Chabbes at Dat	T BOIL	IOMI	DOHOOD	5 DUIL	MO I	HE TEAR END	TTACL C	TOTOT DECT	AMDE	т, тэтт.	
1.	Domestic pursuits				3,136							530
2.	Professional pursuits				2,308	13.	Painters, plaste	erers,	&c			178
3.	Clerical pursuits				1,486	14.	Printers, &c.					137
4.	Students				1,062	15.	Skilled laboure	rs				164
5.	Agricultural pursuits				1,130	16.	Labourers					137
6.	Employed in shops or wa	arehouse	s		1,030	17.	Seamen					75
7.	Dressmakers, milliners,	&c.			219	18.	Engaged in var	ious o	ther trades	and	industries	200
8.	Tailors and tailoresses				92	19.	Engaged in var	ious 1	oublic servi	ces		192
9.	Engineers and mechanic	38			638	20.	Occupation not	state	d			152
10.	Electricians				156	Í	-					
11.	Plumbers, metalworkers	, &c.			610		Total		• •		13	,632
	•	•										

Table J13.—Number of Free and other Students taking Grouped Courses occupying not less than Four Hours a Week and Eighty Hours a Year at Technical Classes other than Classes at Day Technical Schools during the Year ending 31st December, 1911.

				C	ourses an	d Number	of Student	is.	
Controlling Authority.		Number of Schools.	Elementary Commercial.	Higher Commercial.	Practical Mathematics and Science.	Mathematics and Science applied to Trades and Industries.	Domestic Science.	Art and Art-crafts.	Totals.
Auckland Education Board		3	193	23	43	159	34	41	493
Managers of "Elam" School of Art		1		••				159	159
Taranaki Education Board		1	10		1	12	٠ ا		23
Wanganui Education Board		9	144	17		81	14	50	306
Palmerston North High School Board		1	30			22	11	22	85
Wellington Education Board		2	151	120	43	248	72	92	726
Hawke's Bay Education Board		1	35			20	9		64
Nelson Education Board		3	78	18	18	57	53	26	250
Canterbury College Board of Governors		<b>2</b>	••	7		92	••	151	250
North Canterbury Education Board		1	91	23	12	92	11		229
South Canterbury Education Board		1	50						50
Otago Education Board		. 1	251		••	254	64		569
Totals		26	1,033	208	117	1,037	268	541	3,204

Table J14.—Number of Free Pupils in Attendance at Technical Classes during the Year ending 31st December, 1911.

Edi	acation l	District.				Feehnical lools.	At other	r Classes.	То	tals.
					Males.	Females.	Males.	Females.	Males.	Females
Auckland				•• ;	149	154	385	170	534	324
Faranaki							28	8	28	. 8
Wanganui					41	30	143	115	184	145
Wellington			• •		103	155	267	150	370	305
Hawke's Bay					40	41	76	18	116	59
Nelson					24	J ]	66	115	90	115
North Canterbury			• •		152	180	251	109	403	289
South Canterbury						:	34	37	34	37
Otago					43	148	176	96	219	244
Southland	• •	• •	••	• •	••		34	30	34	30
Totals	for 191	1			552	708	1,460	848	2,012	1,556
Totals	for 191	0			507	639	1,295	803	1,802	1,442

Table J15.—Day Technical Schools.—Courses taken by Students in Attendance during 1911.

School.	من				Courses	of Insti	ruction	and Num	ber of S	Students	ş.			Capitation Payments during
50001.		Indu	strial.	Comm	nercial.	Dom	estic.	Agricu	ltural.	A	rt.	То	tals.	Year ending 31st December 1911.
		М.	F.	М.	F.	М.	F.	М.	F.	М.	F.	м.	F.	
Auckland		102		57	118		40					159	158	£ s. d
Wanganui	• •	32		12	34		1	12	::			56	34	
Wellington		55		52	129		26	1	1	i	5	108	160	2,262 0 0
Napier		26		16			41	1	::	,.		42	41	420 0
Nelson		10						1			::	10	1	72 0
Westport		14										14		112 0 (
Christchurch		93	i	39	110		j 78	29				161	188	2,456 0 (
Dunedin		30		17	108	••	52	1	• •	1	2	. 48	162	1,485 0
		362		193	499		237	41	•••	2	7	598	743	9,477 0

Table J16.—Summary of Expenditure by the Government on Manual and Technical Instruction during the Year ending 31st December, 1911.

Capitation—	-1		£ s. d.	£ s. d.	£ s. d.
Manual Instruction { Public school Secondary sch		• • •	19,948 14 10 1,146 16 4	31 00K 11 0	
(Special classes			7,336 4 8	21,095 11 2	
Technical Instruction   Associated cla			6,421 3 11		
. Day technical		• •	9,477 0 0		
(College classes	• • • • • • • • • • • • • • • • • • • •	• •	2,161 2 0		
				25,895 10 7	
Free places at classes other than those at d	ay technical so	chools	••	••	46,491 1 9 5,900 15 10
~ 1 · · · · · · · · · · · · · · · · · ·					
Subsidies on voluntary contributions—					
Manual instruction	• • • • • • • • • • • • • • • • • • • •	• •	1,014 17 8		
Technical instruction	••	• •	4,552 1 11		
				• •	5,566 19 7
Grants-					
Buildings, equipment, and rent—					
Manual instruction			6,857 16 8		
Technical instruction			11,494 16 8		
				18,352 13 4	
Material for technical classes				1,938 10 1	
					20,291 3 5
Railway fares, &c					,
Instructors of classes			1,058 18 5		*
Students			307 10 10		
Free pupils		• • • • • • • • • • • • • • • • • • • •	1,419 13 6		
Public school pupils attending manual-			2,939 11 0		
I done senoor babus assending manage.	manning conti	· · ·	2,000 11 0		5.725 13 9
Examinations—				• •	0,120 10 9
	ondon		286 17 2		
Science and art, Board of Education, I		• •			
Technological, City and Guilds of Lond	on institute	• •	651 13 5		000 10 =
	Jacks "			• •	938 10 7
Inspectors—					
Salaries	••	• •	831 5 0		
Travelling-expenses		• •	170 14 9		
				• •	1,001 19 9
Sundries			• •	••	12 9 6
					85,928 14 2
Less recoveries (examination fees, &c.)				••	254 16 3
,					
Total				••	£85,673 17 11

This total includes £6,550 from National Endowment revenue.

The total expenditure by the Government by way of capitation, subsidies, and grants was for manual instruction £28,968 5s. 6d., and for technical instruction £49,281 15s. 1d. The expenditure for the previous year was respectively £24,008 7s. 7d. and £46,418 11s. 7d.

Table J17 .-- Board of Education, South Kensington. -- Art and Science Examinations, 1911.

["C." represents candidates; "P." passes.]

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\* The work of four students was "Commended," and a book prize was awarded for one student's work in connexion with the National Competitions.

† The work of one student was "Commended" in connexion with the National Competitions.

TABLE J17A.—CITY AND GUILDS OF LONDON INSTITUTE.—TECHNOLOGICAL EXAMINATIONS, 1911.

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\*One candidate was awarded a bronze medal and a prize (Goldsmith's Company).

Table J18.—Return of Staffs of Technical Schools and Classes conducted by the Under-MENTIONED BODIES AS CONTROLLING AUTHORITIES OR MANAGERS, AS THE CASE MAY BE, DURING THE YEAR ENDING 31ST DECEMBER, 1911.

31

Auckland Education Board,-

kland Education Board,—
Department of Technical Education and Manual Training.—Director, £600. Assis ant Director, £366-15s. 3d. Registrar, £170. Three typistes, 1 at £78-6s. 8d., 1 at £74-2s., and 1 at £58-6s. 8d. Two clerks, 1 at £123-3s. 4d. and 1 at £52. Office boy, £24-15s. Caretakers, £135-10s.

Auckland Technical College.—Fifty-five instructors at salaries or allowances ranging from £335 to £3-16s.

Manual Training Centres, Auckland.—Seven instructors at salaries or allowances ranging from £210 to £83-6s. 8d. Seven teachers in training at salaries or allowances ranging from £16-7s. 8d. to £1-5s. Cleaners (three), £111-14s. 8d.

Thames Manual Training School.—Two instructors, each at £85-2s. 5d. Cleaner, £25-12s. 8d.

Thames Technical Classes.—Four instructors at salaries or allowances ranging from £128-0s. 3d. to £9-16s. 6d.

Whangarei Manual Training School.—Three instructors at salaries or allowances ranging from £106-9s. to £76-7s. 9d. Cleaner, £28-16s.

Whangarei Technical Classes.—Two instructors, 1 at £51-6s. 6d. and 1 at £8-0s. 4d.

Hamilton and Cambridge Manual Training Centres.—Two instructors, 1 at £153-4s. 6d. and 1 at £146-13s. Cleaners, £13-13s.

Cleaners, £13 13s.

Waihi Technical Classes.—Local superintendent, £20. Four instructors at salaries or allowances ranging from

£85 2s. 5d. to £20.

Sundry Country Classes.—Three instructors at salaries or allowances ranging from £65 11s. 10d. to £13 6s. 8d.

Special Instructor in Agriculture, £320 16s. 8d.

Managers of the "Elam" School of Art.—Director and secretary, £450. Three teachers at salaries or allowances ranging from £150 to £75. Two attendants, 1 at £39 and 1 at £26.

Taranaki Education Board,—

New Physical School Charles (1992 Inspector (also Inspector of Schools), £75. Assistant, £50. Codette, £46.

New Plymouth Technical School.—Director (also Inspector of Schools), £75. Assistant, £50. Cadetre, £4C. Superintendent, £12 10s. Organizer for district, £240. Thirteen instructors at salaries or allowances ranging from £151 4s. 2d. to £2 10s.

ranging from £10 48. 2d. to £2 108. Stratford Technical School.— Superintendent, £25 11s. 4d. Two instructors, 1 at £7 10s. and 1 at £5. Special Itinerant Instructors.—Woodwork, 1 at £186 5s. 6d. Cookery, 1 at £113 18s., and an assistant at £12 10s. Dressmaking, 1 at £70 12s. 6d. (also instructor for Wanganui Board). Wool-sorting, 1 at £27 9s. 2d.

Wanganui Education Board,—
Wanganui Technical College.—Director, £380. Thirty instructors at salaries or allowances ranging from £320 to £1 16s. Hawera Technical School.-

Hawera Technical School.—Director, Northern District (also instructor in dairy-work), £305. Seven instructors at salaries or allowances ranging from £34 to £1 11s. 6d.

Feilding Technical School.—Director, Southern District, £305. Ten instructors at salaries or allowances ranging from £40 to £5 5s.

Technical Classes at sundry (twenty-five) Centres.—Twenty-seven instructors at salaries or allowances ranging from £53 to £3 15s.

Special Tringent Instructors Assimilated A

ranging from £55 to £5 15s.

Special Itinerant Instructors.—Agriculture, 1 at £325. Woodwork (two instructors), 1 at £240 10s. and 1 at £223 10s. Cookery (three instructors), 1 at £150, 1 at £120, and 1 at £110. Dressmaking, 1 at £84 2-. 6d. (also instructor for Taranaki Board). Dressmaking and millinery (two instructors), 1 at £189 2s. and 1 at £123 2s. 6d. Art, 1 at £140. Veterinary science, 1 at £147 2s. 6d. Commercial, 1 at £69 8s. 4d.

Rural Courses, District High Schools.—Eight special instructors at salaries or allowances ranging from £187 10s. to £9 15s.

Board of Governors, Palmerston North High School,—
Palmerston North Technical School.—Director, £300. Art master, £275. Twenty-seven instructors at salaries or allowances ranging from £54 to £4 4s.

Wellington Education Board,

Wellington Technical School.—Director, £650. Registrar, £150. Librarian, £52. O Typiste, £36. Forty-eight instructors at salaries or allowances ranging from £339 to £7. Petone Technical School.—Director (also instructor technical classes), £92. Regis instructors at salaries or allowances ranging from £60 to £8. Office assistant, £64. Registrar, £15. Twelve

Special Itinerant Instructors.—Agriculture, two instructors, each at £322 10s. Woodwork, four instructors at salaries or allowances ranging from £265 to £120. Cookery, four instructors at salaries or allowances ranging from £150 to £90.

Teachers' Training Classes.—Singing, 1 instructor at £100. Five instructors at salaries or allowances ranging from £60 to £5.

Managers of the Masterton Technical School.—Secretary and treasurer, £60. Art master, £100. Eight instructors at salaries or allowances ranging from £97 15s. to £10 10s.

at salaries of allowances ranging from £37 15s. to £10 10s.

Hawke's Bay Education Board,—
Special and School Classes.—Secretary (also Secretary to Education Board), £25. Clerks, £75.

Napier Technical College.—Director, £338 15s. Cleaners, £60 5s. 8d. Seventeen instructors at salaries or allowances ranging from £231 5s. to £1.

Waipawa Technical Classes.—Director and secretary, £10 10s.

Hastings Technical Classes.—Four instructor at £18.

Teachers' Training Classes.—Four instructors, each at £20.

Special Instructors. Assimplying and dairy work, two instructors. Let £460 16s. 8d. (also Director of School)

Teachers' Training Classes.—Four instructors, each at £20.

Special Instructors.—Agriculture and dairy work, two instructors, 1 at £460 16s. 8d. (also Director of School Classes) and 1 at £276 12s. 10d. Woodwork, three instructors, 1 at £210 16s. 8d., 1 at £147, and 1 at £30. Cookery and dressmaking (three instructors), 1 at £159 10s., 1 at £130, and 1 at £21 13s 4d.

Board of Governors, Dannevirke High School,—

Dannevirke Technical School.—Four instructors at salaries or allowances ranging from £107 15s. to £9.

Board of Governors Gisborne High School,—

Gisborne Technical School.—Secretary, £32 10s. Five instructors at salaries or allowances ranging from £159

7s. 6d. to £3 16s. 6d.

Marlborough Education Board,—
Special Instructors.—Agriculture and dairy-work, 1 at £100 (also instructor Nelson Education Board). Woodwork, 1 at £67 5s. Cookery, 1 at £60.

Teachers' Training Classes.—Two instructors, 1 at £5 and 1 at £3.

Nelson Technical School.—Director for district, £275. Four instructors at salaries or allowances ranging from Nelson Technical School.—Director for district, £275. Four instructors at salaries or allowances ranging from £200 to £120, and four instructors at allowances fixed on 5s.-per-hour basis.

Westport Technical School.—Supervisor, £40. Five instructors at allowances fixed on 5s.-per-hour basis.

Rection Technical Classes.—One instructor at allowance fixed on 5s.-per-hour basis.

Special Instructors.—Agriculture, 1 at £300 (see Marlborough). Woodwork, 1 at £200. Ironwork, 1 at £225, and an assistant at £60. Cookery, two instructors, 1 at £180 and 1 at £130.

Grey Education Board,—

Greymouth Technical School.—Director (also Inspector of Schools), £25. Six instructors at salaries or allowances ranging from £21.8s. to £2.10s

ances ranging from £21 8s. to £2 10s.
Westland Education Board,—

Teachers' Training Class.—One instructor at £17 17s.

Canterbury College Board of Governors,-

Canterbury College Board of Governors,—
School of Art.—Director, £500. Caretaker, £130. Assistant caretaker, £20. Ten instructors at salaries or allowances ranging from £210 to £20.

North Canterbury Education Board.—Director of School Cookery and Woodwork Classes (see also Director, Christchurch Technical College), £100. Two instructors in agriculture, 1 at £350 (also instructor, Christchurch Technical College) and 1 at £200. Two instructors in woodwork, 1 at £300 and 1 at £160. Two instructors in cookery, 1 at £103 5s. and 1 at £92 10s. Two instructors in woodwork and three instructors in cookery (also instructors at Christchurch Technical College). One instructor in wool-classing at £170 8s.

Christchurch Technical College.—Director and secretary, £600. Assistant secretary, £95. Registrar, £166 13s. 4d. Clerk, £29 8s. Forty-four instructors at salaries or allowances ranging from £325 to £4 4s.

Ashburton Technical School.—Director and secretary, £50. Thirteen instructors at salaries or allowances ranging from £325 to £4 4s.

Rangiora Technical School.—Everleve instructors at salaries or allowances ranging from £80 to £3.

Kaiapoi Technical School.—Secretary (also instructor), £16. Five instructors at salaries or allowances ranging from £48 10s. to £16 4s. 6d.

Lyttelton Technical Classes.—Four instructors, each at £15.

Akaroa Technical Classes.—Four instructors at salaries or allowances ranging from £20 to £5.

Other Country Centres (nine).—Eleven instructors at salaries or allowances ranging from £36 15s. to £3.

South Canterbury Education Board.—Director of School Classes (also Director, Timaru Technical School), £350. One instructor in agriculture at £400. One instructor in woodwork, £210. Two instructors in cookery, 1 at £160 and 1 at £70. One instructor in dressmaking (also instructor at Timaru, Temuka, and Pleasant Point

£160 and 1 at £70. One instructor in dressmaking (also instructor at Timaru, Temuka, and Pleasant Point Technical Schools), £108.

Timaru Technical School .- Twenty instructors at salaries or allowances ranging from £52 to £1 10s.

Pleasant Point Technical School.—Secretary and Director, £10. Two classes taken by itinerant instructors.

Temuka Technical School.—Director, £50. Six instructors at salaries or allowances ranging from £25 4s. to £12.

Waimate Technical School.—Director, £20. Secretary, £10 10s. salaries or allowances ranging from £29 11s. to £5 5s. Fairlie Technical School.—Secretary and Director, £17 2s. One in Caretaker, £16 5s. Five instructors at

One instructor at £40 10s.

Otago Education Board.—Special instructors: Cookery, 2 at £120; woodwork, 1 at £200, 1 at £37 10s. (seven months),

and 1 at £12 (six months).

Dunedin Technical School and Sub-centres.—Director and secretary, £500. Registrar (also instructor), £100.

Typiste, £25. Janitor, £101. Forty-eight instructors at salaries or allowances ranging from £271 to £2.

Dunedin School of Art.—Principal, £350. Ten instructors at salaries or allowances ranging from £200 to £11.

Teachers' Training Classes.—Seven instructors at salaries or allowances ranging from £25 4s. to £14 9s.

Technical Classes at sundry (seven) Country Centres.—Eleven instructors at salaries or allowances ranging from

Oamaru Technical School.—Secretary, £100. Twelve instructors at salaries or allowances ranging from £28 to £6

Southland Education Board.—Special instructors: Two instructors in woodwork, 1 at £252 10s. and 1 at £225; three instructors in cookery, 1 at £125, 1 at £101 19s. 8d., and 1 at £45; one instructor in wool-classing at £131 11s.

Invercargill Technical School.—Director of Technical Instruction (also architect to Education Board), £50.

Clerk, £92. Caretaker, £22 104. Art master. £222 188 4d. Eighteen instructors at calculation and the second sec

ranging from £27 12s. 6d. to £10.

Teachers' Training Classes at Gore and Invercargill.—Fifteen instructors at salaries or allowances ranging from £25 4s. to £6 5s.

Technical Classes at sundry (eight) Country Centres.—Three itinerant instructors and three instructors at salaries or allowances ranging from £33 to £3. Board of Governors, Gore High School,—

Gore Technical School. - Secretary, £10 10s. Seven instructors at salaries or allowances ranging from £13 10s. to £5 10s.

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## APPENDIX.

## MANUAL AND TECHNICAL INSTRUCTION IN THE SEVERAL EDUCATION DISTRICTS.

#### AUCKLAND.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

During the year steady progress was made in manual training and technical instruction. Technical classes were carried on in Auckland City, as in previous years, in temporary buildings, on account of the Seddon Memorial Technical College not having yet been completed. This building should have been finished in November, 1910, but, owing to unforeseen difficulties, it is not yet ready for occupation. The number of individual students in attendance at technical classes in Auckland City last year was 1,348.

Manual-training schools were opened during the year at Hamilton and Cambridge, and others will be opened shortly at Devonport, Pukekohe, Helensville, and Waihi.

The awarding of special prizes to schools making a special feature of school-gardens has given a considerable impetus to the teaching of nature-study and elementary agriculture in the primary schools, the number of classes recognized in this subject for last year being 140, as against 73 in 1910. Handwork was taught in 197 public schools, and swimming in 12.

In schools below Grade IV, taught by a male teacher, 75 were recognized for needlework.

#### EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

Rural Education in District High Schools.—We regret to say that, owing to a number of vexatious, though perhaps unavoidable, delays in providing accommodation and equipment, it was found impossible to introduce into our district high schools before the end of the year the full scheme of rural education to which reference was made in our last report. Two of these schools, however, have already entered on the course, and, with the erection and equipment of manual-training centres at Waihi, Pukekohe, and the Northern Wairoa, the schools in the immediate neighbourhood of these centres will follow, so that the close of the present year should witness a considerable expansion of the work already begun. We are most anxious to see this particular form of instruction more widely diffused, feeling sure that its introduction cannot fail to be of very real and direct benefit to our young

people.

Instruction in Agriculture.—The newly appointed instructor in agriculture entered on his duties at the beginning of the year, and by his energy and enthusiasm has already stimulated teachers to further effort, and has become a very real factor in the promotion of greater efficiency in that phase of school-work coming more directly within his sphere of influence. During the progress of the year two short courses of instruction in elementary agriculture were provided, and gladly attended by an adequate enrolment; whilst at the beginning of January another course was specially arranged for those teachers who were unable to attend previously. Considerable benefit was undoubtedly derived by all who were able to take advantage of the instruction thus imparted, though both instructor and students felt the absence of a suitable garden in which to demonstrate, experiment, and observe. With the object of making some provision for this necessary part of the special work to which reference is herein made, the Board applied to the City Council for the use of a plot of ground in the Domain; this we trust the authorities will see their way to grant, so that before many months have passed greater facilities for enabling teachers to understand the details of gardening operations, and appreciate the possibilities opened up by this phase of school-work, it is hoped, will be forthcoming. It is proposed that the ground in question be made available not only for teachers attending future courses of instruction, but also for students at the Training College and pupils taking up work in elementary agriculture at the Technical

School-gardens and Playgrounds.—The Board's offer of prizes for the best school-gardens and school-garden courses had the effect of drawing a large number of schools into the competition. In appraising the work special stress was laid on the degree to which the garden became a means of education, teachers' aims and methods, pupils' notes and drawings, co-ordination of garden-work with other school subjects, the utility and success of the operations undertaken being duly considered in making the final award. In quite a number of cases highly creditable work was done, both inside and outside the building, and very pronounced interest was displayed by pupils in the operations involved; the appearance of the playground, too, was greatly improved—to the undoubted benefit of school and neighbourhood. During the course of his visits the instructor in agriculture emphasized the importance of regarding the playground as the unit, the garden being a highly important portion thereof, and working in the direction of improving the entire school environment. This should undoubtedly be borne in mind when considering any general plan having for its object the evolution of the schoolgarden: i.e., the position of the garden should be determined by its surroundings-e.g., school buildings, approaches thereto, entrance to grounds, neighbouring roads-and not merely, as is frequently the case, be made to depend on aspect, quality of soil, or a desire to utilize a hitherto unused and possibly worthless corner. The preparation of the garden, in short, should form part of a scheme for making school environment more attractive, and should be undertaken concurrently with such other work as will tend towards the gradual improvement of school surroundings.

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EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL EDUCATION AND MANUAL TRAINING.

Handwork.—The teaching of handwork, such as brush drawing, plasticine-modelling, freearm drawing, crayon drawing, stick-laying, paper folding and cutting, cardboard modelling, &c., are now universally recognized as being a necessary part of the primary-school curriculum, and it is pleasing to be able to note that the schools of this district are keeping well up to date in this important work. The teachers generally are most enthusiastic, and are realizing more and more each year the great benefits to be obtained by correlating handwork subjects with the ordinary subjects of the school curriculum, such as nature-study, agriculture, botany, geography, composition, &c. The introduction of crayon drawing in the primer classes as a preliminary course to brush drawing has proved most beneficial, both on account of the very valuable muscular control that it provides for the little ones and also for its aid in imaginative and memory drawing. The excellent help that has been given in the schools by the Board's chief art instructor, Mr. Harry Wallace, during the past eight years has been, and is still, very much appreciated by the teachers, who are ever ready and willing to take his advice. The number of schools in which handwork was taught last year was 197, as compared with 164 in 1910.

Domestic Science and Woodwork.—The teaching of domestic science and woodwork to pupils in the upper standards of the primary schools, which was commenced by the establishment of three specially equipped manual-training schools in Auckland in 1903, is gradually being extended to the larger centres of population in country districts. Two new schools were opened last year, one at Cambridge and the other at Hamilton, and these have now been attended by pupils from the following schools: Cambridge District High, Cambridge West, Hamilton High, Hamilton West, Hamilton East, Ohaupo, Horotiu, Marsh Meadows, Matangi, Frankton, Te Awamutu. The same staff of instructors give instruction in both schools, three days per week being devoted to the Hamilton centre and two to Cambridge. The woodwork department is in charge of Mr. L. Ward, and the domestic science is taken by Miss D. B. Johnson. Manual-training schools were also erected at Helensville and Devonport during the year, and these have since been opened. Similar schools are also in course of erection at Pukekohe and Waihi, and these will shortly be in full working-order. Money has been collected locally at Te Kopuru, Dargaville, Waipu, Maungaturoto, and Paparoa, and it is hoped that during the year manual-training schools will be erected at all these places. It will thus be seen that a great deal has been and is being done to spread the teaching of domestic science and manual training into the country districts, and although in some cases the advent of the work is not heralded with any great enthusiasm yet the teaching of these branches of education is generally much appreciated where it has been in existence long enough for its practical benefits to be seen. During the year Miss M. L. Renwick, who had been appointed by the Board as chief instructor in domestic science at the Auckland Technical College, arrived in Auckland, and amongst the first duties which she undertook was that of becoming acquainted with the domestic science teaching as carried out in the Auckland manual-training schools. As a result considerable improvements have been introduced in connection with the teaching of this important work. It is pleasing to be able to note that Miss Renwick was agreeably surprised to find that we had such excellent centres for the teaching of cookery and laundry-work in Auckland, which she considered were superior to any she had seen at Home.

Needlework.—In order to get over the difficulty of providing instruction in sewing in schools below Grade IV taught by a single male teacher, the Department provides a special capitation grant for sewing-mistresses in these schools. The grant is paid at the rate of 10s. per head per annum, on condition that at least two hours per week are devoted to sewing throughout the school year of forty weeks. As some of the schools in the backblocks are very small, the Department provides for a minimum payment of £6 per annum where the average attendance of pupils taking sewing is less than twelve. Although great difficulty is sometimes experienced in getting suitable sewing-mistresses in some of the small schools, yet there can be no doubt that the provision of funds for teaching this very important subject has proved on the whole most beneficial, and last year 75 schools under Grade IV

had specially appointed sewing-mistresses.

Swimming and Life-saving.—This subject still does not receive the consideration in the primary schools that its great importance demands. Up to the present Auckland City and suburbs have been very poorly provided with swimming-baths, and the distances of most of the schools from the Albert Street baths have had the effect of preventing the headmasters from sending the pupils there for instruction in swimming. New baths have recently been provided at Mount Eden, whilst others are being erected at Shelly Beach, Ponsonby, and at Hobson Street. When these are open to the public a large number of school-children will be within easy reach of one or other of them, so that it is hoped that in the near future the majority of the boys and girls in and around the city will receive instruction in swimming and life-saving. As in previous years, several country schools avail themselves of streams and tidal rivers for teaching this subject; but the fact that in 12 schools only out of about 575 in this district was swimming taught indicates that very little is done in this direction compared to what might be.

Elementary Agriculture and Nature-study.—It is pleasing to be able to report that considerable progress has been made in the teaching of elementary agriculture and nature-study in the primary schools during the past year, the number of schools in which this important branch of education was taught last year being 140, or nearly double that of the preceding year, when the number was 73. This remarkable progress can be accounted for chiefly in two ways. In the first place, the late Chairman of the Board, Mr. C. J. Parr, was instrumental in getting the Board to offer prizes of £5, £3, and £2 in each of the six inspectorial districts for the greatest improvement to the school grounds and gardens during the year. As a result many of the teachers who previously had not taken a great deal of interest in the school-garden entered into the competition with spirit and enthusiasm. In the second place, the sympathy given to the work by the Chief Inspector and his staff did much to encourage teachers to take up the teaching of elementary agriculture in their schools. One has only

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to mention that no less than 277 of the Board's teachers attended the courses of instruction held by Mr. V. W. Jackson, B.A., during the three years that he was engaged as instructor in elementary agriculture under the Board, and obtained special certificates qualifying them to teach this subject, to show that even now there is a large number of teachers qualified to take this work in their schools who have not yet made a start. The present instructor in elementary agriculture and nature-study, Mr. J. P. Kalaugher, who commenced his duties at the beginning of last year, has visited a large number of schools, and his advice to the teachers has been very much appreciated. During September and October special classes in elementary agriculture and nature-study for teachers were conducted by Mr. Kalaugher at Hamilton. Each of these courses was held for a period of three weeks, and embraced not only theoretical and laboratory work, but also instruction in the school-garden. In making the selection of teachers to attend these classes preference was given to those who had not previously had an opportunity of attending any of the special courses in agriculture held by Mr. Jackson whilst he was in the service of the Board. For each class the number applying for admission was in excess of the number that could be accommodated, and the majority of those who did attend were enthusiastic as to the benefits which they derived from attendance at the class.

The students of the Auckland Training College attended special classes at the Technical College in art, domestic science, and manual training (woodwork). Special classes for teachers in art, dressmaking and needlework, hygiene, laundry-work, and physiology were held at the Auckland Technical College. At Whangarei a teachers' class in cookery was also held.

#### Technical and Continuation Classes in Country Centres.

Whangarei.—The following classes were held: English, commercial arithmetic, cookery, brush drawing, freehand and model drawing, painting, poker-work, carpentry and joinery, and trade drawing. The number of individual students enrolled was 73, the class entries being 100. At the annual examinations held in December, 33 papers were worked, and 26 passes obtained. In the middle of the year Mr. G. B. Woolley was promoted to the Newmarket Manual-training School, and Mr. F. J. Layzell was appointed in his place. During the twelve months that Mr. Woolley was in charge of the woodwork classes at Whangarei he did excellent work, and his departure was very much regretted in the district. The Board was fortunate in obtaining so well qualified a successor as Mr. Layzell, who is a most enthusiastic teacher. At the end of the year Miss Griffiths was appointed as domestic science instructor for the new manual-training schools at Devonport, Pukekohe, and Helensville. During the three years and a half that Miss Griffiths was in charge of the cookery centre at Whangarei she rendered excellent and enthusiastic service, and received a very hearty send-off from the inhabitants when she left. At the end of the session an exhibition of the work done by the students in the various classes was held. This was well attended by parents and residents, and the live interest taken in the work was most encouraging to the students and teachers.

Thames.—Technical and continuation classes were in much greater demand in Thames last year than for several previous years, the number of students in attendance being almost double that of the former year. Classes were held in the following subjects: Commercial arithmetic, English, type-writing, shorthand, book-keeping, high-class cookery, household cookery, cookery for nurses, dress-making, woodwork, theory and practice of plumbing. Miss A. Murphy again acted as local superintendent, and was as energetic and enthusiastic as ever in carrying out her duties. The number of individual students enrolled was 115, the class entries being 337. Fifty-seven papers were worked at the December examinations, and 46 passes were recorded. Special mention should be made of the excellent work done by Miss Lawson in the cookery classes, these classes being very popular for the first time in several years.

Waihi.—In spite of the classes in Waihi having still to be conducted in the District High School and in a rented building, steady progress was made during the year. Classes in English, commercial arithmetic, commercial correspondence, book-keeping, shorthand, dressmaking, millinery, and building-construction were held, especially good work being done in the building-construction class under Mr. Smith. The number of individual students enrolled was 86, the class entries being 223. At the examinations held in December the number of papers worked was 79, and 39 passes were obtained. Mr. S. H. Macky, headmaster of the Waihi East Public School, again carried out enthusiastically his duties as local superintendent.

Cambridge.—Classes in dressmaking, cookery, and woodwork were held at Cambridge. Of these, the only ones that were at all well patronized were the dressmaking classes, in which there were 29 pupils.

Te Aroha.—Mr. B. A. Franklin, Sanitary Inspector for the Thames district under the Health Department, conducted a plumbing class, at which 5 students attended.

Paeroa and Hamilton.—The itinerant dressmaking instructor, Mrs. A. M. King, held dressmaking classes at Hamilton and Paeroa, the number of students being 44 at Hamilton and 4 at Paeroa.

## Auckland Technical College.

At the time of writing my report last year I fully anticipated that the new building—the Seddon Memorial Technical College—would be ready for occupation by the end of 1911. Further vexatious delay on the part of the contractors has, however, prevented this, and there appears at present little prospect of our getting into the new college much before the end of 1912. It is sincerely to be hoped that further funds will shortly be forthcoming to allow of the five stories of the building being completed, as at the termination of the present contract, which provides for the first three stories only, the new college not only will be anything but an architectural ornament to the city, but it will be entirely inadequate in accommodation even for present requirements. The total number of individual students attending day and evening classes last year was 1,363, as compared with 1,338 for the previous year.

Day Technical School for Boys and Girls.—The number of boys and girls in attendance at the day Technical School last year was 323, as against 278 for 1910. The courses of instruction provided in the school were commercial, domestic, science and technological, and engineering, the best patronized being the commercial course. The most unsatisfactory feature in connection with the day Technical School is the fact that so large a number of students are satisfied with the one year's course, the demand for their services being such that they are readily able to obtain good employment after having been in the school only twelve months.

Evening Classes.—In spite of the wretched accommodation excellent work was done in the evening classes by the teachers and students. It says much for the enthusiasm of both that they are able to rise above the surroundings in which most of the work is carried on. The continuation class, which provides a course in general education to enable students to obtain certificates of proficiency qualifying them for Junior Free Places at the College, was attended during the year by 72 students. At the Inspector's examination held in December, 21 of the 40 pupils who presented themselves obtained certificates of proficiency, and 9 certificates of competency.

The students of the College have again been very successful in the examinations held by the City and Guilds of London Institute and by the Board of Education, South Kensington, London. In the City and Guilds Examinations the number of passes obtained by the students of the College was 89. In the Board of Education Examinations no less than 230 passes were obtained.

In conclusion, I wish to express my thanks to the Board for the free hand they have granted me in carrying out my duties, and to my staff for the loyal and enthusiastic way in which they have worked during the year.

George George, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Auckland, Thames, Waihi, Whangarei, Cambridge, Hamilton, Te Aroha, and Paeroa by the Auckland Education Board.

Receipts.	£	s.	đ.	Expenditure.	£	s.	d.
	11,312	0	10		4,731		
Capitation-Day Technical School, Auck-				Office expenses (including salaries, sta-	•		
land	2,670	0	0	tionery, &c.)	1,458	12	11
Capitation on special classes	2,423	4	11	Advertising and printing	192	14	3
Capitation on account of free places	1,404	17	6	Lighting and heating	175	6	<b>2</b>
Rent				Insurance and repairs	29	0	2
Material	23	15	10	Rent	468	1	5
Subsidies on voluntary contributions			_	Examinations, &c	8	<b>2</b>	9
For training of teachers	652			Material for class use	<b>5</b> 89	8	1
Fees				Training of teachers	743	13	3
Voluntary contributions				Contracts (new buildings, additions, &c.)	6,009	9	4
Interest on fixed deposits				Furniture, fittings, and apparatus	460	5	0
Rent from Auckland Technical College site		10		Balance at end of year	5,263	14	11
Sales of material	226						
Miscellaneous receipts	54	6	0				
en en en en en en en en en en en en en e				-			
	£20,129	16	2	£	20,129	16	2
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R. CROWE, Secretary.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE "ELAM" SCHOOL OF ART.

The new regulations issued by the Education Department early in the year relating to the attendance of the younger class of students have had the effect of reducing somewhat the actual number of attendances during the year; but, on the other hand, the "course" system, which commenced this year, will, I think, more than make up to us and other art schools for the loss of the capitation on attendance of the junior students. There was generally a chorus of regret among the students themselves that those attending primary or secondary schools could not be accepted as evening pupils at an art school by the Department. For many reasons I am also sorry for this part of the new regulations, as many of these young students are among the most keen and earnest workers we have. But while these new regulations have debarred a number of eager, hardworking students from attending, they have made the work of supervision of classes easier by eliminating to a large extent the careless and playful element among the younger students which exists in every school.

The number of students on the roll of the school was 375, the total number of attendances registered during the year being 32,793; and, as some 50 of the younger students were affected by the new regulations, the year would evidently have been one of the largest we have ever had if all the attendances could have been counted.

On account of the very long period which elapses between the actual examinations and the date on which the results are known, the examinations of the Board of Education, London, still continue unpopular with students, and as a rule only those who are qualifying for art teachers take these examinations. This year 19 certificates were received by students from London in various branches of art, ranging from drawing and painting from life to elementary drawing. In the examination of work for teachers' certificates, 7 students passed out of 9. The total number in the whole of New Zealand was only 28, with 16 passes, so that our results may be looked upon as quite satisfactory.

During the year Mr. A. F. Nicoll resigned his position as instructor in order to visit England. His place was taken by Mr. Edward Friström, whose work is so well and favourably known throughout Australia and New Zealand. Under Mr. Friström's charge the classes for drawing and painting from life and still life have made already a great advance, and his energy and enthusiasm are rapidly spreading to his students. The annual exhibition of students' work, held in the Council Chamber by permission of His Worship the Mayor, was very successful, and the opinion was generally expressed that it was the best that had been held for many years, especially in the more advanced work. The classes in wood-

carving and modelling under Mr. H. Mantel have been well attended during the year, and much excellent work has been done. Many of the older students in these branches are gaining increased confidence in themselves and their work, and are now attempting with a large amount of success work of a much more difficult and elaborate nature than they have up till now attempted. I hope to be able to arrange for much larger and more suitable accommodation for these classes in 1912 than we have ever had. The advent of what is known as the "course" system will be no new thing to this school, as a system of courses depending on the individual aim and requirement of each student has been in existence for years; but the increased payments for the older and more advanced students will have a beneficial effect on art schools adopting the "course" system.

E. W. PAYTON, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Managers of the "Elam" School of Art.

Receipts.	-	£	d	đ.	Expenditure.		£	s.	a
Balance at beginning of year		189		10	Salaries of instructors		752		
Capitation on associated classes	• •	327		9	Office expenses (including salaries,	sta-	,02	10	J
Rent	••	20	_	-	tionery, &c.)		88	3	11
Furniture, fittings, and apparatus		17	11	11	Advertising and printing			14	
Material		23	17	2	Lighting and heating		27	16	9
Subsidies on voluntary contributions		200	0	0	Insurance and repairs		1	11	8
Fees		59			Rent		40	0	0
From the trustees of the "Elam" bequ	est	251	19	6	Material for class use		13		7
					Models		32	6	0
					Various expenses		11	0	4
					Furniture, fittings, and apparatus		33	0	5
					Balance at end of year	• •	44	4	0
	£1	,089	17	2	•	£	1,089	17	2
	_				Company Cl.			-	

SAM. JACKSON, Chairman E. W. PAYTON, Secretary of Managers.

## TARANAKI.

# EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

Teachers' Saturday Classes.—Saturday classes for the training of teachers were again held during the year at New Plymouth and Stratford, and included, among other subjects, drawing, cookery, physiology, dairy-work, cardboard, plasticine-modelling, and chemistry. In all 82 teachers attended the classes, 41 at each centre. As far as numbers are concerned this is very gratifying, although the regularity of attendance was somewhat disappointing. This was surprising, seeing that the teachers are so accustomed to exact regular attendance from their pupils. As evidence of the benefit of these classes it may be mentioned that at the end of the session several of the teachers qualified for certificates in handwork at the examination conducted by the Education Department's Inspector. For the City and Guilds Examination in cookery 6 teachers presented themselves, and were all successful in securing a first-class pass. Two teachers were also successful in gaining a second-class pass in free-hand, model, and geometrical drawing at the South Kensington Examination. A number likewise qualified in the subjects of dairy-work and physiology for the Teacher's Certificate Examination. We feel, however, that a large proportion of those who attended the classes have not earnestly endeavoured to take full advantage of the instruction imparted, otherwise a greater percentage would have presented themselves for these examinations.

School Manual Class.—During the year there were 95 schools in operation in the district, and the greater number of these took up handwork in some form or other. In addition to the ordinary handwork subjects, instruction in woodwork, cookery, agriculture, dairy-work, chemistry, physiology and first aid, physical measurements, advanced needlework, botany, swimming, dressmaking, elementary surveying, ironwork, &c., was recognized in 142 cases. The classes in cookery and woodwork conducted at Stratford and New Plymouth as centres continue to be as popular as ever. During the year Inglewood was also made a centre for these classes. Instruction in agriculture and dairy-work has been made a special feature. Thirty-nine classes have been in operation throughout the district during the year. Most of the schools taking up these subjects are now well equipped with the apparatus necessary for carrying on the experimental work so essential in these subjects. We are pleased to see that teachers are beginning to recognize the importance of giving prominence to these subjects in a district such as ours, the prosperity of which depends almost entirely on agriculture and dairying. We are of opinion that no child who intends to follow rural pursuits should be permitted to leave school without having an intelligent grasp of the principles of agriculture and dairy-work.

The rural classes that have been carried on at the Stratford District High School for the past two years have now got beyond the experimental stage, and have fully justified their establishment. Fifty-six pupils (27 boys and 29 girls) were enrolled, with an average of 47 for the year.

# EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL INSTRUCTION.

Technical and continuation classes were held during the year at New Plymouth, Stratford, and Inglewood, and 212 students were enrolled at New Plymouth, 126 at Stratford, and 37 at Inglewood, as compared with 228, 196, and 23 in 1910.

New Plymouth Centre.—As in previous years, the commercial classes again proved the most popular, a good many students taking advantage of a grouped course in commercial subjects. The technical and industrial classes were not so well attended. At the close of the milking season an experiment was tried of carrying on a one-day-a-week course for farmers' sons, the subjects taken being agriculture, dairy-work, farm carpentry, metal work, &c. Students from Omata, Waitara, Bell Block, Hillsborough, York Road, and Stratford enrolled in the class. The enthusiasm shown and the

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interest taken in the work by these lads was ample evidence that the opportunity afforded to those who could not spare the time to take a full course at a district high school or a secondary school was fully-appreciated, and it is to be hoped that a good many will avail themselves of a similar course next year. In looking into the number of Standard VI proficiency certificates actually granted to scholars in New Plymouth for 1910, it was found that over 30 per cent. of the holders did not avail themselves of free tuition either at the New Plymouth High School or at the technical evening classes. Many of these, of course, go to work or leave the district, but inquiries show that all are not thus accounted There would seem little need in a Dominion such as ours for children who pass the Sixth Standard of our schools with proficiency at the age of twelve or fourteen to go straight to work. The majority of parents can well afford to allow them to continue their education until sixteen or seventeen years of To meet the demand of those wishing their children to receive a further education along commercial or industrial lines it is intended to establish in connection with the Technical College day classes offering a course in commercial subjects, such as commercial English, arithmetic, geography, book-keeping and accounts, précis-writing and correspondence, shorthand and typewriting, &c. An industrial course, including mathematics, building and machine drawing and construction, mechanics, woodwork, metal-work, &c., will also be offered, and a domestic course comprising cookery, science of common life, hygiene, physiology, millinery, dressmaking, &c., will be drawn up for those who do not intend to take up commercial work. It was felt that the compulsory military training scheme would militate somewhat against the classes, hence it was thought wise to have our students drafted into a company connected with the College, and to have the drill nights arranged so as not to interfere with the classes held in the evening. Outside classes in dressmaking were carried on at Opunake and Hillsborough. The Sash and Door Company were good enough to present a complete wood-turning outfit A sum of money was needed to purchase motive power and fittings, and a canvass among those interested in the matter resulted in some £25 being collected. The lathe and accessories should prove a welcome addition to the school, and be of value to those in the woodwork trades.

Stratford Centre.—Technical classes in wool-sorting were held at Toko, Te Wera, and Kohuratahi; in dairy science at Midhirst and Ngaere; in dressmaking at Stratford and Tariki; and in book-keeping, précis-writing, and drawing at Stratford. Continuation classes in English, arithmetic, Latin, and junior mathematics were held at Stratford. Good work was done in the wool-sorting classes, one of which was established forty-three miles east from Stratford. For his earlier lessons the instructor found a difficulty in getting enough wool, and wool of different varieties for classing purposes. Later, however, he procured some from the South Island, mostly of fine texture, and this, with the local supplies available—mostly of a coarse texture—gave his students plenty of material. These

classes should be further extended next year.

It is disappointing that classes in dairy science were held at only two centres. These two classes, however, were well attended, and by the best type of student—the young farmer—and the course of instruction was a very valuable one. Dairy science is a subject of such vital importance to the settlers of our province that efforts should be made to establish classes in that subject throughout the whole district. The gradual extending eastwards of the railway-line should make it possible for classes in this subject to be established in the locality of which Te Wera is the centre, and a visit of the Board's Technical Organizer to that locality should be followed with good results.

The students taking the rural course during 1911 in Stratford District High School have been instructed in the following subjects: Physics, chemistry, agriculture, dairying, wood and iron work, surveying, cookery, dressmaking, hygiene, and physiology. The aim in all the work has been the same throughout—viz., to make the teaching as practical as possible. In chemistry and physics the work in the laboratory has been designed in such a way that it forms the groundwork for the cognate subjects, agriculture, dairy-work, chemistry, and hygiene. The second-year students have in this way been enabled to take physical measurements and agriculture in the Civil Service Examination, and in the future it is proposed that intending candidates will be able to present themselves for examination in chemistry, dairying, and agriculture. In agriculture special attention has been paid to the preparation of the seed-bed, and the subsequent care of the seedling. This has been made possible by the erection of a greenhouse in the school-grounds, and the boys who prepared the seed-bed and the ground for the tomato-plants have now the satisfaction of seeing the house well filled with healthy fruit-bearing plants. Experiments on the growing of lucerne have also been conducted with satisfactory results. The dairying classes have had practical instruction in the chemical and physical properties of milk, and every student in the class has estimated the water, total solids, and fat in milk, and the moisture and fat in butter. Hygiene and physiology have been treated on broad lines, special attention being directed to the digestion of food, the elementary analysis of food, and ventilation. The boys have taken much interest in surveying, and towards the end of the year were engaged in plotting various traverses by means of a sighting-compass. The whole course of work as taken in the District High School is becoming deservedly popular with parents and pupils alike, and greater numbers of children may confidently be expected in the rural classes each succeeding year. The average number on the roll for last year was 49. At present the course of work is arranged to extend over only two years, and to bring the students up to the standard of the Civil Service Junior Examination. It is desirable, however, that work should not stop here, and arrangements should be made by which it could be carried on for an additional two years, and its scope extended to the requirements for the Civil Service Senior Exami-The decision of the Board to establish two Senior Scholarships, with dairy-work, agri culture, &c., as compulsory subjects for examination, should help materially in this direction. provide efficient instruction for senior rural students, however, would, with the present school staff available, be scarcely possible, and before it could be undertaken a reconstruction of the staff would be necessary to enable the rural work to be carried out efficiently, as the difficulties experienced last year have again emphasized the necessity of having on the staff at least one female teacher with science qualifications.

Inglewood Centre.—During the year classes in book-keeping and dressmaking were established: only one term in each, however, was carried on, the support promised not being sufficient for a second

term. Mr. Hawson, the instructor in book-keeping, addressed a large meeting on "How to keep a Cash Account," and two very able addresses on "Utility Poultry-farming" were delivered by Mr. Gordon. A good class of those interested in poultry-farming should be formed next winter. Mr. Heatley lectured on "Agriculture and Dairying," but as the spring was almost over it was considered rather late to commence a course in these subjects. The manager of the Inglewood butter-factory has very kindly offered his services in the dairying course, and also the use of his factory for testing, &c. At Inglewood, Stratford, York Road, Midhirst, Cardiff, Ngaere, Te Wera, Toko, Kohuratahi, and other places, meetings were held and lectures delivered by Mr. Heatley on technical and agricultural matters; but, while the farmers turned out well to these lectures, they did not apparently see the benefit to be derived from a series of lectures for which a fee was charged.

The question of compulsory attendance at continuation and technical classes was considered by the Board, and a series of regulations drafted by a sub-committee were forwarded to the Education

Department, Wellington, for approval.

In this connection the following extract from a report by the Director of Education for New South Wales makes interesting reading: "The fact is—and the Department has frequent evidence of it boys of seventeen years of age and over who have been away from school influences for two or three years lose the habit of study, and do not desire, nor do they feel themselves prepared for, instruction of a strictly technical character. They think they can get along very well without it. A mere elementary education which terminated at the earliest possible date has lost its effect upon their ambitions by the lapse of two or three years during which they earned a fairly high rate of wages. Unless this gap is filled any widely extended system of trade or technical education is practically The technical school can only be built upon the continuation school. If, as soon as the boy leaves the primary school, he is caught by the continuation school, and he finds in it some instruction which evidently suits his needs and stirs his ambitions and makes him realize his powers, the chances are then all in favour of his taking up later on the more specialized work of the technical school. If not, he drifts. So long as the continuation school rests upon a purely voluntary basis it cannot do its part towards fulfilling the purposes that lie at the root of the whole conception of education as a function of the State. A system of voluntary attendance will secure the training of a few who have grit and ambition to excel; it will not touch the large number who lack that ambition, and are the feeblest both in ability and character. Until the system reaches these there can be no such widespread effects as will put a stamp on the community as a whole. Under the most favourable and exceptional operation of the voluntary system in England, 50 per cent. of the youths leaving school enter life with no more educational foundation for a career than has been obtained by the barest minimum of elementary school attendance. On the other hand, in some German cities, not more than 7 per cent. of the youth go into the world without a superstructure of training specially fitting them for service and productive work. This disparity must tell in the results of industrial competition. The experience of Scotland, Germany, and the United States has led these countries to the conclusion that the extension of compulsory attendance beyond the limits of the primary school is absolutely necessary.

In conclusion, I may say that the thanks of the Board are due to the instructors, who, often at great inconvenience to themselves, have discharged their duties diligently and regularly, to the Press, who have been ever ready to bring the benefits of the classes before the public; and to those public

bodies and private citizens who have so generously contributed towards the funds.

W. A. BALLANTYNE, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at New Plymouth, Opunake, and Hillsborough.

Cuases como	ceu ai	11000	10	gnic	ant, opanane, and 11 moortagn.			
Receipts.		£	s.	đ.	Expenditure.	£	8.	d.
Balance at beginning of year		174	2	8	Salaries of instructors	341	11	8
Capitation on special classes		108	6	3	Office expenses (including salaries, sta-			
Capitation on account of free places		43			tionery, &c.)	14	16	7
Rent			15		Advertising and printing	33	10	6
Furniture, fittings, and apparatus		16	10	$^{2}$	Lighting and heating	12	16	0
Material		14	17	6		11	11	0
Subsidies on voluntary contributions		32	8	0	Material for class use	8	17	1
Fees		146	3	9	Caretaker	31	6	<b>2</b>
Voluntary contributions	- m	69	2	0	Refunds, &c	32	10	0
Deposit fees		40	0	0	Legal expenses	1	.1	0
Material sold		. 1	0	0	Contracts (new buildings, additions, &c.)	6	18	1
Dr. balance at end of year	• •	28	8	8	Furniture, fittings, and apparatus	185	4	5
		£680	2	6		£680	2	6

R. G. WHETTER, for Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Stratford, Midhirst, Ngaere, Toko, Te Wera, Kohuratahi, and Tariki.

Receipts.			£	s.	d.		£	s.	d.
Capitation on special classes			52	3	1		. 1	2 14	5
Capitation on account of free places			2	8	6	Salaries of instructors	. 12	1 18	6
Rent			5	0	0	Office expenses (including salaries, sta	-		
Furniture, fittings, and apparatus			7	18	9	tionery, &c.)	. !	€ 5	4
Material			0	11	2	Advertising and printing		3 13	6
Subsidies on voluntary contribution	S		9	19	0	Lighting and heating	. :	2 2	1
Fees			91	5	6	Insurance and repairs	1	) 1	6
Voluntary contributions			12	10	0	Caretaker	10	0 (	0
Refunds			0	3	0	Refunds, &c	. (	10	6
Dr. balance at end of year		٠.	-14	13	5	Furniture, fittings, and apparatus	. 1	76	7
			0100				~		
			£196	12	5		£19	3 12	5

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Inglewood.

	Receipts.			£	я.	d.	Expenditure.		£	g.	d.
Capitation on specia				9	2	3	Dr. balance at beginning of year		38	19	
Rent				1	1	0	Salaries of instructors		38		8
Furniture, fittings,	and apparatu	18		64	9	0	Office expenses (including salaries,	sta-	-	_	
Subsidies on volunt	ary contribut	ions		50	0	0	tionery, &c.)		5	: 5	1
Fees				25	$^{2}$	6	Advertising and printing		2	11	3
Charge for requisite	s			0	13	6	Lighting and heating		0	10	0
Refund				0	9	0	Insurance and repairs		1	13	10
Dr. balance at end o	of year			2	8	9	Rent		1	10	0
	•						Material for class use		0	5	0
						1	Caretaker		0	15	6
						.	Contracts (new buildings, additions, &c.)		39	2	3
						- 1	Furniture, fittings, and apparatus		24	3	11
			-			- 1					
			£	2153	6	0			£153	6	0
			=			'					_

R. G. WHETTER, for Secretary.

## WANGANUI.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

The amount of money raised locally for the purposes of manual and technical instruction was £414 10s. 11d. In the matter of building, the new Technical College at Wanganui, opened on the 28th September by the Hon. G. Fowlds, was completed at a total cost of £10,000, not including equipment. The College, which now claims 156 individual day and 295 individual technical pupils, is destined to play a great part in the education of the young people of this district. Towards the end of the year a new building at Manaia and an additional room at the Hawera School were put in hand. The total enrolments for the year were 3,139—in the Centre, 1,612; in the North, 838; and in the South, 689. It has continued to be the Board's aim to keep in the forefront the teaching of agriculture. In the primary schools, in the secondary classes of district high schools, and in teachers' instruction classes, instruction in agriculture and dairy-work have accordingly bulked very largely. Thirty-six pupils taking the rural course at the district high schools paid a visit to Mr. E. Short's Almadale Farm, near Feilding, staying there the better part of a week, under the charge of Mr. J. Grant, B.A., Agricultural Instructor. Lectures and instruction were also given at the camp by experts especially qualified for The thanks of the Board are due to Mr. Short for placing at the disposal of the boys his prize stock for the purposes of observation, to Mr. and Mrs. Dunlop for kindness shown to them while they were in camp, and to the experts who gave their services free. The Board desires to acknowledge from the following bodies donations towards the agricultural scholarships: Taranaki Farmers' Union, Wanganui Agricultural and Pastoral Society, Feilding Agricultural and Pastoral Society, Executive Council Wellington Branch New Zealand Farmers' Union. These scholarships heighten the interest of the pupils in their work, and also induce some of the most promising to stay longer at the schools than they would otherwise do. Towards the close of the year Mr. Grant, Supervisor of Agricultural Training, visited the principal agricultural schools and colleges in New South Wales and Victoria, gathering valuable information regarding the methods of agricultural instruction in these States. his visit is the appointment of Mr. Banner, of the Hawkesbury Agricultural College, to the charge of the Southern Technical District and the Feilding Technical School. Mr. Banner's qualifications and ability are such as to lead the Board to believe that his sphere of usefulness will extend considerably beyond the radius of school-work. Saturday classes for the instruction of teachers were held at Hawera, Wanganui, Feilding, Taihape, and Palmerston North. The subjects of instruction were art (five centres), practical agriculture, agricultural science, and handwork (one centre each). The annual grant of £220, together with the capitation earned by the classes, was found to be about £20 short of the amount required to meet the cost of the classes. In addition to the subjects named above, instruction in vocal music was given at Hawera, Wanganui, Taihape, and Feilding. No portion of the grant may, however, be expended in the teaching of this subject. The Board's Administration Fund is therefore called upon to contribute about £60 per annum, the cost of giving this instruction. The most popular subjects were agriculture, handwork, singing, and drawing.

# EXTRACT FROM THE REPORT OF THE SUPERINTENDENT OF MANUAL AND TECHNICAL INSTRUCTION.

For several reasons a rearrangement of the staff has been found necessary. Owing to the erection of the new Technical College at Wanganui, the directorship there has fallen into the hands of the Principal of the College, Mr. Armour, and the Vice-Principal, Mr. Varney. Mr. Watkin is to be transferred to the central office as Board's instructor of drawing, and his position at Feilding is to be filled by Mr. A. O. Banner, of Hawkesbury Agricultural College, New South Wales. Mr. Banner will undertake agricultural work at the primary and district high schools' secondary departments in the South, setting Mr. Grant free for work in connection with the Wanganui Technical College, the three district high schools, and the primary schools in the Central District—quite enough for one man. Mr. Clark, who previously took woodwork in the North, has been attached exclusively to the Technical College, and unfortunately his place has not yet been filled. Towards the close of last year Mr. Hawson, instructor of book-keeping in the Northern District, finding the work unremunerative, threw up his position. It is now proposed that the North shall have a manual and technical staff of its own. This arrangement would save travelling-expenses, and would also admit of superior organization. The ideal arrangement would be for each district to have its own staff, and there are indications that by the end of the present year (1912) the ideal will in all probability be realized. At the beginning of the year 1911 an effort was made to secure for Mr. Hambly constant employment in wool-classing; but, apart from work offering in connection with the rural course at the district high schools, little was done, and towards the end of

the year the instructor had to go. It seems that the need for instruction in wool-classing in this district is for the time being supplied, doubtless to arise again when science and experience shall have contributed a new body of principles upon which an advance in connection with the industry will depend.

It may be gathered from the reports submitted that, though the number of students has decreased, the interest in the work itself has not flagged. The work done may be grouped, as hitherto, under the following heads: Primary industry classes, commercial classes, art classes, domestic classes, and building-construction classes. The primary industry classes comprise wool-classing, veterinary science, beekeeping, poultry-raising, and orcharding. No agriculture or dairy science classes for adults were The commercial course includes book-keeping, typing, shorthand, commercial arithmetic, commercial English, and business routine. From the lists of the successful students given it will be seen that the Board's certificate in book-keeping is coveted by the young people attending the schools. It is a business certificate the value of which is vouched for by a business man. With respect to the art classes I may state that in the opinion of the Department's Inspector the work done at the three centres is of a very creditable kind, and the lists of successful students support the Inspector's view. The domestic course comprises cookery, dressmaking, and home nursing, and it says much for the quality of the teaching that the classes have been going on continuously for many years. It is greatly to be desired that in all cases courses in cookery and dressmaking should be supplemented by courses in home nursing, so that the schools may do their part in the production of the "complete housekeeper." The Directors and Committees will perhaps give this view their consideration. Lessons on the constructive arts comprise building-construction, plumbing, and architectural drawing. Of these classes plumbing has the sympathy and support of most of the Town and Borough Councils, while the builders in Wanganui give substantial support to the building-construction classes. It goes without saying that no classes have been held in pure science, not owing to the want of laboratories or teaching-power, but because there has been no demand. The Wanganui Technical College, with its splendid equipment, may now be expected to give a lead in this direction.

The Education Department has not yet sanctioned the Board's suggested regulations re compulsory attendance at continuation classes. The provision of the Education Amendment Act, 1910, therefore still remains a dead-letter. The scheme is certainly not one that should be embraced light-heartedly, but as the Legislature had evidently made up its mind on the matter it seems a pity that the experiment should not be tried, especially in view of the fact that several of the Committees are not only willing, but extremely anxious, to make it. While we in New Zealand are thinking about this problem it has been already solved in Scotland, as appears from the reports that have been considerately

sent to me from the Scotch Education Department.

I have again to place on record the excellent work done by the Technical Committees and the Directors at the different centres. Without the co-operation of the Committees it would be difficult to perform the business incident to the carrying-on of the schools and to enlist the sympathy and co-operation of the people. The Directors have not spared themselves, and if the results have not been always in keeping with the efforts put forth they may take comfort in the reflection that they are at least preparing the soil for the reception of the seed. Throughout the entire year the instructors did not once fail to be at their posts, and there is every reason to believe that their work was well done and warmly appreciated. Mr. Bell efficiently performed his duties as executive clerk of the Board's Technical Department.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE NORTHERN DISTRICT.

In the Northern District the term enrolments for the year totalled 1,026. Individual students numbered 473, and, as for two years past, Hawera centre was in the lead as regards attendance. Art classes, book-keeping, dressmaking, and veterinary science were the subjects most in favour. There has been a solid advance in subjects of rural interest. Successful classes in veterinary science, poultry-farming, shearing, and beekeeping were formed. The beekeeping classes at Hawera have been especially successful, junior, senior, and advanced work being taken. This class has now lasted for three seasons, and this year has drawn students from Stratford, Kaponga, Manaia, and Eltham. The class in poultryfarming has been a most enthusiastic one. The students themselves have built a hen-house and an incubator-house. A couple of hatchings of chickens were made, although the machine arrived very late in the season. The class in shearing and wool-sorting, &c., had but a small attendance, but good work was done under an able instructor. Several intending students sent in their names, but could not get off work to take up the class. A course in veterinary science was taken throughout the district by Mr. Wilmot C. Quinnell, M.R.C.V.S. The enrolments in this were very satisfactory. The commercial classes have continued with fair success. At Hawera, where a course is provided, the attendance has been good. In country districts where book-keeping and accounting were taken support was less than usual. The drop in capitation allowance on country classes will keep these from paying. Since it is impossible to provide complete courses, we can take it for granted that adults will not come out two nights a week to any subject. The art classes have continued with fair success. At Hawera the attendance has been good. In Waverley, Patea, and Eltham greater support can be expected from now on, as students are being drawn from boys and girls leaving school. The dressmaking classes are improving, keen demand now being evident. Miss Dempsey has spared no pains to make her classes a success. Several more could have been formed if the instructor's services had been available. From support promised day classes in rural subjects are practically assured for next year. The buildings continue to be better looked after than in previous years. Overcrowding was in evidence at Hawera, but the new room just granted will improve matters. When rooms for cookery and woodwork are provided at Waverley this should see the end of building operations in this district for several years to come. the rural and domestic classes are in full operation in the district high schools there will be little need for permanent instructors apart from the Board's staff. At present we have not quite sufficient classes to keep instructors constantly employed, and as a result there is much change from year to year. Compulsory attendance would be beneficial in this direction.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE WANGANUI TECHNICAL COLLEGE.

Owing to the removal of the old buildings and the erection of the new school, work was carried on during the greater part of the year under very discouraging conditions; but the instructors and the students assisted most willingly during the transition period, cheerfully enduring much inconvenience. Classes were conducted in St. Paul's Hall (art), in the Methodist Schoolroom (commercial), in Mr. Graham's shop (plumbing), in Mr. Huston's rooms (dressmaking and millinery), and in the storerooms on the new site (applied art). Our thanks are due to the trustees and owners of these rooms for their assistance in helping us over our difficulties.

The day classes were well attended, the following being the various courses: Engineering and agricultural, commercial, art. Despite the year's drawbacks much good work was accomplished, as was evidenced by the successes in the various examinations. Art department: In April Mr. Seaward was granted leave of absence to visit the Old Country. During this period Misses I. M. Copeland and J. Murray conducted the classes in a most capable manner, maintaining much interest in this important branch of the school's work. The evening classes suffered most through the work being removed to hired rooms where the lighting was unsatisfactory. The life classes were abandoned for part of the year. Wood-carving has been somewhat replaced by metal-work, a form of handwork which gives evidence of becoming very popular. Students have shown marked improvement, especially scholarship pupils who take both modelling and design in their course. Mr. Andrews, as usual, has shown great interest in the work of his classes. Engineering department: Messrs. Crow and Morrison have again done a capital year's work. The attendance was well maintained in the day classes, but the evening classes suffered considerably. For some months during the dismantling of the old school it was impossible to continue the evening classes in practical engineering. Commercial department: This continues to be the most popular department of the school's work, and great credit is due to Mr. Cox and the various members of the staff for the good work that has been achieved by their students. The advanced accountancy and commercial law classes put in a splendid year's work, and two of the students (Miss Neilson and Mr. W. B. Allan) succeeded in passing the Intermediate Examination in Accountancy conducted by the University of New Zealand. In the Board's book-keeping examination the following were the results out of 42 entries; Senior, 9 (1 with distinction); junior, 10 (2 with distinction); preliminary, 16. In Pitman's shorthand examinations our students gained 49 certificates, including 4 for speed. The December results just to hand are as follows: 15 elementary certificates, 3 theory certificates, 7 speed certificates. The evening cookery classes were abandoned for a time on account of the dismantling of the old cookery-room. Miss Mollison conducted a cookery class for nurses in the early part of the year, the Girls' College room being used through the courtesy of Miss Cruickshank, the Lady Principal. In the subsequent examination each student succeeded in gaining a creditable The dressmaking and millinery classes under Miss Dandy's supervision were very successful, especially towards the end of the year, when the new buildings were available. The evening trade classes did a good year's work and were well attended, especially the plumbers' and carpenters' courses. General classes were conducted much as usual, but the photography and mathematics classes lapsed through lack of accommodation. The new school was opened by the Hon. Mr. Fowlds on Thursday, 28th September. It was estimated that on the opening day over two thousand people passed through the buildings, every one being satisfied that Wanganui now possesses a most convenient and excellently arranged school, ample provision being available for all classes of technical work. It is a source of gratification that instructors and pupils are now able to work under most favourable conditions. The old school had pleasant associations for many of us, who have seen it grow from very small beginnings, but "the old order changeth, giving place to the new," and we anticipate for the new structure a long career of usefulness. During the year students have shown great interest both in their studies and in their school. Subscriptions were collected for the purchase of pictures and books. The engineering class camped up-river during the third week in December, and their "surveying" experience under the able guidance of their instructors will prove very beneficial to them. In conclusion, my best thanks are due to the Press for the generous manner in which they have always treated the school, to the Technical School Committee for their willing assistance, and to the instructors who have worked so willingly and loyally for the success of the school. A. VARNEY, Director.

# EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE CENTRAL DISTRICT.

Technical and continuation classes were conducted at Marton and Taihape during the year. The attendance was very disappointing, especially at Taihape. The classes were well advertised, and in addition the local directors made a personal canvass for pupils. It would appear that various forms of amusement, which are conducted nightly, have got a greater hold on the young people than the knowledge which we are trying to disseminate. A very successful class for wool-classing was conducted for one term at Taoroa. The attendance was good, and the students, who were mostly young farmers, did very good practical work. Another class was held at Mangaweka. Good work was done here also. The dressmaking classes in both Marton and Taihape were rather poorly attended. However, those students who did attend were rewarded in obtaining more personal attention than would have been possible had the classes been larger. In Marton one class in cookery was held during the year; it was fairly well attended. A class for plumbing and sanitary science was held in Marton. All the students were working at the trade, and were studying with a view of passing the examinations which are held annually for plumbers. The commercial classes in Taihape were carried on for a couple of terms, and then lapsed owing to the decrease in the attendance. In Marton a very successful class was carried on. The classes in woodwork were a failure; it was expected that classes would be established in Ohakune, but, though several attempts were made, the response was never satisfactory enough to warrant a beginning being made. I have to thank the local Directors and the teaching staffs of both schools for their faithful work during the year. It was an uphill fight, but I hope that the coming year will see a great improvement in the attendance at all the classes.

J. Grant, Director,

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE SOUTHERN DISTRICT.

At Feilding the total roll number was 328, and the number of individual students was 285. were 23 free-place students—15 junior and 8 senior—on the books. Classes have been held in the following subjects, the roll number being shown in brackets: English and arithmetic (22), book-keeping (26), shorthand and typewriting (30), art needlework and design (15), dressmaking (24), millinery (13), woodwork (18), Maori (10), art (43), carving and metal-work (18), first aid and ambulance (14), veterinary science (5), teachers' art (49), teachers' singing (41). The attendance has on the whole been very satisfactory, and good work has been done by both teachers and students. The classes in commercial subjects are not as well patronized as they ought to be in a town the size of Feilding, nor is the number of freeplace students taking advantage of the opportunities offered by the classes as high as it might be. It was found impossible to run plumbing classes this year owing to the shortage of students. Next year it is expected that there will be a sufficient number of youths to form a working class. Four of the students succeeded in passing the Board's preliminary stage of book-keeping. Several students sat for various art examinations under South Kensington, but results are not yet to hand. The Feilding Chamber of Commerce very kindly donated prizes for commercial subjects. It is hoped that next year arrangements may make it possible to award prizes in other subjects also. Technical classes have been conducted during the year at the following centres: Apiti, Pohangina, Ashhurst, Bunnythorpe, Kimbolton, Cheltenham, Bull's, and Rongotea. At Apiti and at Pohangina technical-school buildings have been erected and equipped, which has greatly assisted matters. The classes at Apiti have been remarkably well attended, and excellent work done under the able direction of Mr. James Matthews, to whom great praise is due for his energetic prosecution of technical work in his centre. The work at the other centres has been uniformly good, and the various instructors concerned merit much praise. It is very remarkable that the subject of wool-classing, which last year was so successful, has this year been a failure. It is difficult to account for this, but probably the high prices ruling for wool have somewhat discounted the value of classing. LEONARD J. WATKIN, Director.

# Extracts from the Reports of the Supervisors of Agricultural Instruction. School Classes in Agriculture and Dairy-work.

1. Northern District.—During the year the motor cycle provided by the Board has been of great service in connection with these classes. In suitable weather a run of a few minutes only was required to reach a second school. Owing to this, and by taking advantage of differences in time-tables, I have frequently been able to give an hour's instruction in each of the four schools. The most noticeable development in connection with school agriculture in this district has been the great interest taken by teachers and pupils in improvements of the grounds. At the Hawera Agricultural and Pastoral Society's show a class was arranged for the "best-kept school-grounds," and twelve schools entered. More attention has also been paid to the growing of flowers, and to the planting of native trees and shrubs. In the majority of schools a good beginning has been made in the establishing of orchards. This work I have long desired to see seriously taken in hand. I know no branch of agriculture in which our boys and girls take a keener interest than in the broader principles of the proper treatment of fruittrees, and in the application of these to pruning, soil-cultivation, and manuring. Several of our schools have established apiaries on a small scale, but there has not been the advance expected by me. The reason for this can be found in that our summer holidays come at a time when most attention has to be given to bees. Increased attention is being paid to trenching, surface cultivation, and to the growing of green crops. Our soils readily respond to good cultural treatment. In this connection it may be mentioned that several schools have in the past depended too much on the addition of fertilizers to the plots, but this practice is steadily being replaced by more suitable methods of tillage. I hope to initiate district manurial experiments early next season. The application of fertilizers to the soils here has been in the past altogether too haphazard. Fortunately a keen desire is evinced by teachers to have further information in this line, and to have more systematic work undertaken. Increased interest is being taken in dairy-work, several teachers having expressed a desire to take up the combined course next year. It would be advisable for the Board to make a regulation that all teachers in this district taking or about to take up dairy-work should be expected to attend the proposed course of instruction at Hawera. In several schools there has been an improvement in the way in which the notebooks have been kept, but on the whole they still leave much to be desired. Necessary records are kept, but there is not sufficient individuality shown in the book-work of the pupils. With one or two exceptions garden tools are well kept. In several schools they are as well looked after as one could wish. At Hawera and Patea District High Schools two hours a week were devoted to agriculture and dairy-work. A great deal of practical work was attempted, but I am not satisfied with the results. I believe that the ordinary staff of the schools should be more and more used in connection with rural course agriculture. The instructors could take short courses in special branches. Weakness was shown by the pupils in suitably expressing the results of their observation. I should therefore like to see more correlation of agricultural subjects with oral and written composition. Next year I hope to take the boys to the Moumahaki State Farm for instruction in farm practice. A short course for teachers in elementary practical agriculture was taken in Hawera, and good work was done by all who attended.

2. Central and Southern Districts.—At the end of the year 1910 the number of classes in elementary agriculture and dairy science was 130, the number of pupils receiving instruction being 2,556. At the end of this year (1911) the number of classes has increased to 139, the number of pupils receiving instruction being 2,385. During the year I have been engaged in visiting schools where agriculture is taught, in teaching in some of the district high schools, in supervising the classes in practical agriculture at Marton, in teaching physiology to the Wanganui pupil-teachers on Friday evenings, and agriculture to teachers on Saturday afternoons. The gardens on the whole are fairly well kept. In a few cases the work is excellent. In many of the schools much attention is being given to the beautifying of the playground. The successful attempts made during the year should act as an incentive to other teachers

to improve the appearance of their playgrounds. Possibly, if a considerable demand arises for shelter-trees and ornamental shrubs, we may be able to grow a number of suitable trees and distribute them amongst the schools. Many teachers who are taking the combined course find that a period of twenty hours is not enough for the agricultural work. Probably a better division of the time would be twenty-five hours for agriculture and fifteen for dairy science. In indoor experimental work some good work was done in several schools. It is now quite clear that chemicals and expensive apparatus are not necessary for school experimental work. In some schools I found the pupils brimming over with information about the experiments they had been working with home-made apparatus. The garden tools have been well looked after during the year. Through the generosity of Mr. James G. Wilson a piece of ground was set apart at Marton for the use of the boys of the district high schools. In addition to providing the land, Mr. Wilson also provided the horses and farm tools. The boys travelled from Wanganui, Feilding, and Taihape by train to Marton. They worked about four hours a week. We did not make a start until October, and in consequence did not succeed in doing as well as we would have liked. As a schoolroom is in course of erection alongside the ground, we hope to be able to show better work for the coming year. A very successful camp of instruction in animal knowledge was held at Mr. E. Short's farm, "Almadale," Feilding. About 40 boys were in attendance. Regular lessons on horses, cattle, and sheep were given. The boys gained a very considerable insight into the methods of handling valuable animals. We thank Mr. Short for giving us the opportunity of studying his pedigree herds.

EXTRACTS FROM THE REPORTS OF ITINERANT INSTRUCTORS.

## Science.

Since commencing my duties in April I have taken the various subjects of the science courses at Hawera, Patea, Wanganui, Feilding, and Taihape, comprising the following subjects: Botany, chemistry, physical measurements, practical mathematics and surveying, agriculture, electricity and magnetism, heat, and trigonometry. Excellent progress has been made in most centres, notwithstanding the fact that some of the classes were for a time greatly disorganized through sickness. I should like especially to mention the keenness of the lads at Feilding and at Taihape in connection with botany, which has proved to be the most popular subject of the rural course. The science notebooks of many are a credit to themselves and to their school, and are well worth preserving, some being worthy of very special mention. A genuine spirit of work prevails in most centres, and progress is correspondingly rapid, and the maintenance of discipline, as a result, requires no further attention. Pupils have been prepared for Junior Civil Service and Matriculation, and excellent results are anticipated. The absence of a course of pure mathematics has materially affected some of the work in surveying and in physical measurements. I would suggest that in physical measurements, at least, the permanent staff take some of the more elementary work. None of the schools is completely equipped with the necessary apparatus for the teaching of this subject, but this could partly be remedied by having much of it constructed by the pupils themselves in the woodwork classes. At Wanganui I have taken the pure sciences bearing on the engineering course, and comprising electricity and magnetism, heat and trigonometry. Here, too, the work in trigonometry was greatly handicapped through lack of training in pure mathematics, algebra in particular.

## Woodwork.

1. Wanganui and Northern Districts.—There were in the Wanganui and Northern Districts a total of 18 classes. The a tendance was generally good. As intimated in last year's report, an attempt has been made to vary the type of models. Many of the stereotyped manual-training models, having their origin in the English schemes of a decade ago, have been discarded, especially in the Standard VI course, and models with a more obviously practical everyday use have been substituted. rollers, knife-cleaners, tabourets, &c., are made with greater zest, inasmuch as the parent exhibits a livelier interest in such objects than in those models that can often only by courtesy be described as useful. It is not quite so easy to arrange the various tool operations in their correct sequence as generally recognized, and owing to the fact that fewer models are made there is the disadvantage of less practice This deficiency, however, is partly compensated for by a series of special lessons in practical plane geometry. At Hawera the rural-course pupils took a course in elementary building-construction and the principles of mechanics as related to life on the farm. There was some overlapping in the teaching of this subject by the science and woodwork instructors, but in future a more definite division of the work will be made. The practical work undertaken by boys in their first year was the making of ladders, gates, and other useful farm accessories. The balance of the class, consisting of boys in their second year, built a small shed, the various stages in its construction being shown in the accompanying photographs.\* It is proposed that some instruction in metal-work be given next year. A suitable room and appliances will in that case need to be provided. It is possible that Mr. Browne will arrange for the use of the present plumbing-room at Hawera. It would be suitable if forge-work were not included in the course.

2. Southern and Central Districts.—Classes have been held in Palmerston North, Feilding, and Marton. The average attendance has been 17 for forty lessons. Satisfactory work has been done, and the conduct of the pupils has been, with but few exceptions, of a good standard. Greater interest has been taken in the work than hitherto, especially by Standard VI, owing to the models being larger and more of a simple structural character. In Palmerston a number of the tools have been replaced by new ones, which change has been much appreciated by the boys, who have been enabled to do much more accurate and satisfactory work.

The secondary classes at the Feilding and Marton District High Schools did very good work. The conduct has been of a very high order, the boys entering into their work with enthusiasm, and

showing a keen interest in it. The average attendance has been 13 for thirty-six and forty lessons at the respective places, the low average being due to a large number of the boys leaving towards the end of the year. At Feilding the work has comprised the construction of a number of beehives, field and picket gates, ladders, and a ledge door, whilst the boys have equipped the science-room with forms, and have almost completed two sets of lockers. The second-year rural-course boys have commenced the construction of a shed, but, owing to their small numbers, wet weather, and holidays, only the foundations have been completed. At Marton the boys have made beehives, field and picket gates, ledge doors, trough, door-grating, step-ladder, and have almost completed a wheelbarrow, besides simple joints, &c. The work in building-construction and drawing included the making of scales, drawings of all models, also doors (ledge, frame ledge, and panels), foundations, framing and roofs (lean-to, couple-close, collar-tie, and king-post) of buildings. Occasional inspection visits have been made to buildings under construction, which visits have proved very instructive and interesting.

## Cookery and Hygiene.

1. Wanganui.—The classes comprised Standard V and Standard VI girls from the District High and Queen's Park Schools. The numbers have not been quite as great this year, but the attendance and attention have been excellent. Besides the theory of and practice in cooking, the lessons have aimed at giving the girls instruction in the laws of health. A class in domestic economy for the technical day girls has also been held weekly, when the house (its construction, furnishing, management, &c.) was the subject under consideration. Judging from this class I think this subject is very necessary for the older girls, and if a room could be fitted up to give them practical experience in the work it would make the teaching more effective.

2. Central and Southern Districts.—Much interest was taken by the girls in their work. At various times the District High School girls went as thoroughly as possible into dinner-cooking. Scarlet fever and measles necessitated two lessons weekly (in order to get in forty attendances). These were given in November and December. At Feilding the usual exhibition was held. The girls, in addition to making cakes, &c., for afternoon tea, cooked a dinner. The usual examinations took place, Standard VI girls doing remarkably well, four girls gaining full marks. It is a pity some of the bigger girls cannot attend more regularly. The classes at Palmerston North on the whole were large; the attendance was somewhat poor. The Campbell Street School girls improved very much in their work. Many thanks are due to Messrs. Watson and Warden for kindly co-operation. All classes did well in their examinations.

3. Northern District and Marton.—Lessons in cookery were given to Standards V, VI, and secondary pupils at Eltham, Hawera, Patea, and Marton District High Schools. Elementary physiology and hygiene were taught to Standard VI girls to qualify them for the home arts certificate. A special course of lessons in household management, hygiene, and physiology was given at each of the centres, while at Hawera a special course in laundry-work was taken for six months of the year. At many of the centres pupils successfully competed at the agricultural shows, and the prize-money has been devoted to the expenses of the cookery classes. At Eltham the girls assisted in preparing a special "afternoon tea" for the visit of the Minister of Education. At Hawera, for the Coronation celebrations, the High School pupils made twelve large plum-puddings, the ingredients of which were kindly donated by the storekeepers. These special occasions give the girls an added interest in their work. During next year I propose having a "visitors' day" at each centre, so that parents can note the practical part of the girl's work in cookery, household management, and laundry-work. Last June two senior pupils from Hawera District High School were successful in passing the examinations (with first-class certificates) in cookery held by the City and Guilds, London. Might I here suggest that the New Zealand Education Department should institute an examination of its own, and grant certificates to successful pupils from the various secondary and technical schools. The examination questions would then probably have a more direct bearing on the colonial life of our girls.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Alton, Apiti, Ashhurst, Bull's, Bunnythorpe, Cheltenham, Eltham, Feilding, Foxton, Hawera, Kapuni, Kaponga, Kimbolton, Manutahi, Manaia, Mangaweka, Marton, Mangawhero, Matapu, Okaiawa, Patea, Pohangina, Rongotea, Taihape, Taoroa, Turakina, Wanganui, and Waverley.

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Receipts.		£	s.	d.	${\it Expenditure}.$	£	s.	d.
Capitation on special classes		1,908			Balance at beginning of year			6
Capitation on account of free places		<b>7</b> 95				4,158	14	7
Rent			19		Office administration	125	0	0
Furniture, fittings, and apparatus	• •	1,810			Advertising and printing	212	15	0
Material		208			Lighting, heating, and cleaning	494	5	6
Subsidies on voluntary contributions		469			Insurance and repairs	96	7	8
Instructors' coach fares		54		0	Rent	79	6	7
Fees		1,211			Examinations, &c	41	12	6
Voluntary contributions		428	15	11	Material for class use	252	10	6
Contributions to instructors' salaries		168			Instructors' travelling-expenses	251	0	<b>2</b>
Examination fees		6	10	0	Telephone	22	6	1
Material sold		38	10	1	Clerical assistance	35	12	0
Grant for training of teachers		220			Library and prizes	38	7	7
Balance at end of year		3,690	12	10	Miscellaneous expenses			
•					Contracts (new buildings, additions, &c.) .	193	15	10
					Furniture, fittings, and apparatus	2,303	17	5
	-							
	£	11,102	19	2		£11,102	19	$^{2}$
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EXTRACT FROM THE REPORT OF THE CHAIRMAN OF THE BOARD OF GOVERNORS OF THE PALMERSTON NORTH HIGH SCHOOL.

During the past year the number of classes at the Technical School shows an increase over that of the preceding years. Among the new classes were 3 for engineering, 2 for veterinary science, and 2 for sheep-shearing, the total number of classes being about 56, with an average attendance of about 14 students in each class. The work of the students has been of better quality, while excellent results have been obtained in the various science and art examinations. During the year an exhibition of school-work was held, the school being thrown open for a week, and demonstrations were given by the students of various classes. Large numbers of people visited the school, and expressed their surprise and pleasure that such good work was done. It is proposed to hold another exhibition on similar lines this year. The number of students holding free places was 96, an increase of 30 over the number for the previous year. An engineering workshop has been erected and fitted up. The highest number of enrolments at any time during the year was 770, as against 680 for 1910. The numbers for 1912, however, promise to eclipse all previous records, for although the session has only just commenced the numbers now are 792, which for a town of the size of Palmerston North is, I think, a record. Although the fees for the year do not produce sufficient to cover teaching expenses, yet through the generosity of the public the receipts for the year show a credit balance of between £40 and £50 over the expenditure, thus proving that the school is actually paying its way. This refers to the actual working expenses only—not to outside expenditure, such as purchase of section, &c. Owing to the successful efforts of the Mayoress, the land adjoining the Technical School recently purchased on an agreement was paid for, the balance owing being £400. There are no outstanding liabilities on the Technical School Account. The Director has spared no pains to make the school successful, and the Government Inspectors have furnished the most pleasing reports on the ability of the teaching staff. It is impossible to really separate the finance of the High School and Technical School, as the Board is responsible for the administration of both. For the purposes of book-keeping, however, separate accounts are kept, and separate statements furnished in the balance-sheet. While, therefore, at the end of the financial year the balancesheet shows a considerable debit, the financial affairs of the Board, as before stated, have since been placed in a thoroughly sound position, and the pressure of the overdraft removed. In conclusion, the thanks of the Board are due to the various public bodies for donations, to the Press for readiness to publish anything of interest in connection with the schools, and particularly to all those who assisted in carrying out the function arranged by the Mayoress. On my own behalf I desire to thank the members of the Board and the officials for their unfailing courtesy and assistance in carrying out the duties appertaining to the position of Chairman. W. H. Collingwood, Chairman.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE PALMERSTON NORTH TECHNICAL SCHOOL.

The technical and continuation classes show a considerable increase on last year, both in the number of classes and the number of students. The art department, however, has suffered slightly, but will in all probability right itself next year. There is a great improvement noticeable in the attendance and quality of the work done by the free-place students. A better class of student seems to have come The students generally recognize the value of the opportunities offered, and are doing their best to take advantage of the same. An earnest spirit of endeavour seems to be spurring them on. Commercial classes: These were well attended, and show an improvement on the work of last year. The Standard VI class conducted by Mr. Warden continues to be well attended, and does good work, the number attending being 28. Trade classes: Building-construction is still a difficult class to keep going, although a good teacher has been in charge. The plumbing class has, however, done good work, there being more apprentices attending now than at any former time. The engineering class has been specially well attended, and promises very well for the future. A new engineering workshop was opened at the commencement of the third term, and the class for workshop practice has been attended by about 15 students. The woodwork classes have also been well attended. Domestic classes: The classes in dressmaking and cookery have been exceedingly well attended, and much good work has been done, several of the students sitting for the City and Guilds and South Kensington Examinations. Agricultural classes: These classes, although small in number, have been very well attended, and a course in general agriculture, farm carpentry, estimating areas, &c., has been taken. The wool-classing, veterinary science, and sheep-shearing classes have also been well patronized. Twenty-six students took veterinary science for the first time this year. The course included practical demonstrations upon the bodies of dead animals. Nineteen students took sheep-shearing. This class is the first of its kind to start in the North Island, and was most successful. Not only was machine and blade shearing taught, but wool-classing, baling, and pressing as well. In the shearing the students were taught how to catch the sheep, and to hold it in the right position before commencing shearing. The Director and five students of the wool-classing class went to Mr. W. Dixon's sheep-station Papanui, Mataroa, and rolled and classed his clip of about 20,000 sheep. Mr. Dixon expressed his pleasure and satisfaction at the workmanlike manner in which the work was done, and requested that another lot of students should be sent up to him for the shearing next year. This indicates that the instruction has been of a sound and practical nature. The report of his wool sales is being awaited with great interest. In the electricity and chemistry classes a splendid course of instruction has been taken, several of the students sitting for the South Kensington Science Examinations. The art classes, although not so well attended this year, have done excellent work, as was evidenced by the number of prizes taken at the Palmerston North show.

During the month of June an exhibition week was kept at the Technical School, when the various branches of technical work were exhibited. The school was thrown open to the public for four afternoons and evenings, and on each evening demonstrations were given by the students of the various classes.

The exhibition was most successful, and was visited by hundreds of interested people. About a dozen students who have completed a two-year Junior Free Place course are to be recommended to the Department for Senior Free Places. Mr. Isaac, Inspector of Technical Schools, visited the school in August last, and his advice and recommendations were much appreciated. The number of individual students for the year was 535, and the average weekly attendances about 720. The staff has worked well during the year, and the success of students in examinations and competitions is largely due to the interest, skill, and care with which the instructors have attended to their duties. The thanks of the Technical School authorities are due to the numerous well-wishers of the school for donations, and to the Press generally for ready assistance given in regard to advertising, &c.

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F. D. OPIE, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Palmerston North by the Palmerston North High School Board.

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Receipts.		£	s.	d.	Expenditure.		£	g.	d.
Capitation on special classes		360	0	0	Balance at beginning of year		224	6	10
Capitation on account of free places		164	0	0	Salaries of instructors		901	2	6
Buildings		350	0	0	Office expenses (including salaries, s	sta-			
Furniture, fittings, and apparatus		272	7	10	tionery, Director, &c.)		311	7	11
Material		76	5	5	Advertising and printing		34	7	3
Subsidies on voluntary contributions		152	<b>2</b>	3	Lighting and heating		- 58	19	10
Fees		420	9	6			49	16	10
Voluntary contributions		161	10	0	Maintenance		43	2	6
High School—					Examinations, &c		1	0	0
Fees, wool-classing, veterinary science	ence,				Material for class use		69	19	7
and sheep-shearing classes		17	17	0	Telephone and sundries		17	2	9
Material for classes		1	10	0	Bank interest		3	11	0
Art master's salary		50	0	. 0	Contracts (new buildings, additions, &c.)		353	12	0
Woodwork instructor's salary		15	15	0	Architect, &c		22	12	10
Sales of material		10	18	5	Furniture, fittings, and apparatus		293	1	9
Contractor for plans, engineering-shop		5	5	0	Deposit on engineering-workshop site		62	0	0
Balance at end of year		403	3	2	Interest on same		15	0	0
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	£2	2,461	3	7		£2	,461	3	7
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WILLIAM HUNTER, Secretary.

## WELLINGTON.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Capitation on account of manual instruction was earned by 125 schools in 1911, as compared with 118 in 1910. Well-kept gardens are found in the grounds of several schools which for various reasons are unable to qualify for capitation in agriculture. The Board's Inspectors report an improvement in the quality of the work done by the pupils who undertook the rural course. A movement at Petone for the introduction of the rural course into an industrial centre, and a second movement for the establishment of an agricultural college for the Wairarapa, so that the district high school rural course may be continued to a satisfactory conclusion, are clear evidences of the favourable impression created by the rural work already accomplished. The courses of instruction held for teachers were as follows: At Wellington—Art and handwork classes by Miss Lee, assisted by Miss B. MacKenzie; physical measurements and physiology by Mr. Stuckey; woodwork and cardboard-modelling by Mr. Howe. At Masterton—Drawing by Mr. Grant; physiology and hygiene for women by Miss Lazarus. At Greytown—A fortnight's continuous instruction in agriculture and nature-study, undertaken by twenty-one teachers, under the guidance of Messrs. Davies and Cumming. At Pahiatua—A course of lessons in agriculture by Mr. Cumming. But for the unsuitability of the railway time-table the attendance at the Wairarapa classes would have been much larger than was possible in the circumstances.

# EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

Steady progress is being made in handwork and in such branches of drawing as freearm and brush work. The appointment of an additional instructor in woodwork enabled the number of classes to be increased. In the practical work of cookery and dressmaking a steady advance is being made, and when the lady selected in England for the purpose of supervising the subjects of a domestic course takes up her duties we look forward to a considerable improvement in the instruction of such subjects as physiology, domestic economy, and hygiene, and we hope to see laundry-work added to the programme. When handwork was added to the syllabus it was given a separate place in the work and programme of the school, and treated as an isolated subject introduced for the purpose of forming "a counter-irritant to bookwork." But as teachers gradually perceived that, by correlating different branches of handwork with other subjects of the syllabus, the general work made a steady advance, manual instruction gradually came to be looked upon more as a method than as a subject, and as a method of applying educational principles it has certainly justified its existence. In giving grants for manual instruction certain restrictions as to the time given to practical work have been laid down. These limitations were probably justified while the work was new, but the time has now come when some of them might well be dispensed with. Their retention tends to make a teacher treat the subject as isolated, and hampers him to some extent in applying the methods of manual instruction to other subjects. We are not suggesting a lessening of the time given to practical work, but in cases where handwork has been correlated with such subjects as, say, geography or arithmetic, these restrictions are apt to encourage the teacher to subordinate the interests of the main subject to a lesson on handwork.

Nature-study, elementary agriculture, physiology and first aid, physical measurements, and in a few schools elementary chemistry are taken in accordance with syllabus requirements. good work is being done, more particularly along the lines of deepening the pupil's interests and strengthening the more formal work of the school. Geography, drawing, composition, and arithmetic should specially benefit from a wise correlation with elementary science. We are all too ready in the press of school-work to forget that if science is to justify its retention on a primary-school syllabus a point on which educational authorities are far from being unanimous-it can do so only by giving opportunity for a direct appeal to facts and first-hand experiment. Our teaching still tends to be too didactic. Rousseau (not Professor Armstrong) said, "Let your pupil know nothing because you have told him, but because he has comprehended it himself. He is not to learn science, but to discover it. If you ever substitute authority for reason he will be but the sport of other's opinions." necessarily pursue this heuristic method to the reductio ad absurdum of making every step forward a laboratory experiment. The child is still the "heir of all the ages," and his deductions from information wisely given or facts judiciously brought under his notice may still be heuristic. We are on perfectly safe ground so long as we give the pupil an opportunity of responding either physically or mentally to impressions made in any way by our teaching. Further and more important even from the pedagogic point of view is the continued insistence on clear oral or written statement of facts This more than any other factor has conduced to Germany's observed and of inferences drawn. educational pre-eminence. Critics of German methods have noted the fact that the so-called science lesson is rather a lesson on the command of the mother-tongue than a science lesson ad hoc.

Of late years there has been a most beneficial movement towards making the girl's training bear more intimate relationship to the home life. Hence the introduction of cookery, laundry-work, house-wifery, physiology and hygiene, &c. In all these subjects good work is being done in our district, and a wise mean is maintained between their purely vocational and their educational values. There is still room, however, for closer correlation between them and the ordinary school course. In the needlework we feel that some of the syllabus requirements might be modified to allow, particularly in the higher standards, of drawing and design taking the same place with regard to sewing that it now takes with woodwork. In cookery and laundry-work arithmetic should lead to the keeping of household accounts, which might be made as truly educative and certainly of more utility for primary children than, say, obsolete computations in compound interest or calculations as to the time required to empty or fill a bath by the somewhat unusual method of keeping the supply and waste pipes open at one and the same time. Physical drill and games should form a natural complement to the more

theoretical treatment of physiology and hygiene.

The rural science course in connection with the secondary departments of district high schools, inaugurated in 1909, has fully justified its establishment. Good work has been done, and this year there was keen competition for the Board's B or Rural Senior Scholarships reserved for those taking the rural course. Marks are allocated as follows: (1) For Junior Civil Service papers, 1,500; (2) for practical work and oral examination, 50. We were specially pleased to find the general improvement in the practical work as evidenced in these scholarship examinations. Practically all opposition to the introduction of this course in our district high schools has disappeared; in fact, criticism has rather taken the form of "asking for more." In last year's report we stated plainly the limitations of this work—"it was inaugurated to bring about a more intimate relation between the course of instruction in the district high schools and rural pursuits." This purpose it is satisfactorily accomplishing, but parents find that after the completion of two years students are at the end of a road which should lead right up to an agricultural college—the natural complement to such a course of instruction. Though somewhat outside our province, we would like strongly to support the claim for such an institution. Its absence (for Lincoln College is full, even if it were not so far away) gives some reason for the demand that our district high schools should develop more on the lines of the purely vocational schools of America or Switzerland. We do not wish it to be inferred from these remarks that the "rural course" without this cope-stone of a specialized school of agriculture is in any way a failure even for those boys who intend to go on to the land. Such is not the case, for we feel confident that the high-school pupil will take to his life's work an added interest in rural affairs, and a mind quickened to grapple with the problems of the farm.

At Wellington and Masterton instruction classes for teachers, pupil-teachers, and probationers were held in freehand, model, blackboard, and geometrical drawing, brushwork, design, woodwork, cardboard modelling, cookery, physiology, physical measurements, and towards the end of the year Mr. Cumming gave a course of lectures in elementary agriculture at Pahiatua. Those teachers who attended were greatly interested, and improved work in elementary agriculture and nature-study may confidently be expected in their schools. The unfavourable weather-conditions which prevail in the Pahiatua County interfere considerably with the attendance at such a class, but as there are many teachers in this district whose school-work would be greatly benefited by these lectures we hope to see a larger number taking advantage of them this year. Twenty-one teachers, representing fourteen schools, attended at Greytown for two weeks during the month of September for the purpose of receiving instruction in elementary agriculture and nature-study from Mr. Davies and Mr. Cumming. In reporting on the work the instructors say, "We desire to express our appreciation of the excellent working spirit displayed by the class as a whole, and especially by those teachers in residence who returned to the laboratory night after night, evidently bent on making the most of their opportunity." An inspection visit paid to the school confirmed the good opinion of the work as given by the instructors.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE WELLINGTON TECHNICAL SCHOOL.

The year 1911 has been in many respects one of readjustment. New regulations governing classes and capitation, and the admission of the day Technical School to a definite status, have necessitated rearrangement of the work to fit changes in the financial position, which has been somewhat improved

for associated classes but made somewhat worse for the day technical-school classes. The net result has been a considerable gain educationally and a slight gain financially. The principle that advanced work in teaching should be more highly paid than elementary has been indirectly recognized in regulations providing grants of higher capitation for students taking grouped courses and attending regularly -year after year for several years. The good effect of these changes should be found in greater encouragement of those classes which hitherto have been too expensive for technical schools to provide, as, in the nature of things, the more advanced a class is the fewer are the students in the class, and the more inadequate a per caput grant unless literally graded.

inadequate a per caput grant unless literally graded.

The total number (1,533) of those who have joined classes in 1911 is somewhat in advance of the number for 1910, which was itself a record year. The rate of growth is not at present high, and indeed cannot be high until we have better facilities to offer. A slightly larger proportion of students take grouped courses, and on the whole the work done was more searching and thorough than in previous years. The behaviour and attendance of students was, with few exceptions, fairly good. Free-place students are better in respect of regularity, on the whole, than paying students, but do not always show as keen interest in all subjects as is desirable. In the compulsory subjects this inattention is naturally most noticeable, students being often too young and too ignorant to know what is best for them

The art classes are satisfactory in every way, except that, owing to the small demand for trained art workers, the number of students offering is not large. Results in the national competitions in London show that the school is not disgraced by comparison with British art schools.

The science and mathematics classes have been extended in scope and numbers during the year, and continue to do good work. A valuable collection of apparatus, obtained by grant from the Education Department, has been added to the equipment of the mechanics and mathematics classes, and should do much to increase their popularity and efficiency. The engineering classes have been at least equal in standard to those of previous years, and students have been very successful both in internal and also in external examinations. The classes relating to the building trades have on the whole been smaller than in the previous two or three years, owing largely to the unusual depression in the building trades. The demand for commercial instruction continues unabated, and has been well met by the instructors in charge. The large increases in the continuation classes in the last two or three years have greatly overtaxed the accommodation available. Notwithstanding this difficulty of overcrowding good work has been done: e.g., 40 out of 46 students in English in the senior class passed the Senior Civil Service Examination in that subject.

Wool-classing: A successful season's work was done.

The domestic economy classes continue to improve in numbers and in enthusiasm, but are very severely handicapped by the absurd inadequacy of our accommodation. The day Technical School continues to thrive.

At the national competitions of the Board of Education, London, one student obtained a book prize and was commended for exhibits (drawing of head from life—black and white); two students were commended for their exhibits in animal studies; one student was commended for her modelled head from life.

The buildings and equipment have been maintained in good order and repair during the year. Cleaning and caretaking have been careful and thorough. The thanks of the school are due to the Wellington City Council for its annual contribution of £300, and to the contributors of prizes for competition among the day and evening students in the December class examinations.

W. S. LA TROBE, M.A., Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted at the Wellington Technical School.

				- , ,	<i>j</i>					
Receipts.		£	s.	đ.	Exper	iditure.		£	s.	d.
Balance at beginning of year		1,178	11	0	Salaries of instructors			5,801	4	10
Capitation—Day Technical School		2,262	0	0	Office expenses (including	salaries,	sta-			
Capitation on associated classes	٠.	2,400	0	0	tionery, &c.)			614	15	6
Capitation on account of free places		865	15	9	Advertising and printing			172	10	9
Rent		39	0	0	Lighting and heating			170	16	11
Furniture, fittings, and apparatus		- 30	0	0	Insurance and repairs			159	11	0
Material		272	18	8	Rent			94	14	4
Subsidies on voluntary contributions		304	11	0	Examinations, &c			54	15	0
Fees		1,023	11	6	Material for class use			861	8	9
Voluntary contributions		301	1	0	Typewriter repairs			23	6	6
Sales of material	٠.	132	14	11	Library			33	3	6
Wellington College, for instruction		141	0	0	Prizes			<b>57</b>	5	5
Marine Department, for "Amokura" class	ses	126	13	7	Sundries			54	16	9
Sundries		15	15	0	Furniture, fittings, and appe	ıratus		210	9	3
				-	Balance at end of year			784	13	11
					•					
	ä	£9,093	12	5				£9,093	12	5
				==						

DAVID ROBERTSON, Chairman W. S. LA TROBE, Secretary of Managers.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE PETONE TECHNICAL SCHOOL.

Steady progress has been made throughout the school, and the pupils generally are showing greater enthusiasm and keenness in their work. While this spirit exists amongst the students there can be no doubt as to the ultimate success of the school as a whole. During the year two open nights have been held, one at the end of the first quarter and one during the third term. Both of these have been largely attended by parents and others, and undoubtedly, taking all things into consideration, they do a great

deal to advertise the school, although they have their drawbacks. A number of the older pupils stay away on these occasions, as naturally they do not like their work being criticized, and often by people who are thoroughly incompetent to do so. During the year a wool-sorting class was started. Mr. A. Cate, of the Petone woollen-mills, was appointed instructor. The progress made by his class has been The students have shown a great desire to learn as much as they possibly can about wool, and the school itself has, owing to the generosity of the manager of the woollen-mills, been in the happy position of being able to supply as much wool as was wanted by the pupils, and of every description required, for absolutely nothing. In this respect we have been particularly fortunate, and I do not think that there is another wool class in the whole of the Dominion that is better equipped in this particular than the class at Petone. There is only one drawback, and that is in the matter of accommodation. However, until the class has been going for another year I do not feel inclined to put forward any proposal, although I am sure that in time a large shed will have to be built, which will do for a drillshed, wool-shed, and gymnasium. Mr. Cate has been enthusiastic with his class, and he has managed to interest such well-known wool-men as Mr. Burridge and Mr. Lees, the latter of whom gave a very interesting lecture during the year. It is common knowledge that the more education a person gets the more he sees the need of it. Many boys, having passed Standard VI, seem, however, to think that they have all the education that they will ever require. It is gratifying to note that of those who have gone beyond the ordinary primary education some are beginning to see that there are advantages to be obtained at a The headmasters, too, of the various Valley schools are helping by placing before technical school. their older pupils the value of technical education. The reports from the various instructors are very satisfactory, although in one or two classes the attendance was not so good as it should be. This was particularly noticeable in the cookery class, and it is hoped that this useful class will be better supported next year. 101 Senior Cadets have been posted to this school. About 50 of these boys are at present on the school roll. Arrangements will be made so that the drill will interfere as little as possible with the working of the school. A beginning has been made in forming a reference library and a museum, and although there has been but small progress so far yet a start has been made. Mr. J. Kingdom has presented the school with eighteen bound volumes of a technical magazine. This valuable donation is a very acceptable contribution to the library. Mr. Burns, at one time an instructor of the mechanical drawing class, has presented the school with a valuable model of a ratchet pump. Several pupils have been successful at the examinations of the Board of Education, South Kensington, and of the City and Guilds of London Institute, also at various public examinations. Seven pupils have been recommended for the award of Senior Free Places.

During the year the manager of the Petone Railway Workshops gave an interesting lecture to a large number of adults on the theory of steam and steam-making. This lecture was much appreciated by those present. A set of Cusson's elementary models were procured during the year for the use of the students in the mechanical drawing class. I must take this opportunity of thanking Mr. Hope for the assistance he gave to this class during the year by bringing small useful models at various times for sketching purposes. Miss Kimbell, the instructress in art, resigned during the year, as she was giving Miss Gooder, of Wellington, was appointed to take her place. The reports up teaching altogether. of the various instructors are of a highly satisfactory nature, and the Board is fortunate in having on its staff some very keen and capable teachers. Many of those have been connected with the school for a number of years, and it is due to their earnest work that the attendance has gone up. of grouping recommended by the Department has been adopted. There is no doubt that those taking a systematic course of study derive far more benefit than those taking subjects in a haphazard style. The system at present in force, however, could easily be simplified, making the preparation of claims for capitation a less complicated matter than it is at present. No doubt the Department will arrange for a more adaptable system, which will simplify matters for all concerned. The assistance given by the various local bodies, companies, and other associations is much appreciated, and I think, if the townspeople fully realized the amount of good that the Technical School does, that more institutions would follow the excellent example that has been set them. In conclusion, I must thank the Board for the very hearty way in which they have supported any recommendations that I have made, the Hon. Secretary, Mr. J. G. Castle, for his assistance and advice during the year, the Department for their unfailing courtesy, and the staff one and all for their loyal support.

JAS. H. LYNSKEY, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes at Petone Technical School.

					2 connecte school.			
Receipts.		£	s.	d.	Expenditure.	£	0	d.
Balance at beginning of year	• •		15	2	Salaries of instructors	<b>4</b> 48		
Capitation on associated classes	• •	163		4	Office expenses (including salaries, sta-	-10	••	Ü
Capitation on account of free places	• •		15		tionery, &c.)	17	11	8
Furniture, fittings, and apparatus Material	• •		18		Advertising and printing	11	8	ŏ
Subsidies on voluntary contributions	• •		$1\frac{4}{5}$		Lighting and heating	38	13	9
Food	• •	$\frac{92}{152}$			Insurance and repairs	17	10	9
Voluntary contributions	• •		10		Material for class use Bonus to Director	41		11
From controlling authority, on account	nf	50	10	U	Caratakar	20	-	0
school classes	• • •	9	5	4	Cartage	53	_	0
Sales, &c,	•••	10		4	Bank commission and cheque books		10	~
			_		Furniture, fittings, and annaratus			0
					Balance at end of year		$\frac{14}{12}$	-
					- same of your		ız	TO
		£754	7	11	·	£754	7	11
				_	l e		_	

ALEXANDER THOMSON, Chairman of Managers, J. G. Castle, Secretary

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE MASTERTON TECHNICAL SCHOOL.

The fifteenth year's course of instruction at the Masterton Technical School was commenced on Monday, the 20th March, and was continued throughout three terms of twelve weeks each, until Saturday, the 9th December, 1911. In the course of this period 25 classes were conducted, and instruction was given in the following subjects: Painting, freehand, model, and perspective drawing, light and shade, general drawing, drawing from life, machine and building construction, dressmaking, plumbing, commercial work, shorthand and typewriting, wool-classing, English and arithmetic, and Civil Service subjects. Arrangements for the formation of classes in veterinary science, art needlework, and electricity and magnetism were also in course of progress, but owing to various reasons the establishment of classes for instruction in these subjects had to be held over for the present. Taken on the whole, the attendance of pupils at the classes was very satisfactory, the average roll number being 264, whilst the average number of pupils in attendance during the whole of the period now under review was 204.

In accordance with the custom obtaining in former years the classes were again thrown open to the admission, as free pupils, of holders of Standard VI proficiency certificates, and no less than 50 pupils availed themselves of the privilege thus extended them. Forty-four of these succeeded in earning for the school the special capitation grant allowed by the Education Department in respect of free-place holders. The remaining 6, owing to illness, removal from the district, or other reasons, failed to make the necessary percentage of attendances. Referring to the classes generally, there appears to be a strong demand for instruction bearing on commercial lines, whilst little interest or enthusiasm has so far been evinced in connection with classes bearing on the artistic side of life. To such an extent was this the case that, whilst as many as 49 pupils came forward for the commercial course, the highest number presenting themselves for instruction in any branch of art was 8, and the average number on the roll of the various art classes was 6. Considering the splendid facilities the Masterton Technical School affords to art students, the Managers are disappointed that there should have been so little response during the past year. that the art-room is well equipped in respect to its lighting and furniture, it is hoped that a much larger number of students will enrol in the art classes during the current year. Wool classes under the auspices of the Technical School were conducted by the wool instructor, Mr. E. L. Lees, at the following subcentres: Tinui, Bideford, Te Wharau, Waikaraka, and Gladstone. These classes were on the whole well attended, no fewer than 103 students coming forward for instruction during the first term. In the second term, however, principally owing to the bad weather, and also to the fact that the sheep were beginning to require the constant attention of the settlers, the attendance was not nearly so good. Judging from the experience gained the Managers are inclined to believe that a better plan for conducting wool classes at such sub-centres as those now referred to would be to send an instructor out for a week or ten days to each centre, where he could then complete his course of lectures before moving on to the next point of instruction. By the adoption of such a system as that just indicated, not only would the pupils receive the advantage of a continuous course of instruction, but they would also benefit to the extent of the decreased cost for travelling. At all events, the scheme seems to be one worthy of consideration. During the year the co-operation of the Masterton Agricultural and Pastoral Association was sought in connection with the establishment of classes affecting the agricultural and pastoral interests of the community, and the association responded by appointing one of the members of its committee, Mr. Welch, to attend meetings of the Board of Managers in the capacity of an advisory member. Owing, however, to the lateness of the year, and also to the fact that no new classes bearing on farming interests were contemplated, it was found unnecessary to invite Mr. Welch's attendance. Looking forward to the coming year, however, the suggested formation of classes for instruction in veterinary science, wool-classing, and similar subjects affecting the farming population, the Managers will gladly welcome as an advisory member the representative appointed by the Agricultural and Pastoral Association. Mr. E. C. Isaac, of the Education Department's inspectorial staff, visited the school from the 10th to the 15th May, and a satisfactory report on the condition and conduct of the school was subsequently forwarded to the Managers. In his report the inspector recommended additional furniture for the art-room, and this has since been obtained. Referring to the work of the plumbing class, Mr. Isaac acknowledged the disability under which the class labours owing to the frequent absence of pupils caused by the claims of country work. accompanying statement of receipts and expenditure in respect of the year ended the 31st December, 1911, shows the receipts for the year to have amounted to £900 19s. 7d., whilst the disbursements during the same period, including a debit balance of £18 3s. 3d. carried forward from last year, amounted to £780 10s. 8d., thus leaving a credit balance at the end of the year of £120 8s. 11d. It is perhaps worthy of remark that this is the first occasion on which an audited statement has been available for submission to the annual meeting of subscribers, which in accordance with the Act must be held during the months of January or February in each year. In conclusion, the Managers desire to take this opportunity of thanking all who have assisted them in their efforts for the advancement of technical education in this district. Special acknowledgment is now made of the valuable financial assistance rendered by the Education Department, the Masterton Trust Lands Trust, the Masterton Borough Council, and the Tinui branch of the Farmers' Union. The Managers wish also to thank the staff for its loyal co-operation, and the Press for its unfailing courtesy and valuable assistance on all occasions.

W. H. Jackson, Chairman. N. D. Bunting, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted at the Masterton Technical School.

with.	Receipts.			£	s.	đ.	Expenditu	re.		£	s.	d.
Capitation on associ	ated classe	в		169	19	9	Balance at beginning of year			18	3	3
Capitation on accou	nt of free p	laces		95	9	0	Salaries of instructors			505	2	6
Material	• •	• •		6	18	8	Office expenses (including a	alaries,	sta-			
*Subsidies on volunts	ary contrib	utions		194	0	4	tionery, &c.)			63	11	6
Fees	• •			247		6	Advertising and printing			14	4	0
Voluntary contribut				164		2	Lighting and heating			24	7	11
Rent for use of roon	1s		٠,		10	0	Insurance and repairs			14	8	11
Sales of material	• •			14	0	2	Rent			′ 1	0	0
							Examinations, &c			3	3	6
							Material for class use			10	8	0
							Instructor's travelling-expenses			71	13	<b>2</b>
							Cartage, freight, &c			7	0	4
							Bank charges, &c			1	11	0
							Caretaker			33	2	6
							Postages, &c	• •		1	12	0
							Furniture, fittings, and apparat	tus		11	2	1
						- 1	Balance at end of year	• •	• •	120	8	11
										, ——		
				£900	19	7				£900	19	7
							TIT TT T					

W. H. Jackson, Chairman N. D. Bunting, Secretary of Managers.

#### HAWKE'S BAY.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

The number of pupils in all subjects of manual and technical instruction has increased. The report of the Director gives in considerable detail the results of the work of the year. The Board is satisfied that excellent work is being done in this department. At Hastings and Woodville District High Schools the whole of the secondary pupils took the rural or scientific course. At Waipawa a few of the pupils continued the literary course. In 1912 it is expected that the whole of them will take up the approved rural course. The work done by the classes taking this course is fully reported on in the Director's report. I may, however, say that the students have taken a great interest and pleasure in the work, and the Board and the parents are satisfied that the change in the syllabus is undoubtedly in the right direction. The Saturday training classes for teachers were held at Gisborne—science and art; Napier—science and art; Dannevirke—science, art, and agriculture; Hastings—agriculture; Woodville—agriculture. The attendance at all these classes was most satisfactory. Examinations were held at the end of each term, and certificates were awarded on the results of the final examination.

# EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

The fostering of manual instruction in woodwork, elementary agriculture, cookery, and dress-making is causing much less time to be given to other essential work. As far as it is understood nature-study is taught in the schools, and if some better plan than the present capitation grants were adopted to foster manual instruction and nature-study in all schools a vast amount more good might be done than is at present accomplished. Some excellent school-gardens and experimental plots are to be found throughout the district, among which must be specially named Matamau, Otane, and Petane, and a score of the teachers might be named who have qualified to carry on instruction in woodwork and elementary agriculture. Manual work is popular where carried on, but where it would be perhaps most useful there no instruction is given. In every country school it is desirable to foster an agricultural bias, and but for the capitation spectre this and other subjects of manual instruction might occupy a most important place in the training of the children. If manual instruction is considered worthy of a place in the schools provision should be made for it in all the Board schools, irrespective of size or locality.

# EXTRACT FROM THE REPORT OF THE ITINERANT INSTRUCTORS IN AGRICULTURE.

It is now two years since a systematic course of instruction in elementary agriculture was introduced into the primary schools of this district. At the beginning of last year (1911) the Board introduced into the district high schools an agricultural course which provided for the further development of the primary-school work. Mr. William C. Morris, of the Sydney Teachers' College, and late of the Hawkesbury Agricultural College, was appointed assistant instructor, and to him was intrusted the teaching of the science subjects included in this course.

# Primary Schools.—Two Years' Scheme of Work in Agriculture. Class-room Work.

Part I.—I. The soil: What it is. Soil-makers—(1) Atmosphere, oxygen and CO<sub>2</sub>, weathering; (2) water (three forms), physical and chemical action; (3) organic life. II. Classification of soil: Sand, clay, loam, and humus. Physical properties—perosity, capillarity, retentive power, colour, and texture; experiments showing properties as outlined in leaflets. III. The plant: Flowering and non-flowering; parts of a plant; functions and forms of each part—(a) roots, (b) stem, (c) leaves, (d) flowers and fruits. IV. Plant-propagation: Seeds and seed-testing; cuttings, layering, budding, and grafting. V. Relationship between plant and soil: Soil is (1) storehouse for plant-food;

(2) reservoir for water; (3) holder of heat necessary for germination of seeds and growth of plants; (4) home for germs, &c., necessary for plant-development. VI. The soil and soil-moisture: Origin—of soil-water, how is it held, how utilized by plant, how removed from soil; drainage; need for drainage.

Part II.—VII. Plant-food: Substances found in plants; essential and non-essential substances; sources whence derived—(1) the air, (2) the soil. VIII. Air-derived foods: Oxygen, carbon-dioxide, nitrogen; preparation and properties of these elements; importance to plant-life; part of plant whose duty it is to obtain these foods. IX. Soil-derived foods: Nitrogen—preparation, properties, and importance; hydrogen—from water in soil; mineral foods—potash, calcium, phosphorus. X. Fertile and infertile soils: Infertility due to absence of plant-foods, generally one for more of following—Nitrogen, calcium, potassium, phosphorus. XI. Improvement of soils: (1) Cultivation, &c.; (2) manures—green, farmyard, artificial. Artificial manures—slow and quick acting; how and when applied; kinds to use. XII. Plant pests: Insects, fungi, bacteria. Remedies; preventatives in common use.

This course of instruction was issued two years ago by the Board for the guidance of teachers. It is intended to be suggestive, and the teachers are allowed and encouraged to modify it if school environment so demanded. Saturday classes were held at various centres throughout the district, and the work here outlined was covered by the agricultural instructors. It will be noticed by perusing the first part of the course that the work deals only with the plant, the soil, moisture, and the relationship between these three. A certain amount of this will have already been covered as nature-study in the lower standards, but as the pupil of the upper standards will be actually at work in the school-garden he will have an opportunity of applying the knowledge gained lower down the schools. Part II of the course deals with plant-foods, both soil- and air-derived. The gases important to plant-life are prepared so that the pupils could obtain an idea of their properties. Simple experiments showed the importance of these gases to the plant. Seeds placed in a jar of oxygen germinated more rapidly than others in a jar of air, whilst others in a jar of nitrogen failed to grow. A jar of oxygen in which seeds had grown was found to contain carbonic dioxide, showing that the seeds were alive, and had the power to use up oxygen like animals. The work outlined in this course may be given most appropriately during the last two years in the primary school. The time to be devoted to the course will necessarily vary in the different schools, but on an average not less than one hour a week will be required to make the course effective. A text-book is not necessary.

required to make the course effective. A text-book is not necessary.

The instruction in the class-room should be supplemented with simple experiments with soils, plants, and animals similar to those outlined earlier in this report. Every effort should be made to connect the class-room instruction with the outdoor work at school, at home, and on the neighbouring farms. Where possible excursions should be made to farms, orchards, dairies, and factories, and the children should be encouraged to record their observations at the time and afterwards embody them in essays. Emphasis is here laid on the fact that no attempt is made at attempting to teach primary-school children practical farming. School farms are based wholly on a wrong principle, and school-gardens, though healthful and pleasurable, are merely adjuncts to the science course in elementary agriculture. It is now agreed by all authorities that mere information in regard to the facts of science constitutes only a part—and a small part—of the function that science should exercise in preparing a boy for starting out in life. The instruction must be directed to the cultivation of regular habits of thought to the scientific method. To accomplish this it becomes essential that the pupil, under careful guidance, should discover as far as possible all facts for himself. Unless this spirit of self-reliance and self-inquiry is encouraged and developed, the agricultural work, however good it appears to the onlooker, judged from an educational standpoint, is valueless.

## PRACTICAL WORK.

The School-garden.—The size of the garden and the number of separate plots will depend on the amount of land available and on the number of pupils. With a few exceptions no difficulty has been experienced in obtaining the minimum area of land needed for primary agricultural work. Two types of gardens are common throughout the district. The dimensions of a typical garden in a small school are 66 ft. by 38 ft. It contains four central plots each 22 ft. by 11 ft., and four borders each 5 ft. wide. If flowers are cultivated the garden would be quite large enough for 16 to 20 pupils. One border is used for grass-plots, the others are used as seed-beds, beds for striking cuttings, compost heap, &c. The main paths are 3 ft. wide, and the paths between the plots 2 ft. wide. If preferred, the four borders could be used for ornamental purposes, and this portion of the work (flower-growing) could be undertaken by the girls. For larger schools the dimensions of the garden should be about 92 ft. by 64 ft. In addition to four borders 5 ft. wide, there should be twelve central plots arranged in two parallel rows, with a central path 4 ft. wide between them.

The practical garden-work for 1910 dealt specially with the cultivation of different vegetables

The practical garden-work for 1910 dealt specially with the cultivation of different vegetables and a few farm crops such as swedes, mangels, and maize. The children were required to keep special notebooks in which they recorded observations on the preparation of the soil, planting of the seed, germination, growth, and development of the different parts of the plant (especially the parts of economic value), maturity, and harvesting. In order to make use of the knowledge already gained by the pupils it was thought advisable for the schools throughout the district to carry out simple experiments with manures. With a few exceptions all classes conducted similar experiments. The work undertaken was outlined and discussed by the instructors at the Saturday classes for teachers. Here it was pointed out by the instructors that the minimum amount of plant-food added to the soil by manures which would produce any result on a crop was: Nitrogen in the form of nitrates, 10 lb. per acre; potash in the form of dipotassic oxide, 20 lb. per acre; phosphorus as phosphorus pentoxide or anhydride, 15 lb. per acre. The manures used in the school experiments were nitrate of soda,

sulphate of potash, and superphosphate. These manures are generally spoken of as simple manures, inasmuch as each one only contains an essential plant-food. Four plots were set aside for experiments with these manures, and the crops experimented with were (1) potatoes, (2) maize or sorghum, and (3) swedes or mangels. The class-room instruction bearing on this work was confined to simple experiments with these manures, having for their aim the discovery of such properties as would give an idea as to the correct and incorrect seasons for applying the fertilizers. It was found that if a little nitrate of soda was placed in a test-tube, water added, and the contents then shaken, the nitrate would all dissolve. In a losser degree the same thing happened when superphosphate and sulphate of potash were treated in the same manner. If the liquid containing these substances in solution was now evaporated, a powder remained behind in the test-tube. It was also shown that super and sulphate of potash would dissolve more readily if a little acid was added to the water in the test-tubes. simple experiments such as these the pupils were able to understand that the manures became dissolved in the soil-moisture, on the weak acids present in the ground, and were then taken up by the roots of the plants. Applying soluble manures in wet weather was only wasteful, as there was every danger of their dissolving and passing through the soil and being lost to the plant. In this way it was brought home to the pupils that the manures had to be applied at a particular time in order to obtain satisfactory results. Manures that became available readily had to be applied with the crop or shortly after it appeared above ground. Slow-acting manures were applied before the crops were sown, so as to allow of the gradual conversion from the unavailable to the available state. Dealing with the manures used in this experiment (manures containing plant-food immediately available), it was deemed advisable to wait until the crops had appeared above the ground, and then apply as a top-dressing and work into the soil with a Dutch hoe. To allow of a more even distribution of the manure over the various sections, the quantities used were mixed with three or four times the amount of air-dried sand or soil. The crops experimented with were planted the first week in September, and the manures were added immediately on their appearance above ground. At certain schools heavy rains occurred directly after the manures were applied, and, as could be expected, the results of the experiment did not prove satisfactory. Summarizing, it is to be regretted that the experiments throughout the district were not as successful as one could wish. Certainly the amount of labour expended by pupus and was worthy of better results. The chief causes contributing to such unsatisfactory results were: the soil-temperature throughout the district was from 5° to 12° Fahr. lower than for the same period of August, 1910. As all seeds have a minimum, an optimum, and a maximum temperature of germination, and the nearer the temperature approaches the optimum the quicker the seeds grow, it is easily understood that germination would not be as rapid in 1911 as in 1910. (b) Manures applied too near the young seedlings; (c) wet weather during planting season in many cases rotted the seeds and made a second sowing necessary; (d) the dry and windy spell in October and November. The practical failure of the experiment, however, cannot detract from the good work done by the majority of the schools. Certain schools, by the quality of their work and the scientific methods adopted, demand special mention. They are Otane, Matamau, Tepapakuku, Makauri, Clive, and Mahora. The work of these schools, both indoor (theoretical) and outdoor (practical), is excellent. Other schools doing very good work are Te Karaka, Kaiti, Puha, Petane, Taradale, Pakowhai, Meanee, Pukahu, and Woodville. Last year 75 schools had classes recognized by the Education Department in agriculture and dairying. A large number of the smaller country schools did garden-work, but the time devoted to the work was insufficient to earn capitation.

At the beginning of 1911 the Education Board made provision for the continuation of the agricultural work of the primary schools by introducing into the district high schools a rural science course. This course contains the following sciences: Agriculture and dairying, chemistry, and physical measurements. The pupils at present attending the district high schools are either those who live near at hand or those who have been successful in obtaining a scholarship. In the back-country schools many children are debarred from obtaining secondary education in any form. The district high schools are too far away, and the parents are unable to board the children near the school. There is also a growing tendency for pupils to leave school immediately after obtaining the proficiency certificate, whilst some leave before this stage. It is from fourteen years onward to seventeen, say—the formative years—that are the most valuable for educational purposes. The boy or girl who leaves school at thirteen or fourteen has by the time three years have passed forgotten the best of anything he learned at school. With the object of assisting the pupils who remain at school until the Sixth Standard is reached, the Board has under consideration the advisability of granting a number of scholarships, tenable at the district high school. These scholarships will be awarded on the Sixth Standard examination, plus a paper in elementary agriculture. If granted, these scholarships must give considerable impetus to the agricultural work throughout the district. In concluding this portion of the report we must again place on record our appreciation of the earnest and conscientious manner in which the majority of the teachers throughout the district have carried out this branch of the school-work.

With the introduction of the rural science course into the district high schools it became necessary to reorganize the work in connection with woodwork and domestic science. Mr. C. Dandy, of the Wanganui Education Board, was appointed to the position of instructor in woodwork for both primary and secondary classes in the Middle and Southern Wards of the district. The Napier classes were conducted by the Napier Technical Association, and Mr. W. Menzies, of Christchurch, was appointed to take charge of the Gisborne centre. The work throughout the whole district is gradually being raised to a higher standard, and the grounding given to the pupils last year must give rise to the production of a better class of work than heretofore.

The domestic science classes were in charge of Mrs. F. Cross (Hastings and Southern Ward), Mrs. W. Fossey (Napier), and Miss M. Higgens (Gisborne). The inclusion of a course of domestic science in

primary and secondary schools for girls needs no justification. Whatever her future in life may be, a girl will in all probability, sooner or later, be concerned with the well-being of others, and a training in household-management (including cookery, hygiene, &c.), and the principles governing the maintenance of health, is absolutely essential, and must be regarded as an important part of a girl's educational equipment. One of the chief obstacles in making this work as interesting as it should be is the difficulty in obtaining fully qualified domestic-science teachers. Most of the domestic-science instructresses have little experience as teachers. A domestic-science mistress should have the ordinary class-teacher's training during the early years of her career, and later on specialize for two or three years. At present the Board is fortunate in possessing three teachers who are doing very satisfactory work in this subject: this, however, may only be temporary. In any future appointments it should be made clear that applicants should possess other qualifications than the certificates issued by the City and Guilds of London Institute. If possible we would strongly urge upon the Board the necessity of sending the District High School domestic-science mistress to Otago University for a period of three months, to have the advantages of the training that can be obtained there from Professor Boyd-Smith.

The girls from the primary schools take forty hours' instruction in cookery and forty hours in dressmaking during the year. Each lesson lasts two hours. We are of the opinion that the time devoted to dressmaking is too great. The course could be made more interesting and valuable if a little plain sewing, darning, &c., was introduced. The cookery course consists of elementary instruction in kitchen-management, methods of cooking, and demonstration and practice in preparing and cooking simple dishes. The high-school work is more advanced, and includes cookery, theory and practice; classification of foods; elementary domestic chemistry; marketing; household economy, including accounts; and table-setting.

Teachers' training classes were held during the year at Gisborne, Napier, Hastings, and Dannevirke. At Gisborne, Napier, and Dannevirke instruction was given in art and in elementary chemistry. Agricultural classes were held at Gisborne, Hastings, and Dannevirke. The results of the final examination showed that good work had been done throughout the year.

The following is an outline of the course of work in science subjects included in the rural course taken at the Hastings, Waipawa, and Woodville District High Schools:—

## Agriculture (Theoretical).

Section I.—1. The soil and its contents: (a.) What the soil is—organic portion; inorganic portion.
(b.) Soil-makers—water in its various forms; the atmosphere; organic life. (c.) What the soil does.
2. The soil and its physical properties: Colour, texture, capillarity, retentive powers, temperature, moisture; main classifications—clay, sand, loam, marl, and humus. 3. Soil-moisture: (a) Its importance; (b) how it is held; (c) how the moisture-holding capacity may be increased; (d) removal of water. Irrigation. Drainage. 4. Tillage: (a) What it is; (b) what it does; (c) implements used.
5. The fertility of the soil: (a) How it is lost; (b) how it may be maintained; farm resources; (c) commercial resources.

Section II.—1. The plant: (a) Its relation to the soil; (b) its relation to animal-life; (c) value to man. Parts—functions of the various parts and forms; how the plant feeds; soil food and air food.

2. Plant-propagation: Methods of propagation; seedage, seed-testing, selection, vitality, purity, &c.; necessities for germination—(a) warmth, (b) oxygen, (c) water; the raising and care of seedlings; bud-propagation—(a) detached buds, (b) undetached.

3. Preparation of the soil.

4. Care of the plants: Protection from weeds, insects, fungi and bacterial pests.

5. Pastures, meadows, and forage crops.

6. Manures: (a) Natural and artificial; (b) nitrogenous, potash, and phosphatic.

Section III.—1. Farm animals: Elementary anatomy of (a) how the animal lives; (b) feeding of animals; (c) use of different farm-animals; (d) stock-management.

#### Agriculture (Practical).

1. Setting out plots and paths: Grading; levelling; use of boning-rods, straight-edge, &c.

2. Trenching: (a) Single, (b) double. 3. Vegetable-culture. 4. Cereal-culture. 5. Root-culture.

6. Experimental work: (a) Plant-improvement; (b) plant-selection; (c) manurial tests; (d) physical properties of the soil—capillarity, porosity, retentive power.

7. Basket experiments with manures.

8. Culture-fluid experiments.

9. Seed-testing: Value of testing methods—(a) purity, (b) vitality, (c) utility value.

10. Basket experiments with different soils.

11. Plant-enemies: Insects, fungi, &c.; preventatives, &c.—sprays, Bordeaux mixture, arsenate of lead, &c.

# Dairy-work.

Section I.—1. Milk and its composition: Water, fat, albumen, casein, lactose, and ash; percentage of ingredients; constancy of ingredients. 2. Milk-testing: Its importance; the Babcock tester; sampling milk; measuring; making the test; reading the test; testing the apparatus; the machine, test-bottle, pipette, acid-measure, thermometer, and lactometer. 3. Cream and its composition: Methods of creaming—gravity, dilution, cream-separator; testing cream for butter-fat; ripening cream; acidity; Marshall's acid and rennet test; the alkaline test. 4. Skim-milk: Its use as a by-product; composition; percentage of butter-fat. 5. The souring of milk: Milk-sugar; the action of lactic-acid bacilli on milk; acidity of milk. 6. Quevenne's lactometer, and its use in determining specific gravity and milk-adulteration. 7. Milk-preservatives: Formalin, boric acid, silicic acid. 8. Separating cream from milk: The cream-separator. 9. Care of milk: Care of dairy utensils; need of cleanliness.

Section II.—1. Chemistry of butter-making. 2. Chemistry of cheese-making.

Section III.—1. The dairy cow: Points of a good cow, 2. Chief dairy breeds, 3, Value of different foods, 4. Effect of various foodstuffs on milk,

## Physical Measurements.

First Year.—1. The metric system: The measurements of length and area; relation between the two. 2. The balance and its uses: Care in handling; the measurements of mass. 3. The measurements of the volume of a liquid: Use of (a) pipette, (b) burette, (c) measurement-glass. 4. The measurement of temperature: Difference between heat and temperature; expansion of liquids, solids, gases; experiments to show the same; the thermometer, conversion of thermometric scales. 5. The relative density of liquids: (a) Ordinary method; (b) specific-gravity bottle. 6. Relative density of solids: (a) Regular solids; (b) irregular solids; (c) specific-gravity bottle; (d) principle of Archimedes. 7. Pressure: The pressure of the air; method of measuring it. The barometer—its construction; standard atmospheric pressure. 8. Evaporation and condensation: A natural process; cloud-formation, rain, &c. Water—purification of water; boiling-point of liquids; effect of pressure on the boiling-point. 8. Change of state: Liquefaction and solidification; effect of heat on certain solids—(a) ice, (b) paraffin, (c) sulphur; melting-point of solids.

Second Year—1. Solutions: Water and sugar; experiment to see if a liquid increases when a substance is dissolved in it; substances soluble in water; solids in natural water; distillation; hard and soft waters; soap test; solubility of solids in water; influence of temperature on solubility; solvent action of other liquids. 2. Freezing-mixtures: Salt solution; ammonium-nitrate solution.

3. Latent heat: Meaning of the term; latent heat of liquefaction; latent heat of vaporization; the wet- and dry-bulb thermometers. 4. The measurement of heat; the effect of mixing two quantities of water at different temperatures; specific heat; specific heat of metals, &c. 5. Simple machines: The lever, the pulley, the balance; application to farm-work. 6. Gravitation: Newton's law; the centre of gravity; equilibrium. 7. Mechanical properties of water and other liquids: Flotation (hydrometers), &c.; elasticity, diffusion, surface tension, &c. 8. Graphic representation: Temperatures—wet and dry bulb, maximum and minimum thermometer; rainfall; soil-temperature; crop-yield;

germination-tests, &c.

## Agricultural Chemistry.

Section I, Inorganic Chemistry.—1. Composition of matter: Physical and chemical changes; mechanical mixtures and chemical compounds; chemical action. 2. Chemical manipulation and apparatus: Names and use of apparatus; glass cutting and bending; cork-boring; fitting up wash-bottle; weighing; measuring liquids; filtering. 3. Solutions; evaporation and precipitation. 4. Elements; symbols; chemical nomenclature; combination of elements. 5. Occurrence, preparation, properties, and importance of the following elements: Oxygen, hydrogen, nitrogen, carbon, oxides, marsh-gas, chlorine. 6. Water: Natural waters; impurities; hard and soft waters; physical properties; chemical composition; water of crystallization. 7. Air: Its composition; properties; importance to plants and animals. 8. Acids; bases; salts; neutralization; classification of salts; soil salts, how formed; classification of elements—acid-forming, base-forming; chief acids, their composition, preparation, and properties; laws of chemical action; indestructibility of matter. 9. Atomic and molecular theory; valence. 10. Soil-elements and their compounds essential for plant-life—nitrogen; ammonia; nitric acid and nitrogen compounds; phosphorus and its compounds; potassium and sodium and their compounds. 11. Calcium and its compounds. 12. Sulphur and its compounds.

Section II.—1. Mechanical analysis of soils. 2. Action of lime on sand and clay; slaking lime; action of air and acids on lime; tests for lime and humus matter in soils. 3. Silica; sand and clay; mechanical properties of soil. 4. Soil-acidity and remedies. 5. Tests for nitrates, phosphates, sulphates, &c.; experiments with manures—lime manures, potash manures, nitrogenous manures, compound manures, phosphatic manures, mixing manures. 6. Elementary analysis; qualitative experiments with soils and manures. 7. Tables for analysis (qualitative).

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Gisborne, Napier, Hastings, Waipawa, Dannevirke, and Woodville.

	rice, irapier, iia	oringo, ir arparaa, Daninoceirio, ana ir oodee	200C•
Receipts.	£ s. d.	Expenditure.	£ s. d.
Balance at beginning of year	281 18 4		293 0 0
Capitation on special classes	91 14 9	( ,	
Capitation on account of free places	5,80 0 0	1000000, 0000, 0000	$20 \ 10 \ 6$
Furniture, fittings, and apparatus	53 4 5		386
Material	10 19 4		6 16 8
Subsidies on voluntary contributions	180 0 0		8 16 0
Training of teachers	175 0 0		32 18 6
Fees	11 15 0	( ( ( ( ( ( ( (	$525 \ 4 \ 0$
Voluntary contributions	180 0 0		30 5 0
		Furniture, fittings, and apparatus	49 0 5
		Expenses acquiring site	$55 \ 0 \ 0$
		Balance at end of year	539 <b>1</b> 2 3
		_	
	£1,564 11 10	£	1,564 11 10

G. Crawshaw, Secretary.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE NAPIER TECHNICAL COLLEGE.

The work of the year has again been very successful in all departments, particularly so in the evening classes, not only in point of numbers, attendance, conduct, but also in the increased number of students who have taken up related courses of work. This has been rendered more possible by the increased capitation granted by the Department for pupils taking related courses of study.

The work was carried on under similar branches as last year—viz., (a) An organized day technical school of 83 pupils; (b) eight primary-school classes in woodwork, cookery, and dressmaking; (c) two

classes in cookery and one dressmaking from the Hukarere Maori Girls' School; two classes in cookery, one in dressmaking, and one in woodwork from the Catholic schools of Napier and Meanee; (d) an evening school of twenty-seven classes, which were combined into courses suitable for the various trades and commercial and domestic occupations. An average of nearly 800 pupils attended the

- College weekly during the year, a considerable increase over the year 1910.

Day Technical School.—83 pupils were admitted during the year, 81 being holders of free places; the number being made up as follows: Senior Free Places, 15 (5 boys, 10 girls); Junior Free Places, 66 (31 boys, 35 girls). The work was arranged in courses for first-, second-, third-, and fourth-year pupils, and was divided as follows: (a) A trade or technical course suitable for boys who might become members of any of the skilled trades; (b) commercial course for boys who intended to enter offices, warehouses, shops, &c.; and a combined domestic science and commercial course for girls, half the available time being given up to each of these branches of the girl's course. It is satisfactory to note that nearly every eligible girl and boy was enabled to obtain an appointment during the year, the boys going to workshops being spoken especially well of by the employer or shop-foreman.

Half-yearly and annual examinations were held, 61 pupils sitting for the latter, the results being that 33 passed first class, 27 second class, and 1 failed to obtain 40 per cent. of possible marks. Speaking generally, the work has been exceptionally well done during the year, and the attendance and conduct

of the pupils beyond reproach, a fine spirit of esprit de corps being noticeable.

The chief event of the year was the equipping and opening of the Engineering School, a fine well-lighted building of hollow concrete blocks built on the small piece of ground available. The building is equipped with a gas-engine of 11½ B.h.p., two screw-cutting lathes (one for metric pitches), two drilling-machines, shaping-machine, grinding-apparatus, shearing and punching machine, power hack-saw, marking-out table, forge, anvil, &c., besides the usual vices, small tools, &c., for 24 pupils; and it is a creditable fact that the fitting-up of the shop, including the placing of machines, all overhead shafting and gear, making and fixing benches and vices, was done entirely by the boys themselves, under the direction of the ins ructor, Mr. A. J. Newman. It need hardly be said that the educational value of this opportunity was fully realized by the lads. A fine assortment of modern electrical apparatus and engineering models was also obtained during the year, by means of grants from the Department. Two new typewriters have also been added to the equipment of the College. Visits of inspection were made by the boys to the railway workshops, where they were given every facility by the manager and other members of the staff, so that valuable information was gained. The girls visited the woollenmills, being conducted over the works by Mr. Chisholm, who explained fully the details attending the manufacture of blankets from the sheep's back to the finished article.

All boys and girls attended the swimming-baths each week during the summer months, 15 boys obtaining certificates of proficiency for distances varying from 440 to 1,760 yards. Cricket and football clubs have been carried on by the boys, and tennis and hockey clubs by the girls, the Junior

Hockey Cup being annexed for the first time by the latter.

Two exhibitions of school-work were held during the year, one in October at the Agricultural and Pastoral Society's show at Hastings, where 50 ft. of space proved all too small for the exhibits of cookery, dressmaking, needlework, millinery, woodwork, ticket-writing, model-drawing, engineering, machine-drawing, &c.; and the annual exhibition held in the College in December, when all the practical work done during the year was exhibited in dressmaking, needlework, millinery, woodwork, art, engineering, machine-drawing, geometry, &c., in addition to a large display of cookery, both plain and fancy. About 1,800 persons attended this exhibition, the four large rooms of the College, in addition to the engineering room, being used. The comments spoke well for the work of the pupils.

Two free demonstrations in paper-bag cookery were given by Miss Kibblewhite, the domestic-

science mistress, the attendance being about 150 on each occasion.

Evening Classes.—The work of this department is very encouraging indeed, showing an advance on that of 1910. There were about 50 per cent. more pupils, and an increased number of pupils taking related courses of work. The actual number of pupils admitted, excluding any day technical classes, was 230. The highest average attendance for any one month was 291, lowest 268, as against 215 and 138 in 1910.

The annual examinations were held at the end of November, the results being as under: Students entered for examination, 97. Number of subjects in which examinations were held, 22. Number of students who passed first class, 135; second class, 62; failed, 67. Total number of papers worked, 264. At the close of 1910 session 66 pupils entered for the various examinations, and 137 papers were worked. This averages two papers per student for 1910, whilst for 1911 the average is three papers, pointing to the fact that students are taking a more complete course of study than in 1910; moreover, the standard of examination was raised considerably for the present session. Classes were carried on in the following subjects: Art, woodwork, English, arithmetic, mathematics, geometry, building-construction, machine-construction, engineering, electricity, plumbing, ticket-writing, dressmaking, cookery, millinery, needlework, wool-sorting, sheep-shearing, book-keeping, shorthand, typewriting, mechanics, the subjects being grouped into courses as follows: Building trade, cabinetmaking, engineering, plumbing, domestic and commercial; and it is a matter for congratulation that none of the classes ceased working before the end of the year. A new feature of the work was the establishment, a shed with six machines was available. Ten pupils entered, and the class was carried on continuously each day for nearly six weeks, 5,000 sheep being shorn during the period, the students shearing, at the end of the course, an average of 90 sheep per day, the work being done in a highly satisfactory manner. Eight students were examined at the close of the course, seven being awarded first-class certificates.

As a result of the College examinations held at the end of the year, 40 pupils have been recommended

to the Department for the award of Senior Free Places.

A number of students entered for the City and Guilds and South Kensington Examinations, the passes being as follows: Dressmaking, 2; cookery, 1; electric wiring, 1; machine-drawing, 3; free-hand, 1; geometry, 2; mathematics, 1; model-drawing, 1. Examinations in cookery were also conducted for 12 nurses from the local Hospital, all the candidates passing first class.

During the year Mr. A. J. Newman joined the staff as engineering instructor, and Mr. J. Connor

as master for shorthand, typing, French, and commercial subjects.

In conclusion, I have to return most hearty thanks to the officers of the Education Department for valuable suggestions, and for meeting the requirements of the College in so ready a manner; to my fellow-workers the members of the staff, who have supported me unfailingly throughout the year; and to the Board of Managers for rendering assistance in every way.

WALTER FOSSEY, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted at the Napier Technical College.

					1				
Receipts.		£	s.	đ.	Expenditure.		£	s.	đ.
Balance at beginning of year		691			Salaries of instructors	1,	525	16	2
Capitation—Day Technical School		420		0		ta			
Capitation on associated classes		642		10	tionery, &c.)	٠.	30	6	<b>2</b>
Capitation on account of free places		292			Advertising and printing		32	1	9
Furniture, fittings, and apparatus		500	5	11	Lighting and heating		50	4	9
Material		54		1	Insurance and repairs		12		4
Subsidies on voluntary contributions		208			Examinations, &c	٠.	1	0	0
Fees		189	_	-	Material for class use		170	6	1
Voluntary contributions		263	17	6	Taxes and rates			11	8
From controlling authority on account	of				Prizes			9	2
school classes and salaries		245			Sundries (cartage, &c.)		11	1	9
Buildings (deposits)	• •			6			594	9	7
Sales of material		101				٠.	$^{22}$		0
Interest (Savings-bank)		14	18	10	Furniture, fittings, and apparatus		547	11	4
					Balance at end of year		639	4	7
	£	3,649	4	4		£3,	649	4	4
	_			==					_

C. H. Edwards, Chairman Walter Fossey, Secretary of Managers.

# EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE WAIPAWA TECHNICAL CLASSES.

The number of students who offered themselves at the beginning of this year for the evening continuation and technical classes was so small, both at Waipawa and Waipukurau, that the effort had to be abandoned for the present. Meanwhile the Managers will watch with interest the working of the compulsory clauses of the Education Amendment Act, 1910, in those centres which have resolved to bring these clauses into operation. From various causes also—chiefly that of arranging the work for those seasons of the year most suitable to farmers—the classes for wool-sorting, agriculture, and dairying which had been contemplated for 1911 were in like manner a failure, and the Managers resolved to suspend operations entirely until 1912, when it is hoped that, through the organized co-operation of the Central Pastoral and Agricultural Society, it will be possible to establish such classes on a firmer foundation. The Education Board still carries on school classes in woodwork, cookery, and dressmaking, and to these has been added this year a rural course at the local district high school. In closing this rather empty report the Managers desire to say that experience has now convinced them that the difficulty in connection with the extension of technical education is neither of funds nor of finding efficient instructors, but solely and entirely the difficulty of overcoming the indifference of those for whose benefit these educational advantages are intended.

J. D. Watson, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Waipawa Technical Classes Association.

			•				
Receipts.	£	s.	d.	Expenditure.	£	s.	đ
Balance at beginning of year	 78	2	10	Salaries of instructors	0	10	0
Capitation on associated classes	 $^{28}$	5	8	Office expenses (including salaries, stationery,			
Subsidies on voluntary contributions			0	&o.)	10	10	0
Voluntary contributions	 $^{2}$	10	0	Advertising and printing	5	9	3
				Material for class use	0	1	4
				Bank charges	0	13	6
				Installation of gas	17	19	0
				Balance at end of year	136	5	5
•							
	£171	8	6		£171	8	6
				l		_	=
				A. E. Jull, Chairman			

A. E. Jull, Chairman J. D. Watson, Secretary of Managers.

EXTRACT FROM THE REPORT OF THE BOARD OF GOVERNORS OF THE GISBORNE HIGH SCHOOL.

Special classes were carried on at the Technical School as follows—book-keeping, typewriting, shorthand, and plumbing; but the attendance was not satisfactory. The Board, appreciating the interest shown by the sheep-farmers, engaged the services of an experienced instructor in wool-classing, and classes were held at various centres throughout the district. The attendance was fairly good, and those who attended expressed themselves as well satisfied with the instruction given. Donations

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of money from the Gisborne Borough Council, the Cook County Council, and the Waikohu County Council were of material assistance in enabling the work to be carried on. Sheep-farmers also made donations of fleeces of wool for the use of classes. During the year examinations in plumbing were held under the auspices of the City and Guilds of London Institute, the Plumbers' Board of Control of the Wellington Technical School, and the Plumbers' Board of Control of the Gisborne Borough Council. The results were as follows: City and Guilds, 5 candidates passed; Wellington Board of Control, 3 candidates passed; Gisborne Board of Control, 6 candidates passed.

J. W. Nolan, Chairman. W. Morgan, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Gisborne by the Gisborne High School Board of Governors.

		- 0						
Receipts.		£	s.	đ.	Expenditure.	£	s.	d.
Balance at beginning of year		125	7	9	Salaries of instructors	207	2	0
Capitation on special classes		63		0	Office expenses (including salaries, stationery,			
Material		10	18	10	&c.)	34	16	9
Subsidies on voluntary contributions		63	13	6	Advertising and printing	22	18	0
Fees	, .	174	14	6	Lighting and heating	10	19	4
Voluntary contributions	• •	<b>55</b>	0	0	Insurance and repairs	14	16	4
Refund from Gisborne School Commi	ittee on				Rent	7	10	0
account of caretaker's salary		$^2$	10	0	Examinations, &c	5	6	0
					Material for class use	65	2	9
					Instructor's travelling-expenses	31	2	0
					Caretaker	14	0	-
					Furniture, fittings, and apparatus	21		
					Balance at end of year	60	3	10
								_
		£495	9	7		£495	. 9	7
			=					_

W. Morgan, Secretary.

EXTRACT FROM THE REPORT OF THE CONTROLLING AUTHORITY OF THE DANNEVIRKE TECHNICAL SCHOOL.

Classes in woodwork (24 pupils), cookery (24), dressmaking (22), agriculture (19), and chemistry (57) were held throughout the year in connection with the High School. In agriculture the appointment of Mr. Loten as supervisor, and the setting-apart of an area of land for outdoor work, put this subject on a much better footing than hitherto. A continuation class in shorthand and typewriting was held for two terms, but the book-keeping class failed for lack of students. Technical classes were held in painting and drawing (45 students), plumbing (8), building-construction (7). Such important classes as dairying, veterinary science, chemistry, &c., failed to get any support. The numbers attending all classes were: School classes, 81; continuation classes, 11; technical special classes, 60: total, 152. The attendance at continuation and technical classes is very disappointing, and most of those who do attend do not continue long enough to get any real educational benefit.

THOMAS MACALLAN, Hon. Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Dannevirke by the Dannevirke High School Board of Governors.

						· · · · · · · · · · · · · · · · · · ·			
	Receipts.		£	8.	đ.	Expenditure.	£	s.	d.
Capitation on special cla	usses .		57	8	0	Balance at beginning of year	70	13	8
Rent			7	10	0	Salaries of instructors	140	11	0
Material			0	15	8	Office expenses (including salaries, stationery,			
Subsidies on voluntary of			19	1	6	&c.)	0	12	6
Grant for instructor's tr	avelling-exp	oenses	5	19	0	Advertising and printing	9	4	3
Fees			95	11	0	Lighting and heating	3	7	0
Voluntary contributions			18	11	0	Insurance and repairs	0	10	5
Sale of material			4	9	6	Material for class use	10	5	4
Balance at end of year			28	5	11	Ferniture, fittings, and apparatus	2	7	5
•						,			
			£237	11	7		£237	11	7

T. MACALLAN, Secretary.

# MARLBOROUGH.

#### EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Recognized classes for manual instruction were conducted at 59 schools, the following subjects being taught: Elementary agriculture, swimming and life-saving, elementary physical measurements, and various branches of handwork. School classes in woodwork, cookery, and advanced plain needlework were conducted at the Blenheim Technical School, and were attended by pupils from the following schools: Blenheim, Picton, Springlands, Grovetown, Renwick, Fairhall, Tuamarina, Koromiko, Marlborough High School, and Convent.

Last year's programme of Saturday classes for the teachers in this district embraced the following subjects: Woodwork, cookery, dairy-work, vocal music, physical measurements, drawing. At the end of the year the Board arranged to hold a summer school in Blenheim during the summer vacation. The school was attended by nearly a hundred teachers, and it proved a great success from an educational point of view. The Inspector, in his annual report, gives full particulars of the programme of work undertaken. The Board is grateful to the Education Department for having granted free passes to those teachers who were obliged to travel by rail in order to reach the school.

#### EXTRACT FROM THE REPORT OF THE INSPECTOR OF SCHOOLS.

Seventy-one schools taught some form of handwork, 44 exhibiting two or more varieties. Gardening was taught at 49 public and 3 private schools. A few of the gardens are libels on the productive capacity of the district; others are busy little laboratories where science is brought to the tes of practice, the concrete study of cause and effect being a valuable part of school activity. Here the otherwise dull boy sometimes gains a new self-respect, and physical powers that would run truant are disciplined to the purposes of citizenship. In several schools the notes turn chiefly on a part of botany in which plants are viewed as inanimate objects to be described. The study of plants tends to become more scientific when they are better understood as living things needing air, food, and water, affected by heat and light. The teacher may also find other interesting regions in soil-study, and in the observation of plant and insect pests. Science and good practical gardening do not always run together. Occasionally where there is a good garden a remarkably small amount of scientific information appears in the essay. Children should be encouraged to keep a note of all the operations, and the reason for each. Farming is now generally recognized as a branch of science, with a call for the educated man; it is full of interest for the research student. It is also increasingly attractive to the pupils. Some critics affect to despise the big carrot and the big potato; but in so far as these are the result of premeditated preparation and attention to the ground and time of planting they are criteria of good educative work that deserve to be taken into account. Horticultural societies and the agricultural and pastoral associations, by offering special prizes, continue to show an interest in the labours of the pupils. At most schools the tools are carefully housed and protected; in a few they tell a tale of weak discipline and poor management.

Blenheim Technical School: Woodwork and cookery, 9 classes each; advanced needlework, 7 classes. Pupils are centralized in these subjects from Picton (by rail, eighteen miles), Waitohi (by rail, fourteen miles), Tuamarina (by rail, six miles), Grovetown (by coach, two miles), Blenheim Borough School, Fairhall (four miles), Renwick (by coach, seven miles), Springlands (two miles), the Convent (Blenheim), and Marlborough High School (Blenheim). In the teaching of cookery the gas-oven and the range are both used.

At least four classes in dairy-work are expected to come into operation during 1912. Arrangements have been made for teaching swimming and life-saving to the pupils of the upper classes at the Blenheim School.

Technical and continuation classes: It may be noted that in Marlborough, of those successful in gaining proficiency certificates, the proportion that proceed to Marlborough High School seems to be above the average of corresponding places in the Dominion; and, as the High School has modernized its programme by the formation of classes in woodwork, cookery, physical measurements, dairy-work, and agriculture, not to mention other classes in pure science, mathematics, and modern languages, it appears that this school also serves the purposes of a technical high school. Further, the technical education thus supplied appears to be quite as sound and extensive as that supplied in any other similar centre of the Dominion. The high school apparently supplies the local need in this respect, which is indicated by the poor support given to evening technical and continuation classes.

Teachers' classes for physical measurements (Miss Ross, M.A.), cookery (Miss Grace), instrumental drawing (Mr. H. Oldham), nature-study and design (Mrs. S. Jones) were held at Blenheim. A summer school for teachers was held at the Marlborough High School, Blenheim, from the 22nd January to the 2nd February, 1912, but it really belongs to the period under review, for all arrangements were made during 1911. This was the third such school held in Blenheim since 1905. The teachers were requested to give up one week of their holidays to these classes, and the Board closed the schools for one week of the school-year so that a fortnight might be available. In all, 93 students were enrolled. Of these, 53 were enabled to have twenty hours' practical work in dairying, the programme for the D certificate being covered.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Blenheim and Canvastown.

Receipts	£ s. d.	Expenditure.	£	s.	d.
Training of teachers	 120 0 0	Balance at beginning of year	173	11	8
Capitation on special classes	 29 8 5		152	10	6
Fees	 $$ $\sim 2 0 0$	Office expenses (including salaries, stationery,			
Balance at end of year	 201 14 8		14		
		Lighting and heating and material for class use	12	2	1
		_			
	£353 3 1	£	3353	3	1
		]		خنت .	
		E. Hylton, Secre	tarv		

# NELSON.

# Extract from the Report of the Education Board.

An advance has to be recorded in the number of manual and technical classes held during the year, and in the number of pupils attending classes. A new branch of manual instruction was taken up during the year—viz., dairy-work—and equipment was provided and classes started at 7 primary schools and 2 district high schools. This work is under the control of the instructor in agriculture. The work carried on in other manual-training subjects—cookery, woodwork, ironwork, agriculture, &c.—is reported on favourably. Plasticine-modelling continues to be the chief handwork subject in the primary schools, but brushwork and freearm drawing are being freely taken up. It is to be regretted that there is a decrease in the number of classes for swimming and life-saving. Instruction in needlework was given in 7 schools in charge of male teachers, the special instructors receiving a payment at the rate of 10s. for each child taught during the year. In regard to technical instruction continued progress

is being shown at the Nelson and Westport Schools. At the beginning of the year the Board was fortunate in securing the services of Mr. F. J. C. Cockburn, A.R.C.A., as art master at the Nelson School. A new art-room was built, and a large number of art students were enrolled. The day Trades School at Nelson, inaugurated at the beginning of the year, did not attract many students, and it may become necessary to discontinue these classes for a time. The attendance at the afternoon and evening classes, both at Nelson and Westport, have been very good, and the Board feels that the instruction imparted is proving of great value to the community. At Reefton and Wakefield school classes in woodwork and cookery have been conducted; woodwork is also taught at the Stoke Orphanage by the Board's instructor, and classes in dressmaking have been held in the Waimeas, and commercial classes at Motueka. Provision has been made for commencing classes in cookery at Motueka this year, a room having been built for the purpose. A science-room has been erected at Takaka, portion of the cost being provided by donations received from the Takaka County Council and funds raised by the District High School Committee. Classes for teachers were held at Nelson and Westport. The Board's thanks are due to the Westport Borough Council, Buller County Council, Westport Harbour Board, Inangahua County Council, Takaka County Council, and Nelson City Council, and others who have donated funds towards the maintenance of technical instruction.

## EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

Classes in the following branches of elementary handwork have been recognized in 37 schools: Plasticine-modelling, brush drawing, elementary design and colour-work, paper-folding, freearm drawing, bricklaying, cardboard-modelling, needlework. A number of other schools carry on some branch of handwork. In such schools the working-conditions often prevent the fulfilling of the conditions necessary for earning the capitation grant. In this connection a large number of schools have been equipped for freearm drawing. The subject is a favourite one with the pupils, and excellent work has been done, more especially in several of our infant schools. Fifty-five schools again receive instruction in manual training, special centres for the first three subjects having been formed at Nelson, Wakefield, Westport, and Reefton. The following branches of work have been taken up: Ironwork, woodwork, cookery, agriculture, physiology and first aid, swimming, physical measurements, elementary chemistry, dairy-work. The chief increase has taken place in the formation of 6 new classes for instruction in dairy-work, 8 schools now taking a combined course of agriculture and dairy-work. With the exception of Murchison and Karamea, each of the other schools carrying on this instruction was visited in alternate weeks by Mr. Bruce, instructor in agriculture, under whose direction the work was conducted. In the case of the two schools mentioned, situated in outlying parts of the district, the work was carried on by the teachers after inauguration by the instructor. The pupils have shown much interest in the work, which has been carried out with considerable skill and success. It is proposed to extend the work in the district high schools over a two-years course, for which a suitable programme of work will be issued. The erection of a science-room at Takaka and the equipment of the room at Motueka will provide very necessary facilities for the conduct of this work. Already a demand for further classes in this subject begins to show some appreciation of the effort to embrace instruction in touch with the environment of the pupils.

Good work continues to be done by many schools in elementary agriculture. In the smaller schools the lack of simple apparatus for carrying out indoor experiments is a distinct disadvantage. The practice of keeping notebooks with the pupil's own records of the work we hope to see universally followed.

Classes for the instruction of teachers have again been held at Nelson and Westport, the subjects taken being cookery, woodwork, and various branches of drawing. Classes in chemistry were held at the Nelson Technical School and at Motueka. In Nelson the attendance was quite incommensurate with the advantages accruing from a course of practical work in such a subject.

In the middle of the year Mr. Cockburn, the art instructor from the Nelson Technical School, visited Westport and conducted demonstration lessons in drawing as prescribed in the syllabus as a school subject. His instruction, though extending over a brief period, gave many teachers a fresh insight into the subject, and we were pleased to notice in several schools manifestations of the practical application of the principles demonstrated.

## EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL INSTRUCTION.

Manual-training classes at specially equipped centres and under special instructors were conducted at Nelson, Wakefield, Westport, and Reefton. At Nelson woodwork and cookery classes for the town schools, Stoke, and Richmond were well and regularly attended, and did good work. At Westport cookery and ironwork classes were conducted, but the attendance thereat, though improving in regularity, has not yet reached a satisfactory stage. Climatic conditions doubtless contribute considerably to this state of affairs, especially with the country classes, which have to journey long distances by rail. In the ironwork classes a change of programme is contemplated, whereby pupils will take more sheetmetal work, for which a preliminary course in cardboard-modelling in schools would form a good foundation. This amended course will prove of greater educational value in assisting in the teaching of arithmetic and geometry, and will tend to arouse greater interest on the part of the pupils. efficiently and fully for classes at the smaller centres at Reefton and Wakefield presents many difficulties, some of which seem impossible to overcome in the near future. During the year the classes at the two centres named ran for nearly fourteen weeks, three hours per week being devoted to instruction. Naturally the work falls short of what is being done elsewhere, but financial considerations and the inability to devote more of the time of the permanent staff to these centres have been the stumblingblocks to more extended courses being carried out. Thanks to generous financial assistance from the Inangahua County Council, Reefton can be run without loss, but the same cannot be said of the Wakefield centre. However, with an assistant cookery instructress and a pupil-teacher in the woodwork department, the latter place may be used to more advantage during the coming year.

Technical instruction in the district continues to progress. Increases in attendance, number of classes, and revenue derived therefrom have to be recorded. The issue of revised departmental regulations after the sessions at Nelson and Westport had commenced necessitated a readjustment of timetables and programmes of work to conform with the special conditions required for grouped courses of instruction. Despite their hurried arrangement these courses were conducted in a fairly satisfactory manner, though difficulties regarding time available, accommodation and equipment, and teaching staff prevented their being as comprehensive as is desirable. However, the experience of 1911 has shown where many improvements can be effected, and the coming year should see these in operation.

Our technical schools at Nelson and Westport have now passed that stage, incidental to small struggling institutions, where one of the chief considerations is the securing of as many pupils as possible, and thus assuring revenue sufficient for all expenses. Nelson and Westport schools are now well equipped for work on definite lines suitable to district requirements, and the time has come when, instead of encouraging the attendance of large numbers at single classes, which in themselves cannot provide the best means of securing a technical training, we should, with certain exceptions, insist on attendance at a group of related subjects having a direct bearing upon some trade or occupation. This course will be adopted during the coming year, and, though it may result in a lessening of the numbers in attendance at the schools, it will confer much greater benefits upon the community. generous financial provisions made in recent departmental regulations will also assure that the Board's finances will not be detrimentally affected by this step. The following is a brief comment upon the

main features of the work of the past year:—

Nelson.—The domestic branch was excellently attended, and produced good results; an extension of its scope to include dressmaking, millinery, cookery, hygiene, English, and arithmetic will be brought about during the coming session. A striking feature of the attendance was the large number desiring dressmaking, many pupils having to be refused admission to classes. The commercial department was again very popular-in fact, it would appear that more of the youth, particularly girls, embark upon an elementary commercial training than can possibly be absorbed by the demands of employers in city and district. A class in accountancy, held three nights weekly, was introduced during the year, received very good support from those employed in offices, and did excellent work. The exter of the scope of instruction in art and art crafts was the most important development of the year. appointment of a highly qualified art master to the permanent staff, and the provision of suitable accommodation and equipment, made possible instruction of a kind not previously attempted. The classes were well attended, and a successful exhibition of students' work served to bring under the notice of the public the facilities for art instruction now available in Nelson. The work of the telegraphy classes was fair, but the attendance was very irregular, a fault not entirely due to the special conditions under which the students were working. It cannot be said that the plumbing-work of the past year was satisfactory. The class was a small one, and the attendance, especially at theory and practical workshop mathematics, was irregular. In this respect the plumbers present a marked contrast to the engineering apprentices, who attended regularly and worked most enthusiastically at the mathematics The day trades course, though attended by but a small number of boys, did efficient work in heoretical and practical subjects. The evening carpentry class, which was composed principally both theoretical and practical subjects. of amateurs, was liberally patronized.

Westport.—The day Engineering School completed the third year of its existence. 14 in number, have been regular in attendance and keenly enthusiastic in their work. As the result of representations made by the Board, a clause was introduced into the Shipping and Seamen Amendment Act, 1911, which will have an important effect in assuring recognition of the time spent by the boys at the school. Under this clause two years' attendance at a day engineering school approved by the Marine Department will be recognized as two of the five years required to be served before a person can sit for his third marine engineer's certificate, provided that the remaining three years are put in at some commercial shop fulfilling the requirements of the Act. This is but one step in the direction necessary to secure adequate recognition of the instruction given at Westport, where the teaching is distinctly on vocational lines. It will next be advisable to endeavour to secure from the Railway Department some form of preference for the admission of technical school engineering pupils to the Department's workshops, and, if possible, a waiving of the age limit at which a youth may enter the service. Until this is done it will not be advisable to ask private employers to grant to a Statesupported institution what another Department of the State refuses. A tribute to the quality of the instruction at the Westport Day Engineering School is found in the fact that all of the five boys who joined when the institution started three years ago are still attending, while in the evening class half of the number are third-year pupils. Small plumbing, carpentry, and art classes were conducted satisfactorily at Westport, but the lack of suitable accommodation for the pupils of these and the

commercial classes proved a great inconvenience.

No technical classes were held at Reefton; two dressmaking classes were conducted in the Waimeas, and commercial and chemistry classes at Motueka. A course in farm carpentry was carried on at Stoke Industrial School. During the year requests for classes, dressmaking in particular, were made from several country centres, but as the only instructors available were fully employed at Nelson Technical School it was considered inadvisable to disorganize the work of that institution for the purpose of carrying on isolated classes in small centres.

Drawing, cookery, woodwork, and chemistry classes for the instruction of teachers were held at

Nelson, a chemistry class at Motueka, and a brief course in drawing at Westport.

During the year a new art-room, cloak-rooms and lavatories, and a small room for modelling and casting were added at Nelson, a cookery-room was erected at Motueka, and a start made with the erection of a small laboratory at Takaka. Additions to Westport Technical School are urgently needed. Several changes in the staff have occurred. Mr. Duff, English, mathematics, and commercial master at Nelson, accepted a more remunerative position at Invercargill, and Miss Lousley resigned

her position as cookery instructress on the Coast, being succeeded by Miss Wildman. Mr. Lewis, plumbing instructor at Nelson, resigned on account of leaving the district, Mr. G. Price being appointed in his place. Master D. P. Mumm was appointed pupil-teacher in the engineering depart-

63

ment, Westport.

The Education Department has given favourable consideration to the various requests for grants for buildings and apparatus, with the result that teaching-facilities have been considerably improved during the year. Welcome financial assistance has also been received from the Nelson City Council, Westport Borough Council, Buller, Inangahua, and Takaka County Councils, and the Westport Harbour Board. I desire, in conclusion, to take the opportunity of thanking the staff of the Board for much assistance rendered during the year, and wish also to mark my appreciation of the energy and enthusiasm displayed by the instructors in the technical branch of the Board's work.

A. A. HINTZ. Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Nelson, Westport, Stoke, Motueka, Brightwater, and Cable Bay by the Nelson Education Board.

Receipts.		£	c	d.	Expenditure. £ s. d.
Capitation—Day Technical Schools at	Nal	a.C	ю.	ч.	Balance at beginning of year 1,020 3 10
		70	Λ	0	0.1
son and Westport	• •	72			
Capitation on special classes		738		9	Office expenses (including salaries, sta-
Capitation on account of free places		328	6	9	tionery, &c.) 349 11 10
Buildings		393	1	10	Advertising and printing 38 14 9
Furniture, fittings, and apparatus		243	0	4	Lighting, heating, and cleaning 137 5 5
Material		119	18	3	Insurance and repairs 10 15 6
Subsidies on voluntary contributions		191	9	0	Rent 1 10 0
Fees		102	8	0	Material for class use 94 17 0
Voluntary contributions		88	3	6	Instructors' travelling-expenses 55 10 6
Marlborough Education Board, on accou	nt of				Cartage and freights 15 13 11
salary of instructor in agriculture		100	0	0	Incidentals 50 14 11
Training of teachers		226	19	6	Contracts (new buildings, additions, &c.),
Rent of sites		54	3	4	architect 422 9 1
Transfer from Buildings Account		573	4	. 0	Furniture, fittings, and apparatus 547 4 6
Balance at end of year	• •	968	19	1	Typewriters 37 1 6
	0	4,199	16		£4,199 16 4
	æ:	±, 199	ΤO	4	324,199 10 4
	-				

N. R. WILLIAMS, Secretary.

## GREY.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Elementary handwork and other classes were held in connection with Ahaura, Cobden, Blackball, and Greymouth Schools, and in the Greymouth District High School woodwork and elementary physiology were also taken. Elementary agricultural classes were held in connection with Poerua Estate, Dobson, and Blackball Schools, and cookery classes in connection with Cobden, Runanga, and Greymouth District High Schools. Among special classes held during the year were teachers' classes in brushwork, drawing, model-drawing, and painting. An engineering class in mechanical drawing, a class in shorthand, a continuation class at Blackball, and a special cookery class (in connection with the Greymouth Convent) were also held. Including the £100 grant for teachers' training, the total receipts for the year from all sources amounted to £273 7s. 6d., and the expenditure (including £45 16s. 9d. for administration) to £211 19s. 9d.

## EXTRACT FROM THE REPORT OF THE INSPECTOR OF SCHOOLS.

The following classes have been in operation at the Technical School during the year: Carpentering, Mr. J. Baybutt; model and brush drawing, Mr. H. Bastings; shorthand, Miss Bell; cooking, Miss Blair (Grey District High School), Miss Duncan (Runanga), Miss Barnhill (Cobden), and Sisters of Mercy (Greymouth). Thanks to the Department's liberal assistance, the Board has been enabled to spend £100 in plastering the Technical School and providing heating-apparatus; and the building is now comfortable, warm, and almost free from damp. As I have already intimated, the work for the year has been generally satisfactory. Teachers have almost invariably done their very best to carry out instructions given.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Greymouth.

Receipts.	£	s.	d.	Expenditure.		£	s.	d
Capitation on special classes	41	8	6	Balance at beginning of year		212	2	5
Material	3	0	0	Salaries of instructors		93	18	0
Special grant for training of teachers	100	0	0	Office expenses (including salaries, st	ationery.	,		
Fees	38	4	0	&c.)		37	$^{2}$	0
Grazing-right of Technical School ground	2	10	0	Advertising and printing		6	4	3
Sales of work	10	1	3	Lighting and heating		$^{2}$	4	5
Balance at end of year	193	12	$^{2}$	Material for class use		12	$^{2}$	$^{2}$
,				Caretaker		7	3	4
				Teachers' travelling-expenses		5	12	0
				Furniture, fittings, and apparatus		12	7	4
	£388	15	11			£388	15	11
					~			=

P. F. Daniel, Secretary.

## WESTLAND.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

(1.) Model and brush drawing: A teachers' class was in operation for seventeen weeks under the tuition of Mr. C. E. Bickerton; 30 teachers attended. (2.) Elementary agriculture: School-gardens were maintained in connection with 5 schools. (3.) Physical measurements: In the Hokitika District High School the tuition in this subject was arranged to include four school classes. (4.) Handwork: School classes were recognized in 13 schools.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Hokitika.

On-sial mant for training of topohore	£ s. d. . 37 6 1 . 6 15 9 . 100 0 0	Office expenses (including salaries, st tionery, &c.)	£ s. d. 17 17 0  3a 10 13 6 1 11 6 4 5 6 14 7 8 34 6 0 61 0 8
	£144 1 10		£144 1 10

CHAS. KIRK, Secretary.

#### NORTH CANTERBURY.

#### EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

The report of the Director of Manual Training on the school classes held in Christchurch, and the reports from the several outlying centres on manual and technical classes generally, are appended. The lease of the building known as the School of Domestic Instruction (Christchurch), in which cookery and laundry-work classes have been carried on for some years, terminated in July, 1911. A new up-to-date centre has been established in Sydenham, in which classes from a number of the city and suburban schools will now be accommodated. In his report Mr. Howell refers to the value of manual training and to the need of a closer co-ordination between this work and that of the primary schools. Holding as it does the opinion that the inclusion of manual work among the subjects of the publicschool syllabus is not only of great advantage, but that without it the primary education of pupils cannot be regarded as complete, the Board cordially invites the co-operation of head teachers in its endeavour to see that every boy and every girl within the reach of a manual-training centre receives instruction in some form of handicraft or domestic science. During the year in 96 schools classes in one or other of the several forms of handwork have been carried on, and 55 classes in swimming and life-saving have been continued. In elementary agriculture, covering practical instruction in schoolgarden work, the previous interest has been well sustained, no fewer than 111 schools having participated.

As regards technical work, at the Christchurch Technical College there has been a still further increase in the number of pupils attending both day and evening classes, in the former the number having reached 341 and in the latter 1,301. With so large a roll number, and with a time-table providing for so many and such diverse subjects, the accommodation hitherto available has been taxed to the utmost. The erection of a domestic-science wing and additional workshops, however, has placed matters on a more favourable footing, and when the laboratory now in course of erection is completed the work of the College will be carried out under the most favourable circumstances. desires to congratulate the Board of Managers on their enterprise in establishing a Girls' Training Hostel, and to express the belief that this institution will be of great value to girl students desirous of acquiring a thorough knowledge of domestic training. Technical classes have been continued at all other established centres. At Ashburton a new technical school, now in course of erection, will increase the facilities hitherto existing, and the appointment of a director, of which at the date of this report the Board is advised, will still further stimulate the interest in the work. The new technical school at Kaiapoi is now in use, the classes being under the direct supervision of an associated Board of Managers. It is a matter for regret that at Akaroa there has been no extension of manual and technical work, and that classes in operation have not been so well attended as usual. At other centres the work has been continued on previous lines. In August last the Rangiora High School Board and the local Board of Managers jointly submitted a proposal that the Education Board should transfer its powers as controlling authority to the Rangiora High School Board, the chief reasons advanced being that under the arrangement then existing there was considerable overlapping in the work, and that the contemplated change would do away with a considerable dissipation of teaching energy. Education Board offered no objection so far as technical classes were concerned, subject to adequate provision being made for school classes, and the proposal was thereupon approved by the Department and carried into effect.

## EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

Drawing and Handwork.—Due provision for the teaching of these subjects has been made in the school time-tables, and the treatment more closely accords with modern demands. In some schools a feature referred to in our report for last year still demands close attention-viz., the need of keeping a definite aim in view, and of preparing a varied and carefully graduated scheme of exercises as a means for carefully developing and systematizing the course of instruction. In the larger schools much of what may be regarded as industrial drawing is done in connection with the woodwork classes. Manual occupations of various kinds form a prominent and popular feature of the instruction given in the lower and preparatory classes, and by the more successful teachers have been successfully co-ordinated with the older subjects of the syllabus. Instruction in elementary agriculture in the higher classes comes as a natural development of nature-study in the lower portion of the school. Those teachers who have realized the aim skilfully and clearly set before them by Mr. Malcolm, the Board's instructor, succeed in making agriculture a truly educative subject by the intelligent combination of lessons on the principle of tillage, with practical and experimental work in the school-garden. It is gratifying to record the hearty support extended to this movement by the parents in several localities, though in one or two unexpected quarters the proposal to establish school-gardens is treated with apathy, if not met with opposition. A meed of praise is due to those teachers in sole charge who have shown an active interest in this branch of instruction, and whose school-gardens, besides being of educational value, form attractive features of the school environment. To those teachers whose schools have been associated with the various central classes credit is due for the sympathetic interest shown in such subjects as woodwork, cookery, laundry-work, and agriculture. A laudable effort at selfimprovement was made by those who, at some personal sacrifice, during their vacation attended the summer school conducted by Mr. Malcolm, and qualified by examination for the certificate in agriculture.

## EXTRACT FROM THE REPORT OF THE DIRECTOR OF MANUAL TRAINING.

The present session has been one of change and development, and has not been free from the inconveniences that nearly always accompany these. The lease of the School of Domestic Instruction building, which has been used for cookery and laundry-work classes, terminated in July last, and it was wisely decided that no further attempt should be made to concentrate the classes. A grant having been made by the Department for a second centre to accommodate cookery, laundry-work, and woodwork classes, this has now been erected in proximity to the Sydenham School. Those who have seen the centre will agree that it is a credit to the Board, and will prove a valuable addition to the educational facilities of the district. Classes from Sydenham, Addington, Waltham, Opawa, and Somerfield Schools, together with sections of classes from West Christchurch School, will be accommodated in this building, and the fact that it is of ready access from these schools will enable the important work to be carried out with much less expenditure of time on travelling. I hope that the next year or two will see considerable improvement in the conveniences at the Normal School woodwork centre, and the erection of another centre in the east of the district that will provide as good facilities for schools in that direction as have now been provided for schools in the south. Early in the session we lost the services of Miss Evans, who had discharged very faithfully and well the duties of domestic-science instructor at the School of Domestic Instruction and Normal School centres for three years. Miss Blackmore and Miss Ponder have been added to the staff, and have carried out successfully the work intrusted to them. Next year Miss Blackmore will have general charge of the Normal School cookery centre, Miss Ponder of the Sydenham cookery centre, and Mr. Barrett of the Sydenham woodwork centre. With one exception the work of the year has been carried on as heretofore, the exception referred to being an increase of fifteen minutes in the cookery practice classes for Standard V. Three years ago it was decided to shorten the lesson for Standard V from an hour and a half to an hour and a quarter, but two years' experience proved that it was impossible to complete satisfactorily the majority of the practice lessons in this short period, and that the efficiency of the work was thus seriously impaired. Manual training seems still to be regarded by some as a branch of little importance, in spite of the fact that its high value is everywhere gaining increasing recognition. In England and Wales, for instance, in 1906–7 approximately 126,000 scholars received instruction in handicraft; in 1907-8 142,000 received such instruction. The English Board of Education recently set up a Committee of Inspectors to consider "how the extension of manual instruction through all the classes of public elementary schools and its co-ordination with the ordinary curriculum of the school could best be secured." This committee of educationists, consisting of highly trained university men, would certainly have no bias in favour of this work, and yet they say." would associate ourselves with the opinion often expressed that the education hitherto given in the ordinary elementary schools has not been in the fullest sense practical. We believe that with the introduction of good handwork methods the literary side of the education would also become more real and better appreciated." They draw attention to the well-known fact that the possibility of highly skilled movement of the hand depends upon a highly developed nervous system, co-ordinated in the brain, and, in its turn, the skilled exercise of the hand strengthens and extends the functions of the "A close correlation has also been noted between the growth of power in speech and in skilled muscular movement, especially of the hand. The relation of the brain-centres involved is still obscure. but the connection in practice is undoubted. One observer has noted in an ordinary school, where manual work now plays a large part in the curriculum, that the store and use of language grow with the introduction of manual work, and points out that with a richer store of words the children have also become less discursive. To neglect a type of training of which the direct effect is to increase the

efficiency of specialized groups of muscles, and of the brain and sense organs in connection with them, is seriously to mutilate our education; and it is the more serious in the case of the many children whose faculties for work, discipline, and constructive mental effort can best, or only, be developed in this way." What is greatly needed is a closer co-ordination between the work of the manual-training centre and the work of the school; but this can only be done by sympathetic revision of the schemes of work now in use, and by a spread of the knowledge of the aims and methods of manual training. If manual training is of importance to the pupils in our schools it is surely urgent that those who are going to be teachers should know something about its principles and practice, and that these should be included in their regular course of training.

Classes for teachers in cookery and woodwork have been held on Saturday mornings alternating with the class in agriculture; the attendance at the cookery class has been quite satisfactory, but at woodwork disappointing.

Country classes have been held for dressmaking at Cheviot, and for wool-classing at Cheviot, Spye, Waiau, and Hawarden. These classes have been altogether successful, and have been much appreciated by the students.

JOHN H. HOWELL, Director of Manual Training.

# EXTRACT FROM THE REPORT ON SPECIAL CLASSES AT KAIAPOI.

During the past year the attendance at the classes showed a slight fall in comparison with the previous year. This perhaps may be explained by one or two classes being discontinued owing to lack of support. The dressmaking classes have been extremely popular during this season, and the students turned out some excellent work. The woodwork class was enthusiastically appreciated by those pupils who attended, but I am sorry to say that the class was not a large one. With regard to woodcarving, the season opened with a large class, and continued through two terms. The millinery class received only fair support during the first two terms, but the attendance improved during the last term. The cookery class, for some unaccountable reason, does not attract as many pupils as one would expect. It was held for one term with a good attendance, but as very few pupils were forthcoming for the second term the Committee decided to close it. The class for book-keeping was conducted for one term, and was fairly well attended. Generally speaking the classes were attended fairly satisfactorily, and the work turned out by the pupils on the whole has been excellent. As time goes on technical instruction seems to be more and more appreciated, and during the coming session the Committee have decided, in response to numerous requests and applications, to endeavour to add several subjects to the curriculum.

#### EXTRACT FROM THE REPORT ON SPECIAL CLASSES AT LEESTON AND DOYLESTON.

The class for woodwork was small, but was well attended. The class was closed for the winter months on account of the small number on the roll. The class for ironwork was well attended, and some good work was done. The dressmaking classes have been large, and are improving each year; the instructress, Miss L. M. Rennie, is well pleased with the results. The cookery class for school-children has been well attended, and the pupils have benefited by the instruction given.

# EXTRACT FROM THE REPORT ON SPECIAL CLASSES AT LINCOLN.

During the year classes were held for cookery and woodwork. The cookery classes have been attended with excellent results, and the students have greatly benefited by Miss Rennie's instruction. In the case of the woodwork class good work was done by the few pupils who attended.

# EXTRACT FROM THE REPORT ON SPECIAL CLASSES AT AMBERLEY.

Owing to lack of interest it was found desirable to discontinue the cookery class. Classes in millinery and dressmaking were established, which for two terms were well attended; a falling off, however, took place in the third term, which, so far as the dressmaking class is concerned, seemed to be accounted for by the change from the chart system of former years. Donations, and subsidy thereon, from the Kowai Road Board and the Amberley Town Board made it possible to carry on the classes as usual. Thirty-three students were admitted during the year.

## EXTRACT FROM THE REPORT ON SPECIAL CLASSES AT SOUTHBRIDGE AND DARFIELD.

At Southbridge during 1911 only dressmaking classes were carried on for three terms. Good work was done, but the attendance fell off considerably. At the end of the year the Committee thought it better to discontinue the classes for the present, pending fresh arrangements. A class for agricultural chemistry was again held at Darfield, the interest in which was maintained throughout the session, a number of the students continuing their studies for several evenings after the close of the course in spite of the fact that the instructor was unable to be present.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Technical and Continuation Classes in Christchurch and in Country Districts.

•	1													Re	ecei	pts													
Centre.	Beg	lanc at inni Yea	ng		on Classes.	ts f		Buildings and Rent.	veri		Voluntary z Contribu-	tions.	F	ees		Co	olun- ary nıri- tions	P	On ecor of of ubl eho lass	ic-		the		Bat 1	Dr. ilan End Year	οí	Tol	als.	
Amberley Christchurch Darfield Kaiapoi and Bel- fast	£ 27 7 38	s. 3  19 5	d. 5 6 5		s. 13 14 6 17	d. 6 0 0 3	£ 748	s.  	d. 0	£ 7	°. 7  	d. 0	£ 19 57 1 86	$\frac{0}{15}$	d. 0 0 0 11	£	s. d 7 (	) 16 40	2	11	5	s. 13  17	d. 0		s.   9	d.	£ 109 83 13 1,172	3 14 0 7	
Leeston and Doyleston Lincoln Southbridge Cheviot, Hawarden, Spye, and Waiau	40 18 63	18 2 0 	11 3 3	68 2 14 41		0 6 6	2	0	0	6	19 	6	18 4 5 125	4 0 17 2	0 6 0			23		0		10	7				132 56 83 166	7 7 14 17	
Totals	195	9	9	260	19	9	750	9	0	14	6	6	318	3	5	7	7	0 82	: E	5 11	11	1	4	177	9	6	1,817	12	
Сев	itre.						alar of cruc	ies tors	I	ncie Exp	den ens	es,	Ad I	iver Prin hti: Iea	ting ng, s	ng,		ndit Rent and teri			and			Ba Et	Cr. land at id o ear.	f	Tot	als.	
Amberley Christohurch Darfield Kaiapoi and Belf Leeston and Doy Lincoln Southbridge Cheviot, Hawar Waiau	lesto		)ye		id	$\frac{7}{3}$	1 1 2 1 3 1 1 1 4 1 5 1	0 ( 6 ( 0 9 8 8	) ) ) ) ) )	£ 1 3 48 7	8. 5 0  18 9  10 4	d. 8 0 8 0		0 1 6 7	4 5 2	d. 3 0 8	1 115	s. 13 ··· 7 3 12 2 0	d. 2 8 8 10 0	830		7 : 1 : 3 :	1. 3 7 6	48 7 34	18 4 1	d. 6 0 10 5 10 9 6	$   \begin{array}{r}     13 \\     1,179 \\     132 \\     56 \\     83 \\   \end{array} $	14 0 7 7	
Totals						52	2	3 (	3 -	6 <b>2</b>	7	4	1	14	19	10	136	19	4	84	1 '	7	4	239	14	10	1,817	12	!

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE CHRISTCHURCH TECHNICAL COLLEGE.

Day Technical School.—During the present year the number on the roll has reached 341, an increase of more than one-sixth. It necessarily happens in a school like this, where pupils are continually leaving towards the end of the year to take appointments, that there is a more rapid decrease than in secondary schools of other types. In this respect, however, the position is more satisfactory than formerly; whereas during last year a decrease of 53 occurred, this year, in spite of increased numbers, it is only 51. This should indicate, we hope, that parents are recognizing the value of longer training, and I am certain that any sacrifices this may cause them will be amply repaid. It cannot be too strongly emphasized that while one year of training is much better than none, the second year is in general of much greater value than the first, and the third than the second. The domestic science classes have up to the present been greatly handicapped by the fact that so many of them have had to be taken in inconvenient rooms in another part of the town, and much time accordingly wasted in going to and The erection of the new domestic science wing has given us on our own ground facilities for carrying out this important work in the most favourable circumstances. Further, owing to our lack of accommodation here, during the last two years our agricultural classes have had to be taken at the Normal School laboratory, kindly lent by the North Canterbury Board of Education. This also has meant the loss of a good deal of time, especially in the case of country boys coming by train. The new laboratory now nearing completion will prove a very great boon, and add much to the efficiency of this work.

The past year will always be memorable as the one in which the scheme for the Girls' Training Hostel has been successfully launched. We look confidently to this institution to co-ordinate the various disconnected classes in which we have given domestic training, and to dignify them by a communal college life in the healthy and pleasant spot on which the hostel is now being built. That it shall send forth capable and strong girl students to meet worthily all the high and varied claims that the State makes upon womanhood will be the best recompense of the many willing workers who have laboured for its establishment. It is, however, as the outward and visible sign of the growing recognition of the value of technical education that our hostel, our two new wings, and three new workshops are of so much significance; but no institution can maintain its usefulness by external expansion only. Accompanying this there must always be the internal adjustments to the needs of the day.

development of our system has steadily progressed, we have not accomplished all we should like, or even all that is possible. This has been especially true of one aspect of our work. While we have done much to prepare our pupils to acquit themselves worthily in their callings, we have not done all that is desirable in the direction of preparing them for the duties of citizenship. History has been taken in the commercial classes only, and in these no doubt the members of the staff who have dealt with this subject have endeavoured that their pupils should arrive at the conclusions which history teaches and which are of such moment in the life of to-day. But outside this no opportunity, other than that which the literature lessons may from time to time give, has been afforded for bringing before pupils the relationship in which they stand to the State, for impressing upon them the duties of citizens, and the qualities of mind and of heart that the State demands. However much we may differ as to the best means by which this may be brought about, all will agree that it should be a chief end in education. I hope next year to be able to arrange that all classes may have lessons in the organization of the State and on the right functions of the citizens. Our school has for two years past provided some training for positions of responsibility through our system of school prefects and class monitors. A further development in the same direction has recently taken place by the establishment of a school parliament, consisting of representatives from each class authorized to consider and deal with any matters relating to the school that do not introduce any new principle or method that has not had official sanction.

Evening School.—It seemed that the record which was reached last year would be likely to form for some time the high-water mark of our attendance, when the number of students on our roll was nearly 1,200. The growth that has marked the College from its inception has, however, continued, and the total number of students receiving instruction in all departments of the College during 1911 reached a total of 1,301. The transfer of the domestic science department from the noisy rooms at the corner of Worcester and Manchester Streets, where for the past five years they have been housed, to the quiet, light, and airy rooms of our new wing now permit the work to be carried on under the best The provision of additional accommodation for our woodwork, bookbinding, and typography classes has greatly increased the efficiency of the instruction, while the new south wing just completed will give a much-needed drawing-office and a class-room and laboratory for physical science. With the blacksmiths' workshop we may consider that our provision for the industries of the district is as complete as the demands at present require, though I hope that at no distant date we shall be able to find a sufficient number of students prepared to take a course in brickwork, in house-painting, and in that industry which has done so much and is destined to do so much more for Canterbury—I refer to the dairying industry. During the session one new class was started, and one which had been dropped for two sessions was revived. The class for sanitary inspectors proved to meet an unexpectedly large demand, no fewer than 26 students joining the class; while the class for bookbinding has had a much increased roll, more regular attendance, and produced excellent results. Last year I was able to report that the Typographical Association had donated a sum of money, subsidized to an equal amount by the Master Printers' Association, for scholarships to students attending the typography class whose work and attendance deserved such recognition. These associations will be glad to know that the encouragement thus given has been attended by an increase of more than 30 per cent. in the roll number and a very high average attendance. This year the Canterbury Carpenters and Joiners' Union has decided to donate a sum of money for similar scholarships to be awarded to apprentices in carpentry and joinery who attend regularly and stand well in the College examinations. A very important and new principle was introduced by the recent award for carpenters and joiners in the Canterbury District, by which apprentices who have secured a two-years certificate at the Technical College shall be entitled to 2s. per week above the award rates. The amount involved may be small, but the establishment of a test of competency is a principle of first-rate importance, destined to be of great benefit to masters, workers, and the public. The work of the engineering department has reached a much higher standard than in any previous year, and the demand for instruction in plumbing was so great that an extra class has been formed. In coachbuilding and signwriting, while excellent work has been done, the number availing themselves of the instruction are not as large as these important trades should supply. Five classes for instruction in wool-classing and sorting have been held in Christchurch and have been very well attended, while our instructor, Mr. Marquet, has conducted for the Education Board classes at Waiau, Hawarden, Spye, and Cheviot. It is very encouraging that so much attention is now being paid throughout the district to this subject, in which the Board had such difficulty in starting its pioneer classes. In the higher-grade examination, kindly conducted by Mr. Walter Hill, 11 candidates were presented, and all were awarded first-class certificates. An important innovation was made this year in the conduct of a class in a country district—I refer to the class in machine-This class was well attended, and gave great satisfaction to all concerned. shearing at Glenmark. We are much indebted to Mr. Johnston, who kindly placed his shearing-shed at our disposal and provided accommodation for the students. The classes in shearing held at the showgrounds, Addington, maintained the good position gained in the previous year.

The results of the City and Guilds of London examinations have again been gratifying, our students obtaining two first-class certificates in the honours grade and thirty others. At the Trades and Labour Council's industrial exhibition our students were also very successful. Three secured prizes in carpentry and joinery, and three in typographical work, while a coachbuilding student obtained the good medal. The growth of the commercial and general classes has been marked, and the attendance well maintained. In four cases it was necessary to form additional classes, and great inconvenience was experienced for want of proper accommodation. The extensions that have now been made to our buildings should, however, meet all present needs. An important experiment is to be made this year in providing opportunities for evening technical instruction in suburbs at some distance from the Technical College. Some of our students have to spend a considerable proportion of their time in travelling to and from the College, and to lessen this as far as possible, and to remove

what may be an obstacle sufficient to prevent many from availing themselves of the present facilities for instruction, the Board has decided, with the co-operation of the Richmond School Committee, to start branch classes at Richmond School, where students will be able to take the same subjects and the same courses as at the Technical College, with possibly a much shorter journey, on two nights in the week. The remainder of the course will be taken at the Technical College. If the classes are successful at Richmond it is the intention of the Board to establish similar classes in other districts.

The Literary and Debating Society has continued its useful work, though the meetings, which for lack of any vacant room we have had to hold on Saturday evenings, have not been as well attended as we should like. During the year two very successful dramatic performances have been given—"She Stoops to Conquer" and "Tom Cobb." This society has so far been our sole welding agency, but we look forward to the possibility of a more corporate life when the hostel grounds can be made available for the use of athletic clubs. No institution to-day can claim to have given all it can to its students if it does not see that they not only work well, but that they play well. Technical education in evening schools makes such demands upon the free time of the students that the requirements of the scheme for compulsory military training seemed likely to produce disastrous results upon the system. The Officer Commanding the Canterbury District has, however, met the wishes of the Board in every way possible, and has consented that our students, instead of being required to drill during term-time, may complete their drills during the vacations, which have been lengthened in autumn and spring to allow time for this to be done.

There is a great need in this district for serious efforts on the part not only of educational authorities, but especially of employers and parents, to ensure that the able efforts which are made in our primary schools to lay the foundations of education at heavy cost should not be so largely thrown away by the failure of the pupils to continue the process of training and development. It is a matter receiving most earnest thought from statesmen as well as educationists in those great rival nations, Germany and Great Britain, and laws are being from time to time promoted to prevent that great dissipation of powers in the youth of the nation which renders to a large extent useless the educational efforts of earlier years. In New Zealand, with our shorter hours of work and higher standard of comfort, the leakage between the primary and continuation schools should be far smaller than it is. Technical education cannot fully repay the nation until it is made continuous with earlier education, and there is no loss of time and training. It is of the utmost importance to the prosperity of the country that there should be at that plastic time of life no gap to diminish the power of the student to profit by the instruction given. We have undertaken in one direction a very large expenditure to produce efficient soldiers; let us leave no stone unturned to produce efficient workers, those who have day by day to engage in a very real industrial strife, upon which in the long-run the very existence of our nation depends. The country that does not lay the foundations of its greatness in the mind and character of its people is building upon sand.

John H. Howell, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted at the Christchurch Technical College.

Receipts.	£s	s.	d.	Expenditure. £ s. d.
Balance at beginning of year	471 1	4	<b>2</b>	Salaries of instructors 4,606 17 11
Capitation, day Technical School	2,456	0	0	Office expenses (including salaries, sta-
Capitation on associated classes	1,950	0	0	tionery, &c.) 1,105 13 7
Capitation on account of free places	872 1	8	1	Advertising and printing 95 5 6
Buildings	3,100	0	0	Lighting and heating 236 10 5
Rent	116 1	3	4	Insurance and repairs 33 3 9
Furniture, fittings, and apparatus	230	5	7	Rent 216 13 4
Material	330	9	2	Material for class use 613 11 11
Subsidies on voluntary contributions		ō	0	Books and stationery 296 2 4
Fees	962	9	0	Refunds-deposits and fees 46 5 6
Voluntary contributions	1,092	6	<b>2</b>	Scholarships 106 13 4
Sessional charges and deposits	167 1	8	6	Prize fund 39 17 3
Sales of books and stationery	384 1		0	Contracts (new buildings, additions, &c.) 3,720 5 7
Materials and apparatus sales	59	5	6	Furniture, fittings, and apparatus 869 17 10
Refunds by Education Board and Canter-				Land-purchase 400 0 0
haur College	490	9	8	Balance at end of year 1,334 17 2
Refunds by Education Board on account of				7,001 1, 2
salaries of instructors, rent, material, &c.		9	2	
Prize fund	22 1		3	
Refunds-Working Account	11 1	4	5	
Cadet corps—repayments (final)	57	9	1	•
Refunds-building and property	26 1		4	
	613,721 1	.5	5	£13,721 15 5
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				CHARLES ALLISON, Chairman)
				JOHN H. HOWELL, Secretary of Managers.
				South II. HOWELD, Decidedly

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE ASHBURTON TECHNICAL SCHOOL.

The session commenced on the 13th February, and was continued until the end of November, and was divided into three terms of twelve weeks each. The total number of students enrolled during the year was 299 (a substantial increase on last year), of which 272 attended technical and 27 continuation classes. The average attendance at the various classes were: Cookery, 47; dressmaking, 90; carpentry and joinery, 4; building-construction, 11; wool-classing, 20; copperwork and woodcarving, 11; painting, 8; millinery, 12; sheep-shearing, 10; commercial English, 23; commercial arithmetic, 23; shorthand, 20; book-keeping, 18; typewriting, 14. In addition to the above,

instruction was given to children attending primary and secondary schools as under: Woodwork, 159 pupils; cookery, 112 pupils. New classes started during the year were millinery and machine sheep-shearing, a generous donation of £50 from the Canterbury Sheepowners' Union of Employers being responsible for the starting of the latter. At both these classes attendances were satisfactory. The grant of £1,885 from the Department for a new Technical School is welcomed by the

The grant of £1,885 from the Department for a new Technical School is welcomed by the Managers, and although some £600 is required to add a room for woodwork it is confidently anticipated that the amount will be raised locally, the Ashburton County Council already having contributed

£100 and the Borough Council £50 toward the object.

The thanks of the Managers are due to Messrs. Friedlander Bros., James Hampton, and the Ashburton Agricultural and Pastoral Association for the free use of rooms in which to hold the wool-classing, sheep-shearing, and shorthand and typewriting classes; also to the Ashburton County and Borough Councils, High School Board, Agricultural and Pastoral Association, Borough and Hampstead School Committees, Canterbury Sheepowners' Union of Employers, and to private subscribers, for generous financial assistance during the year.

HENRY DAVIS, Chairman
J. B. CHRISTIAN, Secretary of Managers.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Ashburton Technical Classes Association.

Receipts.		£	s.	đ.	Expenditure		£	s.	d.
Capitation on associated classes		228	10	6	Balance at beginning of year		121	13	2
Furniture, fittings, and apparatus		34	11	6	Salaries of instructors		587	10	4
Subsidies on voluntary contributions		242	16	6	Office expenses (including salaries, station	aery,			
Fees		274	17	0	&c.)		56	9	3
Voluntary contributions		327	11	7	Advertising and printing		. 16	1	6
From controlling authority, on account	of				Lighting and heating		32	11	4
school classes		74	$^{2}$	6	Insurance and repairs		16	16	. 0
From High School Board, on account	of				Rent			12	
school classes		64	7	6	Material for class use		97	18	11
Sales		9	18	6	Caretaker		29	8	0
Examination fees		2	0	0	Sundry expenses		27	14	10
					Furniture, fittings, and apparatus		33	3	$^{2}$
					Expenses $re$ lease	٠.	5	15	0
					Balance at end of year		178	$^{2}$	1
	£	1,258	15	7		£1	,258	15	7
	=			_		_			

HENRY DAVIS, Chairman J. B. Christian, Secretary of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE RANGIORA TECHNICAL SCHOOL.

During the past year the work at the Rangiora Technical School has been, on the whole, successful and efficient. The following subjects have been taught: Cookery, dressmaking, book-keeping, English, shorthand, typewriting, woodwork, painting, millinery, and wool-classing. The school was attended during the year by 213 pupils, there being 5 free-place pupils. The auxiliary classes held at Oxford and Cust for dressmaking proved popular and successful. Arrangements were made for inaugurating a class for wool-sorting at Oxford, and this will commence in April, 1912. The arrangement of school classes for cookery and woodwork, by which the pupils of Ashley, Fernside, and Southbrook Schools are served, has proved a success, these classes being well attended. The Managers have every reason to be satisfied with the staff of teachers, who have shown themselves commendably efficient and most attentive to their duties. The Rangiora Borough Council, the Rangiora Road Board, and the Northern Agricultural and Pastoral Association have again contributed to the funds of the school, and this money, together with the Government subsidy thereon, has materially assisted the finances of the Board of Managers. Towards the end of the year (1911) it was deemed advisable, owing to the extension of the classes, to have the control placed in the hands of the Rangiora High School Board of Governors, and a resolution suggesting this was given effect to, the High School Board taking over the control from the st January, 1912.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Rangiora Technical Classes Association.

Receipts.		E	s.	đ.	Expenditure.	£	s.	d.
Balance at beginning of year		4	10	6	Salaries of instructors	246	12	0
Capitation on associated classes	- 16	0	10	9	Office expenses (including salaries, sta-			
Capitation on account of free places	1	0	5	3	tionery, &c	2	11	1
Fees	13	6	16	10	Advertising and printing	6	14	2
Voluntary contributions				0	Lighting and heating	7	12	1
Sundries		0	16	6	Material for class use	26	3	7
					Sundries	4	15	10
					Bank charges, &c	0	17	6
					Caretaker	14	0	0
					Furniture, fittings, and apparatus	9	14	6
					Balance at end of year	3	19	1
		_						
	£32	2	19	1.0		£322	19	10

J. CARMICHAEL, Chairman of Managers. J. Marshall, Treasurer

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EXTRACT FROM THE REPORT OF THE MANAGERS OF THE AKAROA TECHNICAL SCHOOL.

During the year the following classes were held: Cookery, 18 pupils; dressmaking, 18 pupils; woodwork, 12 pupils; wood-sorting, 7 pupils; laundry-work, 11 pupils. In addition to these a cookery class for school-children was held. Although excellent work was done in many of the classes, the Managers regret that in some of them the attendance was not so good towards the end of the year. This was probably due to the counter-attractions in the town during the winter months. Only one class was held in wool-sorting this year, but special endeavour will be made during the ensuing year to bring this class up to its former strength. The class in cookery was most successful, Mrs. Bell having proved herself an excellent teacher. During the year two demonstrations were given in paper-bag cookery, there being a large attendance of the public on each occasion. The woodwork class made a good start, but unfortunately the instructor could not attend during the second term, so the interest slackened. The class in woodwork for schoolboys was not held, owing to the instructor's absence; but we hope it will be continued next year. The Association has, unfortunately, lost the services of Mr. W. K. Virtue as treasurer. He took a leading part in the initiation of the classes, and has been a most efficient treasurer since.

ALEX. GRAY, Hon. Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Banks Peninsula Technical Classes Association.

Receipts.		£	s.	d.	Expenditure.	£	s.	à.
Capitation on associated classes		56	11	0	Balance at beginning of year	43	4	1
Fees		31	19	6	Salaries of instructors	62	0	0
Voluntary contributions	• •	21	6	0	Office expenses (including salaries, stationery,			
From controlling authority, on account	of .				&c.)	0	4	0
school classes		13	16	11	Advertising and printing	1	. 5	0
Sales		11	8	10	Lighting and heating	3	17	0
Balance at end of year		4	12	6	Insurance and repairs	4	4	7
•					Rent, cleaning, &c	9	2	0
					Material for class use	14	7	7
					Bank charges, &c	1	10	6
	£1	139	14	9		£139	14	9
	=			_				_

JOHN BRUCE, Chairman ALEX. GRAY, Secretary of Managers.

EXTRACT FROM THE REPORT OF THE CHAIRMAN OF THE BOARD OF GOVERNORS OF CANTERBURY COLLEGE.

School of Engineering.—Following on the determination of the Senate to establish a travelling scholarship in engineering, I am pleased to be able to report that this year we have been able to act upon it, and to have one of our graduates appointed. I hope that ere long the Senate may see its way to enable this scholarship to be tenable for a longer period than one year, as the present term is too short for a student to acquire such a full theoretical and practical knowledge as he should.

The recent alterations made in the course for the degree of Bachelor of Engineering should result in more students coming from the distant parts of the Dominion, as the shortening of the course by one year means a corresponding reduction in the cost of obtaining a degree. The cost of equipping and maintaining the School of Engineering is so great that it is our business to attract as many as intend to take a thorough course for their future profession. At one time during the past year it was freely rumoured that another University College intended to equip and maintain a similar school. Were such to be done it would not only be a great pity but a great waste of public money, for it is much better for the whole community to have one school properly equipped, staffed, and furnished with students, than to have two or more such poorly attended, and, for some time at all events, one of them not fully equipped. In connection with this matter it must be remembered that arrangements were made some years ago for each University College to specialize in one particular branch of study, and the specialization in engineering was allotted to Canterbury College on account of the magnitude of the equipment, and the grant made for that purpose has enabled the school to possess most of the latest appliances necessary for its work. That this work enables the students to advance in their profession is evident from the lists supplied year by year of the positions obtained by erstwhile students.

School of Art.—In reference to the question of finance with regard to this department I am glad to be able to point to a decided improvement, not only because it has come as a relief from the anxiety that was naturally felt when I brought down my last statement, but also because with an improved monetary position it is possible to extend the excellent work that is being done. Again this year the work of the students has been in open competition in the Dominion very successful, and, in competition with students from the leading art schools in England, one of our students has been for the second time able to secure in the national competitions honourable mention for painting from life, while several had their work accepted for the art class and teachers' certificates in England. When the Board of Governors introduced the system of two scholarships of £25 per annum, a hope was then expressed that in the near future a travelling art scholarship might be established, to enable a really brilliant student to visit the art centres of the world. It has not as yet been possible to see the way to carry this out, but I hope the time is not so very far distant when such a scholarship may be established. As may be gathered from the report of the Director and from the various Press notices from time to time, the school is making a steady advance from year to year.

EXTRACT FROM THE REPORT OF THE PROFESSOR IN CHARGE, SCHOOL OF ENGINEERING.

The most important occurrence was the establishment by the University of a travelling scholarship in engineering. This scholarship is of the value of £100, and tenable for one year. The regulations of the scholarship provide for the holder travelling to some other country approved of by the Chancellor, and there profitably employing his time in acquiring further knowledge of his profession. This scholarship will be of the greatest value in enabling a young man of promise to acquire a knowledge of the methods of carrying out engineering works of magnitude at present not to be obtained in this country.

During the year 160 individual students attended lectures, the hour-attendances per week amounting to 935, a reduction in the numbers of the previous year, owing mainly to the fact that at the end of 1910 the teaching of electricity was transferred from the School of Engineering to the College proper. Twenty matriculated students were studying for the University degree or for the associate-ship of the School of Engineering in the School of Engineering, in addition to which 6 engineering students were taking their preliminary year in the College. Thirty-one lectures per week were delivered, and instruction in drawing and designing, experimental work in the laboratories, and in field-work was given for 115 hours per week during the session.

At the University examinations, 1910, 1 student sat for and passed in the final examination for the degree of B.E. (electrical); 1 student sat for and passed the first part of the second examination in electrical engineering; 1 student completed the first professional examination in civil engineering; and 3 students completed the first part of the first professional examination, and 1 student passed the entrance examination. At the associateship examinations, 1911, one student passed the final examination for the associateship of the School of Engineering in mechanical engineering, whilst the passes in the other subjects of the associateship courses taken at the School of Engineering were: In freehand mechanical drawing, 4; descriptive geometry (advanced), 3; mechanical drawing, 3; steam-engine (elementary), 3; steam-engine (intermediate), 4; steam-engine (advanced), 1; applied mechanics, 5; mechanics of machinery, 5; hydraulies and pneumatics, 2; strength of materials (elementary), 6; strength of materials (intermediate), 2; strength of materials (advanced), 1; surveying (elementary), 3; building-construction, 3; principles of civil engineering, 3; electrical engineering (intermediate), 1. Associateship students taking subjects outside their regular course attended lectures, passed examinations, and obtained certificates in the following: Surveying (elementary), 1; principles of civil engineering, 1; and surveying (advanced), 1.

Ninety-six certificates were awarded to students attending evening lectures who attended lectures and passed examinations in the following subjects: Freehand mechanical drawing, descriptive geometry and setting-out work, mechanical drawing, steam-engine (elementary), applied mechanics (elementary), hydraulics, strength of materials (elementary), surveying (elementary), theory of workshop practice, and electrical engineering (elementary, C.C.).

During the year the demand for students trained at the School of Engineering has exceeded the number available. Amongst other appointments the following have been obtained since the date of my last report: Professor in Charge of the Mechanical Engineering Department, Syracuse University; Government Astronomer, New Zealand Government; Engineer-in-charge of Railway-construction, Madras; Assistant Engineer, Department of Harbours and Rivers, Brisbane; Assistant Engineer, Department of Roads and Bridges, Western Australia; Assistant Engineer, Metropolitan Board of Works, Sydney; Surveyor and Magnetic Observer, Dr. Mawson's Antarctic Expedition; Engineer to Waimarino County Council; Demonstrator, School of Engineering; Surveyor, Public Works Department; Assistant Engineer, Auckland City Council; Draftsman, Auckland Drainage Board; Assistant Engineer, Invercargill Municipal Tramways; Draftsman, Brisbane; Engineer, Heathcote County Council; Foreman of Works, Sumner Borough Council; Assistant Engineer, Christchurch City Council; Assistant Engineer, Lyttelton Harbour Board; Assistant Engineer, Public Works Department, Sydney; Assistant Engineer, Malay Federated States.

Mr. M. W. Mehaffey, B.E. (Mech.), having resigned the position of demonstrator at the School of Engineering to take up the practice of his profession, Mr. P. G. Bamford, B.E. (Mech.), was appointed to fill the vacancy. A combined survey and geological camp, under the joint control of the Lecturers in Surveying and Geology, was established at Castle Hill for a week during the long vacation. This camp was attended by 10 students. A considerable amount of work was done, and, the innovation proving in every way successful, similar camps of longer duration will be a feature of each long vacation. During the year tests were made in the engineering laboratories on wire rope for the Public Works Department, bridge-bolts for the New Zealand Government Railways, dumping-bands for the Wellington Harbour Board, drain-pipes for the Timaru Borough Council, rolled bars for the Otago Rolling-mills, concrete blocks for the Auckland City Council, and on bronze, roofing-tiles, pipes, chain-link, granite, cement, and wire rope for private individuals and firms.

The plant having been carefully upkept, and having received no accidental damage, there has been little deterioration during the year. The following additions have been made: An oscillograph, an electro-magnet, apparatus for the teaching of preliminary electrical engineering, a sextant, dumpy level, aneroid barometer, Atwood's machine, centrifugal-force apparatus, momentum apparatus, variable moment of inertia apparatus, harmonic-motion apparatus, Young's modulus apparatus, float-gear, nozzles, measuring-box with screens plates and notches, a large number of lantern-slides, and a set of metallurgical diagrams.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911.

	, I		- · · I		- /	The state of the s			
***	Receipts.		£	s.	d.	Expenditure.	£	s.	d.
	Balance, 1st January, 1911		334	12	1	Salaries	2,816	8	8
	Contribution from Museum, Library,	and				Apparatus for surveying, &c	40	.1	5
	School of Technical Science End	low-				Rent of building (College), 5 per cent. on			
	ment Fund			0	0	£3,250	162	10	0
	Contribution from superior-education	re-				Exhibitions	40	0	0
	serves (College)—					Scholarships	70	Ō	0
	For electrical department		- 99	0	0	Contribution towards expenses of Regis-		_	-
	For exhibitions		40	0	0	trar's office	120	0	0
	For scholarships		70	0	0				
	Government grants—					members of Board	11	2	11
	For specialization in engineering		2,000	0	0	Coal, gas, and electricity	142	4	3
	For technical classes		409	19	9	Insurance	36	2	2
	For material (two years)			7	0	Insurance Printing and stationery	77	14	3
	For furniture, fittings, and appara	atus				Advertising	28	6	9
	(two years) Students' fees		498	10	0	Laboratory stores	7	5	3
	Students' fees		550			Experimental work apparatus—			
	Testing fees (share of)	٠.			3	Applied mechanics and mechanical engi-			
	rees for certificate of associate		2	2	0	neering	170		1
	Allowance for apparatus transferred	to				neering	76		1
	physical laboratory				0	Electrical engineering	75	17	$^{2}$
	Interest		19		2	Stores and chemicals (electrical engineer-			
	Special prizes		5	5	0	ing)	14		0
	Fines		0	8	0	ing) Upkeep of plant and repairs to machinery	84		
					- 1	Telephone subscription		0	
						Books			7
						Sundries	4	1	5
						Rent of section (B.H.S.) in Hereford Street		_	_
					1	(share of)	20	0	0
					ĺ	Grant towards salary of assistant in mathe-			_
						matics (College)	10	0	0
						Apparatus electrical engineering (special			_
						vote)	80		_1
						Balance	588	9	11
			04 607				A COT		
			£4,687		9	άτ <sub>ν</sub>	4,687	9	9
					ı	Cro C Missar Pos	iatro		-
						Geo. G. Mason, Reg	ısırar.		

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE SCHOOL OF ART.

The attendance and progress of the students during the year has been excellent. The number of individual students for the first term was 336, for the second term 365, and for the third term 338. An exhibition of students' work was held during February. The exhibits were appreciated by the public, and during the week several thousands visited the school. The Press gave several favourable reports on the advancement of the work of the school as a whole.

Instruction was given in drawing and painting from life, still life, antique, and landscape. A special feature was made of anatomical study and figure composition, a number of important compositions in colour being executed during the year. The work executed in the design classes has continued on practical lines, students as far as possible being encouraged to carry out their drawings in some material. A considerable time has been given to the study of plant-forms and their application to ornament. A few students made use of the school's etching-press to carry out their work. Next year it is hoped that a special class for etching will be formed in the evening.

The work of the artistic craft department comprised carrying out in material the working-designs made in the design classes. Examples of Limoges and Cloisonné enamelling, jewellery, and general art-metal work were executed. Excellent specimens of wood-carving, gesso, embossed leather, and leaded-light work were made by the students during the year. Classes for these crafts were held in the morning, afternoon, and evening. Marked progress has been made in the modelling department. Several advanced students gave all their time to figure-modelling and composition this year, with a result that many fine examples of bas-relief and work in the round have resulted. All the students holding Government and College free places attended at least one modelling class weekly. The trade modelling classes have done good work throughout the year, a number of creditable examples of modelled designs being executed. Although the attendance in the architecture department does not increase as it should in a city where so much rebuilding is in progress, yet it is made up by the earnest work of the members of the various classes. A number of very creditable examples of architectural design were executed in the Wednesday class. Good solid work has been done in the signwriting class, and the attendance has been satisfactory.

Classes for teachers and pupil-teachers were held on Saturday mornings and Monday evenings for elementary drawing, design, brushwork, and modelling. The accommodation of the school was severely taxed on Saturday mornings. A large room for blackboard work is urgently required. Special classes for Normal College students were held on Tuesday afternoons for blackboard, freehand, and model drawing, brushwork, and modelling, and useful work was done by the students in this section. The time is too short for the number of subjects required by the regulations for teachers in training. The Arts and Crafts Guild continues as a valuable adjunct to the school's work. Monthly lectures and criticisms, musical and literary study, form part of its objects. At the commencement of the year Mr. Richard Wallwork, A.R.C.A., arrived from England, and commenced his duties as master of the life classes. The excellent work executed in his classes has thoroughly justified his appointment. No other changes have taken place. In connection with the advanced art examinations held by the Board of Education, London, some 20 students received certificates. Again this year one of the students received honourable mention for painting from life in the national competition amongst schools of art in Great Britain. Several works were accepted for art class teachers' certificates. The usual local examinations were held at the end of the year. Two scholarships valued at £25 and eleven scholarships carrying free tuition were awarded to students of the day and evening classes. A travelling scholarship to enable a brilliant art student to visit Europe is urgently needed in New Zealand. A

national art travelling scholarship, similar to the annual travelling scholarships granted by the English Board of Education, should be available for New Zealand art students. Thanks are due to Messrs. J. W. Gibb and Hammond and Co. for special prizes, and also to W. H. Montgomery, Esq., for a valuable prize for figure-drawing, and to the executors of the late Mr. William Sey for prizes in connection with the signwriting class. In conclusion, I have to thank the Board for the support given to me in my efforts to further the benefits and growth of the school.

R. HERDMAN-SMITH, F.S.A.M., &c., Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911.

Receipts.	£		d.	Expenditure. £ s. d	l.
Balance, 1st January, 1911	121	10	11	Salaries 1,691 5	4
Students' fees	442	19	6	Contribution towards expenses of Registrar's	
Grant from North Canterbury Board of				office 80 0	n
Education for instruction in drawing	90	0	0	Contribution towards travelling-expenses of	
Government capitation—				members of Board 5 18 1	1
For technical classes	1,675	0	11	Insurance 17 0	
For free places			8	Gas	
Government grants—					9
For material	53	12	6	1	ŏ
For furniture, fittings, and apparatus		12		Printing, stationery, &c 27 14	_
Grant from Museum, Library, and School of		-	_	Fuel	
Technical Science endowment	300	0	0	Expenses of Speech Night and exhibition 5 18	
Grant from Boys' High School for instruct-					8
ing pupils in woodwork and drawing				Washing, cleaning, and appliances 3 10	
(third term)	40	0	0	Kerosene heater and kerosene	
Interest	- 1		3		ŏ
Refund of Customs duty					4
Special prizes				Apparatus	_
opeoin prizon	_			Material 17 9 10	
				Darley for well and lithurs are	-
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				Balance 743 1	8
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•	æ⊿, 900	<del>9</del>		£2,953 9 (	D
				GEO G MASON Registron	-

### Geo. G. Mason, Registrar.

# SOUTH CANTERBURY.

EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

During the year 30 classes have been recognized in elementary agriculture. The interest in school-gardening is well maintained, and many of the teachers are entitled to praise for the enthusiasm they have shown and the hard work they have expended in making the gardens not only beautiful, but also useful as a field for developing the observational faculties of the children. Handwork in various forms is taken up in the lower classes, and the lessons in cookery and woodwork continue to be given in the higher classes of the large schools with very marked success.

## EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL INSTRUCTION.

Associated classes were conducted by the different Technical Associations at Timaru, Temuka, Waimate, Fairlie, and Pleasant Point. The Board has no jurisdiction over these classes except through their two representatives on the Board of Management at each centre. The Board has, however, to forward all capitation claims, &c., and conduct all correspondence between the associations and the Department. This takes up a considerable amount of time, and the Board receives nothing in return for administration. Local control of technical schools, no doubt, has the effect of creating greater interest in the work, as is shown by the flourishing position of each of the associations in the district. At the same time it would be well if there could be some form of co-operation amongst the managers of the different associations in the way of appointing itinerant instructors. It often happens that classes cannot be carried on because suitable instructors are not available locally.

Special classes under the full control of the Board were confined last year to teachers' classes and classes in dressmaking at Hannaton and Winchester. Teachers' classes were conducted in agriculture and drawing. Mr. John Brown, B.Sc., assisted by Messrs. Cross and Grant, gave a course of lessons in agriculture. Most of the work done was of a practical nature, and it is hoped that the course proved of some benefit to the teachers in carrying out their schemes of instruction in agriculture. The average attendance at this class was 30. The class in drawing was ably carried on by Mr. William Greene; the students attending this class did good work, as is shown by the results at the teachers' examinations. The class in dressmaking at Hannaton was taught by Miss Shrimpton, and the class in dressmaking at Winchester was taught by Miss Smith, the Board's instructor at the district high schools.

Classes in elementary handwork were held at 32 different schools in the district. The courses taken up were almost identical with those taught and taken up last year. Brush drawing, however, is now taught only at a few schools, as there appears to be no place for it in the curriculum. The course adopted generally includes bricklaying, stick-laying, paper-folding, paper-weaving, and plasticine-modelling in the preparatory classes; plasticine-modelling in Standard I; carton-work in Standards II and III; cardboard-modelling in Standards IV and V; and, where practicable, woodwork and cookery in Standards V and VI. This course seems to give entire satisfaction, and forms the best means of correlating the work with other subjects. In some cases in the smaller schools elementary handwork subjects are taken in the lower standards, and dropped in the higher standards

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owing to the insufficiency of the staff. This seems rather a pity, as much of the value of the work is lost by being discontinued in the upper standards. Last year 15 schools with no female teacher received financial assistance from the Department under the Manual and Technical Act by the appointment of outside instructors in needlework. In addition to the above, 97 classes for manual instruction were recognized by the Department. These include the classes held in connection with the special agricultural courses at Temuka and Pleasant Point. Nineteen classes were held in woodwork and 17 classes in cookery at Timaru, Temuka, Waimate, Pleasant Point, and Fairlie. In woodwork the syllabus of instruction was much the same as in previous years, and correlated as far as possible with the work of the standard classes. The district high school pupils taking the agricultural course of work were given lessons that had a decided trend to practical farm carpentry, the exercises comprising gates, troughs, &c., and the joints most useful in framed wooden buildings. The interest taken in the work by all grades of pupils is very gratifying, and the large number of excellently finished models completed at the end of the year is good evidence of careful and accurate observation on their part. In cookery advantage was taken of the Department's amended regulations, 1911, to carry out a course of instruction in cookery, domestic economy, and domestic hygiene. This course was successfully carried out at Timaru, Temuka, and Waimate, and of necessity gave a great deal of extra work and trouble to the instructors, as they were required to give sixty hours' instruction during the year instead of forty as heretofore. Swimming and life-saving has again received due attention at all the large schools where public baths are available. It is now a rare thing to find a boy or a girl in the upper standards who cannot swim, and in the lower standards also a great deal of instruction is given. The country schools still labour under great disadvantage from the fact that no public baths are available in which to give instruction. It is hard to find any means of overcoming this difficulty. The annual sports, which took place last February, brought out a good deal of competition, and some fine records for boys were put up. The challenge shield presented by the Board was won by the Marist Brothers' School. Timaru. Valuable book prizes were given to successful competitors. Thirty classes were recognized in elementary agriculture, a considerable increase over previous years. The interest taken in the subject grows year by year, and one has only to inspect the displays made by the schools at the different shows of the horticultural societies in the district to appreciate the good work that is being done. There are still some schools in the district that might take up agriculture with advantage to themselves. The Department makes a liberal allowance for the purchase of tools, and the Board provides seeds, &c., out of the moneys granted for capitation. The Department also gives a pound-for-pound subsidy on all moneys raised for school-gardens, to enable such work as digging, ploughing, or fencing to be done. Agricultural courses of instruction were also carried out at Temuka and Pleasant Point. From a financial point of view the school classes have been self-supporting, as when all capitation claims have been paid over by the Department there will be a small credit balance on the year's work. gratifying, because there has been no stint in the supply of material and apparatus, and at the same time there has been no waste. In conclusion, I have to state that all teachers in manual and technical subjects have been enthusiastic in their work. They are ever ready to adopt the latest methods. have to thank all the teachers for their loyal co-operation in carrying out the work. I desire also to place on record the promptness and fairness with which all claims were met by the Central Department. RICHINGS GRANT, Director.

Statement of Receipts and Expenditure in respect of School, Special, and Associated Classes for the Year ending 31st December, 1911.

Umman ditama

	Recei	pts.		£	s.	d.		penditu <b>r</b>	·e.		£	s.	d.
School classes							Debit balance				1,131	4	9
Capitation				1,153	13	5	School classes						
Furniture, fittings, a	ud appara	tus		65	17	7	Furniture, fittings, a	nd appa	ratus		65		7
Voluntary contribut	ions, beq	uests, a	and				Maintenance and sal	aries			1,396	5	5
				265	9	0	Special and associated	classes-	•••		,		
Associated and special							Capitation -						
Capitation—							Ťimaru				235	9	3
Timaru				235	9	3	Waimate			٠	61	19	Ō
Waimate				61	19	0	Fairlie				24	7	6
Fairlie				24	7	6	Pleasant Point				9	4	6
Pleasant Point				· 100 9	4	6	Teachers' classes				14	õ	3
Teachers' classes				14		3	Winchester					-	ñ
Winchester					10	ŏ	Material	• •		• •			•
Material—	••		• •			•	Timaru				18	4	10
Timaru				18	4	10	Waimate			• •	8		ő
				8	ō	0	Fairlie			• •	3	5	9
Waimate Fairlie				3	5	9	Teachers' classes				13	7	
				13		3	Subsidies on voluntary			• •	. 10	•	J
				10	•		Timaru				86	71	0
Subsidies on voluntary				96	11	0	Pleasant Point			• •			6
Timaru		• •	٠.	6	2	6	Capitation on free plac			• •	131		0
Pleasant Point		• •	• •	131		0				• •	19		Õ
Capitation, free places-	-Timaru		٠.	131	0	0	Fees, special classes		• •	٠.	19	T !	U
Fees, special classes	• •	• •	• •	10	U	U	Furniture, fittings, and Timaru				0	10	0
Furniture, fittings, and				0	10	0	Timaru Teachers' classes	• •		٠.		10	
Timaru		• •	٠.					• •	• •	• •	14		7
Teachers' classes			٠.	265		4	Winchester	• •	• •			14	
Winchester			• •		14	0	Training of teachers				63		9
Special grant training	of teachers	3	• •	150	0	0	Paid to Superannuation		• •	• •		6	4
Receipts from High Sch	hool—						Administration	• •			155	Ü	0
Salaries, woodwork	and co	oking	ın-		^	_							
structors			• •	75	0	0							
Grant for material			• •	6	0	0							
Cookery sales				29	7	9							
Woodwork sales				. 9	<b>2</b>	6							
Paid on account of st	aperannus	tion		15	6	4							
Balance				813	19	6	<u> </u>						
						_				-			
			•	£3,502	7	3				3	63,502	7	3
												<b>=</b> _	<u> </u>
							1		D	C	2		

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Timaru, Hannaton, and Winchester.

Receipts.	£	s.	d.	Expenditure.	£	8.	d.
Capitation on special classes	 26	10	3	Balance at beginning of year	82	15	0
*Furniture, fittings, and apparatus	 271	7	4	Salaries of instructors	106	12	0
Material	 13	7	3	Material for class use	1	0	0
Special grant for training of teachers	 150	0	0	Travelling-expenses	$^{2}$	18	10
Fees	 13	0	0	Administration	13	2	5
				Furniture, fittings, and apparatus	20	13	7
				Balance at end of year	247	3	0
					0.54		
	£474	4	10		£474	4	10
	-	_	_				

A. Bell, Secretary.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE TIMARU TECHNICAL SCHOOL.

The association has now completed the eleventh year of its existence. Timaru was one of the first places in the Dominion to take advantage of the machinery provided by the Manual and Technical Instruction Act, 1900, and in the eleven intervening years the school has gradually increased in size and extended its sphere of usefulness. The 1911 session shows a marked increase over preceding years in the number of students attending the school, and the reports of the different examiners show that the quality of the work done was excellent. The following gives the number of students enrolled in each subject during the year: Commercial arithmetic, 71; agriculture, 7; ambulance work, 35; building-construction, 16; book-keeping, 39; invalid cookery, 8; plain cookery, 73; drawing, modelling, and painting, 16; children's drawing, 12; dressmaking, 48; electricity, 9; commercial Evolution of the cookery, 73; drawing, 12; dressmaking, 48; electricity, 9; commercial Evolution of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; drawing, 70; electricity, 9; commercial evolutions of the cookery, 73; electricity, 9; commercial evolutions of the cookery, 73; electricity, 9; commercial evolutions of the cookery, 73; electricity, 9; commercial evolutions of the cookery, 73; electricity, 9; commercial evolutions of the cookery, 73; electricity, 9; commercial evolutions of the cookery, 74; electricity, 9; commercial evolutions of the cookery, 74; electricity, 9; commercial evolutions of the cookery, 74; electricity, 9; commercial evolutions of the cookery, 74; electricity, 9; commercial evolutions of the cookery, 74; electricity, 9; commercial evolutions of the cookery, 74; electricity, 9; commercial evolutions of the cookery, 74; electricity, 9; commercial evolutions of the cookery evol mercial English, 70; advanced mathematics, 9; millinery, 37; plumbing, 12; shorthand, 55; Standard VI, 11; typing, 55; carving, 4; woodwork, 8; wool-classing, 20; senior Latin, 10; matriculation class, 7; total, 632 class entries. This is a much larger number than we have ever had before, and shows an increasing demand for technical education in the town. In accordance with the amended regulations, 1910, definite courses of instruction were carried on, involving attendance at classes in related subjects on one, two, three, or more evenings per week. The courses were confined to a domestic course, a commercial course, a trades course, and an arts course. It is pleasing to note that the domestic, the commercial, and the trades courses were exceptionally well attended. The other courses were not so well attended. The attendance at the class in agriculture and horticulture was rather disappointing, but wool-classing has now been successfully carried on at this school for three years. Of course, students were allowed to take one or more unrelated subjects, but they were not encouraged to do so. Seventy-one free students attended the school during the year, 9 senior and 62 junior. The attendance of these free pupils was exceptionally good, and their diligence was highly satisfactory. Ten junior free pupils who have completed their two-years course have been granted by the Department Senior Free Places, tenable at the school for the next three years. On several occasions the Managers have considered the advisability of carrying on afternoon classes, providing a course of domestic instruction for girls. This course was placed on the prospectus last year, but there were not sufficient applications forthcoming to warrant the Managers in carrying out the scheme. The time is not far distant when Timaru will have to follow the lead of the larger centres in the matter of carrying on a day Technical School. During the year the Managers met nine times, and attended to everything connected with the welfare of the school. Visiting committees were appointed each month, and official visits were paid to the different classes whilst at work. Owing to ill health the Technical Inspector was unable to visit the school whilst the classes were in progress, but he visited the school at the close of the session and expressed satisfaction with the work that had been done. At the close of the session examinations were conducted in the different subjects, and certificates were granted to deserving students. Seven candidates passed the Standard VI examination, and five plumbers qualified for licenses in accordance with borough by-laws. A glance at the balance-sheet will show that the finances of the school are still in a sound condition, but to bring this about the Managers have had to practise the strictest economy, as the school has no endowments, but has to depend on its own resources for its very existence. A pleasing feature is the large amount collected in fees, demonstrating the fact that people are willing to pay for the instruction which they need. Summarizing, the work of the past year must be considered highly satisfactory. The number of students on the roll shows a substantial increase on the previous year, and the examiners report that the different classes did good work. The attendance was excellent, and the diligence and general behaviour of the students were all that could be desired, not a single case of bad behaviour having been reported. The thanks of the association are due to all who in any way contributed to the success of the school during the year, to the local bodies and citizens who contributed liberally to the funds, and to the Press, who always loyally support the school and are ever ready to promote the cause of technical education in the town. A special word of thanks is due to the teachers for the very able manner in which they have carried out their onerous duties during the year. The whole success of the school depends on the staff, and their loyal enthusiasm in the past has placed the school in the position it occupies to-day. Their work is often a labour of love, as the remuneration allowed does not compensate them for the amount of trouble they go to to carry out the work success-The Managers also desire to place on record the prompt attention of the Central Department to all claims and applications made during the year.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Timaru Technical Classes Association.

_			υ									
Rece	pts.			£	s.	d	Expenditure.			£	8.	d.
Balance at beginning of	rear			212	17	11	Salaries of instructors, &c			682	4	$^{2}$
Capitation on associated	classes			235	9	3	Office expenses (including salaries,	statione	ry,			
Capitation on account of	free pl	aces		131	12	0	&c.)		٠.	6	15	8
Furniture, fittings, and a	pparat	us		9	10	0	Advertising and printing		٠.	22	18	б
Material	••			18	4	10	Lighting and heating			-	1	-
Subsidies on voluntary co	ontribu	tions		86	11	0	Insurance and repairs			4	17	10
Fees				268	16	3	Examinations, &c.			5	15	0
Voluntary contributions				104	13	3	Material for class use			50	15	4
Sales of material				5	6	9	Fees refunded			3	7	
Interest				0	2	ן נ	Sundries		٠.	$^{2}$	-	5
Refunds				1	3	4	Furniture, fittings, and apparatus			49	12	4
							Balance at end of year			211	10	3
							•					
			£1	,074	6	8			£1	,074	6	8

J. A. VALENTINE, Chairman BICHINGS GRANT, Secretary of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE TEMUKA TECHNICAL SCHOOL.

The Board of Managers for 1911 consisted of eleven members, as against ten for the previous year—namely, Messrs. M. McLeod (Chairman) and T. Buxton, representing the subscribers; Messrs. J. Bambridge and J. W. Joynt, the Temuka Borough Council; Mr. W. F. Evans, the Temuka Caledonian Society; Mr. T. Gunnion, the Temuka Bicycle Club; Mr. F. Saunders, the Temuka District High School Committee; and Messrs D. McInnes and G. Thomson, the South Canterbury Board of Education. As in the previous year, the attendance of members at the Board's meetings has been very regular, and close attention has been paid to all matters of detail. The staff remained the same as for the year 1910, except that Mr. John Brown, B.Sc., instructor in agriculture to the South Canterbury Education Board, conducted a class in agriculture. We are pleased to report that the work of students was somewhat better than in the previous year, and no doubt this was largely due to the energy and enthusiasm displayed by our staff. Eleven classes were carried on, the same number as last year. One branch of commercial work was dropped for the year, and agriculture, a new subject in our school, was taken up in its place. For the year 148 individual students enrolled, and this number must be considered good for a district of the size of Temuka. The numbers that attended the various classes were—Agriculture, 12; dressmaking, 46; relief carving, 10; cookery, 47; wool-classing, 15; millinery, 17; painting, 10; carpentry, 9; commercial work, 13; and all these classes maintained a good average.

The Managers were disappointed at the smallness of the number that enrolled in the class in They feel that in a farming community like this such a class should be the largest in It is, however, very hard to convince successful farmers that a course of instruction in the scientific principles underlying the various branches of agriculture is going to put any money in their own or their sons' pockets; and the young men who should form the bulk of the class are often too fond of amusement to give any time to science classes. The Managers, however, feel certain that, with an increasing population and the closer settlement of the land, the farmers of the future must be able to improve on the methods of their fathers, and must have an intelligent understanding not only of the practice but of the principles of agriculture. They hope, therefore, to be able to induce more young farmers to start this year, and with this end in view may start a class in veterinary science or some other subject which will be useful and popular. They also hope to see a greater number of students taking advantage of the classes in carpentry. It may not be generally known that in some trades, like carpentry, cabinetmaking, and plumbing, those who have attended a technical school for two years, and can show a certificate to that effect, get an advantage over their fellow-workers who have not attended such a school in the matter of weekly wages as well as in the matter of efficiency. In some cases there is a difference of as much as 2s. per week between what is paid to ordinary apprentices and what is obtained by apprentices coming straight from the technical school. This fact alone should be sufficient to make young people see that employers are beginning to recognize the advantages of technical education; and if, in some cases, it does no more than give accurate training to the hand and the eye before the student leaves the school, still it has done much to make him more confident and more competent when he takes up some position either for himself or on wages.

Examinations for certificates were again held at the end of the year, and we are pleased to be able to report that a greater number were successful this year than last. In wool-classing a fourth-year certificate will be issued to Mr. E. Fitzgerald, while Messrs. D. McLeod, G. Burborough, R. McMillan, F. Grayburn, J. Aitken, and A. Ellis will receive second-year certificates. In commercial work 4 students gained certificates, Misses K. Twomey, G. Larcombe, and V. Mahan, and Master C. McMillan. Nine sat for the cookery examinations, and all passed: they are Mrs. McLeod, Misses E. Gapper, Isabella McLeod, A. Scott, E. Coughlan, M. Sim, A. Fitzgerald, C. Fitzgerald, E. Tooley. In millinery-work a certificate will be given to Miss J. Currie, who has attended our classes regularly for four years, and whose work is highly satisfactory.

The Managers have for some time recognized that the accommodation was not sufficient, and accordingly applied to the Department for a new cookery-room. The Department's Inspector, Mr. E. C. Isaac, visited the school and reported on the matter, and the Managers are pleased to be able to report that the sum of £400 has been voted. Plans are now being prepared, and before many months we should be in possession of one of the most up-to-date rooms in the Dominion. It is proposed to use the present room for millinery and dressmaking classes. The Managers desire to point out that something should be done to improve the woodwork-room. It was built to hold 24 pupils, but some of the classes every year have over 30 pupils, and so the room is inconveniently overcrowded. Desks

should be provided where the drawing could be done. This would necessitate the extension of the present room by about 10 ft. It should also be lined and some means of heating provided, for in winter it is so cold that the children cannot draw. The woodwork benches are sadly out of date and out of repair, and should be remade and provided with better vices similar to those in the Christchurch Technical School.

During the year a new sewing-machine has been added to the equipment of the school, two racks have been set in over the kitchen ranges, and the tables in the wool-room have been extended and improved. This year we hope to add still further to our equipment. A new typewriter or two will

be of great benefit, and more apparatus is required in the carpentry-shop.

The Managers cannot conclude without again thanking local bodies, the Press, and the general public for the hearty support that they have given during the past year. They also desire to thank Mr. John McInnes, of Winchester, for the immense benefit he has conferred on the wool-classing students in lending such a large quantity of wool free of charge. It is to this fact, and to the enthusiasm of the instructor, Mr. H. F. Harte, that such excellent work is done in this class. To the other instructors also our best thanks are due for the zeal displayed in their work.

M. McLeod, Chairman. J. T. Smart, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Temuka Technical Classes Association.

				9						
	Receipts.			£	S.	d.	Expenditure.	£	s.	d.
Balance at beginning of	year			109	18	6	Salaries of instructors	139	8	0
Fees				99	$^{2}$	0	Office expenses (including salaries, stationery,			
Voluntary contributions				35	2	0	&c.)	50	16	3
From controlling auth	ority, on	account	of				Advertising and printing	9	5	3
school classes				1	$^4$	7	Lighting and heating	10	6	8
Sales of material	.,			9	19	5	Insurance and repairs	2	9	8
							Material for class use	<b>2</b>	17	5
							Caretaker	15	0	0
							Bank charges, &c.	Ö	11	0
							Telephone	4	7	5
							Sundries	7	1	3
							Furniture, fittings, and apparatus	12	13	0
							Balance at end of year	0	10	7
	•			£255	6	6		£255	6	6
							,			

M. McLeod, Chairman J. T. SMART, Secretary of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE WAIMATE TECHNICAL SCHOOL.

The association has had a very successful year. The subjects of instruction were as follows: Wool-classing, dressmaking, cookery, sick-room cookery, painting, domestic hygiene, home nursing, and veterinary science. The enthusiasm of Mr. Harte, the instructor of the class for woolclassing (35 students), combined with his fine knowledge of his subject, has again made this class one of the most successful and most useful of those carried on by the association. The class for dressmaking (43 students) has been conducted by Miss Coe, of Timaru. All pupils have made excellent progress. In drafting, measuring, cutting out, and putting together each student had to do her own work, with the result that she has now a full insight into the work. Miss Wilson has conducted the classes for cookery (56 students) with her usual ability, and the work has been of a high order. Several lessons were given in paper-bag cookery. What the class for painting (15 students) lacked in numbers it has made up in enthusiasm. Of Mr. Greene's ability no comment is needed, and the work of the pupils is evidence that they have made good use of their opportunity. Classes for domestic hygiene and home nursing (59 students) were conducted by Dr. A. G. Pitt in a most able and enthusiastic manner. No effort was spared to make the classes both instructive and attractive, and the fact that they have not only the highest roll number but also the best average attendance proves that his labour has not been in vain. Although the class for veterinary science (17 students) was carried on for only one term, the course of lectures to farmers was of very great value, and was highly appreciated by those who attended. Mr. Patterson is a lecturer of great ability, and it is to be hoped his services may be secured next year. During the year a grant of £100 was made for a room for the wool-classing class, which has hitherto been carried on in the carpentry-room under great disadvantages. Instead of building a special room, however, the Managers have arranged with the School Committee to transfer the carpentry class to the gymnasium, convert the carpentry-room into a cookery-room, and use the present cookery-room for wool-classing, lectures, &c.

Geo. Dash, Chairman.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Waimate Technical Classes Association.

		U									
	Receipts.		£	s.	d.	Exp	enditure.		£	s.	d.
Capitation on associate	d classes	 	61	19		Balance at beginning of y	ear		18	3	1
Material		 	12	7					181	<b>2</b>	0
Fees		 	99	15	0	Office expenses (including	salaries, sta	tionery,			
Voluntary contribution	ıs	 			0				4	7	7
Refunds		 				Advertising and printing			14	0	0
Balance at end of year		 	32	7	11	Lighting and heating			13	18	4
•									4	9	$^{2}$
						Material for class use			24	10	O
		-									
		. £	2260	10	$^2$				£260	10	2

GEO. DASH, Chairman W. H. BECKETT, Secretary of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE PLEASANT POINT TECHNICAL CLASSES ASSOCIATION.

Not a great deal of work was done by the association during the year, mainly owing to the apathy of those for whose benefit the classes were established. Good classes were held in agriculture and dressmaking, but attempts to form classes in cookery and blacksmithing were unsuccessful owing to lack of pupils. There was considerable demand for a class in wool-sorting, but the services of a competent instructor were not available. It is hoped to secure the services of a suitable man for the coming session. The association continues to receive the generous support of local bodies. The school was extensively used during the year for school classes in agriculture, cookery, and dressmaking.

J. Maze, Chairman.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Pleasant Point Technical Classes Association.

I	Receipts.		£	s.	d.	Expenditure.	£	s.	d.
Balance at beginning of y	ear		 52	4	7	Salaries of instructors	8	8	6
Capitation on associated of	lasses		 9	4	6	Office expenses (including salaries, stationery,			
Subsidies on voluntary co	ntributi	ons	 6	2	6	&c.)	10	18	3
Fees			 14	17	6	Advertising and printing	1	13	0
Voluntary contributions		.:	 9	17	0	Lighting and heating	0	5	3
Hire of room			 1	5	0	Insurance and repairs	1	2	4
						Caretaker	10	7	0
						Bank charges	0	10	0
						Balance at end of year	60	6	9
			£93	11	1		£93	11	1
					_				
						J. Maze, Chairman			

GEO. T. PALMER, Secretary of Managers.

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE FAIRLIE TECHNICAL CLASSES ASSOCIATION.

The subjects of instruction were as follows: Dressmaking (25 students), cookery (12 students), and agriculture (20 students). The number of individual students attending the classes was 75, a slight increase on the preceding year. At the beginning of the year an effort was made to conduct a class in agricultural chemistry, but eventually it was decided to carry out a course of lectures on agriculture, these lectures being given by J. Brown, B.Sc., instructor for the South Canterbury Board of Education. This class was eminently successful, the lectures being of great interest to the farmers in the district. Cookery and dressmaking were most successfully conducted by Miss Wilson and Miss Coe. During the year the association lost by death J. E. Goodwin, one of the founders of the Fairlie Technical Classes Association, and a manager who had always taken a very keen interest in technical education. Mr. T. Foden was elected to fill the vacancy thus caused. One of the most pleasing features in connection with last session was the number of students who made use of railway concessions and travelled by rail to attend the classes. The sphere of usefulness of the association has thus been greatly extended. In conclusion, the Managers have to thank the public institutions and private individuals who have so liberally supported the classes in the past, and they trust that they will still more appreciate the value of the technical education placed within their reach.

Jos. King, Chairman. D. McCaskill, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Fairlie Technical Classes Association.

Rece	ipts.		£	s.	d.	Expenditure			£	s.	đ.
Balance at beginning of year			45	18	9	Salaries of instructors			40		
Capitation on associated class	sses		24	7	6	Office expenses (including salaries	statione	ry,			
Material			3	5	9	&c.)	• •		18	8	6
Fees			31	4	6	Advertising and printing			1	3	0
Voluntary contributions			20	7	0	Lighting and heating			2	13	3
Sales of material			2	17	6	Insurance and repairs		٠.	1	10	0
Interest		21.	2	4	1	Material for class use			6	7	10
•						Improvements to school			2	0	.0
						Caretaker		٠.	4	8	0
						Instructors' expenses			6	18	0
						Furniture, fittings, and apparatus		٠.	9	0	0
						Balance at end of year	• •		37	6	6
								_			
		£	130	5				£	130	5	1
		_			_	JOSEPH KING, Chairman	1	-			
								nag	ers.		
						D. McCaskill, Secretary	)	0			

### OTAGO.

### EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

In December last there were 659 boys receiving instruction in woodwork, 658 girls in cookery, 6,797 girls in needlework, while 1,857 pupils of both sexes were attending classes in agriculture, 1,045 in physical measurements, and 13,110 in other branches of handwork. These figures show a very considerable increase over previous years. Forty-five schools participated in cookery and woodwork instruction, the total number of pupils being 42 per cent. in excess of that of the previous year. School-gardens were in operation in connection with 84 schools. The principle of central school instruction, which has been in operation in Dunedin for some years, has been extended to Oamaru, Balclutha, and Tokomairiro, and the pupils of several schools on the railway-line have been taken there for instruction in cookery and woodwork.

E.-5.

Day and evening classes for adults, as noted below, have been established and directly controlled by the Board. The figures show the number that attended each class.

		Typewriting.	Shorthand.	Cookery.	Dressmaking.	Wool-classing.	Book-keeping.
•	***,			<del> </del>	1	·	<u></u>
Balclutha		 9	10	14	31	13	38
Milton		 16	16	27	28	19	. 38
Lawrence		 9	7	l	24		21
Clinton		 	, .		18	1	
Owaka		 1			24		i
Waiwera		 			18		
Stirling		 • •	• •	• •	13		• •

These classes have proved extremely successful. The Board records with pleasure the hearty local interest evinced and support accorded in connection with the most of them, and believes there is good ground for anticipating for them similar success in future years. The financing of these country classes for adults must, however, always be a serious consideration, as, after providing for the emolument of the teachers employed, there is but little, if any, margin from the fees and capitation to meet contingencies.

The total number of pupils receiving instruction at the School of Art was 643, including 116 day students, 176 evening students, 133 day students of the Technical School, 139 teachers attending Saturday classes, 33 teachers attending week-day classes, 41 teachers attending special branch classes at Oamaru, 100 Training College students, and 13 teachers attending a special course to prepare them for their certificate examination.

Training-classes for teachers were carried on as follows: Dunedin—Drawing, design, brushwork, modelling, cookery, needlework, dressmaking, physiology and first aid, agriculture (elementary and advanced), vocal music, elocution, and physical training. Oamaru—Drawing, design, brushwork, modelling, elocution. The capitation received for all manual and technical instruction classes during the year was £2,615 6s. 7d., or £580 2s. 3d. more than for 1910. The advisability of introducing at the district high schools in this district the Department's scheme of rural instruction was considered by the Board in 1910, but in consequence of the disfavour with which it was regarded by the majority of the School Committees and headmasters concerned the Board did not deem it prudent to proceed The question was, however, reopened in June last, when it was found that the with it at that time. attitude of the School Committees and headmasters had so altered that they had withdrawn all opposition to the scheme, and were prepared to give it the very heartiest support. The Board accordingly decided to make arrangements for the introduction of the scheme at the beginning of 1912. work of initiating the scheme has been very heavy, involving as it has done the drafting of suitable programmes of instruction, the appointment of two qualified teachers in agricultural science, one teacher in woodwork, one in cookery, and one in dressmaking, besides the erection of the following buildings: Balclutha-cookery and science rooms, and enlarging of woodwork-room; Tokomairirocookery and science rooms, and alteration of woodwork-room; Lawrence—woodwork, cookery, and science rooms; Mosgiel—science-room; Tapanui—woodwork, cookery, and science rooms. All these buildings are now in course of erection. A grant for the necessary rooms at Palmerston has not yet been sanctioned by the Government. As may be inferred, the cost of providing the abovementioned technical rooms has been large, and the acknowledgments of the Board are due to the Government for the favourable consideration accorded to the applications for grants in connection therewith that the Board has found it necessary to make. As much expedition as was possible has been exercised in the erection of the buildings, but much yet remains to be done before the scheme can be considered in proper working-order. So far, however, the prospects are most encouraging, and the Board believes it is not too optimistic in expecting from the scheme, when fully inaugurated, the most beneficial results. Owing to the public-spiritedness of local bodies and private persons at Roxburgh, Alexandra, Clyde, Cromwell, and Naseby in agreeing to provide for two years half the salary of an instructor in rural science, the Board was enabled to engage a third agricultural instructor, whose work will be confined exclusively to the goldfields district.

The following is a summary of the receipts and expenditure in connection with the special and school classes for manual and technical instruction for the year 1911: Expenditure—maintenance (salaries, material, &c.), £3,696 18s. 8d.; buildings, fittings, and apparatus, £630 13s. 5d.: total, £4,327 12s. 1d. Receipts—from Government: capitation, £2,615 6s. 7d.; buildings, fittings, and apparatus, £678 2s. 4d.; fees, £549 2s. 3d.: total, £3,842 11s. 2d. Dr. balance for year, £485 0s. 11d.

## EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

In most of our schools some form of handwork or manual training is undertaken, and in most cases deftness and mechanical accuracy are being developed very satisfactorily. The various subjects taken up lend themselves admirably to the cultivation of the power of oral expression, a phase of the work that is not receiving its due share of attention at the hands of the teachers. Observation, drawing, and manipulation must be supplemented by oral expression of what is to be done, how it is to be done, and why it is to be done, before manual training produces its full educative result. In order that the benefits of instruction in woodwork and cookery might be extended to pupils in the rural schools in North Otago, the Department sanctioned full day courses in these branches for that centre. This enabled the Board to engage additional teachers for these subjects, and at the same time to extend the instruction to pupils in some of our southern schools. We wish to express our gratitude to the Inspector-General for his personal interest and valuable advice in connection with this movement.

During the year the Board, after consultation with the Committees and head teachers of five of our district high schools, decided to introduce into these schools a course of instruction that will have

some definite relation to the future occupations of the pupils attending them. In this course arrangements have been made to differentiate between the work of the boys and that of the girls. The latter will receive instruction and practice in cookery, domestic economy, hygiene, and dressmaking. In this way we hope to give the girls a definite, though necessarily limited, course of training in household management. We look upon the scheme introduced by the Department in 1909 as the most important advance in education that has taken place for years; but we recognize that it is only the beginning of a movement that must lead to the establishment of fully equipped agricultural colleges for boys and hostels for complete domestic training for girls. The scheme has been enthusiastically supported by Committees and local bodies, and, though the initiation of the scheme has been costly, the Department has been most generous in its grants for buildings. By the introduction of this scheme the larger schools of the district will also benefit, for it will enable the Board to extend the courses in manual and domestic work further than has been possible hitherto.

With the aims of manual and technical training we are in hearty sympathy, and, while thoroughly recognizing that we are working under conditions that are far from ideal, we believe that, aided by local interest and enthusiastic teachers, we have reasonable expectations of success from the efforts to secure in our district high schools such courses of study as will give due weight to the disciplinary and

utilitarian phases of education.

### EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE SCHOOL OF ART.

The school staff afforded instruction to 801 students, made up as follows: Day students, 116; evening students, 176; day students of the Technical School, 133; pupil-teachers attending afternoon classes, 38; pupil-teachers attending Saturday classes, 37; teachers attending afternoon courses, 45; teachers attending Saturday courses, 102; students in training, 100. Forty-one teachers attended the Oamaru classes, and a special course provided for uncertificated teachers was attended by 13 students. There was a gratifying increase in the number of day students of the paying class, although, considering the facilities the school presents and the extremely low fee charged, it is a matter for regret that so few should take advantage of the Board's provision. Still, it is pleasing to record that a large proportion of these students are in constant and regular attendance, displaying enthusiasm in their work. A very complete course of art subjects has been provided for them, and solid progress made during the year, especially in design, perspective, drawing from the antique and from life, and in all classes of painting. An attempt has been made to induce the students to take a keener interest in the principles underlying the branches of work in which they were engaged, and the improved quality of their drawings has amply repaid the effort in this direction. The interest taken in the life class, and the success achieved by the work of the students (who gained first place in Wellington, Christchurch, and Dunedin for "drawing the head from life" at the students' competitions inaugurated by the art societies), coupled with the improvement shown in drawing the figure from the antique, points to their state of preparedness to undertake the study of the figure from life, on which it is now hoped to concentrate their efforts. A steady advance has also been made in painting from life and still life, encouragement being found in the fact that for the first time for many years the prize offered by the Otago Art Society for "painting the head from life" was gained by a student of the school, and the bronze medal of the Canterbury Society of Arts was awarded to the still-life painting of another Dunedin student. The improved acquaintance with design emphazises the urgent necessity for the establishment of an arts and crafts department to complete the equipment of the school for the teaching of practical design. Although working drawings have been made for most crafts, there is at present no provision for their practical execution other than in needlework, stencil, modelling, illuminating, and a few minor accomplishments. Practical assistance has been afforded throughout the year for those engaged in drawing for advertising, illustrating, and photography. The art needlework class, although poorly attended by needlewomen, is now supplying an excellent field for the energies of female students in design.

During the first quarter much solid progress was made by the members of the landscape class, and every opportunity taken to indulge in open-air study from nature, but the unfortunate state of the weather during the spring term militated greatly against the success of the sketching expeditions. In spite of this drawback students were enthusiastic, and many of them showed a gratifying ability to dispense with leading-strings. The energies of the staff were somewhat severely taxed in providing instruction to 133 day students of the Technical School, a task imposing an extra six hours' work each week upon the two male assistants, which was given in an excellent spirit. Courses in geometrical, isometrical, and perspective drawing, mechanical drawing, freehand, model, plant form, and elementary design were arranged for this purpose. The juvenile classes have continued their useful elementary instruction in freehand and model drawing, brushwork, construction of pattern, and arrangement of floral forms to decorate given spaces. The value of the course provided for pupil-teachers and probationers during the afternoons is best evidenced by the increasing number of Training College students who present themselves having wholly or partially passed the subjects in drawing necessary for the D certificate. For these courses in brushwork, design, modelling, perspective, and nature-study were provided in addition to the usual courses of instruction afforded to the junior students in training. The Director again visited the Training College one afternoon each week for the purpose of affording demonstrations and practical lessons in instrumental drawing for handwork, brushwork,

design, &c., to the senior students.

On Saturday mornings provision was made from 9.30 a.m. to 1 p.m. for affording instruction to teachers outside Dunedin. Pupil-teachers, probationers, and uncertificated teachers were afforded assistance in preparing for their examinations, but generally an effort was made to equip teachers with a thorough knowledge of the subjects in handwork most commonly taught in the schools and the drawing in relation to those subjects. For this purpose particular attention was paid to brushwork, modelling, bricklaying, drawing for cardboard work, light and shade, plant study and design. A course in stencilling, with special reference to its value in the blackboard demonstration of design, and as a practical exposition of the necessity of simplicity and even distribution of decorative forms based upon natural objects, was a successful innovation in the handwork course, and one much appre-

ciated by teachers. The restrictions as to the issue of free passes imposed by the Department, and the large number of alternative courses provided by the Board, necessarily interfered somewhat with the attendance; and, under the circumstances, it is a tribute to the recognized value of these classes that 139 teachers availed themselves of the provision. A somewhat similar course in brushwork, design, stencilling, and drawing in elementary schools was provided by the Director in Oamaru, where the teachers, after proving themselves keenly interested and indefatigable in application, expressed their appreciation of the course and their purpose to make it practically benefit the work in their schools. During the year the Director also gave a special course of twelve lectures to headmasters and male assistants on "The Principles and Practice of Design," illustrating his remarks by very numerous specially prepared diagrams and demonstrations. The series was well attended, and followed with apparent interest. The improvement in the work submitted as answers to the drawing tests imposed in the annual Proficiency Examinations in Otago was of itself sufficient evidence of the benefit which teachers have derived from these courses in drawing and design.

In the evening classes a wide programme of art subjects was provided—freehand, model, geometry, perspective, light and shade, drawing from antique, drawing from life, drawing from natural objects, painting, modelling, &c.—and the attendance was well maintained throughout the year. The policy of holding the life class on different evenings from the antique drawing was adhered to, and a somewhat larger percentage of students availed themselves of the opportunity to attend both sections. There was a gratifying increase in the attention paid to perspective drawing by architects, cabinetmakers' designers, and draughtsmen generally. For tradesmen a very complete course of preparatory and instrumental drawing was provided and largely attended. The classes in building-construction and architecture were also well patronized. Drawing for cabinetmakers and for decorators' and ticket-writers' work was specialized in to the benefit of many young tradesmen, who have little or no other opportunity of acquiring any knowledge of the setting-out of work. The class in machine-construction was abandoned in order to avoid overlapping with the engineering course of the Technical School, but there have been many expressions of dissatisfaction from young tradesmen who preferred to take purely a draughtsman's course, having sufficient opportunities to acquire the knowledge of machine tools, fitting, and erection in their daily work. The falling-away of the attendance in the trade classes after the midwinter vacation was very marked, and it is proposed to try to meet the difficulty in 1912 by reducing the interval between the second and third terms to one week, substituting therefor a week's holiday at Easter. There is little doubt that, owing mainly to a misunderstanding of the conditions on the part of young men, the introduction of the territorial system of compulsory training had a prejudicial effect on the attendance at the evening classes. It is hoped that with a better acquaintance of the system this interference will be minimized. The Otago Art Society invited the school to join with them in their autumn exhibition of sketches, and a very successful and well-attended display was the result. The school examples were of every variety, ranging from elementary studies to paintings from life and landscapes from nature; examples of design, modelling, architectural details, perspectives, &c., were included, the whole exhibition attracting much attention and favourable comment.

The number of students who passed the examinations of the English Board of Education (South Kensington Science and Art) was 44, of whom 20 obtained first-class and 24 second-class passes. In freehand drawing, 7 first class, 5 second class; model-drawing, 3 first class, 6 second class; geometrical drawing, 2 second class; perspective, 2 first class, 1 second class; light and shade, 1 first class, 3 second class; drawing from the antique, 1 first class, 1 second class; design (stage 1), 2 first class, 1 second class; memory drawing of plant-form, 1 second class; building-construction (stage 1), 2 first class, 1 second class; (stage 2), 1 first class, 1 second class; (stage 3), 1 first class, 2 second class. These examinations were held at such an awkward period of the year's work—June—and the results came to hand so late—February of the following year—that not only is it difficult to induce any large proportion of the students to prepare themselves adequately for the tests, but their concurrence with the end of the second quarter has a tendency to relax the interest of students just when the work should be most vigorously pursued. The following New Zealand successes have been gained by students of the school: Drawing the head from life—Prize awarded equally to two Dunedin students at the New Zealand Academy of Fine Arts; medal awarded, Canterbury Society of Arts; prize awarded, Otago Art Society. Painting head from life—Prize, Otago Art Society. Drawing from antique—Prize awarded, Canterbury Society of Arts. Marine (landscape) study from nature—Prize awarded, Otago Art Society. Landscape—Honourable mention, Otago Art Society. In conclusion, I have to thank the members of the staff for their attention to duty and interest in the work. There have been no resignations during the year.

R. HAWCRIDGE, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted at Dunedin.

Receipts.	£	я.	d.	Expend	liture.		£	s.	d.
Capitation on special classes	56		3	Balance at beginning of year		1	,606		
Capitation on account of free places	2	8 1	6	Salaries of instructors	• •		,191	11	11
Furniture, fittings, and apparatus	12	4 13	9	Office expenses (including sala	ries, stati	ionery,			
Material	:	5 19	6	&c.) `			30	0	0
Subsidies on voluntary contributions		6 1	0	Advertising and printing			68	15	8
Fees	54	9 15	3	Lighting and heating			83	4	8
Voluntary contributions	1	3 0	4	Rent			5	-0	0
Balance at end of year	2,15	7 18	10	Material for class use		• •	48	13	3
	,			Cleaning			86	17	.6
,				Hire of models			14	15	0
				Sundries			4	13	6
				Furniture, fittings, and appar	atus		316	18	2
				,					
	£3,45	3 15	5			£3	,456	15	5
	-								_

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE DUNEDIN TECHNICAL SCHOOL.

The Board, consisting of the same number of members as in the preceding year, was constituted as follows: Representing the Otago Education Board—Messrs. P. Goyen, F.L.S., P. McKinlay, M.A., George C. Israel, James Mitchell, C. D. R. Richardson, B.A., and William Scott; representing the Technical Classes Association—Messrs. Alexander Burt, J. H. Wilkinson, George Simpson, and George Thomson, F.L.S., M.P.; representing the Dunedin City Council—Messrs. Thomas Cole, Thomas Scott, and Alfred E. Tapper. Mr. Thomas Scott again filled the position of Chairman, and Mr. J. F. Arnold was associated with the Board in the capacity of Hon. Treasurer. The operations for the past year were of a highly satisfactory nature. The enrolment of individual students totalled 1,089, the highest in the history of the school. Year by year the value of the work and the importance of the institution as a connecting-link between the general education system on the one hand and the commercial and industrial world on the other is more directly recognized. The remarkable success and consequent expansion of the day school, which is really a technical high school, illustrates one phase of this recognition. It is only three years since a full day course was instituted, the services of three permanent teachers being secured for the purpose, but such has been the growth of this department that now a staff of fourteen teachers is regarded as insufficient to overtake the work. All the rooms in the building are at present in daily use, and it is becoming evident that before the completion of our Memorial College we shall require to make temporary provision for day scholars.

The campaign for funds in aid of the erection of the King Edward Technical College was continued with increased vigour, and before the end of the year the amount promised reached £3,600. In order to fulfil their implied promise to the Minister of Education the Managers require to yet raise £1,400; but, taking account of the liberal spirit in which the appeal has already been met by a generous public, we anticipate being able to obtain the required amount during the present year. Full particulars of the accommodation to be provided in the new building were issued to local architects, and competitive designs for a Memorial College were invited. In response eleven designs were submitted, and although all gave evidence of able and careful execution, and each possessed features of special merit, it was deemed advisable to instruct Mr. Mandeno, the selected architect, to prepare a design more in keeping with the requirements and according to further directions supplied by the Board. When the Education Department approved of the new elevation and plans in their entirety, and authorized the Board to proceed with the erection of the building, the Managers felt that their action in arranging for a new design has facilitated a settlement, and otherwise justified the extra care and precautions taken.

It should be here noted that the statement of receipts and expenditure for the year shows a satisfactory credit balance, and it may be added that, with judicious and economical management, the support accorded by the general public, local bodies, and the Government (through the Education Department) is sufficient to ensure a sound financial working-basis for all our wants other than that of building. The income accruing from the Callendar Estate being now available, regulations for the awarding and holding of the Callendar Memorial Scholarships have been adopted. Fifteen scholarships, each of the annual value of £5, are available for apprentices attending the school trade classes, including those for domestic science. Notwithstanding our report of a successful year's work, the attendance at trade classes is, with perhaps two exceptions, anything but satisfactory. It has often been stated that few tradesmen have any knowledge or grasp of the principles underlying their trade, and this fact has been repeatedly brought before members of your Board when seeking for practical men to act as instructors in the trade classes. It is only after much searching and inquiry that a competent man can be found, and when such a man is found he invariably occupies a superior position, so exemplifying the value of the special knowledge he possesses. There is also another aspect of this matter that is worthy of the attention of the worker. The successful demand for more pay and shorter hours must lead to an increase in the cost of production, and consequently in the cost of living—that is, unless the efficiency of the worker increases in proportion; and it seems to us that the direct road to this desired expertness and increased ability must needs be through technical instruction. Let the workman, then, become more expert and competent, and he will have a just claim for shorter hours or for a higher percentage of the profits of production. Board has not been unmindful of its own workers—the teachers and the students. In recent years there has been a steady numerical increase in the regular staff, and for the purpose of securing greater permanency of service it has been deemed advisable to give teachers annual increments in A return giving the localities from which the students of our evening classes were drawn revealed the fact that the majority of them come from the suburbs, and that many of these, being free-place holders, require to travel a considerable distance to the school on three-more often on four. and even on five-evenings a week. To obviate the necessity for so much travelling classes for instruction in English and arithmetic (the subjects for which the teachers and rooms could easily be secured) were established in various suburban centres. This provision relieved Junior Free Place holders from attendance at the Dunedin Technical School on at least two evenings a week. The undertaking involved a slight financial loss, but it seems to members that it will not be long till the suburban classes become an essential as well as a self-supporting part of our system of evening instruction in Greater Dunedin. The tendency towards overlapping on the part of the various public educational institutions in this city has at times attracted our attention and led to discussion. We recognize that each must of necessity have a separate Board or Committee, but a general directing body or Council might well, without any tendency towards centralization, exercise a controlling influence over all educational institutions of this city. The action of Professors Black, Gilray, and Shand in continuing to grant free tuition in their university classes to our leading students is deserving of special mention, as well as of the thanks of members. The Board is again indebted to the honorary examiners for much gratuitous work undertaken by them in connection with the annual examinations. In conclusion, we wish to record our appreciation of the conscientious, painstaking, and energetic manner in which members of the staff discharge their duties. The success of the school is in no small measure due to the enthusiasm of our teachers. The results attained by our students in the Science and Art and in the London Guild Examinations testify to the efficiency of the instruction offered by our school.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE DUNEDIN TECHNICAL SCHOOL.

The attendance register of the day Technical School shows that 48 boys and 162 girls received instruction during the year. Of these 191 were free-place holders. The technical course for the preparation of trade apprentices is becoming better known and appreciated, 30 boys attending for instruction this year as against 16 in the preceding year. For the day domestic course there were 52 entrants, and it is worth noting that several of these day pupils were among the successful candidates for the London Guild examinations. The classes in chemistry and physics in this department are suited to the requirements of girls wishing to matriculate with the intention of proceeding to a domestic science degree. So far no other school in Otago has made this provision, although it is necessary to enable the university degree course to be brought to a successful issue. Consistent attention has been given to the teaching of commercial work, and the appointment of a special teacher for each subject has led to a greatly increased attendance, the results being of a highly satisfactory nature. At the beginning of the year the girls of the school were given the option of tuition and practice in deep breathing, vocal exercises, and singing as an addition to the usual physical exercises, and it is a matter for regret that only about one-third of them took advantage of the instruction thus offered. The art course, conducted in connection with the School of Art, is worthy of better support than it has yet received.

The evening school was attended by 884 individual students, classed as follows: Junior Free Place holders—119 males, 53 females; Senior Free Place holders—39 males, 28 females; other than free-place holders—407 males, 238 females. During the past session the majority of the students seeking admission to the electrical science course required to attend for instruction in drawing, mathematics, or elementary physics, and this depleted the number in attendance at practical electricity to

such an extent that it was deemed advisable to omit the class for the year.

The school examination results indicate that the quality of the work done by the students of the evening classes was somewhat uneven. Several members of these classes each year proceed to the University by matriculation, and for many years the school has been very successful in this respect. During last year, however, candidates were inclined to rely too much on the reputation of the school, and seemed disposed to curtail the period of their preparation. The result of this policy need hardly be mentioned; but intending candidates should realize that a three or four years' secondary school course cannot be covered in two winter sessions at the Technical School. The continuation subjects met with a fair measure of support, and doubtless much benefit to the students resulted. I am not yet satisfied, however, that students give sufficient time and attention to English before entering upon the study of commercial and technical subjects. For example, the examination-papers from the penmanship and commercial correspondence classes show that good penmanship and very fair correspondence are at times disfigured by bad spelling. In book-keeping, again, neat writing, methodical arrangement, and careful placing were often accompanied by inaccurate additions. It is true such deficiencies are not a common feature of the work, but yet they occur with sufficient frequency to arrest attention, and a corresponding weakness pertains to other subjects essential to a course. For example, some of our young people would like to become electrical engineers without being troubled with the study of mathematics, or patternmakers without the necessary practice in drawing, and so on in respect to other subjects. It is hoped that the recognition of courses under regulations issued last year will to some extent counteract this tendency. The slightly increased capitation will enable the school authorities to make extra provision for smaller classes, and at the same time enable them to refuse admission to any student not prepared to undertake the complete study of his subject. Notwithstanding the weaknesses just referred to, much good work continues to be done in our evening classes. The success attained by students in the Science and Art and the City and Guilds of London Institute Examinations is sufficient indication of the high quality of the instruction provided. Members of the staff have been regular and painstaking in the discharge of their duties, and have rendered me a hearty co-operation in advancing the interests and reputation of the Dunedin Technical School. Angus Marshall, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911.

Bittlement of necespis wi	ia inspendicale j	of the Teal chains of the Decem	007, 1011.
Receipts.	£ s. d.	Expenditure	e. £ s. d.
Balance at beginning of year	560 8 10	Salaries of instructors	2,673 1 2
Capitation on associated classes	2,710 17 9	Office expenses (including salaries,	stationery,
Capitation on account of free places	2,110 11 3	( &c.)	235 11 2
Furniture, fittings, and apparatus	184 8 11		94 12 8
Material	115 17 6		183 5 7
Subsidies on voluntary contributions	$331 \ 5 \ 0$	Insurance and repairs	62 14 3
Fees	608 8 8		16 3 0
Voluntary contributions	997 11 5	1	190 16 0
Sale of material	5 18 0	1 7 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	101 0 0
			14 0 0
		Furniture, fittings, and apparatus	
		Balance at end of year	1,386 19 5
	£5,514 16 1	Thos. Scott, Chairman Angus Marshall, Secreta	£5,514 16 1 of Managers.
		121,000	-J .

EXTRACT FROM THE REPORT OF THE MANAGERS OF THE OAMARU TECHNICAL SCHOOL.

The result of the year's work has been satisfactory, the enrolment and attendance having improved, showing an increase of 20 pupils this year, the number reaching 186 divided among 16 classes. There is every reason to believe that the aims and objects of the Managers are being recognized, and that the youths of the town will embrace the opportunity afforded by the Technical Association to gain further education at a nominal cost. The Managers desire to thank the various public bodies and individual subscribers for their support, also the local Press for valued assistance.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Associated Classes conducted by the Oamaru Technical Classes Association.

#### SOUTHLAND.

#### EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

At practically every school in the district pupils have the advantage of manual training in some form or other. Our teachers deserve much credit for the unanimity with which they have fallen in with the views of the Board and of its officers in this matter, particularly so when it is remembered that the value of the training is only very gradually obtaining its due recognition. The report of the Director of Manual and Technical Education gives particulars of the establishment at Invercargill, Gore, and Riverton of woodwork and cookery training centres by which no less than 36 schools have benefited. Though for some little time the conservatism of the mass in educational matters may cause friction, we believe that before very long the Board's policy will be generally approved, and that it will be given credit for having conferred on many country schools benefits previously limited to town and suburban schools. We wish the new departure much success, and ask parents and teachers to bear with us in the difficulties inseparable from a new enterprise.

We view with much satisfaction the prospect of the establishment of a day technical school in Invercargill at an early date. Such an institution is entirely necessary. With its sister institutions, the Southland Boys' and Girls' High Schools, it should be most valuable in moulding the characters and developing the capabilities of our young people at a most critical period in their lives, and in fitting them thoroughly for the spheres they will occupy in the future. We wish it every success.

### EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL INSTRUCTION.

Speaking generally, technical education throughout the district has fairly maintained in all its branches the position formerly attained, whilst in three departments distinct advance has been made. Of these I shall treat in due course.

School Classes: The work accomplished in the lower standards does not call for any special comment. The teachers co-ordinate the instruction as far as possible, in accordance with the subjects taken in the higher standards, with satisfactory results. In the kindergarten department the infant mind, by the simple process of folding exactly a squared piece of paper, grasps the mathematical truth that things which are equal to the same thing are equal to one another, and the transition from the primary to the secondary stages of mathematical reasoning becomes comparatively easy of attainment. In like manner the cutting-out and the building-up in cardboard of a simple cube grounds the pupil in the principles underlying all mechanical arts and sciences. In plasticine-modelling and in brush drawing the artistic side of our nature—that which raises us above the commonplace—is fostered and developed. Were these and kindred subjects removed from our syllabus the loss would be most keenly felt. In the upper standards the work undertaken comprised chiefly advanced needlework and cookery for girls, woodwork and elementary agriculture for boys, and elementary physical measurements for both girls and boys. The first notable advance to which attention may be directed was the establishment of fully-equipped

The first notable advance to which attention may be directed was the establishment of fully-equipped centres at Gore and Riverton, and of a second centre in Invercargill, where the boys and girls, gathered together from no less than 36 schools hitherto out of reach, were instructed in the most essential subjects of woodwork and cookery by competent instructors. This was made possible by the Department's agreeing to allow the children who had to travel to these centres by train to continue at work for one whole day per week, for a period of twelve or thirteen weeks, as best suited the train service. During the first and third periods, while the days were long, the children attending schools situated at the furthest points of the railway service from the centres were brought in, whilst during the second period, when the days were short, those nearer at hand were cared for. The scheme proved completely successful. Teachers and parents alike, with few exceptions, co-operated with the Board most willingly in order that the rising generation under their care might receive all the benefits to be derived from attendance at these classes. In one or two instances, where the scheme was not sufficiently understood by parents, a circular letter to the following effect was forwarded:—

"Manual training in schools is now universally recognized as a branch of education of the utmost importance. Every country in the forefront of the world's progress to-day has adopted this system, and has added it to its educational syllabus with most beneficial results. The young of any community who have not in early youth passed through a course of hand-and-eye training lag behind in the race for existence. New Zealand has realized this, and is determined that its young people shall be as fully equipped for life's battles as are those of less favoured countries. The Education Department has risen to the occasion, and has with great liberality assisted local bodies to meet the existing need. It has encouraged to the utmost of its power the establishment of manual-training schools at convenient centres, and has liberally borne not only the whole cost of the erection and equipment of suitable

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buildings, but has made provision for the free transport of the children to those centres, and for the payment of efficient instructors. In consequence every Education Board in the Dominion has established such schools, and everywhere the establishment of them has been hailed with delight by those interested as a step a long way in advance of educational facilities hitherto existing. The ideal is to have a cookery and woodwork class established in connection with every school in the Dominion, but in the practical working-out of the scheme the expense consequent thereupon has been found to be prohibitive of the attainment of the ideal. The next best course, therefore, has been adopted—viz., that of establishing as many properly equipped centres as possible, under the charge of fully qualified teachers, where instruction in these most essential subjects may be given to as many children in the higher standards of our schools as can be brought together. The instruction imparted in both subjects is of such a nature as cannot be given either at home or in the ordinary schools, co-ordinating as it does the training of the hand, the eye, and the brain. A visit paid to the school by yourself or any member of the Committee will amply demonstrate this, and all are cordially invited to pay such a visit.

In establishing these manual-training centres the Southland Board is only assisting in carrying out the aims of the Education Department. It rests, therefore, with the parents to co-operate heartily with the Board in making the scheme a complete success by seeing to it that their children attend The Board is aware that a certain amount of self-sacrifice is called for on the part both of parents and children, but at the same time feels that the advantages to be gained far outweigh the sacrifice involved. Further, the Board desires to point out that the Department has made exceptional provision for the well-being of children who have to travel by train, inasmuch as it has agreed to recognize attendance at the classes for the short period of thirteen whole days as equivalent to the time which is demanded of the boys and girls who live adjacent to the centres. In Invercargill the

town children have to attend for two hours per week for a period of thirty weeks.

"Keeping in view, therefore, the national welfare of our children, the Board trusts that parents will loyally see to it that those under their care are in every way encouraged to avail themselves to the utmost of these privileges and opportunities which are placed within their reach, and which, taken advantage of to the full, can only result in the production of a more efficient type of manhood and womanhood.

The attendance of pupils at these classes, considering that the long distance travelled in many instances necessitated a very early start in the morning and a correspondingly late return in the evening, was remarkably good. In order that the finances might be secured on a sound basis all the pupils in Standard IV were included in the scheme. It is found, however, that Standard IV pupils are not sufficiently advanced to benefit by the instruction imparted in either class, and if it could be accomplished it would be to the benefit of all concerned were pupils not admitted to the classes until they had entered Standard V. The second noteworthy advance made by the Board was the appointment of an agricultural inspector to supervise the work of elementary agriculture in the schools of the district, to give instruction to teachers on Saturdays, and to conduct the agricultural classes in connection with the day Technical College. Mr. J. Moodie, who has had considerable experience in this branch of education under the North Canterbury Board, was appointed to this position, and it is expected that this most important work will receive considerable impetus during the coming year.

Teachers' Saturday training classes in subjects of manual and technical instruction were continued as in former years at Invercargill and at Gore. In Invercargill a class was conducted in cardboard-modelling by Mr. W. McElrea, B.E., Headmaster of the Balclutha District High School. The class was extremely popular, and Mr. McElrea succeeded in interesting his students to a degree never previously attained in this subject. The other classes conducted were physiology and first aid, elementary agriculture, advanced needlework, plasticine-modelling, blackboard drawing, freehand and model drawing. In addition, classes in school method, English, mathematics, and elocution were conducted at both centres for the benefit of teachers who were anxious to complete their D The teachers, however, bore the cost of these classes themselves, no part of the special

grant for the training of teachers being devoted thereto.

Successful evening classes were conducted in Invercargill, as in past years. Except for the usual fluctuations in certain subjects the attendance was very good, 369 individual students having distributed themselves over the 30 classes on the syllabus. The number of free-place students was 59, against 58 in 1910. Other evening classes were held at Queenstown, Greenhills, and Riverton. As in former years, the work accomplished at Greenhills was of a very high order. The classes conducted for several years past at Bluff and Mataura were, owing to a combination of local circumstances, allowed to lapse for a year, but efforts will be made to resuscitate them during 1912. Classes were established at Invercargill and at six other centres throughout the district in the subject of wool-classing, under the direction of Mr. J. McGregor. Every class was well attended, no less than 194 students having enrolled, and all spoke most highly of the value of the instruction imparted.

The third notable advance affecting technical education in Southland was the decision of the Board to establish, with the authority of the Department, a day Technical School in Invercargill. The initial steps towards this end were taken during 1910, and were developed during the current year. The consent of the Education Department having been obtained, the Board proceeded, towards the end of the year, to the appointment of a staff. It was estimated that possibly an average of 60 students would attend, and preparations were made accordingly. Dr. D. E. Hansen, M.A., M.Sc., was appointed Principal of the school, and Mr. Oliver Duff was appointed to the position of first assistant. At the close of the year everything was in readiness to open the school at the beginning of February, 1912. Although it is trenching somewhat on the operations of the current year, I may be allowed to say that the school opened on the 5th February with 104 students in attendance; that at the present time there are 139 names on the roll; and that, owing to the large attendance, it has been found necessary to appoint a lady assistant and a commercial master to the permanent staff. Four courses of instruction were placed on the syllabus-viz., commercial, trades, domestic, and agricultural-and each course has its quota of students, the commercial predominating. A complete staff of visiting instructors has also been appointed to give instruction in building-construction, cookery and hygiene, dressmaking, veterinary science, wool-classing, land-surveying, shorthand, typewriting, and agriculture. The school promises to rank as one of Invercargill's most cherished and valued institutions.

The main Technical College buildings were considerably enlarged during the year, and all the rooms are fully occupied. An additional woodwork centre was also erected in Invercargill, but owing to the large number of students in attendance at the Technical College, and of primary-school children from the town and country schools attending the manual-training classes, the available accommodation is quite inadequate. A request has been made to the Education Department for the necessary funds wherewith to erect a new centre on the Board's property in Don Street. For the same reason, also, the available playground was found to be too limited in area, and a quarter-acre section adjoining the College was purchased at a cost of £1,130. When the necessary levelling, gravelling, and fencing is completed, the grounds, though restricted, will meet all reasonable demands. To equip the College fully an engineering workshop requires to be erected at as early a date as possible. It is hoped that these important works will be got under way during the current year.

For the first time for very many years the balance-sheet shows a balance on the wrong side of the ledger. This is accounted for by the extensive building operations which have been carried on during the year, and the purchase of the additional section. The strictest economy will require to be exercised for some years to come. It is confidently expected, however, that assistance in this matter, to a

greater or lesser extent, will be willingly rendered by the local bodies.

Mr. E. C. Isaac, Organizing Inspector of Manual and Technical Instruction, visited Invercargill and Riverton during the year, and inspected the work in progress. To the Education Department the thanks of the Board are again due for the most courteous and kindly consideration of all matters brought under their notice. To the local Press, which has most obligingly opened its columns to the dissemination of information respecting technical education throughout the district, hearty thanks are also due. Without its assistance the measure of success attending the establishment of the College and the conduct of the evening classes could not have been attained.

W. A. McCaw, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of School and Special Classes in the Southland District.

	Specie	u	Hasses	w	i th	ne Southland District.						
Receipts.			£	8.	d.	Fla	penditu	ro				
	•		2,869	3		Central Account—	Pontanta	,		£	s.	đ.
Central Account—	••	••	2,000	•	_	Salaries of instructors,	evening	r classos		$2\overline{14}$		0
Fees, special and continuation	classes		119	10	2	Salary of art instructor			• •	222		4
Fees, art classes	Classes	• •		2	$\tilde{6}$	Material for classes					10	
Subsidy, High School, art instru-	otor's sol		-	-	ő	l 4 4			• •		10	ŏ
Subsidy, Education Board, college	vioto alac	er y	95	0	ŏ		••	••	• •		8	0
	Starte oran	ses		13	8	Rent of section	• •	• •	• •			
	• •	• •	150		2			••	• •		0	0
Capitation, technical classes	• •	• •			7	Heating and lighting		• •	• •		14	4
Capitation, continuation classes		• •		6		Heating and lighting,	art	••	• •	10		8
Furniture and fittings		• •	184			Advertising and printin		• •	• •		8	3
Material	••	٠.		19	6	Museum fittings		• •	• •		9	5
Subsidy on voluntary contribution	ns	• •	20	5	U		••	• •	• •		5	0
Bluff Account—			10			Administration	1.724	••	• •		10	
Fees	• •	• •		3	0	Contract, erection of a				1,660		
Rent	• •	٠.	2	10	0	Furniture and fittings		• •	• •		10	
Riverton Account—						Cost of section	• •	• •	• •	1,130	0	0
Fees	••	• •	27	_	0	Mataura Account—						
Refunds	• •	٠.	1	7	0	Printing	• •	• •	٠.	0	12	6
Dipton Account—						Bluff Account—						
Capitation, continuation classe	es		8	9	5		• •			10		9
Wool-classing Account—						Advertising and printing				0	12	0
Fees			131		0	Rent	• •			<b>2</b>	10	0
Sale of wool		٠.	28	6	10	Riverton Account—						
Teachers' Training Account—						Salaries of instructors				19	0	0
Special grant			175	0	0	Material				4	6	6
Capitation			112	8	8	Advertising and printing	ıg			1	12	5
Capitation  Material  Collegiate Account—			$^{2}$	5	6	Dipton Account—	-					
Collegiate Account—						Capitation paid				8	9	5
Fees		٠.	46	11	3	Greenhills Account—						
Capitation			44	19	11	0				33	13	6
Schools' Standard Account—						Wool-classing Account-						
Capitation, handwork classes		٠.	340	16	7	Salary of instructor				131	11	0
Capitation, needlework classes			144	4	3	Material and expenses				41	15	8
Schools' Technical Account-			we will			Teachers' Training Accou						*
Initial capitation			50	10	0	Salaries of instructors				174	3	10
~ • . •	••		314	10	4	Material					$1\overline{2}$	
Capitation Sewing-machines	• •			10		- · · ·					15	
Conveyance of pupils				11		Collegiate Account-	• •	••	• •	_	•••	
Woodwork-room, Invercargill			150			Salaries of instructors				95	0	2
			660			Material				12	ŏ	ō
Riverton building Riverton equipment			150		-	Schools' Standard Accou		••	••	12	U	·
Cookery and woodwork refund	s			ĭ	_	Salaries of needlework	instruct	tors		150	15	8
Voluntary contributions				14		Material			••	137		ő
Subsidy on voluntary contribu						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	• •	• •	• •	64		ĭ
Balance at end of year		• •	1,120			Schools' Technical Accou		••	• •	01	11	-
	••	• •	٠,٠٠٠	U		Salaries of instructors				742	Q	10
						Material				318		8
						1		••	••	462		
						Buildings, Invercargill	••	••	• •	317		9
						Buildings, Gore		••	••		4	0
						Buildings, Riverton		••	• •	851		6
						Furniture and fittings		• •	• •	124		7
								••	• •			-
						Conveyance of pupils		• •	• •		10	
						Heating and lighting		• •	• •		6	
						T 1,	••	• •	• •		14	
							• •	• •	• •		12	
•						Administration	• •	• •	• •	64	17	U
						1						
		ä	<b>£7</b> ,310	14	5	1			4	37,310	14	5

EXTRACT FROM THE REPORT OF THE BOARD OF GOVERNORS OF THE GORE HIGH SCHOOL.

The technical classes conducted by the Governors of Gore High School have been continued with a fair amount of success through the winter months. The fact that we have not had one building in which we could centralize all our work has interfered very much with our success in the past. This difficulty has now been partly overcome, and for the second half of the session we were able to hold our literary and cookery classes at the now completed High School building. For the next session we hope to record a larger enrolment as the result of the above greater convenience, and also from the fact that we will be able to secure instructors for most of the classes from the staff of the High School. Still, the fact remains that it is difficult to make those who have passed through our primary schools realize the great benefits to be derived from these night classes. During the session classes were held in the following subjects: English, arithmetic, book-keeping, electricity and magnetism, dressmaking, cookery, and wood-carving. In all cases the enrolments were satisfactory, and good work was accomplished. Notwithstanding the fact that the classes were held in various rooms in the town, the attendance at classes was well sustained.

Andrew Martin, Chairman.

George Brett, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1911, in respect of Special Classes conducted by the Gore High School Board of Governors.

		,			•				
Receipts.		£	s.	d.	Expenditure.		£	s.	d.
Balance at beginning of year		44	9	10	Salaries of instructors		79	18	2
Capitation on special classes		8	11	3	Office expenses (including salaries, st	a-			
Capitation on account of free places		3	11	6	tionery, &c.)		10	10	0
Buildings		1,000	0		Advertising and printing		11	18	9
Subsidies on voluntary contributions		50	0	0	Lighting and heating		4	16	6
Fees		43	15	0			5	0	0
Voluntary contributions		50	0	0	Material for class use		7	11	0
•							1	14	- 6
						1	,000	0	0
							6	7	.8
					Balance at end of year	• •	72	11	0
	-					_			
	£	€1,200	7	7		£1	,200	7	7
					l •	_			=

GEORGE BRETT, Secretary.

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