

1924.
NEW ZEALAND.

EDUCATION:
TECHNICAL EDUCATION.

[In continuation of E.-5, 1923.]

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

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1. EXTRACT FROM THE FORTY-SEVENTH ANNUAL REPORT OF THE
MINISTER OF EDUCATION.

GENERAL.

Number of Schools.

The number of technical high schools open during 1923 was fourteen, in addition to which there were nine organized technical or art schools offering day courses. Technical classes were also conducted in thirty-three manual-training or other centres, the total number of centres being fifty-six, a decrease of ten on the number for the previous year, mostly in the Auckland Education District.

Attendance.

The total number of students receiving instruction in all technical classes was 18,117, as compared with 16,464 in 1922. The attendance at technical high schools increased from 4,202 in 1922 to 5,054 in 1923, an increase of 852.

Of the total number of 18,117 students, 4,795 held free places at technical high schools, 4,858 at other technical classes, 269 were attending continuation and technical classes held under the regulations for compulsory classes, and 150 were attending under the regulations relating to the free instruction of discharged soldiers.

The decrease in the number of pupils attending under the compulsory regulations was 55 ; and there was also a decrease of over 200 discharged soldiers attending without payment of fees under arrangements made with the Repatriation Department. The increase in numbers of students at classes other than those of technical high schools is probably due mainly to relaxation of restrictions adopted as a means of economy in the previous year. In the case of technical high schools the increase was 852, almost the same as in the previous year, the total for the two years being almost exactly 50 per cent. of the attendance in 1921. The increase is partly due to the conversion of district high schools into technical high schools, but also largely due to increases in the rolls of the technical high schools in the larger towns, the five largest increasing from 2,469 in 1921 to 3,369 in 1922, an increase of more than half the total increase for the two years. The numbers should have been much higher in both years, the deficiency being due to the large proportion of the pupils leaving at the end of the first year. This difficulty is more serious in technical high schools than in other secondary schools, and will probably persist as long as employment is open to children under sixteen years of age.

Staffing.

There were at the end of 1923 249 full-time assistant teachers on the staffs of technical schools, besides a large number of part-time teachers. The teachers employed full time were classified as follows, Class VI being the highest :—

Class.	Division I.		Division II.		Totals.
	Men.	Women.	Men.	Women.	
VI	3	5	3	9	20
V	12	5	9	15	41
IV	24	6	18	17	65
III	17	12	18	19	66
II	14	5	8	8	35
I	7	7	6	2	22
Totals for 1923 ..	77	40	62	70	249
Totals for 1922 ..	63	27	53	66	209

The increase in the numbers of technical-school teachers was due partly to the transfer of manual instruction in certain centres to the technical schools and partly to the increase of 20 per cent. in the attendance at technical high schools as compared with the previous year. Taking both courses into account, the staffing was almost exactly in the same ratio to roll as in the previous year, though a larger proportion had good academic or professional qualifications. The courses of instruction were set on similar lines to those of previous years. The tendency referred to last year for the country technical high schools to concentrate their energies largely on the matriculation course and to neglect, comparatively, the agricultural and home-science courses is no less noticeable this year, though signs are not wanting that the directors and teachers would in most cases prefer to encourage the more vocational courses if it were not that parents and children are anxious that the course taken should lead to the University or to a learned profession. The difficulty can hardly be overcome until the curriculum of the Matriculation Examination is largely extended or until some system of accrediting is substituted for it.

CLASSES OTHER THAN CLASSES AT TECHNICAL HIGH SCHOOLS.

Classes were held at fifty-five centres, as compared with sixty-three in the previous year. The number of individual students was as follows:—

	1922.	1923.
Classes conducted by Education or High School Boards ..	1,807	2,292
Classes conducted by Technical School Boards or by Managers ..	9,195	9,503
Classes conducted by University colleges ..	1,260	1,268
Totals	12,262	13,063

The increase was mainly in classes conducted by Education Boards, which showed the greatest decrease under the restrictions of the previous year. The increase in classes under Technical School Boards was almost entirely in the largest schools. In the smaller technical schools run in connection with technical high schools in country towns the classes were comparatively small and showed little improvement on the previous year.

The following are some particulars of the age, sex, and occupations of students:—

	Seventeen Years of Age and Under.		Over Seventeen Years of Age.		Totals.	
	1922.	1923.	1922.	1923.	1922.	1923.
Males	3,522	3,651	3,537	3,706	7,059	7,357
Females	2,660	2,725	2,543	2,981	5,203	5,706
Totals	6,182	6,376	6,080	6,687	12,262	13,063

SUMMARY OF OCCUPATION OF STUDENTS.

	1922.		1923.	
	Number of Students.	Percentage of Total.	Number of Students.	Percentage of Total.
Clerical pursuits	1,957	15.96	1,972	15.10
Professional pursuits	872	7.11	1,002	7.67
Students	1,960	15.98	2,754	21.08
Domestic pursuits	2,022	16.49	2,193	16.79
Agricultural pursuits	215	1.75	270	2.07
Various trades and industries	4,730	38.58	4,323	33.09
Other occupations not stated	506	4.13	549	4.20
Totals	12,262	100.00	13,063	100.00

“College” classes were conducted in connection with the Auckland University School of Engineering, Canterbury College School of Engineering and School of

Commerce, Otago University School of Domestic Science and School of Commerce, the total capitation earnings for these classes for the year being £2,720.

The School of Domestic Science in Otago University was attended by sixty-four students taking either the course for the degree or that for the diploma. Sixteen Government bursaries were awarded in 1923, making a total of thirty-two tenable during the year. Eight degree and fifteen diploma students completed their courses. Graduates from this school are now filling important positions throughout the Dominion as instructors in home science, and their influence in this important phase of the training of girls is already very marked.

NUMBER OF STUDENTS RECEIVING FREE EDUCATION AT TECHNICAL SCHOOLS OTHER THAN TECHNICAL HIGH SCHOOLS.

				1922.			1923.		
				Males.	Females.	Totals.	Males.	Females.	Totals.
Junior free pupils	First year	..		1,009	673	1,682	1,047	712	1,759
	Second year	..		615	439	1,054	734	426	1,160
Senior free pupils	First year	..		454	317	771	517	399	916
	Second year	..		287	267	554	373	250	623
	Third year	..		172	172	344	210	190	400
Totals	..	..	..	2,537	1,868	4,405	2,881	1,977	4,858

The following technical schools had a roll of more than 500, exclusive of the technical high schools carried on in connection with some of them :—

				Number on Roll.	
				1922.	1923.
Christchurch Technical School	..	..	..	1,670	1,751
Wellington Technical School	..	..	..	1,175	1,321
Dunedin Technical School	..	..	..	1,117	1,170
Auckland Technical School	..	..	..	772	928
Palmerston North Technical School	..	..	..	810	742
Christchurch School of Art	..	..	..	513	654
Invercargill Technical School	..	..	..	583	565

Technological examinations were conducted by the Department on behalf of the City and Guilds of London Institute at eighteen centres in the Dominion. The total number of entries was 401, an increase of 24 over the number for the previous year, and the number of passes was 189, or 47·1 per cent.

TECHNICAL HIGH SCHOOLS.

The number of students in attendance at technical high schools in 1923 was 5,054, compared with 4,202 in the previous year.

The numbers of pupils taking up the various courses provided were as follows :—

Course.				Number of Pupils.			Increase over 1922.
				Boys.	Girls.	Total.	
Industrial	..	..	..	1,469	32	1,501	267
Commercial and general	..	..	..	1,087	1,471	2,558	504
Domestic	..	..	..	..	663	663	52
Agriculture	..	..	..	296	..	296	8
Art	..	..	..	13	23	36	21
Totals	..	..	..	2,865	2,189	5,054	852

NUMBER OF PUPILS RECEIVING FREE EDUCATION AT TECHNICAL HIGH SCHOOLS UNDER
REGULATIONS FOR FREE PLACES.

			1922.			1923.		
			Boys.	Girls.	Totals.	Boys.	Girls.	Totals.
Junior free pupils	First year	..	1,213	929	2,142	1,512	1,117	2,629
	Second year	..	668	532	1,200	814	613	1,427
Senior free pupils	First year	..	227	193	420	275	239	514
	Second year	..	92	94	186	90	79	169
	Third year	..	18	13	31	34	22	56
Totals			2,218	1,761	3,979	2,725	2,070	4,795

FINANCIAL.

The total amount due by the Department to the controlling authorities for the salaries and incidental expenses of all technical classes, including technical high schools, was approximately £125,651, made up as follows :—

	£
Salaries of full-time teachers and Directors	83,672
Capitation for part-time teachers	16,854
Capitation for student teachers	2,261
Overtime payments	2,575
Incidental allowances	27,573
College classes capitation	2,720
	<hr/> 135,655
Less recoveries from tuition fees	10,004
Totals	<hr/> <u>£125,651</u>

2. REPORTS OF THE SUPERINTENDENT OF TECHNICAL EDUCATION AND OF THE INSPECTOR OF MANUAL AND TECHNICAL INSTRUCTION.

SIR,—

Education Department, Wellington, 3rd August, 1924.

I have the honour to report as follows in regard to certain aspects of technical education in the Dominion for the year 1923.

I have again to report a large increase in the enrolment of full-time pupils in technical high schools, and also of full-time pupils in the day classes of other technical schools, such as Hamilton, New Plymouth, Ashburton, Palmerston North, and Timaru, which are practically conducted as technical high schools but are not recognized as such by the Department. The total enrolment of full-time day pupils was approximately 5,700, an increase of over 900 on the numbers for the previous year.

The numbers attending evening classes and other part-time courses showed a slight increase as compared with those for the previous year. The greater part of this increase was due to heavier entries in classes conducted in the large centres, numbers attending in country towns being for the most part disappointingly small. In comparing the numbers with those listed in E.—5 for years previous to 1922 it must, however, be remembered that the exclusion from the present returns of primary pupils of private schools taking manual training in technical schools, and also of teachers in special classes for science, drawing, &c., formerly included, reduces the total by nearly 4,000.

The most encouraging feature of evening-class work at the present time is probably the large enrolment of apprentices in the building and allied trades in the larger technical schools. The increase is an indication of renewed activity in the building trades throughout the Dominion. A similar large increase in numbers of pupils from the electrical trades is probably due to the demand for electricians in connection with the hydro-electric schemes now being developed in this country.

The appended table shows the variation in attendance of students in certain occupations in the last eleven years. Both sexes are included, but in the commercial group females probably predominate, while students from the engineering and building trades are probably without exception males.

The effect of the war is clearly seen in both groups, and also probably to some extent that of the "slump" of 1921-22, though most of the shrinkage in these groups between 1921 and 1922 was due to the regulations for compulsory attendance in force in certain country districts having been placed in abeyance.

STUDENTS IN TECHNICAL SCHOOLS.

Occupation.	Numbers attending Technical Classes from certain Groups of Industrial Occupations in the Years										
	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
Clerical	1,752	1,874	1,996	2,207	2,382	2,173	1,911	2,146	2,214	1,957	1,972
Shop and warehouse	1,144	1,187	1,307	1,422	1,373	1,295	1,295	1,300	1,042	1,203	858
Dressmaking, millinery, &c. ..	230	267	241	262	249	227	227	245	240	264	135
Tailors and tailoresses	84	118	100	127	102	68	102	85	131	86	83
Printers, &c.	151	170	176	147	176	151	130	119	130	79	83
Total commercial	3,361	3,616	3,820	4,165	4,282	3,914	3,665	3,895	3,757	3,589	3,131
Engineers and mechanics	638	644	699	745	784	826	961	876	900	701	754
Electricians	238	228	214	248	261	316	278	476	408	359	420
Plumbers and metal-workers ..	601	622	441	377	351	290	362	546	577	511	634
Woodworkers	535	521	454	384	315	289	346	506	539	428	519
Painters, plasterers, &c. .. .	162	136	126	117	124	101	109	79	107	186	69
Total engineering and building	2,174	2,151	1,934	1,871	1,835	1,822	2,056	2,483	2,531	2,185	2,396
Number of centres at which recognized technical classes were held	132	138	168	151	154	131	110	121	94	66	56
City and Guilds Examinations: Trade subjects—											
Entries	270	215	186	250	236	226	156	261	339	363	362
Passes	172	133	122	141	128	111	70	161	185	187	165
Percentage of passes	63.8	62.0	65.7	56.5	54.3	49.0	45.0	61.8	54.6	51.5	45.7

It appears generally from the table that there is a distinct tendency for the classes in the engineering and the building trades to grow stronger, while, on the other hand, the continuation and commercial classes tend to become on the whole smaller. The weakening of these classes in numbers is perhaps largely due to the increase in the numbers attending full-time post-primary courses, the increase in which has been large in both district high schools and high schools; while in technical high schools the number attending fourteen such schools in 1923 was 5,024, as against 1,664 attending eight schools in 1913, an increase of over 200 per cent.

In connection with these figures it should be noted that there has been in recent years a considerable shrinkage in the number of centres in which recognized technical classes are being held. While this shrinkage is partly due to a change in the method of recognition, it is also, largely due to the discontinuance of such classes as woodwork for amateurs, dressmaking, cookery, English, arithmetic, and elementary commercial subjects in small centres. The growth of the post-primary day-school system has to a large extent removed the necessity for such classes, though doubtless as population increases an increased demand may warrant the re-establishment of such centres, with more satisfactory courses bearing directly on local industries.

The results of the City and Guilds Examinations for the past ten years would appear to show that in trade subjects the standard of attainment is not so high as it was before the war, though the difference is not well marked, the proportion of passes to the total number of trade students being much the same as in former years. The only trade in which progress may be gauged by results of local examinations is that of plumbing. In this trade the Plumbers' Board has had occasion to note in the last few years a distinct decline in average attainment of candidates for certificates. This decline is due, in the opinion of the technical-school teachers, mainly to the fact that, whereas before the Plumbers' Board of New Zealand was set up under the Plumbers Registration Act the passing of first-, second-, third-, and fourth-year examinations was a usual and often a prescribed preliminary for apprentices wishing to qualify for certificates, it is not now compulsory for apprentices to take any specific technical-school course before sitting for the certificate examination, with the consequence that a large proportion of the candidates attempt to prepare for the examination by a short course of cramming. Steps are being taken in at least one centre to ensure, by day classes as well as by compulsory attendance at evening classes, that the apprentices shall take a full course extending over the years of apprenticeship. The extension of this principle to other trades is contemplated by the provisions of the Apprentice Act of 1923. This Act provides means by which in any trade and locality the Arbitration Court may direct attendance of young learners at suitable classes, while provision is also made whereby the cost of more directly vocational training may be met by the employers if the majority employing the majority of the workers in any trade in any locality are prepared to co-operate in establishing classes.

The need for systematic technical training of apprentices has been felt for a long time, as has been shown in the case of the plumbing trade, in which, in places where the apprentices are induced to take a reasonably good course, the results of the certificate examinations are satisfactory, but where they are allowed to leave their technical-school training to the last few months of apprenticeship the results are correspondingly poor.

It is to be hoped that full advantage will be taken of the powers given in the Apprentice Act, and, further, that the importance of day continuation and technical classes will become more generally recognized, so that the provisions of the Apprentice Act relating to the technical training of apprentices may be extended to include all young people at work. It is, however, quite certain that the reintroduction of compulsory attendance only at evening classes of young people between fourteen and seventeen would not be in accordance with either the letter or the spirit of recent legislation, while in the opinion of the great majority of Directors of Technical Schools and of those in the industries it would be of very doubtful advantage educationally. The Inspectors of Technical Schools have repeatedly noted a lack of freshness in the appearance of young people at evening classes. In many cases it was obviously difficult for students to fix their attention on the work in hand or even to keep awake. In these circumstances it is easily seen that the work of unwilling students forced to take subjects in which they were not interested could not be of any appreciable value.

During the year grants totalling nearly £35,000 were made in respect of buildings and equipment. Additions were made to the following schools: Wellington Technical College (completion of north front of main building); Palmerston North (extension of engineering workshops); Masterton (alterations to woodwork-shop); Dunedin (erection of G. M. Thomson wing for the home-science department); Feilding (hostel for boys).

British Empire Exhibition.—A large and representative exhibit of work done in technical schools and manual-training classes in the Dominion was sent to England for the British Empire Exhibition. The work was not specially prepared, but was selected from the ordinary work done in class during the year. The general quality of the exhibits was good, and the range of work fairly wide.

Classification of Teachers.—The system of classification adopted for teachers in technical and manual-training schools has worked smoothly during the year, and appears to satisfy the great majority of the teachers. The number of appeals in respect of the annual reclassification was small, and the cases presented no serious difficulties, and indicated no essential weaknesses in the method of classification. Indication points, however, towards the necessity of making some provision for regulating the strength of staff which may be approved in respect of each school, in order to prevent popular schools from obtaining an undue advantage in staffing.

I have to record with deep regret the untimely death of Mr. F. D. Opie, late Director of the Palmerston North Technical School. Mr. Opie managed the school for many years with great tact and enthusiasm, and, practically without any permanent assistance, built up one of the most successful evening schools in the Dominion.

I have, &c.,

W. S. LA TROBE,

Superintendent of Technical Education.

The Director of Education, Wellington.

SIR,—

Education Department, Wellington, 28th July, 1924.

I have the honour to present a report on technical education as carried on at the technical high schools for the year 1923.

The opening of the new technical high school at Greymouth in February made the fourteenth school of this type inaugurated in the Dominion, an increase of one upon the number for the previous year. As for the previous year, there was a large increase in the numbers of full-time day students attending technical high schools, being in each case equivalent to an increase of 20 per cent. of the whole.

The most disturbing feature in connection with the work done at the technical high schools is the great wastage of pupils during the first and second years' attendance. Returns where available show that some 20 per cent. of the entrants leave before the end of the first year, while only some 30 per cent. complete the second year, and the proportion staying for three and four years is in most schools negligible. Various reasons have been given in explanation of this very serious state of affairs, and certain remedies have been proposed. The causes are undoubtedly to be found in social and economic conditions rather than in any inherent defect in the schools themselves, and the remedy lies most probably in the direction of suitably controlling those conditions.

It is satisfactory to note that there is an increasing tendency for pupils to take courses other than the general or literary courses, and it may be expected that this tendency will become more pronounced as workshop, field, and laboratory accommodation are added to the technical high schools, especially to those which are in the position of being the only post-primary school in the

town or district. An exaggerated importance, however, is still in some schools attached to the passing of external examinations, such as Matriculation and Public Service Entrance, as an end in itself, and in such schools the curriculum of the general course is necessarily limited and confined strictly to the requirements of these examinations, while able pupils are naturally encouraged to take the course and add lustre to the school by their success in their examinations. At the same time it is satisfactory to note that in at least one school which has been very successful in presenting candidates for matriculation this objection loses some of its force in that a fair number of pupils stay on after matriculation and study for the higher leaving-certificate, while others sit for professional examinations in accountancy, engineering, and teaching.

A very wide range of subjects is taught in technical schools under varying conditions, and the Inspectors offer the following remarks and criticisms upon certain aspects of the work:—

Languages.—Here the teaching of the mother tongue is rightly regarded as a matter of the first importance, and great improvements have of recent years taken place in the teaching of this all-important subject. The more formal work in English grammar has been reduced to moderate limits, and more attention is being paid to forms of self-expression and to becoming acquainted with some of the best of our vast heritage of literature, both of poetry and prose. Here again the tendency is to be too conservative, and all teachers would do well to read the very excellent “Report on the Teaching of English in England,” published by the English Board of Education, and to consult more recent books which have obviously been inspired by that report. A large amount of debating and dramatic work is also undertaken in various schools, and it is pleasing to note with what facility children practised in such methods are able to express themselves orally and in writing. As far as Latin and French are concerned, these are in most instances wisely taught only to pupils who appear able to profit by studying them and who are likely to stay at school sufficiently long to be able to gather more than a mere smattering; but, even so, it cannot be said that the standard attained or the methods of teaching employed are for the most part any more than fair.

Mathematics.—As is to be expected, this is one of the subjects to which great attention is devoted and which is, on the whole, well taught. Traditional methods, however, are very strong, and are perpetuated by the text-books in use, which for the most part exercise the ingenuity of the student in manipulations and transformations without giving him any real grasp of principles or of facility in using the mathematical tool. It is suggested that large parts of arithmetic, algebra, and geometry as ordinarily taught could well be cut away, and the time so gained used in such a way that no boy who had completed, say, a two-years course should be unaware of the nature and use of logarithms and the slide-rule; further, during the third year he should be able to become acquainted with the fundamental processes of the differential and integral calculus. The traditional arithmetic which is often given to girls taking home-science courses might with advantage be replaced by the teaching of a simple system of household accounts and book-keeping.

Agriculture is a subject taught in nearly all schools, in some, indeed, being made the main subject in the curriculum for boys. Opinions differ as to the amount of field-work that it is advisable to give and the size of plots or gardens required. While some schools would be in favour of farms of many acres, others are in favour of small experimental plots, and others again are satisfied with giving experimental work in the school laboratory. All are agreed, however, that a good general education is the necessary preliminary for the sound training for the future scientific farmer, and deprecate too early specialization in the education of the would-be farmer.

Engineering.—The number of boys entering the engineering courses has shown considerable fluctuations in recent years, but in the large centres, at any rate, the tendency has been to increase at a fairly steady rate. The word “engineer” is very loosely used—it is popularly applied to the artisan or mechanic, whereas it should be retained for the professional engineer of University or equivalent standing. If a boy wishes to become a tradesman his needs would probably best be met by a two-years course of post-primary instruction, including such subjects as English, history and geography, mathematics, drawing (both mechanical and free), woodwork, metal-work, &c., so as to give him as good an all-round education as can be secured in that limited time, followed by an apprenticeship the length of which would be regulated according to his standard on entry. If he intends to become a professional engineer he will need a full secondary course leading to matriculation and the University. There is the further case of the marine engineer, for whom there exists a steady demand in New Zealand, whose needs would have to be met by a special course not coinciding entirely with either of those outlined above. Such special courses would naturally be held in the schools of seaport towns.

In the matter of engineering equipment and machinery considerable sums have been spent in providing new machines, chiefly to replace older ones. The question here arises as to whether the technical schools of the Dominion should have examples of specialized machinery as used in various trades, and to what extent, if any, or whether simple tools demonstrating fundamental processes only should be installed. The same question, of course, has arisen in more acute form in England, America, and elsewhere, and the complete answer has not yet been found. While in America the technical schools are often lavishly equipped with specialized machinery, in England this has not generally been done; such specialized instruction is regarded as the function of the employers themselves, who have not been loath to undertake it. Most large engineering-works in England now have their “instructional bays,” where the specialized machines and processes are demonstrated to the learners and apprentices by instructors provided by the firms themselves. The whole question of supply and replacement of tools and machines for engineering in technical schools in

New Zealand demands urgent consideration. Some attention has been devoted at certain schools to sheet-metal work and to pattern-making and moulding, and even more attention might profitably be devoted to these subjects.

Building-construction and Carpentry.—There has been a greater demand for instruction in these subjects than in the previous years, and the technical high schools in the large centres have had strong classes in these subjects. Again, there has been a considerable expenditure upon new tools and replacement of worn tools so as to keep a reasonably good standard of completeness. In cabinetmaking many successful classes are now chiefly composed of amateurs who have made woodwork their hobby. Some very good work embodying sound design, construction, and finish has been accomplished, and provided due attention is given to such points as these such classes are worthy of every encouragement. As an experiment simple woodwork was assigned as a part of their course to a class of girls taking the domestic course in a technical high school, and the results have certainly justified the making of the experiment.

Domestic Science and Domestic Arts.—Of the technical high schools and technical schools providing day courses some seventeen have fully organized courses in domestic science and arts, and in all schools some time is given to this work. The courses of instruction generally include some or all of the following subjects: English, experimental science, cookery, laundrywork, dress-making, millinery, pure and applied art, hygiene, first aid and home nursing, arithmetic and household accounts, music, drill, and games. As is naturally to be expected, in places where the technical high schools provide the sole post-primary courses more attention is usually paid to the scientific and theoretical than to the practical side of home-making, and the course in such cases is generally modelled so that third-year students may sit for matriculation, taking home science as a subject. Such students are then, under certain conditions, eligible for bursaries, and a number pass on to the University and take the home-science diploma course with a view to becoming teachers. In other schools greater stress is laid on the practical side of the training, and excellent results are achieved. This is the case generally in the larger centres where technical schools are able to provide courses not necessarily leading to University examinations, and are thus free to develop on broader lines. While in these schools the cooking, dressmaking, hygiene, &c., are as a rule well taught, the same cannot always be said of such subjects as English, arithmetic, and drawing, which are sometimes regarded as of lesser importance. The girls are often put to do the same work in these subjects as others preparing for definite examinations, with unsatisfactory results. Though, no doubt, the difficulties of organization are great, especially in the case of the smaller schools, every endeavour should be made to differentiate the courses so that the teaching shall be purposeful and designed to meet the real needs of the child.

Of the actual work accomplished on the practical side it can be said that a very good standard is almost always reached, and that in certain schools extraordinarily good work is done. The reasons for this are not far to seek, for the course, in a great measure, supplies the instinctive needs of the adolescent girl, who thus brings to bear the one thing most necessary in the educative process—a deep and true interest with its accompanying pleasurable emotion. It is obvious, however, that many aspects of the question of training in domestic science and arts can be dealt with adequately only by a woman, and it is therefore a matter for congratulation that the year under review is the last of those in which the services of a highly qualified woman Inspector have not been available.

Commercial Subjects.—It is becoming increasingly common to admit only girls to two-years commercial courses where a considerable part of the time is devoted to shorthand and typewriting. For boys wishing to take a commercial course a modified general course is arranged in which is incorporated book-keeping and commercial arithmetic, and in some cases a full course for the Accountants' Preliminary Examination of the University. It is being realized more fully that a good general education of more modern type is the best preparation for a successful commercial career, and that undue early specialization must be avoided.

Drawing.—As a rule mechanical drawing is well taught, the schools being well supplied with models, parts of machines, and engines to serve as materials for instruction. In the matter of free drawing, including design, lettering, painting, modelling, there is a great diversity of aims and attainments. Some schools devote considerable time to drawing and obtain excellent results, while in others very little time or attention is devoted to it. It should be the aim of every school to secure at least one teacher well qualified in drawing and enthusiastic in the teaching of it, so that the attention which it merits may be given to this very important means of self-expression. During the last few years the teaching staff of the Dominion has been strengthened by the addition of several graduates of the Royal College of Arts, London, and the effects of their teaching are now becoming apparent.

Singing.—Again, very different degrees of attention are paid to this subject. In all schools boys as well as girls should be taught to sing. Some schools have prepared pupils to give cantatas and operettas in public in order to aid the school funds; others have inaugurated "community sings," and have school orchestras, whose efforts are made use of at school assemblies, anniversaries, and socials. There are others, again, in which no time at all is given to singing, and thereby a great opportunity is missed by neglecting a subject which can do so much to raise the tone of a school by giving opportunity for corporate self-expression and intellectual enjoyment.

Physical Exercises and Games.—The importance of these outdoor activities is fully realized. It is the general practice to devote daily some fifteen or twenty minutes to more or less formal exercises,

either at the commencement of morning session or at the morning break, and this practice has much to recommend it. Cadet work is taken up with enthusiasm at certain of the technical high schools, and the Seddon Memorial Technical College Cadets were the runners-up for the Riddiford Cup. Special physical-culture mistresses have been appointed to take the work of the girls in the larger schools, and the results of such special teaching are in every way admirable. Football, basketball, hockey, cricket, and swimming are very strongly supported in almost every school.

General Organization of Schools.—Technical schools are in all cases open to pupils of both sexes, in the technical high schools the number of boys being about one-third more than that of the girls. There is an increasing tendency for such schools, though nominally co-educational, to become separate schools for boys and girls under one roof and one principal—that is to say, for the boys and girls to be segregated in classes by themselves and taught, the boys by men and the girls by women exclusively. Such schools cannot properly be called co-educational schools at all; and, while the consensus of opinion amongst educationists is strongly in favour of co-education, it is also agreed that it is far more dangerous to segregate the sexes in the same school than to teach them in separate institutions. It is understood that in certain subjects the boys and girls must be separated, but when they should naturally be taught together, as they should in the greater part of their school-work, it is uneducational and wrong to separate them. The Inspectors have observed the best tone and school spirit in those schools which are conducted as nearly as possible on full co-educational lines.

I have, &c.,

F. C. RENYARD,

Inspector of Manual and Technical Instruction.

The Director of Education, Wellington.

3. DETAILED TABLES RELATING TO TECHNICAL INSTRUCTION.

TABLE J1.—SOME PARTICULARS RELATING TO TECHNICAL EDUCATION FOR THE YEARS 1916–1923 INCLUSIVE.

—	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
Number of centres at which classes were held	151	154	131	110	121	94	66	56
Number of technical high schools	8	8	8	8	9	13	13	14
Number of students—								
(a.) Technical high schools ..	2,105	2,347	2,747	2,926	2,766	3,349	4,202	5,054
(b.) Other classes	17,586	18,400	16,910	17,950	18,628	16,832	12,262	13,063
Number of free pupils at (a) and (b) above	5,975	6,127	6,715	7,242	6,542	6,975	8,384	9,653
Number of students attending under compulsory regulations	1,219	1,334	1,324	1,372	1,636	1,585	324	269
Total expenditure by Government for financial year	£ 84,931	£ 100,199	£ 85,335	£ 132,245	£ 169,530	£ 244,627	£ 207,628	£ 177,501
Including—								
Capitation—								
(a.) Technical high schools ..	25,934	35,795	33,150	47,343	29,818	119,289	119,464	126,795
(b.) Other classes	38,922	44,021	33,119	47,858	31,918			
(c.) Salaries and allowances, &c.	..	..	..	..	20,589			
Grants for buildings and equipment	6,614	6,898	5,773	13,319	67,217	101,198	66,308	34,970
Subsidies on voluntary contributions	4,206	2,154	1,673	6,934	5,466	3,991	4,207	2,561
Conveyance of (a) Instructors	790	261	464	615	635	679	808	527
(b) Students ..	2,596	2,982	3,312	3,852	3,767	4,386	4,742	5,621

TABLE J2.—ASSETS AND LIABILITIES OF (a) THE TECHNICAL INSTRUCTION ACCOUNTS OF EDUCATION BOARDS AS CONTROLLING AUTHORITIES OF TECHNICAL SCHOOLS AND CLASSES, AND (b) TECHNICAL SCHOOL BOARDS AND MANAGERS, AS AT 31ST DECEMBER, 1923.

	Assets.			Liabilities.			Net Balances.	
	Cash Balances and Investments.	Amounts due to Board.	Total.	Cash Deficits.	Other Liabilities.	Total.	Cr.	Dr.
(a.) EDUCATION BOARDS.								
Auckland	£ ..	£ 4,002	£ 4,002	£ 4,936	£ 83	£ 5,019	£ ..	£ 1,017
Taranaki	1,516	..	1,516	..	1,516	1,516	..	..
Wanganui .. .. .	..	..	..	305	95	400	..	400
Hawke's Bay	323	99	422	..	74	74	348	..
Wellington (figures not available) .. .. .	..	..	..	..	..	..	..	..
Nelson	121	25	146	..	..	..	146	..
Canterbury	18	..	18	..	10	10	8	..
Otago .. .. .	..	..	..	..	..	..	..	..
Southland .. .. .	..	53	53	52	..	52	1	..
Totals (excluding Wellington)	1,978	4,179	6,157	5,293	1,778	7,071	503	1,417
(b.) TECHNICAL SCHOOL BOARDS AND MANAGERS.								
Auckland Technical School	2,399	1,520	3,919	..	653	653	3,266	..
"Elam" School of Art	147	123	270	..	120	120	150	..
Pukekohe Technical School	120	67	187	..	..	..	187	..
New Plymouth Technical School	302	440	742	..	207	207	535	..
Hawera Technical School	23	108	131	..	68	68	63	..
Stratford Technical School	221	175	396	..	6	6	390	..
Wanganui Technical School	691	617	1,308	..	432	432	876	..
Feilding Technical School	114	129	243	..	19	19	224	..
Napier Technical School	178	1,093	1,271	..	101	101	1,170	..
Waipawa Technical School	136	58	194	..	..	..	194	..
Wellington Technical School	3,283	1,752	5,035	..	3,330	3,330	1,705	..
Petone Technical School	116	4	120	..	57	57	63	..
Masterton Technical School	1,139	252	1,391	..	3	3	1,388	..
Nelson Technical School	148	308	456	..	43	43	413	..
Westport Technical School	175	229	404	..	21	21	383	..
Christchurch Technical School	3,940	2,308	6,248	..	541	541	5,707	..
Ashburton Technical School	1,155	463	1,618	..	411	411	1,207	..
Timaru Technical School	592	649	1,241	..	169	169	1,072	..
Greymouth Technical School	614	2	616	..	123	123	493	..
Kaiapoi Technical School	82	20	102	..	..	..	102	..
Temuka Technical School	122	132	254	..	119	119	135	..
Waimate Technical School	123	..	123	..	..	..	123	..
Pleasant Point Technical School	18	13	31	..	..	..	31	..
Fairlie Technical School	28	3	31	..	..	..	31	..
Akaroa Technical School (not available) .. .. .	..	..	..	..	..	..	..	..
Dunedin Technical School	2,599	3,875	6,474	..	5,313	5,313	1,161	..
Oamaru Technical School	52	..	52	..	23	23	29	..
Milton Technical School	57	..	57	..	..	..	57	..
Invercargill Technical School	1,281	2,731	4,012	..	2,394	2,394	1,618	..
Totals	19,855	17,071	36,926	..	14,153	14,153	22,773	..
Grand totals	21,833	21,250	43,083	5,293	15,931	21,224	23,276	1,417

TABLE J3.—RECEIPTS BY CONTROLLING AUTHORITIES OF TECHNICAL SCHOOLS AND CLASSES, AND BY MANAGERS OF TECHNICAL SCHOOLS AND CLASSES (INCLUDING TECHNICAL HIGH SCHOOLS), FOR THE YEAR ENDING 31ST DECEMBER, 1923.

	Receipts from Government.					Other Receipts.						Total Receipts.
	Salaries, Incidental Allowances, Capitation, &c.	Sites, Buildings (including Maintenance), Equipment, and Rent.	Material for Class Use.	Subsidies on Voluntary Contributions.	Total Receipts from Government.	Class Fees.	Voluntary Contributions.	For Services rendered to other Schools.	Miscellaneous.	Transfers from other Accounts.	Total of other Receipts.	
A. EDUCATION BOARDS, HIGH SCHOOL BOARDS, AND UNIVERSITY COLLEGES.	£	£	£	£	£	£	£	£	£	£	£	£
Auckland Education Board ..	1,601	3,940	53	760	6,354	406	1,253	39	599	..	2,297	8,651
Taranaki Education Board ..	675	727	43	..	1,445	..	20	..	1	..	21	1,466
Wanganui Education Board ..	95	539	..	..	634	..	..	..	..	230	230	864
Palmerston North High School Board	3,968	948	207	90	5,213	488	93	70	168	..	819	6,032
Hawke's Bay Education Board	3,826	1,067	31	20	4,944	189	20	..	87	..	296	5,240
Wellington Education Board ..	266	..	..	41	307	44	41	..	..	..	85	392
Nelson Education Board—												
Westport Technical School ..	313	218	62	..	593	..	..	..	5	..	5	598
Other technical classes ..	..	2	..	..	2	71	..	..	19	..	90	92
Canterbury Education Board—												
Greymouth Technical School	74	1,000	37	..	1,111	..	..	..	618	..	618	1,729
Other technical classes ..	30	16	..	..	46	42	14	..	6	..	62	108
Canterbury College (in respect of School of Art)	4,005	8	102	..	4,115	880	..	..	370	..	1,250	5,365
Gore High School Board ..	..	..	..	..	..	50	25	..	..	..	75	75
Totals	14,853	8,465	535	911	24,764	2,170	1,466	109	1,873	230	5,848	30,612
B. TECHNICAL SCHOOL BOARDS AND MANAGERS.												
Auckland Technical School ..	14,600	1,350	800	307	17,057	892	1,869	..	816	218	3,795	20,852
"Elam" School of Art ..	1,616	526	53	..	2,195	437	..	..	55	..	492	2,687
Pukekohe Technical School ..	3,874	137	..	..	4,011	48	..	..	108	..	156	4,167
New Plymouth Technical School	3,902	77	..	55	4,034	20	45	73	103	40	281	4,315
Hawera Technical School ..	2,927	373	..	33	3,333	61	34	56	262	170	583	3,916
Stratford Technical School ..	3,520	55	48	321	3,944	28	31	45	234	..	338	4,282
Wanganui Technical School ..	8,931	813	164	..	9,908	364	98	..	3,762	..	4,224	14,132
Feilding Technical School ..	3,054	9,262	40	414	12,770	85	40	20	51	..	196	12,966
Napier Technical School ..	5,662	49	208	119	6,038	222	13	..	355	..	590	6,628
Waipawa Technical School ..	74	..	..	..	74	10	..	..	..	..	10	84
Wellington Technical School ..	11,826	3,025	355	..	15,206	1,868	5,300	..	1,748	..	8,916	24,122
Petone Technical School ..	551	4	22	105	682	150	112	80	50	..	392	1,074
Masterton Technical School ..	2,152	110	53	285	2,600	143	485	..	223	..	851	3,451
Nelson Technical School ..	2,854	28	176	63	3,121	139	35	80	137	..	391	3,512
Westport Technical School ..	3,788	189	..	56	4,033	127	387	50	107	..	671	4,704
Christchurch Technical School	15,793	336	650	320	17,099	1,004	486	..	2,787	..	4,277	21,376
Ashburton Technical School ..	3,552	84	103	3	3,742	123	82	204	206	..	615	4,357
Timaru Technical School ..	2,214	133	60	80	2,487	198	90	..	142	..	430	2,917
Greymouth Technical School ..	3,259	1,359	49	..	4,667	98	488	62	289	..	937	5,604
Kaipoi Technical School ..	25	..	..	..	25	16	..	45	15	..	76	101
Temuka Technical School ..	83	..	..	14	97	41	21	23	74	..	159	256
Waimate Technical School ..	13	..	..	21	34	125	31	..	32	..	188	222
Pleasant Point Technical School	6	..	..	5	11	7	..	3	4	..	14	25
Fairlie Technical School ..	..	..	..	..	..	10	15	..	9	..	34	34
Akaroa Technical School ..	..	..	..	..	..	..	..	..	..	..	..	..
Dunedin Technical School ..	11,806	1,684	250	370	14,110	1,136	184	..	1,062	..	2,382	16,492
Oamaru Technical School ..	101	26	..	56	183	112	38	..	4	..	154	337
Milton Technical School ..	..	..	..	..	..	19	..	..	..	..	19	19
Invercargill Technical School..	8,301	539	177	111	9,128	243	174	..	1,007	..	1,424	10,552
Totals	114,484	20,159	3,208	2,738	140,589	7,726	10,058	741	13,642	428	32,595	173,184
Grand totals ..	129,337	28,624	3,743	3,649	165,353	9,896	11,524	850	15,515	658	38,443	203,796

TABLE J4.—PAYMENTS BY CONTROLLING AUTHORITIES OF TECHNICAL SCHOOLS AND CLASSES, AND BY MANAGERS OF TECHNICAL SCHOOLS AND CLASSES (INCLUDING TECHNICAL HIGH SCHOOLS), FOR THE YEAR ENDING 31ST DECEMBER, 1923.

Controlling Authorities.	Salaries of Directors and Teaching Staffs.	Working-expenses.								Sites, Buildings (including Maintenance), Equipment, and Rent.	Other Expenditure.	Transfers to other Accounts.	Total Expenditure.
		Salaries of Registrars and Clerical Staffs.	Office Expenses.	Material for Class Use.	Caretaker, Cleaning, &c.	Repairs.	Lighting and Heating.	Miscellaneous Working-expenses.	Total Working-expenses.				
A. EDUCATION BOARDS, HIGH SCHOOL BOARDS, AND UNIVERSITY COLLEGES.	£	£	£	£	£	£	£	£	£	£	£	£	£
Auckland Education Board ..	3,084	500	..	119	150	..	100	80	949	9,246	..	..	13,279
Taranaki Education Board ..	64	..	..	2	..	1	3	..	6	1	..	228	299
Wanganui Education Board ..	..	..	..	..	..	..	..	..	..	464	..	222	686
Palmerston North High School Board ..	3,388	140	23	465	108	74	236	174	1,220	1,003	10	..	5,621
Hawke's Bay Education Board..	3,177	220	48	96	146	128	45	105	788	880	21	..	4,866
Wellington Education Board ..	525	..	3	..	15	2	1	33	54	10	..	..	589
Nelson Education Board—													
Westport Technical School ..	..	..	20	11	1	..	5	16	53	282	..	50	385
Other technical classes ..	..	..	5	35	2	..	12	2	56	2	..	..	58
Canterbury Education Board—													
Greymouth Technical School ..	81	..	2	..	4	..	2	..	8	846	..	..	935
Other technical classes ..	67	..	8	1	..	..	2	14	25	10	..	..	102
Canterbury College (in respect of School of Art)	3,752	253	..	131	255	66	211	158	1,074	917	66	..	5,809
Gore High School Board ..	55	..	..	..	6	1	9	6	22	27	..	..	104
Totals ..	14,193	1,113	109	860	687	272	626	588	4,255	13,688	97	500	32,733
B. TECHNICAL SCHOOL BOARDS AND MANAGERS.													
Auckland Technical School ..	12,483	575	201	1,837	568	322	212	233	3,948	1,738	249	..	18,418
“Elam” School of Art ..	1,545	288	120	51	37	76	42	40	654	469	..	..	2,668
Pukekohe Technical School ..	2,976	72	72	74	125	96	31	151	621	559	79	..	4,235
New Plymouth Technical School..	3,356	65	41	224	..	25	24	79	458	171	27	..	4,012
Hawera Technical School ..	2,546	49	96	406	182	5	80	80	898	149	300	..	3,893
Stratford Technical School ..	2,910	11	107	155	216	82	37	20	628	498	25	..	4,061
Wanganui Technical School ..	7,442	176	147	1,019	261	305	68	258	2,234	1,113	3,460	..	14,249
Feilding Technical School ..	2,450	43	57	154	248	12	64	95	673	9,795	58	..	12,976
Napier Technical School ..	4,700	190	44	337	129	129	145	296	1,270	518	349	..	6,837
Waipawa Technical School ..	97	11	2	..	..	..	5	2	20	..	..	..	117
Wellington Technical School ..	10,714	583	263	881	520	234	156	167	2,804	10,872	901	..	25,291
Potone Technical School ..	738	..	6	48	99	8	55	13	229	..	11	..	978
Masterton Technical School ..	2,001	40	47	123	91	147	93	106	647	275	3	..	2,926
Nelson Technical School ..	2,469	200	49	202	104	25	89	139	898	36	..	..	3,403
Westport Technical School ..	3,363	27	60	148	140	62	64	132	633	518	15	..	4,529
Christchurch Technical School ..	12,838	757	205	1,454	885	586	384	425	4,696	825	2,151	..	20,510
Ashburton Technical School ..	3,047	67	73	278	235	125	53	90	921	208	42	..	4,218
Timaru Technical School ..	2,201	90	43	258	100	272	83	43	889	659	15	..	3,764
Greymouth Technical School ..	2,694	72	73	103	116	1	31	99	494	1,507	295	..	4,990
Kaipoi Technical School ..	66	..	6	5	13	4	6	5	39	..	..	..	105
Temuka Technical School ..	136	..	16	23	31	35	21	53	179	4	2	..	321
Waimate Technical School ..	112	..	2	37	9	..	13	18	79	..	..	53	244
Pleasant Point Technical School	20	..	1	..	10	3	..	2	16	..	..	..	36
Fairlie Technical School ..	24	..	6	..	10	..	5	17	38	15	..	..	77
Akaroa Technical School ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dunedin Technical School ..	9,746	581	107	914	486	226	202	406	2,922	2,842	414	..	15,924
Oamaru Technical School ..	175	75	3	18	12	4	8	9	129	20	..	..	324
Milton Technical School ..	10	2	3	..	2	..	1	1	9	..	..	..	19
Invercargill Technical School ..	6,496	396	179	487	305	33	112	132	1,644	1,133	811	..	10,084
Totals ...	97,355	4,370	2,028	9,326	4,934	2,817	2,084	3,111	28,670	33,924	9,207	53	169,209
Grand totals ..	111,548	5,483	2,137	10,186	5,621	3,089	2,710	3,699	32,925	47,612	9,304	553	201,942

TABLE J5.—NUMBER OF PUPILS ATTENDING CLASSES OTHER THAN CLASSES AT TECHNICAL HIGH SCHOOLS DURING THE YEAR ENDED 31ST DECEMBER, 1923.

Controlling Authorities, Technical School Boards, and Managers.	Number of Students.				
	Free Pupils.	Discharged Soldiers.	Compulsory Pupils.	Other Pupils.	Totals.
Auckland Education Board—					
Auckland Technical School*	457	7	..	464	928
"Elam" School of Art* .. .. .	..	..	..	349	349
Other classes, Auckland District.. ..	368	3	31	543	945
Auckland University College Council—					
School of Engineering .. .. .	..	..	..	97	97
Taranaki Education Board—					
New Plymouth Technical School*	191	..	103	40	334
Stratford Technical School*	1	..	..	13	14
Wanganui Education Board—					
Wanganui Technical School*	56	6	48	211	321
Feilding Technical School*	53	..	..	49	102
Palmerston North High School Board—					
Palmerston North Technical School	404	2	..	336	742
Hawke's Bay Education Board—					
Napier Technical School*	84	7	..	156	247
Waipawa Technical School* .. .. .	..	9	..	8	17
Other classes, Hawke's Bay District	86	1	..	78	165
Wellington Education Board—					
Wellington Technical School*	447	..	..	874	1,321
Petone Technical School*	61	..	..	115	176
Other classes, Wellington District	54	..	..	71	125
Managers, Masterton Technical School—					
Masterton Technical School†	209	12	..	184	405
Nelson Education Board—					
Nelson Technical School*	180	..	..	251	431
Westport Technical School*	70	1	..	122	193
Other classes, Nelson District .. .. .	..	..	..	122	122
Canterbury College Board of Governors—					
School of Art	178	6	70	400	654
School of Engineering .. .. .	..	..	..	260	260
School of Commerce .. .. .	..	..	..	78	78
Canterbury Education Board—					
Christchurch Technical School*	649	75	..	1,027	1,751
Ashburton Technical School and subcentres*	244	..	17	66	327
Greymouth Technical School*	7	..	..	59	66
Timaru Technical School*	206	..	..	203	409
Kaiapoi Technical School* .. .. .	..	..	..	43	43
Pleasant Point technical classes* .. .. .	..	..	..	8	8
Temuka technical classes* .. .. .	..	..	..	91	91
Waimate technical classes* .. .. .	..	..	..	106	106
Other classes, Canterbury District .. ..	..	..	..	123	123
Otago University College Council—					
Home-science classes .. .. .	..	..	..	64	64
Commerce classes .. .. .	..	..	..	115	115
Otago Education Board—					
Dunedin Technical School*	503	..	..	497	1,000
Dunedin School of Art* .. .. .	..	..	..	170	170
Oamaru Technical School*	26	..	..	76	102
Milton technical classes* .. .. .	..	..	..	27	27
Southland Education Board—					
Invercargill Technical School*	307	21	..	237	565
Gore High School Board—					
Gore Technical School	17	..	..	53	70
Totals for 1923	4,858	150	269	7,786	13,063
Totals for 1922	4,405	366	324	7,167	12,262

* Schools or classes under the immediate control of managers.

† The Board of Managers is the controlling authority.

TABLE J6.—NUMBER OF STUDENTS, ACCORDING TO AGES, ADMITTED TO CLASSES OTHER THAN CLASSES AT TECHNICAL HIGH SCHOOLS DURING THE YEAR ENDED 31ST DECEMBER, 1923.

Education District.	Under 13 Years.		13-15 Years.		15-17 Years.		Over 17 Years.		Totals.		Students admitted during 1923 who left a Public School during 1922 (Included in Foregoing Totals).	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Auckland ..	38	25	253	236	457	329	613	368	1,361	958	256	168
Taranaki ..	..	3	45	60	59	53	76	52	180	168	43	41
Wanganui ..	..	..	83	112	154	163	270	383	507	658	134	111
Hawke's Bay ..	..	..	28	11	100	36	125	129	253	176	38	9
Wellington ..	9	8	128	80	443	192	714	453	1,294	733	100	82
Nelson ..	18	28	63	70	107	117	145	198	333	413	56	49
Canterbury ..	104	112	348	320	552	353	1,196	931	2,200	1,716	296	283
Otago ..	16	12	264	112	258	130	382	304	920	558	86	39
Southland ..	..	1	37	49	87	113	185	163	309	326	39	42
Totals, 1923 ..	185	189	1,249	1,050	2,217	1,486	3,706	2,981	7,357	5,706	1,048	824
Totals, 1922 ..	214	205	1,039	869	2,269	1,586	3,537	2,543	7,059	5,203	1,016	720

TABLE J7.—OCCUPATIONS OF STUDENTS IN ATTENDANCE AT TECHNICAL CLASSES OTHER THAN CLASSES AT TECHNICAL HIGH SCHOOLS DURING THE YEAR ENDED 31ST DECEMBER, 1923.

Occupations.	Auckland.	Taranaki.	Wanganui.	Hawke's Bay.	Wellington.	Nelson.	Canterbury.	Otago.	Southland.	Totals.
Agricultural pursuits ..	24	..	21	6	22	29	153	9	6	270
Professional pursuits ..	274	49	52	60	152	41	197	92	85	1,002
Clerical pursuits ..	204	12	140	99	584	49	439	346	99	1,972
Domestic pursuits ..	316	5	341	48	350	289	521	166	157	2,193
Students ..	508	223	218	7	142	122	1,310	168	56	2,754
Employees in shops or warehouses ..	135	..	99	41	130	60	211	123	59	858
Dressmakers, milliners, &c. ..	19	1	14	2	18	6	45	16	14	135
Tailors and tailoresses ..	10	..	1	2	22	2	33	13	..	83
Engineers and mechanics ..	170	..	78	34	117	31	193	96	35	754
Electricians ..	104	..	16	11	102	6	136	23	22	420
Plumbers, metal-workers, &c. ..	168	28	33	30	125	19	126	80	25	634
Woodworkers ..	116	29	29	7	91	18	154	65	10	519
Painters and plasterers ..	12	..	5	5	11	4	24	7	1	69
Printers, &c. ..	7	1	1	..	26	7	25	12	4	83
Skilled labourers ..	19	..	2	3	6	..	5	26	12	73
Labourers ..	19	..	2	3	12	11	26	8	2	83
Seamen ..	..	..	..	..	..	..	..	..	..	..
Engaged in various other trades and industries ..	59	..	29	33	48	28	108	59	19	383
Engaged in various public services ..	46	..	16	21	41	18	59	15	13	229
Occupations not stated ..	109	..	68	17	28	6	151	154	16	549
Totals for 1923 ..	2,319	348	1,165	429	2,027	746	3,916	1,478	635	13,063
Totals for 1922 ..	2,073	288	1,148	451	1,863	635	3,662	1,559	583	12,262

TABLE J8.—NUMBER OF PUPILS HOLDING GOVERNMENT FREE PLACES AT TECHNICAL CLASSES OTHER THAN CLASSES AT TECHNICAL HIGH SCHOOLS DURING THE YEAR ENDED 31ST DECEMBER, 1923.

Education District.	Jr. 1st.		Jr. 2nd and 3rd.		Sr. 1st.		Sr. 2nd.		Sr. 3rd and 4th.		Totals.		Grand Totals.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M. & F.
Auckland ..	245	142	128	65	81	35	55	37	24	13	533	202	825
Taranaki ..	43	41	23	24	20	19	7	7	6	2	99	93	192
Wanganui ..	114	120	64	67	26	63	16	19	4	20	224	289	513
Hawke's Bay ..	42	9	40	13	10	14	16	15	2	9	110	60	170
Wellington ..	138	91	104	56	110	61	86	35	68	22	506	265	771
Nelson ..	47	41	36	25	33	23	9	16	7	13	132	118	250
Canterbury ..	266	175	194	117	129	107	104	67	46	79	739	545	1,284
Otago ..	104	39	113	29	85	26	63	31	27	12	392	137	529
Southland ..	48	54	32	30	23	51	17	23	26	20	146	178	324
Totals, 1923 ..	1,047	712	734	426	517	399	373	250	210	190	2,881	1,977	4,858
Totals, 1922 ..	1,009	673	615	439	454	317	287	267	172	172	2,537	1,868	4,405

TABLE J9.—TECHNICAL HIGH SCHOOLS : COURSES TAKEN BY STUDENTS DURING THE YEAR 1923.

School.		Courses of Instruction, and Number and Sex of Students.												Grand Totals.
		Industrial.		Agricultural.		Domestic.		Commercial and General.		Art.		Totals.		
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M. & F.
Auckland	.. ..	370	17	46	.. ..	97	47	171	.. ..	463	285	748		
Pukekohe	.. ..	..	..	13	.. ..	13	90	115	.. ..	103	128	231		
Hawera	.. ..	23	..	5	.. ..	14	73	111	.. ..	101	125	226		
Stratford	.. ..	..	..	56	.. ..	24	70	89	.. ..	126	113	239		
Wanganui	.. ..	61	..	37	.. ..	43	195	85	.. 3	288	131	419		
Feilding	.. ..	..	..	34	.. ..	38	57	30	.. ..	91	68	159		
Napier	.. ..	99	..	28	.. ..	40	42	47	.. ..	169	87	256		
Hastings	.. ..	..	..	12	.. ..	8	92	82	.. ..	104	90	194		
Wellington	.. ..	252	1	..	.. ..	83	71	174	12 14	335	272	607		
Westport	.. ..	36	..	..	.. ..	..	65	77	.. ..	101	77	178		
Christchurch	.. ..	327	..	43	.. ..	145	80	167	.. ..	450	312	762		
Greymouth	.. ..	18	..	..	.. ..	..	85	99	.. ..	103	99	202		
Dunedin	.. ..	155	..	11	.. ..	78	69	127	1 6	236	211	447		
Invercargill	.. ..	128	14	16	.. ..	80	51	97	.. ..	195	191	386		
Totals, 1923	..	1,469	32	296	.. ..	663	1,087	1,471	13 23	2,865	2,189	5,054		
Totals, 1922	..	1,234	..	265	23 ..	611	831	1,223	4 11	2,334	1,868	4,202		

TABLE J10.—NUMBER OF PUPILS HOLDING GOVERNMENT FREE PLACES AT TECHNICAL HIGH SCHOOLS DURING THE YEAR ENDED 31ST DECEMBER, 1923.

School.			Juniors.				Seniors.						Totals.		Grand Totals.
			First Year.		Second Year.		First Year.		Second Year.		Third Year.				
			B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B. & G.
Auckland	..	..	283	169	133	82	28	21	6	5	..	..	450	277	727
Pukekohe	..	..	54	58	28	42	15	20	3	4	1	..	101	124	225
Hawera	..	..	43	57	36	35	7	12	4	7	4	2	94	113	207
Stratford	..	..	67	56	39	33	9	15	4	2	2	2	121	108	229
Wanganui	..	..	125	71	81	20	38	20	18	3	11	3	273	117	390
Feilding	..	..	36	38	38	15	8	7	4	5	..	..	86	65	151
Napier	..	..	62	37	54	27	27	8	7	7	4	2	154	81	235
Hastings	..	..	49	38	28	29	16	15	3	3	..	..	96	85	181
Wellington	..	..	202	143	75	88	26	16	8	7	2	..	313	254	567
Westport	..	..	49	40	22	18	15	7	9	6	2	3	97	74	171
Christchurch	..	..	240	161	124	85	41	33	16	15	5	8	426	302	728
Greymouth	..	..	58	63	32	26	11	6	1	1	..	..	102	96	198
Dunedin	..	..	136	91	69	53	15	32	2	11	..	..	222	187	409
Invercargill	..	..	108	95	55	60	19	27	5	3	3	2	190	187	377
Totals, 1923	..		1,512	1,117	814	613	275	239	90	79	34	22	2,725	2,070	4,795
Totals, 1922	..		1,213	929	668	532	227	193	92	94	18	13	2,218	1,761	3,979

TABLE J11.—NUMBER OF CANDIDATES WHO ENTERED FOR AND WHO PASSED THE TECHNOLOGICAL EXAMINATIONS OF THE CITY AND GUILDS OF LONDON INSTITUTE, 1923.

Subjects of Examination.	Number of Entries.	Number of Passes.	Subjects of Examination.	Number of Entries.	Number of Passes.
Electrical engineering—			Motor-car engineering—		
Grade I	113	56	Grade I	8	4
Grade II (continuous current) ..	53	20	Grade II	2	1
Grade II (alternate current) ..	34	13	Final	1	0
Final	4	2	Carpentry and joinery—		
Electrical installation work—			Grade I	18	10
Grade I	19	7	Grade II	2	1
Final	3	2	Final	1	1
Minor course in plumbing—			Cabinetmaking—		
Grade I	1	1	Grade I	2	2
Grade II	1	0	Final	4	2
Final	1	1	Manual training, woodwork—Final	4	4
Major course in plumbers' work—Grade I	1	1	Millinery	9	4
Mechanical engineering—			Dressmaking	12	7
Division I, Grade I	31	13	Plain needlework	1	1
Division I, Grade II	3	2	Plain cookery	17	12
Division I, Final	1	1			
Division II, Grade I	46	18	Totals, 1923	401	189
Division II, Grade II	9	3	Totals, 1922	377	197

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