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EDUCATION: TECHNICAL EDUCATION.

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

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

GENERAL.

Number of Schools.

THE number of technical high schools open during 1922 was thirteen, in addition to which there were ten organized technical or art schools offering day courses. Technical classes were also conducted in forty-three manual-training or other centres, the total number of centres being sixty-six, a decrease of twenty-eight on the number for the previous year. This was due to the restrictions imposed by the Department in the case of classes where the numbers were insufficient to warrant their establishment.

Attendance.

The total number of students receiving instruction in all technical classes was 16,464, as compared with 20,181 in 1921. The attendance at technical high schools increased from 3,349 in 1921 to 4,202 in 1922, an increase of 853.

Of the total number of 16,464 students, 3,979 held free places at technical high schools, 4,405 at other technical classes, 324 were attending continuation and technical classes held under the regulations for compulsory classes, and 366 were attending under the regulations relating to the free instruction of discharged soldiers.

The decrease in numbers of those attending technical classes is due to several causes, of which the principal are the reduction in the number of centres owing to non-recognition of classes which did not enrol sufficient students to warrant their establishment in a time of financial stress, and the suspension of the operation of regulations requiring compulsory attendance at evening technical classes in certain centres. The restrictions due to the necessity for severe economy have been relaxed since the end of the year, but it is not intended at present to make provision for compulsory attendance at evening classes, as the weight of well-informed opinion appears to be against its reintroduction.

The decrease in the number of pupils attending under the compulsory regulations was about 1,250; and there was also a decrease of over 300 discharged soldiers attending without payment of fees under arrangements made with the Repatriation Department. Nearly all the remaining 350 discharged soldiers would finish their courses at the end of the year. A large drop of 3,600 in the number of paying students was partly due to restriction of classes, and partly to other causes, among them probably the general financial depression. These losses were partially balanced by an increase of nearly 600 in the number of holders of free places in technical classes other than classes at technical high schools. This increase consisted largely of day pupils in the smaller technical schools.

In the case of technical high schools the increase of 853 was somewhat more than 25 per cent. of the total numbers for the previous year. So far as actual student-hours are concerned, this increase rather more than balances the decrease in student-hours due to fall in attendance at other technical classes, since each full-time day pupil attends on the average not less than eight times as many student-hours as an evening pupil.

With the increasingly large attendance of pupils at high schools, the more elementary evening classes must diminish, though advanced classes, held mainly in the larger centres, will not be affected. On the whole, the larger centres maintained in their evening classes numbers at least equal to those for the previous year, while the day classes largely increased.

It is noteworthy that though the number of fee-paying pupils fell from 10,738 in 1921 to 7,167 in 1922, and though the fees charged in 1922 were on at least as low a scale as in 1921, the total fees collected rose from £8,440 in 1921 to £8,504 in 1922, showing that on the average the number of classes taken per student had increased.

Staffing.

There were at the end of 1922 209 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:—

		CAI		Divi	sion I.	Divis	sion II.	Totals.	
		Class.		Men.	Women.	Men.	Women.	Totals.	
VI				3	4	. 3	6	16	
V				11	4.	9	13	37	
IV				13	4	15	13	45	
Ш				17	8	10	24	59	
Π		• •		13	6	14	5	38	
I	• •			6	1	2	5	14	
	Tot	tals for 19	22	63	27	53	66	209	
	Tot	als for 19	21	53	27	47	65	192	

The courses of instruction offered to students in all the larger centres were much the same in scope and character as in previous years. In the smaller centres some classes with very small numbers in attendance, which had previously been recognized, were discontinued. Where, however, a subject was an essential part of the training of a tradesman or other worker who could not obtain this part of his training elsewhere in the town, recognition of a class was not refused even if only four or five students enrolled.

In the technical high schools recently established in country towns the general course forms a large part of the work of the school. These schools therefore differ somewhat in character from the typical technical high school of the larger towns, in which, generally, the industrial and commercial courses attract the largest numbers.

The tendency existing in every school, in which there is a general course, to concentrate largely on the preparation of pupils for public examinations interferes considerably with the proper development of a school of the composite type, in which all courses should be conducted on sound lines and the gaining of distinctions in external examinations subordinated to the true educational needs of the individual pupil, whatever his ability and predilections may be.

It does not appear from the trend of recent events that part-time day continuation classes are gaining in favour with associations of employers, though it is clear that they would be welcomed by the journeymen.

CLASSES OTHER THAN CLASSES AT TECHNICAL HIGH SCHOOLS.

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

	1921.	1922.
Classes conducted by Education or High School Boards	5,567	1,807
Classes conducted by Technical School Boards or by Managers	10,081	9,195
Classes conducted by University colleges	1,184	1,260
Totals	16,832	12,262

It is clear from the table that classes conducted by the Education Boards have suffered the greater losses as compared with the previous year; this is probably due to the restrictions imposed on the holding of small classes and to the exclusion of certain manual-training classes from private schools.

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.	
			1921.	1922.	1921.	1922.	1921.	1922.
Males Females	••	 	4,998 4,207	$3,522 \\ 2,660$	4,102 3,525	3,537 2,543	8,934 7,898	7,059 5,203
Tot	tals	 	9,205	6,182	7,627	6,080	16,832	12,262

SUMMARY OF OCCUPATION OF STUDENTS.

				Number of Students.	Percentage of Total.
Clerical pursuits			 	 1,957	15.96
Professional pursuits			 	 872	$7 \cdot 11$
Students			 	 1,960	15.98
Domestic pursuits			 	 2,022	16.49
Agricultural pursuits			 	 215	1.75
Various trades and ind			 	 4,730	38.58
Other occupations not	stated		 	 506	$4 \cdot 13$
Totals		٠.	 	 $\overline{12,\overline{262}}$	100.00

"College" classes were conducted in connection with the Auckland University School of Engineering and School of Commerce, 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 £2,857.

The School of Domestic Science in Otago University was attended by sixty-three students taking either the course for the degree or that for the diploma. Ten Government bursaries were awarded in 1922, making a total of thirty-six tenable during the year. Six degree and three diploma students completed their course. 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.

			1921.		1922.				
Programmer and the second seco		Males.	Females.	Totals.	Males.	Females.	Totals.		
Junior free pupils First year Second year First year Second year Second year Third year	••	773 497 429 302 126	572 342 360 256 178	1,345 839 789 558 304	1,009 615 454 287 172	673 439 317 267 172	1,682 1,054 771 554 344		
Totals	••	2,127	1,708	3,835	2,537	1,868	4,405		

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.	
			19 2 1.	1922.
Christehurch Technical School		 	 1,633	1,670
Wellington Technical School		 	 1,205	1,175
Dunedin Technical School		 	1,138	1,117
Palmerston North Technical Sch	ool	 	 760	810
Auckland Technical School		 	 854	772
Invercargill Technical School		 	 	583
Christchurch School of Art		 	 	513

Technological examinations were conducted by the Department on behalf of the City and Guilds of London Institute at fifteen centres in the Dominion. The total number of entries was 377, an increase of 15 over the number for the previous year, and the number of passes was 197, or 52·3 per cent.

TECHNICAL HIGH SCHOOLS.

The number of students in attendance at technical high schools in 1921 and 1922 was as follows:—

as as ionows :-						Number o	of Students.
Technical High S	cho	ols—				1921.	1922.
Christchurch	ì					 549	651
Auckland						 493	599
Wellington						 317	465
Dunedin						 421	454
\mathbf{W} anganui						 354	$\boldsymbol{422}$
Invercargill						 335	394
Napier						 259	279
Hawera						 164	187
${f Stratford}$						 165	175
$\mathbf{Pukekohe}$						 126	175
${ m Hastings}$			• •			 101	143
We stport		• •				 23	133
${f Feilding}$	• •	••	• •	• •		 42	125
		Totals	••		••	 $\overline{3,349}$	${4,202}$

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

	a				:	Increase over		
Course.				Boys.	Girls.	Total.	1921.	
Industrial				1	1,234		1,234	283
Commercial a	and general				831	1,223	2,054	3 08
Domestic	•••					611	611	226
Agriculture					265	23	2 88	25
Art	• •	• •	• •		4	11	15	11
	Totals		• •	•••	2,334	1,868	4,202	853

Number of Pupils receiving Free Education at Technical High Schools under Regulations for Free Places.

			1921.			1922.			
40-40-40		Boys.	Girls.	Totals.	Boys.	Girls.	Totals.		
Junior free pupils ${ { m First year} \atop { m Second year} \atop { m Senior free pupils} } { { m First year} \atop { m Second year} \atop { m Third year} }$	••	945 500 174 49 9	758 444 203 51	1,703 944 377 100 16	1,213 668 227 92 18	929 532 193 94 13	2,142 1,200 420 186 31		
Totals	• •	1,677	1,463	3,140	2,218	1,761	3,979		

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 £115,118, made up as follows:—

							£
Salaries of full-time tead	chers and	Directors		• •			77,122
Capitation for part-time	e teachers						15,434
Capitation for student t	eachers						2,204
Overtime payments							1,540
Incidental allowances							24,465
College-classes capitatio	n		• •	• •			2,857
							$\overline{123.622}$
Less recoveries	from tui	tion fees				• •	8,504
773 1							
Totals	• •	• •	• •	• •	• •	• •	£115,118

The following is a summary of the total expenditure by the Department on technical instruction during the financial year ending 31st March, 1923:—

J		0		,	£
Capitation and salaries					119,464
Subsidies on voluntary contributions					4,207
Scholarships and bursaries					2,979
Grants in aid of material for class use					4,529
Grants for buildings and equipment					66,308
Grants for rents of buildings					1,237
Conveyance of—				£	
Instructors				808	1
Free pupils				4,742	
					5,550
Examinations					269
Maintenance, technical-school buildings					588
Inspectors' salaries and travelling-expenses	• •			• •	2,652
					207,783
Less recoveries					155
Total					£207,628
100 C/ U/V/A	٠.	••	• •	• •	

2. REPORT OF THE SUPERINTENDENT OF TECHNICAL EDUCATION.

Sir,—
I have the honour to present a report on technical education in the Dominion for the year 1922.

The year was chiefly marked by a considerable increase in the numbers attending technical high schools, and a large decrease in the numbers of those regarded as attending technical classes, day and evening. This apparent decrease is largely due to the transfer of some two thousand pupils from technical to manual-training account, being young children from private schools admitted to classes in cookery and woodwork, &c., at technical schools and manual-training centres. A decrease of about nine hundred is due to the suspension of the regulations for the compulsory attendance of pupils at evening classes, about three hundred to the reduction in the numbers of returned soldiers taking classes, and probably the remaining fourteen hundred is due largely to the restrictions placed by the Department, for reasons of economy, on the establishment of classes for adults in such subjects as dressmaking and woodwork; though it is to be noted that a large increase in technical-high-school enrolment is often associated, as Mr. Marshall, Director of the Dunedin Technical School, has pointed out, with a corresponding decrease in evening-class numbers. It is also to be noted that the larger technical schools have maintained their numbers, except in one or two cases where reliance on compulsion left the school "in the air" when compulsion was removed.

I have to report that, in the main, the present arrangements for classifying teachers, for paying salaries, and for providing incidental expenses are satisfactory to all concerned, although some small amendments might be made with advantage when opportunity serves.

The rate of growth in the cost of technical education has been almost exactly the same as that in the total cost of education in the Dominion; and, as salaries and other expenses are on about the same relative scale as for other branches, it would appear that the natural increase of work is about the same also.

The expenditure on account of buildings has been exceptionally large during the past two or three years, on account of the necessity for erecting new technical high schools in several of the smaller towns, as well as providing a new school in Wellington, and considerable additions in Christchurch and Dunedin, besides new workshops in Auckland. Further demands will be made for additions at an early date to these new schools, which have filled up much more quickly than was anticipated, while all the larger schools are rapidly becoming overcrowded in spite of recent additions.

The following notes on the work of the year in the various technical schools are based largely on the reports of the Boards and Directors:—

AUCKLAND DISTRICT.

Capitation was paid to the Auckland University Council in respect of courses in engineering subjects, in which ninety-six students were enrolled. The students in engineering make considerable use of laboratory machines and apparatus which were obtained to enable students in the School of Architecture to take practical courses in strength of materials, hydraulics, and kindred subjects necessary to their professional training. Many of the engineering students study with the object of taking the professional examinations of the respective Institutes of Civil, Mechanical, and Electrical Engineering, and it will doubtless be necessary before long to allow these students to take at least part of their professional training for the University degrees in engineering in Auckland, in spite of the fact that one School of Engineering of University rank is already established in Christchurch and is capable of accommodating all the students likely to be offering in the Dominion for some years.

Capitation was also paid in respect of classes in commercial subjects, in which the number of students was 100. There appears to be no good reason why, in connection with these courses, and also with the course in architecture, the University College should not avail itself of the facilities offering at the Technical School and at the School of Art for training in practical subjects. In the case of architecture especially it would be to the advantage of the students to attend the Art School classes in life drawing and painting, in modelling, and probably also in crafts. In these classes the students would have the advantage of being trained by specialists, and also of meeting other students with whom as craftsmen they must later collaborate if the whole available knowledge and skill in the city are to be fully utilized in the design and construction of its buildings.

Through the resignation of Mr. George George, who had been in charge of the Auckland Technical School for nearly twenty years, and the appointment of Mr. G. J. Park, Director of Wanganui Technical School, in his place, considerable changes in the organization and curricula of the Technical High School were introduced at the end of the year, and the school is now offering six day courses on much the same lines as other technical high schools. Mr. R. McLaren, Chief Assistant in English, was appointed Acting-Director during the period of some months which elapsed before Mr. Park was free to take over the school. Mr. McLaren performed the heavy task allotted to him with skill and ability.

During the year a complete range of new workshops, occupying three floors of a new building, and including some 16,000 square feet of useful floor-space, were erected, at a cost of £25,000, entirely provided by Government grants. The new workshops have a uniform width of 30 ft., and are well ventilated and lighted by large windows on both sides, the building being designed on the "daylight factory" principle. Provision is made for the addition of a fourth story at any future time.

7 E.—5.

The school was fortunate during the year in receiving bequests totalling some £5,500 under the wills of the late Richard J. Binns and Richard Hindley. It is probable that a considerable portion of these bequests will be allocated to the building of an assembly-hall, the absence of which is at present a distinct drawback to the work of the Technical High School. Of the Hindley bequest, however, £1,000 is specially appropriated to the provision of bursaries for poor students.

In spite of the difficulties under which the school laboured, your Inspectors were satisfied that the staff did excellent work, and have no doubt that the improvement noted during the year is an

augury of still greater success in the future.

The courses at the Elam School of Art were largely remodelled during the year at the instance of the Department, with a view to providing a satisfactory training for students entering with the intention of taking a full course covering all branches of a general training in art, besides specializing in one or more crafts. This alteration had become necessary partly because the school now opens its doors to junior and senior free-place pupils as well as continuing to accommodate Elam free students. The necessary reorganization is by no means complete, but there is sufficient evidence already that the changes made will benefit the school as well as the pupils. The staff was strengthened during the year by the appointment in London of a recent diplomé of the Royal College of Art, Mr. W. N. Isaac, who received his early training in New Zealand, and attended the Royal College of Art as a New Zealand Expeditionary Force Scholarship holder. It is hoped before long to establish such courses and examinations in New Zealand art schools as will enable young artists to receive special and appropriate training as art teachers without having to go abroad for their certificates, though it will always be a great advantage to the young artist to study in Britain and on the Continent.

The Pukekohe Technical High School showed considerable increase in numbers over those for the previous year. The majority of the pupils took the general or commercial course, but some were preparing for agriculture. The school was handicapped as regards industrial and agricultural courses by lack of workshop accommodation. Provision was made by way of grant—money being advanced locally for Government debentures—for increasing the accommodation, and three wooden class-rooms were available at the beginning of the year. Grants were made towards the end of the year for workshops and a cookery-room on the technical-school site, to replace the former manual-training centre on the primary-school site, and also to provide accommodation for technical classes. The work of the school and the staffing arrangements were found satisfactory by your Inspectors, with the exception that, owing to lack of workshops, the more practical courses were not in evidence.

with the exception that, owing to lack of workshops, the more practical courses were not in evidence. The Hamilton Technical School has developed considerably during the last three years. In 1920 there were twenty-five day pupils, in 1921 sixty-five, and in 1922 the school opened with 118 day pupils. There were also 160 evening-class pupils and over 800 primary pupils attending for manual training. The increase in attendance compelled the Board to arrange for new workshops. £3,000 worth of Government debentures were taken up locally, and a grant of this sum made to build and equip new workshops, the old workshops being converted into class-rooms. Several courses are offered in the day school, and evidently meet local needs, judging by the steady growth in numbers. The question must soon be faced at Hamilton either of establishing a technical high school or of reorganizing the provision for post-primary education by combining the functions of the high school and the technical school under one governing body and providing a number of courses of equal standing in the combined institution.

The same question awaits settlement in several of the larger towns outside the four main centres – for example, New Plymouth and Napier. The solution of the problem is not made any more simple by the fact that the technical high school is naturally a co-educational school, whereas there is in most

centres a tendency for the secondary schools to separate the sexes.

There was a large falling-off in the number of technical classes in small centres, the total number of pupils being 707, as compared with 2,387 in the previous year. Of the fall, about 1,200 was purely nominal, due to the transfer of manual classes attending from private schools. A real drop of about 500 was due mainly to the provisions for compulsory attendance having been placed in abeyance by the Government, partly as a measure of economy, and partly because of a general opinion that compulsory classes were of little real value.

The Auckland Board protested against the abolition of compulsory attendance at evening classes, as also did the Ashburton Technical School Board. Other Boards, however, were equally strongly opposed to compulsory attendance at evening classes, and when the question was discussed at the conference of Boards and Directors the action of the Department was approved by a four-fifths majority of the delegates.

TARANAKI DISTRICT.

Technical classes in this district were confined to the three centres—New Plymouth, where the day classes enrolled about 200 pupils; Stratford, where a technical high school completed its first year of establishment in new buildings with a roll of 187; and Hawera, where the new buildings were occupied during the whole year, the total numbers attending being 227. It is clear from the numbers attending and the fact that these numbers must increase largely in the next year or two that these schools are justifying their establishment. In the case of Stratford and Hawera the accommodation has been planned on modern lines, and can be extended in accordance with the original plans to meet future requirements.

A Technical School Board was established during the year in connection with each of the three schools, and it is expected that a considerable increase of local interest will result from placing the control of each school in the hands of a local Board.

Evening classes throughout the district were affected by the restrictions imposed through the necessity for economy, as also by the discontinuance of compulsory attendance at evening classes.

The large drop in numbers due to this latter cause is a clear indication that compulsory attendance was mostly unpopular, and that the pupils did not recognize the benefits to be obtained by continuing to attend. Considerable assistance was given locally to the schools, particularly by the business men in Stratford for the improvement of the grounds of the Technical High School. A sum of over £800 was raised for this purpose, and a subsidy of £1 for £1 was granted by the Government, payment being spread over a period of three years.

WANGANUI DISTRICT.

In this district also two of the three larger technical schools were for the first time directly under the management of Technical School Boards. About 422 pupils were in attendance at the Wanganui Technical High School, an increase of seventy on the previous year's numbers, the majority taking a commercial and general course, work being done up to the standard of the higher leaving-certificate.

In the evening classes there was a considerable falling-off in numbers, due partly to the discontinuance of compulsory attendance. The general quality of the work done was, however, considerably improved. The school was conducted with skill and energy, first by Mr. G. J. Park, and, on his transfer to Auckland, by Mr. I. E. Newton; Mr. E. H. Clark, for some years supervisor of evening classes, acting as Director and hostel-master during the period which elapsed between Mr. Park's departure and Mr. Newton's arrival. Mr. Clark performed the duties of Acting-Director very efficiently.

The Feilding Technical High School completed its first year, and in the opinion of your Inspectors the foundations have been laid on which a technical high school of more than local usefulness in agricultural and kindred subjects may be built in the near future. The staff, which is very strong on the side of agricultural science and practice; the hostel for boys now in course of erection at a cost of some £15,000, together with a useful site of 20 acres of level ground provided by local effort; and the continued monetary support of the borough and surrounding counties, should enable the Board to develop a vigorous school with a decided bias towards agricultural science. Considerable sums were raised locally for the purpose of improving the grounds and providing playing-fields, &c.

The Palmerston North Technical School continued during the year the steady development of previous years, and was one of the few schools which experienced an increase in numbers attending evening classes. The accommodation was increased during the year by the addition of an engineering class-room, rendered necessary by the growth of the day classes in the engineering course from twenty-two in 1921 to fifty-four in 1922. A considerable portion of the cost was provided locally. The day engineering classes were conducted in the businesslike way which has always characterized the management of the school: for example, a substantial part of the fittings and apparatus for the science-room was made in the workshops, as exercises, by the boys. The dressmaking classes are worthy of special mention, not only for their enrolment of some three hundred students, but for the quality of the work done. Contributions came in freely from local bodies both public and private, besides which over £130 was raised by means of a bazaar in aid of the school funds. The results obtained in outside examinations confirm the impression formed by your Inspectors that the school is well conducted on sound lines.

HAWKE'S BAY DISTRICT.

There was an increase of twenty in the number (279) attending the Technical High School in Napier as compared with the previous year, while the evening classes, though smaller on account of discontinuance of compulsory attendance, were very successful, and exhibited a marked improvement in the quality of the work.

During the year the art teaching of the school was placed on a permanent footing by the appointment of Mr. Roland Hipkins, A.R.C.A., in accordance with the policy of the Department by which young men of sound art training have been brought out from London during the year to take charge of classes in Dunedin, Auckland, Napier, and Wanganui.

Towards the end of the year Mr. Newton resigned the Directorship of the school, and Mr. R. McLaren was appointed in his place, Mr. M. H. Dixon acting as Director until Mr. McLaren could take up his duties, and performing his work with skill and care.

The Hastings Technical High School, established in the previous year, showed a considerable increase in numbers in spite of the fact that many pupils were still allowed to attend high schools in Napier. Additional accommodation was provided by means of portable buildings. The courses taken were commercial and general, though agricultural science was included for the boys and domestic science and arts for the girls. The rapid growth of the school fully warrants a start being made with new buildings on the new site of nearly 20 acres which was bought some three years ago partly by local efforts and partly by Government grant.

WELLINGTON DISTRICT.

The principal development in connection with the Wellington Technical School was the completion, about the middle of the year, of the first part of the new buildings on the Mount Cook site. The cost of the part completed during 1922 was over £46,000, of which £10,000 was provided by the City Council, over £35,000 by Government grants, and about £1,400 by contributions. This cost included, however, some further material and building not yet available for class use. The conditions of work in the new building will be nearly ideal so far as lighting, ventilation, and quiet are concerned, while the rooms will be sufficiently large to meet all probable developments in methods of teaching.

9 E.—5.

The numbers attending were greater than in the previous year, the enrolment in the Technical High School reaching 465, which was a record for the school. In spite of the many difficulties by which the staff was nampered, due to the division of the classes between the old and the partially completed wing of the new buildings, an excellent spirit was observable in the pupils, and the teaching was in the majority of cases sound and modern in method, and vigorous in style. A full range of courses was offered, and it is pleasing to note that the principal increases in numbers took place in the home-science and industrial courses.

In spite of the lack of playing-fields, sports were not neglected, while the school cadet company won for the third time in succession the championship in the annual area tournament. It is to be hoped that before long the whole of the school may be transferred to the new site, where it should become one of the most important centres of technical education in the Dominion.

Evening classes were conducted in a large number of subjects with considerable success, this school being one of the few in which the entries for ordinary technical classes were in excess of those for the previous year.

The Masterton Technical School was attended by approximately the same numbers as in the previous year. The school received considerable monetary assistance, as in former years, from the Trust Lands Trust, and was consequently in a position to add considerably to its equipment without relying entirely on Government grants. Good work was done in the various branches, particularly in engineering and domestic science.

The Petone and Lower Hutt classes, which had formerly been managed together by the Petone Technical School Board, were virtually separated during the year, and arrangements made by which a local committee took over the management of the Lower Hutt classes. The separation was due partly to local and temporary circumstances, but will probably continue until such time as the whole of the public educational institutions of post-primary character in the Hutt Valley have been merged under one controlling body. In each case the classes were supported during the year partly by voluntary contributions and subsidies thereon, as it is impossible for the smaller centres to provide the salaries of supervisors or Directors out of allowances for incidentals. On the other hand, there is a distinct tendency for the managers in small centres to pay too large a proportion of their income for supervising and caretaking and secretarial work. The question of providing by direct grant for the cost of supervision in these cases should be considered, so that suitable scales of salaries may be fixed for all centres.

NELSON DISTRICT.

In the Nelson District, on the whole, numbers attending technical-school classes were relatively well maintained. The year was marked by the development of the Westport Technical High School from being a one-course school for engineering boys to being the general post-primary school for the town, the District High School being disestablished and the pupils transferred to the new school. The school is endowed with a fine site, part of a Corporation reserve given by the town for the purpose, and with new buildings costing, with equipment, well over £18,000, the cost being met out of Government grants. Mr. A. E. Brockett, of the Christchurch Technical School, was appointed Director. There should be an excellent opening in Westport for a school of this kind, and it is expected that the present accommodation will soon be overtaxed. Provision is made in the general lay-out of the buildings for future extensions.

At the Nelson Technical School classes were held mainly for commercial, engineering, art, and domestic students in the daytime, and for the same subjects, with woodwork, plumbing, telegraphy, electrical work, millinery, dressmaking, &c., in the evening, besides the usual Saturday morning classes in science and agriculture for teachers.

Owing to the present buildings being erected on a site of a quarter of an acre, no room is left for expansion, or even for slightly extending the present plumbing and engineering shops, which are quite inadequate to the requirement of the town. The Technical School Board accordingly considered the question of extension of site, but found that it would be impossible to obtain the area required adjoining the present site, and the Board therefore recommended that a new site should be found. A reserve belonging to the Crown, and containing sufficient land for building purposes, near to a recreation reserve, and conveniently accessible from the town, has accordingly been set aside for technical-school purposes.

CANTERBURY DISTRICT.

Considerable progress was made during the year with the new building for electrical engineering and drawing offices in connection with the School of Engineering at Canterbury College, for which a grant of £15,000 was made by Government, while a further amount of £10,000 is available for equipment. The new building connects the old Engineering building with the present Boys' High School, in accordance with the proposal to remodel the High School building for the use mainly of the Engineering School when the boys are transferred to a new school on the ample site recently secured.

There was a considerable increase in the number of matriculated students reading for a degree in engineering as compared with the previous year, but a fall in the number of other students. Full courses were provided, as in former years, leading to degrees in civil, mechanical, and electrical engineering. Students attended from all parts of the Dominion, a large proportion coming from the North Island. The year was marked by the retirement of the professor in charge, Professor Scott, after many years of fruitful service, during which the school had steadily grown in numbers and reputation, its alumni occupying important professional positions in all parts of the world.

E.—5. 10

The Canterbury College School of Art maintained the steady progress of recent years, the number of students increasing from 437 in 1921 to 513 in 1922. Excellent work was done in several branches of art, notably in life drawing and painting, and in such crafts as embroidery and needlework. The school is strong on the painting side, but modelling has been relatively neglected owing to lack of accommodation. The growth of the school and the more perfect organization now possible demand that better provision should be made for modelling and for crafts, especially as architectural design is definitely a part of the school curriculum. With a view to strengthening this side of the work the College Council has made arrangements for obtaining the services of a competent modeller and craftsman from Great Britain.

The Christchurch Technical School shows a considerable increase in numbers—the Technical High School of over one hundred pupils, as compared with a drop of thirty in the previous year, and technical classes an increase of thirty-five on the numbers for the previous year. The enrolment comprised 651 Technical High School pupils and 1,670 technical-class students, a total of 2,321 individual students. During the year a range of new workshops was added to the buildings, which now contain some 21,400 square feet of workshop-space. As in the other principal centres, the Technical High School curricula are so arranged as to lead to the higher leaving-certificate and to qualify pupils for University bursaries in agriculture, engineering, and home science. As in previous years, special instruction in the subjects of domestic economy was given in connection with the Girls' Hostel.

A noteworthy feature of the technical-class work was the course for painters and decorators, attended during day hours by some fourteen trade apprentices, who were given time off by their masters for the purpose. A wide extension of this principle has long been advocated by technicalschool directors as well as by most of the workers and some employers.

The evening trade classes were exceptionally well attended, there being, for example, some eighty apprentices in the woodworking trades attending special evening classes, while the plumbing and engineering classes were also well attended. A class in typography for trade learners deserves special mention. The staff of the school consists mainly of skilled and experienced teachers, and good work Voluntary contributions were received during the year from was evident in all departments. thirty-three bodies, the largest contribution being £300 from the City Council, a contribution which

has been regularly made for a number of years.

Throughout the Canterbury District a number of small technical schools were conducted by local managers, as in previous years, though the numbers attending were largely reduced by restrictions imposed by the Government as a measure of economy. For the most part the classes dropped consisted mainly of adults, and in many instances the classes, though useful in themselves, were of no great educational value. Of the smaller schools, Timaru, with an enrolment of 451 pupils, was the largest, Ashburton, with 377, being next. Ashburton suffered as compared with the previous year through compulsory-attendance regulations being placed in abeyance, but did excellent work notwithstanding, and should soon recover its position and be stronger than before.

The Greymouth Technical School classes were somewhat smaller than in the previous year, the principal courses, as before, being engineering and commerce. At the end of the year the District High School was disestablished, and a Technical High School established in new buildings costing some £13,000, and erected on a site of about 5 acres, part of a Corporation reserve given by the town

for the purpose.

Classes were held also at Kaiapoi, Pleasant Point, Temuka, and Waimate under the respective Boards of Managers in these places.

OTAGO DISTRICT.

The Home Science School of Otago University, under Professors Rawson and Strong, made, in the opinion of your Inspectors, a distinct advance during the year 1922 in the arrangement and content of the courses taken by both diploma and degree students, though the numbers in attendance were some twelve less than in the previous year. An important conference of past and present students was held during the year, largely to consider the present syllabuses of examinations in home science for secondary and technical-school pupils and the courses for training-college students.

A strong demand existed during the year for teachers of home science, and no difficulty was found

in placing those who completed their courses.

Other classes in Otago University which earned capitation under the Manual and Technical Regulations were those for students of commercial subjects, of whom 114 attended, as compared with

100 each in Auckland and Canterbury in the same subjects.

The Dunedin Technical School, with which is now incorporated the Dunedin School of Art, shows an increase of pupils in the Technical High School and a slight decrease in evening classes. the year the Art School was reorganized under two instructors trained at the Royal College of Art, London, with whose aid it is expected that this department will take the position which a school of art ought to occupy in a city of the size and importance of Dunedin.

Another important step taken by the managers during the year was to arrange for the completion of the main buildings by the erection of the G. M. Thomson wing, containing home-science lecture-rooms and laboratories. The cost of the new wing will be £7,060, part of which will be found locally and part granted by Government. The total cost of the buildings, excluding the Burt Hall, will then be about £39,500, of which £18,561 6s. 8d. will have been provided from Government grants. buildings are convenient, economical to keep in order, sufficiently extensive, and well equipped; and the staff is capable in all branches and well balanced, with the result that the work in both day and evening classes is solid in character and on good practical lines.

SOUTHLAND DISTRICT.

The only school in the Southland District offering instruction in technical subjects was the Invercargill Technical School, which, by reason of convenient train services, is able to draw its pupils not only from the town itself, but from a large area of the surrounding country. This institution shows an increase in the Technical High School of 77 pupils—namely, from 339 to 416; and in the evening classes of 105 pupils, the numbers increasing from 478 to 583. In spite of difficulties of ill-planned buildings and restricted site, a fine tone was noticed in the school; and, while it must be admitted that the students generally were less responsive than in more northern schools, there was plenty of evidence of very good work being done in nearly all branches.

Experiments were made in this school, as also in the Feilding, Wellington, and other schools, with the Dalton laboratory plan of organizing school-work. The experiments were not completed last year, but it was evident that the system was not without substantial advantages, provided that the

difficulties of its application could be overcome on the present staffing basis.

RETIREMENT OF MR. E. C. ISAAC, LATE INSPECTOR OF TECHNICAL SCHOOLS.

Mr. E. C. Isaac, for some twenty years Inspector of Technical Schools, retired on superannuation at the beginning of 1923, having reached the age of sixty-five years. He was practically in charge of the educational side of the work from its inception in this Dominion, and to him more than to any other man it owes its growth and present form. His real culture, his burning enthusiasm, his great skill in handicrafts, and his knowledge of several branches of technology fitted him exceptionally well for the task of infusing life into the work of technical schools and manual-training centres. I accompanied him on his last round of inspection, and I can testify to the warmth of affection with which every school staff bade him farewell as an official, and hoped to be visited by him again as an old friend.

I have, &c.,

The Director of Education, Wellington.

W. S. LA TROBE, Superintendent of Technical Education.

3. DETAILED TABLES RELATING TO TECHNICAL INSTRUCTION.

Table J1.—Some Particulars relating to Technical Education for the Years 1915-1922 inclusive.

	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.
Number of centres at which classes were held	168	151	154	131	110	121	94	66
Number of technical high schools	8	8	8	8	8	9	13	13
Number of students—					2 626	2 -22	0.010	
(a.) Technical high schools	1,955	2,105	2,347	2,747	2,926	2,766	3,349	4,202
(b.) Other classes	18,247	17,586	18,400	16,910	17,950	18,628	16,832	12,262
Number of free pupils at (a) and (b)	5,660	5,975	6,127	6,715	7,242	6,542	6,975	8,384
above	858	1,219	1,334	1,324	1,372	1,636	1,585	324
Number of students attending under	696	1,210	1,001	1,024	1,012	1,000	1,000	324
compulsory regulations	£	£	£	£	£	£	£	£
Total expenditure by Government	72,089	84,931	100,199	85,335	132,245	169,530	244,627	207,628
for financial year	12,000	01,001	100,100	00,000	202,210	100,000	,	201,020
				i				
Including— Capitation—		1						
(a.) Technical high schools	19,309	25,934	35,795	33,150	47,343	29,818		
(b.) Other classes	30,729	38,922	44,021	33,119	47,858	31,918	119,289	119,464
(c.) Salaries and allowances,						20,589		110, 101
(c.) Salaries and anowances,		•••	••	''				
Grants for buildings and equip-	7,877	6,614	6,898	5,773	13,319	67,217	101,198	66,308
ment	1,077	0,011	0,000	,,,,,		,		00,508
Subsidies on voluntary contri-	5,323	4,206	2,154	1,673	6,934	5,466	3,991	4,207
butions	0,020	1,200	2,101	2,0.0	,,,,,	-,	0,002	4,201
Conveyance of (a) Instructors	1,018	790	261	464	615	635	679	808
(b) Students	2,659	2,596	2,982	3,312	3,852	3,767	4,386	4,742

Table J2.—Receipts by Controlling Authorities of Technical Schools and Classes, and by Managers of Technical Schools and Classes (including Technical High Schools), for the Year 1922.

		Receip	ts from G	overnment	t.		Ot	her Rece	ipt		
	Salaries, Incidental A I I o w a n c e s, Capitation, &c.	Sites, Buildings (including Main- tenance), Equip- ment, and Rent.	Material for Class Use.	Subsidies on Voluntary Con- tributions.	Total Receipts from Govern- ment.	Class Fees.	Voluntary Contri- butions.	For Services rendered to other Schools.	Miscellaneous	Total of other Receipts.	Total Receipts.
A. EDUCATION BOARDS, HIGH											
School Boards, and University Colleges.	£	£	£	£	£	£	£	£	£	£	£
Auckland Education Board Taranaki Education Board—	2,572	2,379	430	141	5,522	441	831	• •	478	1,750	7,272
New Plymouth Tech. School Hawera Technical School	$\frac{4,235}{2,940}$	$\frac{295}{1,216}$	79 3 6	26	4,635 $4,192$	31 63	99		18	148 304	$4,783 \\ 4,496$
Stratford Technical School	3,007	3,405	37	300	6,749	21		• • •	241 40	61	6,810
Eltham Technical Classes Wanganui Education Board	$\begin{array}{c} 32 \\ 643 \end{array}$	1,828	1 11	25	$\frac{33}{2,507}$					38	33 2,545
Palmerston North High School	2,762	399	204	239	3,604	592	223	76	164	1,055	4,659
Board Hawke's Bay Education Board	2,588	730	14	20	3,352	125	20		64	209	3,561
Wellington Education Board Nelson Education Board—	253	••	• • •	51	304	50	57		• •	107	411
Westport Technical School	2,352	5,873			8,225	47	٠٠,		79	126	8,351
Other technical classes Canterbury Education Board—	• •	2	7	• • •	9	50	7	• • •	6	63	72
Greymouth Technical School	$\frac{1,020}{327}$	$\substack{6,230\\69}$	34 12		7,284 408	50 28	5	• •		50 50	7,334 458
Canterbury College (in respect of	3,660	• • •	100		3,760	772			361	1,133	4,893
School of Art) Gore High School Board	70				70						70
Totals	26,461	22,426	965	802	50,654	2,277	1,242	76	1,499	5,094	55,748
B. TECHNICAL SCHOOL BOARDS											
AND MANAGERS. Auckland Technical School	12,706	19,729	900		33,335	772	105	79	546	1,502	34,837
"Elam" School of Art Pukekohe Technical School	1,387 $2,549$	$\substack{65 \\ 2,539}$	56	ico	1,508 5,188	$-\frac{230}{16}$	i i 5		287	523 141	$2,031 \\ 5,329$
Wanganui Technical School	7,887	701	400	68	9,056	658	107	100	3,605	4,470	13,526
Feilding Technical School	$2,166 \\ 5,836$	$\frac{572}{147}$	$\frac{34}{250}$		$\begin{array}{c} 2,772 \\ 6,233 \end{array}$	$\begin{array}{c} 57 \\ 142 \end{array}$	389 139	24	$\frac{60}{210}$	530 491	$\begin{bmatrix} 3,302 \\ 6,724 \end{bmatrix}$
Napier Technical School Waipawa Technical School	83			• • •	83	33	100			33	116
Wellington Technical School	9,921	19,328	450	410 120	30,109	1,347	884		1,750	3,981	34,090
Petone Technical School	$\frac{625}{1,906}$	44	91	235	745 2,276	42 141	85 200	105	14 202	246 543	$\begin{vmatrix} 991 \\ 2,819 \end{vmatrix}$
Nelson Technical School	3,022	37	19		3,078	122	63	39	76	300	3,378
Christchurch Technical School Kaiapoi Technical School	12,510	4,734	591	650	18,485	$\frac{850}{22}$	$\begin{array}{c c} 627 \\ \hline 39 \end{array}$	$\frac{1}{32}$	$\substack{2,673\\4}$	$\begin{array}{c c} 4,150 \\ 97 \end{array}$	$\begin{bmatrix} 22,635 \\ 97 \end{bmatrix}$
Akaroa Technical School*											
Ashburton Technical School	$\substack{3,687\\19}$	971	177 5	60	4,835 84	139 34	$\begin{array}{c c} 60 \\ 12 \end{array}$	$\begin{array}{c} 34 \\ 24 \end{array}$	139 3	372 73	5,207 157
Temuka Technical School	2,366	244	50	63	2,723	236	80	79	79	474	3,197
Waimate Technical School		,.				28	30		37	95	95
Pleasant Point Technical School Fairlie Technical School	• •	· ·	::	$\begin{array}{c c} 3 \\ 21 \end{array}$	$\frac{3}{21}$	13	5 18	• • •	3 11	21 29	24 50
Dunedin Technical School	10,634		279	595	11,508	1,196	199		2,408	3,803	15,311
Oamaru Technical School	110	53		46	209	187	58		4	249	458
Milton Technical School Invercargill Technical School	7,648	544	177	164	8,533	282	149	• • •	1,042	1,473	10,006
Totals	85,062	49,708	3,479	2,535	140,784	6,563	3,364	516	13,153	23,596	164,380
Grand totals	11,523	72,134	4,444	3,337	191,438	8,840	4,606	592	14,652	28,690	220,128

^{*} Not received in time for publication,

Table J3.—Payments by Controlling Authorities of Technical Schools and Classes, and by Managers of Technical Schools and Classes (including Technical High Schools). For the Year 1922.

	and			•	Working	-expenses	s.			nding quip-		
Controlling Authorities.	Salaries of Directors Teaching Staffs.	Salaries of Registrars and Clerical Staffs.	Office Expenses.	Material for Class Use.	Caretaker, Clean- ing, &c.	Repairs.	Lighting and Heating.	Miscellaneous Working-expenses.	Total Working- expenses,	Sites, Buildings (including Maintenance), Equip- ment, and Rent.	Other Expenditure.	Total Expenditure.
A. EDUCATION BOARDS, HIGH									-			
School Boards, and University Colleges. Auckland Education Board Taranaki Education Board—	£ 2,995	£ 615	£	£ 219	£	£	£ 231	£ 209	£ 1,274	£ 2,623	£	£ 6,892
New Plymouth Technical School Hawera Technical School Stratford Technical School	3,278 2,447 2,377	72 72 75	84 80 123	145 48 61	163 191 192	18	31 23 19	27 47 40	540 461 510	234 779 6,238	118 312 15	4,170 3,999 9,140
Eltham Technical Classes Wanganui Education Board Palmerston North High School Board	64 3,012	102	$\begin{array}{c} \dots \\ 3 \\ 32 \end{array}$	429	96	33 75	23 192	2 144	59 1,070	1,577 1,010	1 105	1,701 5,197
Hawke's Bay Education Board Wellington Education Board Nelson Education Board—	2,122 204	90	28 17	76 22	114 5	85	34 18	96 11	523 73	1,156 28	51	3,852 305
Westport Technical School Other technical classes Canterbury Education Board—	2,148		90	156 2	81 6	5	73	54	459 10	6,248	35	8,890 59
Greymouth Technical School Other technical classes Canterbury College (in respect of School of Art)	$\begin{bmatrix} 699 \\ 278 \\ 3,555 \end{bmatrix}$	•••	17 19 263	16 51 115	60 245	44	28 169	12 108	165 82 900	5,465 64 19	94 66	6,329 518 4,540
Gore High School Board				٠.				5	5			5
Totals	23,226	1,026	756	1,340	1,153	261	842	755	6,133	25,443	797	55,599
B. TECHNICAL SCHOOL BOARDS												
AND MANAGERS. Auckland Technical School "Elam" School of Art	10,758 $1,527$	636 251	327 137	1,009 101	942	24 79	257 45	394 39	3,589 652	18,916 155	232	$\begin{bmatrix} 33,495 \\ 2,334 \end{bmatrix}$
Pukekohe Technical School Wanganui Technical School Feilding Technical School	2,074 7,059 1,794	55 160	31 118 55	37 826 40	91 208 161	50	6 26 42	169 497 69	389 1,835 417	2,708 1,067 998	3,043 28	5,171 13,004 3,237
Napier Technical School Waipawa Technical School	4,930 98	164 14	66	344	133	50	119 6	236	1,112	608 1	231	6,881 129
Wellington Technical School Petone Technical School Masterton Technical School	9,520 794 1,796	546 34	301 13 34	798 35 155	335 97 89	$\begin{array}{c c} 4\\1\\307\end{array}$	153 49 113	215 9 130	2,352 204 862	18,147 61 708	1,617	31,636 1,059 3,406
Nelson Technical School Christchurch Technical School	2,545 $11,431$	200 740	62 226	264 1,080	106 894	107	79 361	48 711	763 4,119	23 5,859	88 2,061	3,419 $23,470$
Kaiapoi Technical School Akaroa Technical School	61			4	18		5	5	32		50	143
Ashburton Technical School Temuka Technical School Timaru Technical School	$ \begin{array}{r r} 3,061 \\ 96 \\ 2,037 \end{array} $	89 78	45 7 69	285 132	216 34 100	616	$\begin{bmatrix} 37\\ 7\\ 89 \end{bmatrix}$	93 3 49	1,381 51 518	281 2 502	117 1 48	$\begin{array}{r r} 4,840 \\ -150 \\ 3,105 \end{array}$
Waimate Technical School Pleasant Point Technical School	73 25		14	27	12 10	1	10	10 3	73 14	2		148 39
Fairlie Technical School Dunedin Technical School Oamaru Technical School	9,246 238	575 66	134 2	1,052 7	480 13	77	190 8	9 474 13	22 2,982 113	3,350 53	335 	31 15,913 404
Milton Technical School Invercargill Technical School	6,456	362	152	521	286		130	114	1,565	1,409	583	10,013
Totals	75,619	3,970	1,798	6,718			1,734		23,075	54,850	8,483	162,027
	98,845				- 	1,586		 	·			

Table J4.—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, 1922.

				Assets.			Liabilities.		Net Ba	lances.
			Cash Balances and Investments.	Amounts due to Board.	Total.	Cash Deficits.	Other Liabilities.	Total.	Cr.	Dr
(a.) EDUCATIO	n Boards.		£	£	£	£	£	£	£	£
Auckland				2,362	2,362	2,264	24	2,288	74	
Taranaki			349	1,421	1,770		159	159	1,611	
Wanganui				263	263	544	322	8 6 6		603
Hawke's Bay			169	165	334		79	79	255	
Wellington			16	210	226		226	226		
Nelson		••		205	205	1,226	85	1,311		1,106
Canterbury	• •	• • •		49	49	35		35	14	•••
Otago	• • •	• • • • • • • • • • • • • • • • • • • •	825		825		825	825		• • •
0 01 1			1		1					
Southland	••	••	1		1		•••		i	••
Totals	• •	• •	1,360	4,675	6,035	4,069	1,720	5,789	1,955	1,709
(b.) Technical School	ol Boards	AND				İ				
Manage	RS.		i i			İ				
Auckland Technical Sci	hool		1 [2, 103	2,108	35	1,502	1,537	571	
" Elam " School of Art			128	161	289	١	30	3 0	2 5 9	
Pukekohe Technical Sc	hool		188	578	766		39	39	727	
Wanganui Technical Sc	chool		522	1,204	1,726		195	195	1,531	
Feilding Technical Scho			66	137	203	٠.	68	68	135	
Napier Technical School			387	1,279	1,666		175	175	1,491	• •
Waipawa Technical Sch		• •	170	19	189			1.0	189	• • •
Wellington Technical S			4.594	2.079	6,673		5,324	5.324	1,349	
Petone Technical School		• •	20	52	72	• •	94	94	1,040	
Masterton Technical Sci		• •	614	646	1,260	•••	iii	11	1,249	
Nelson Technical School		• •	39	782	821	• •	1 1	11	821	• •
Christchurch Technical		• •				••	1 100	1 100		• •
		• •	3,075	3,153	6,228	• • •	1,190	1,190	5,038	• •
Kaiapoi Technical Scho		• •	86	••	86	• •	•••	• •	86	• •
Akaroa Technical School			39	***	39	• •		0.7	39	• •
Ashburton Technical So		• •	1,016	410	1,426	• •	251	251	1,175	• •
Temuka Technical Scho		• •	187	20	207	• • •	6	6	201	• •
Timaru Technical Scho		• •	1,438	244	1,682	• •	190	190	1,492	• •
Waimate Technical Sch			145	• •	145	• •		. • •	145	• •
Pleasant Point Technic		• •	29	15	44	• •		• •	44	• •
Fairlie Technical Schoo			72	• •	72	• •	22	22	50	• •
Dunedin Technical Sch			2,031	1,435	3,466		389	389	3,077	
Oamaru Technical Scho			39		39			• •	39	
Milton Technical Schoo			58		58				5 8	
Invercargill Technical S	School	• •	813	3,358	4,171	••	1,599	1,599	2,572	• •
Totals	••		15,756	17,680	33,436	35	11,085	11,120	22,338	22
Grand tot	als		17,116	22,355	39,471	4,104	12,805	16,909	24,293	1,731

Table J5.—Number of Students, according to Ages, admitted to Classes other than Classes at Technical High Schools during the Year ended 31st December, 1922.

Education Distr	ict.		der ears.	13–15	Years.	15-17	Years.	Over 17	7 Years.	Tot	als.	Students a during 19 left a Publi during (include Foregoing	22 who ic School 1921 ad in
Auckland Taranaki Wanganui Hawke's Bay Wellington Nelson Canterbury Otago		M. 28 1 20 21 20 100 23	7 2 34 7 12 29 104 10	M. 228 58 104 36 115 44 270 149	F. 168 47 101 29 76 61 300 53	M. 456 68 242 76 334 64 593 330	F. 316 46 251 67 182 93 375	M. 611 47 168 100 690 119 1,141 495	259 19 228 136 433 205 779 343	M. 1,323 174 534 212 1,160 247 2,104 997	F. 750 114 614 239 703 388 1,558	M. 206 41 129 48 92 43 289 128	F. 130 35 139 8 86 57 182
Totals, 1921 Totals, 1921		214	205	35 1,039 1,529	34 869 1,526	2,269 2,864	1,586 2,061	$ \begin{array}{r} 166 \\ \hline 3,537 \\ \hline 3,980 \end{array} $	2,543 3,647	308 7,059 8,934	275 5,203 7,898	1,016 1,350	720 790

Table J6.—Number of Pupils attending Classes other than Classes at Technical High Schools during the Year ended 31st December, 1922.

						Nun	aber of Stud	ents.	
Controlling Authorities, Technical	School	Boards, ar	nd Manager	'S.	Free Pupils.	Compulsory Pupils.	Discharged Soldiers.	Other Pupils,	Totals.
Auckland Education Board—								_	
Auckland Technical School*					374		16	382	772
"Elam" School of Art*								398	398
Other classes, Auckland District					264	36	6	401	707
Auckland University College Coun	eil—								
Commercial classes	• •	• •	• •	• •	• •	• • •		100	100
School of Engineering Taranaki Education Board—	• •	• •	• •	• •	• •		• •	96	96
New Plymouth Technical Schoo	1*				180	39	7	49	nico
Hawera Technical School*		• •	• •	• •		1		$\begin{vmatrix} 43 \\ 19 \end{vmatrix}$	269
Wanganui Education Board—	• •	• •	• •	• •	••	1	• •	19	19
Wanganui Technical School*					68	162	10		240
Feilding Technical School*					90			8	98
Palmerston North High School Bo	ard								
Palmerston North Technical Sch	iool				336			474	810
Hawke's Bay Education Board—									
Napier Technical School*					82	43	9	177	311
Waipawa Technical School*	: .		• •	• • •	· ::_	1	10	13	23
Other classes, Hawke's Bay Dist	trict	• •	• •	• • •	45		2	70	117
Wellington Education Board—					990	1	141	-ú.	
Wellington Technical School* Petone Technical School*	• •	• •	• •	• • •	330		141	704	1,175
Lower Hutt Technical School*	• •	• •	• •]	$\begin{array}{c} 35 \\ 47 \end{array}$	1 [••	87	122
Other classes, Wellington Distric		• •	• •	• •	17	1 1	• • •	81 13	128
Managers, Masterton Technical Sci		• •	• •	• •	11		•••	19	30
Masterton Technical School†				[201		3	204	408
Nelson Education Board—		• • •	• • •	• • •		1 1	١ ٢	201	100
Nelson Technical School*					158		7	229	394
Westport Technical School*					61	l i		77	138
Other classes, Nelson District						ł i		103	103
Canterbury College Board of Gover	rnors								
School of Art					145		9	359	513
School of Engineering	• •	• •	• •	• • •	• •	1 1	• •	274	274
School of Commerce	• •	• •	• •	• •			• •	100	100
Canterbury Education Board—					544		105	000	1 (170
Christchurch Technical School* Ashburton Technical School and	aubon.	· · · · · · · · · · · · · · · · · · ·	• •	• • •	$\begin{array}{c} 566 \\ 221 \end{array}$	44	105	999	1,670
Greymouth Technical School*	subcer		• •	[59	1 1	3	109 50	377 109
Timaru Technical School*		• •	• •	::	225	::		226	451
Kaiapoi technical classes*		• • •				::		47	47
Pleasant Point technical classes*		• • •			• • •	::		13	13
Temuka technical classes*								35	35
377					33			••	33
Other classes, Canterbury Distric	et							40	40
Otago University College Council				1		i .			ľ
Home-science classes								63	63
Commerce classes	• •					[]		114	114
Otago Education Board—				- 1] ·	•		1
Dunedin Technical School*	• •	• •	• •		535		10	572	1,117
Dunedin School of Art*	• •	• •	• •		1 91		••	123	124
Oamaru Technical School* Southland Education Board—	• •	• •	• •		31		• • •	110	141
Invercargill Technical School*					301		28	254	583
Totals for 1922					4,405	324	366	7,167	12,262
Totals for 1921				-	9 095	1 505	074	10 790	
TOTALS FOR 1921	• •	• •	• •		3,835	1,585	674	10,738	16,832

^{*} Schools or classes under the immediate control of managers.

[†] The Board of Managers is the controlling authority.

Table J7. — Occupations of Students in Attendance at Technical Classes other than Classes at Technical High Schools during the Year ended 31st December, 1922.

Occupations.	·	Auckland.	Taranaki.	Wanganui.	Hawke's Bay.	Wellington.	Nelson.	Canterbury.	Otago.	Southland.	Totals.
Agricultural pursuits		26		31	4	18	6	118	8	4	215
Professional pursuits		205	8	29	$4\overline{4}$	157	40	223	83	83	872
Clerical pursuits		288	9	129	78	492	45	482	361	73	1.957
Domestic pursuits		234	3	350	43	366	282	463	177	104	2,022
Students		418	199	215	73	116	77	620	197	45	1,960
Employed in shops or warehouses		121	13	137	33	116	37	579	98	69	1,203
Dressmakers, milliners, &c		32		14	4	8	13	167	14	12	264
Tailors and tailoresses		13		. 3	3	13	3	34	17		86
Engineers and mechanics		139	14	84	42	118	30	118	125	31	701
Electricians		82		1	6	88	5	137	25	15	359
Plumbers, metal-workers, &c		113	24	25	29	119	22	89	64	26	511
Woodworkers		121	7	26	4	73	12	129	45	11	428
Painters, plasterers, &c		14		12	1	16		129	5	9	186
Printers, &c		8	1	1	3	12	4.	33	12	5	79
Skilled labourers		17		2		3		44	35	8	109
Labourers		6		22	4	7	15	24	13	8	99
Seamen		2				1		29			32
Engaged in various other trades industries	and	58	• •	30	39	49	16	93	90	35	410
Engaged in various public services		64	3	15	19	46	15	63	18	20	263
Occupations not stated	• •	112	7	22	22	45	13	88	172	25	506
Totals for 1922		2,073	288	1,148	451	1,863	635	3,662	1,559	583	12,262
Totals for 1921		3,824	553	1,835	780	2,016	711	4,664	1,704	745	16,832

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, 1922.

Education Distric	t.	Jr. 1	lst.	Jr. 2nd a	nd 3rd.	Sr.	lst.	Sr. 2	nd.	Sr. 3rd a	nd 4th.	Tot	tals.	Grand Totals.
		В.	G.	в.	G.	в.	G.	в.	G.	в.	G.	в.	G.	
Auckland		206	110	114	40	63	27	31	13	30	4	444	194	638
Taranaki		41	35	33	28	17	11	7	- 6	1	1	99	81	180
Wanganui		103	126	56	92	19	28	11	35	6	18	195	299	494
Hawke's Bay		41	12	10	19	12	13	5	8	2	5	70	57	127
Wellington		122	86	70	40	91	44	73	34	45	25	401	229	630
Nelson		36	37	38	24	16	22	8	23	1	14	99	120	219
Canterbury		273	175	173	123	145	89	79	80	46	66	716	533	1,249
Otago		141	58	91	29	74	48	49	45	23	9	378	189	567
Southland		46	34	30	44	17	35	24	23	18	30	135	166	301
Totals, 19	22	1,009	673	615	439	454	317	287	267	172	172	2,537	1,868	4,40
Totals, 19	21	773	572	497	342	429	360	302	256	126	178	2,127	1,708	3,836

TABLE J9.—TECHNICAL HIGH SCHOOLS.—COURSES TAKEN BY STUDENTS DURING THE YEAR 1922.

			Course	s of Ins	structio	n, and	Numbe	er and S	ex of S	tudents			Grand	
School.	Indust	rial.	Agricul	ltural.	Dome	estic.		nercial eneral.	Aı	t.	Tot	als.	Totals.	
	м.	F.	м.	F.	м.	F.	м.	F.	м.	F.	м.	F.	м. & г	
Auckland	 253		60			77	60	149			373	226	599	
Pukekohe	 \		11			19	62	83			73	102	175	
Hawera	 22		7			15	64	79			93	94	187	
Stratford	 		31	23			55	66			86	89	175	
Wanganui	 96		25			52	165	80		4	286	136	422	
Feilding	 		26			30	47	22			73	52	125	
Napier	 109		15			52	38	65			162	117	279	
Hastings	 1		!				65	78			65	78	143	
Wellington	 197					56	48	153	4	7	249	216	465	
Westport	 32						45	56			77	56	133	
Christehurch	 256		41			133	64	157			361	290	651	
Dunedin	 139		29			80	63	143			231	223	454	
Invercargill	 130	• •	20		• •	97	55	92	• •	٠.	205	189	394	
Totals, 1922	 1, 234		265	23		611	831	1,223	4	11	2,334	1,868	4,202	
Totals, 1921	 951		243	20		385	588	1,158		4	1,782	1,567	3,349	

Table J10.—Number of Pupils holding Government Free Places at Technical High Schools during the Year ended 31st December, 1922.

School,			Juni	ors.				Seni	ors.			, ma	tals.
School.		First	Year.	Second	l Year.	First	Year.	Second	Year.	Third	Year.	10	Latis.
		В.	G.	в.	G.	В.	G.	в.	G.	В.	G.	в.	G.
Auckland		230	131	105	74	26	12	4	2	••		365	219
Pukekohe		38	56	25	33	6	7	2	2			71	98
Hawera		47	43	22	26	13	15	9	10	2		93	94
Stratford		32	30	29	31	14	12	5	4	3	1	83	78
Wanganui		122	55	69	46	34	13	28	7	6	1	259	122
Feilding		39	29	18	17	5	3	2				64	49
Napier		78	43	50	31	14	16	6	13	2	2	150	105
Hastings		32	33	28	25	2	9		2		$\bar{3}$	62	72
Wellington		130	135	69	52	25	16	6	5	i		231	208
Westport		30	23	24	16	15	9	6	7			75	55
Christehurch		180	149	116	63	30	3 <u>1</u>	14	21	2	4	342	268
Dunedin		140	106	53	53	26	31	3	16			222	206
Inveroargill	• •	115	96	60	65	17	19	7	5	2	2	201	187
Totals		1,213	929	668	532	227	193	92	94	18	13	2,218	1,761
										ļ		3,	979

Table J11.—Number of Candidates who entered for and who passed the Technological Examinations of the City and Guilds of London Institute, 1922.

Subjects of Examinate	on.	Number of Entries.	Number of Passes.	Subjects of Examination.				Number of Passes.
Telegraphy—Grade I		 1	1	Motor-car engineering—				
Electrical engineering—			ł	Grade I			10	7
Grade I		 - 88	66	Grade II			5	2
Grade II (first paper)		 36	22	Cabinetmaking—				
Grade II (second paper)		 25	4	Grade I			10	8
Final		 3	1	Final			3	1
Electrical installation work—				Carpentry and joinery—				_
Grade I		 4	2	Grade I	• •		13	8
Final		 5	2	Grade II	• •	• •	16	10
Plumbers' work-Minor course-				Woodwork				
Grade I		 3	3	First year, soheme A			2	1
Grade II		 5		First year, scheme B	• •		4	3
Plumbers' work—Major course			1	Final	• •		2	1
Grade II (written)		 2	2	Millinery			2	1
Mechanical engineering—			!	Dressmaking	• •		2	2
Division I, Grade I		 9	5	Plain needlework			1	1
Division I, Grade II		 3	l	Plain cookery			12	8
Division I, Final		 2	1	Gas engineering—Final			1	1
Division II, Grade I		 98	30					
Division II, Grade II		 7	2	Totals, 1922			377	197
Division II, Final		 2	1					
Structural engineering—Final		 1		Totals, 1921			362	204

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