

1909.  
NEW ZEALAND.

EDUCATION :  
MANUAL AND TECHNICAL INSTRUCTION.

[In continuation of E.-5, 1908.]

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

No. 1.

EXTRACT FROM THE THIRTY-SECOND ANNUAL REPORT OF THE MINISTER OF  
EDUCATION.

MANUAL AND TECHNICAL INSTRUCTION.

*Manual Instruction in Schools.*

Instruction in various branches of elementary handwork, such as modelling, brush-drawing, free-arm and blackboard drawing, paper and cardboard work, treated sometimes as separate subjects, but more often correlated with other subjects of the syllabus, as well as in the more specialised forms of handwork, such as woodwork, cookery, and elementary agriculture, was given in about 60 per cent. of the public schools during the year. Some particulars are given below :—

TABLE I.—SUBJECTS OF AND NUMBER OF CLASSES FOR MANUAL INSTRUCTION IN PUBLIC SCHOOLS,  
1908.

Subjects of Instruction.	Number of Classes.
Elementary handwork .. .. .	2,198
Drawing and design .. .. .	682
Woodwork .. .. .	270
Agriculture .. .. .	460
Dairy-work .. .. .	38
Elementary science .. .. .	57
Physical measurements .. .. .	94
Cookery .. .. .	330
Dressmaking .. .. .	72
Swimming and life-saving .. .. .	103
Physiology and first aid .. .. .	51
<b>Totals .. .. .</b>	<b>4,355</b>

The number of public schools in which handwork was taught was ..	1,200
The number of pupils under instruction was .. ..	112,952
The percentage of total roll-number under instruction was .. ..	76.6
The payments by way of capitation, grants, and subsidies in aid of classes was .. .. .	£20,191 14s. 5d.
The average cost per pupil was .. .. .	3s. 6.9d.

The instruction in cookery and woodwork in most districts was given at specially equipped centres, of which there are now nearly fifty.

Increasing attention continues to be given to instruction in elementary agriculture. School gardens, experimental and observation plots, and, in many cases, suitable laboratory practice, form special features of the instruction, which in several districts is supervised by special itinerant instructors. The number of classes in operation during the year was 460, an increase of 63. In addition, dairy-work was taught in three education districts, the number of classes being 38. In not a few of the schools attempts are being made to bring the curricula into closer touch with local conditions, by giving greater prominence to subjects bearing on rural life and pursuits.

Practical instruction in various branches of elementary science was given to 57 recognised classes. In this connection it may be noted that there are now about twenty well-equipped laboratories available for instruction in science in connection with primary and district high schools. In the case of several of the latter schools laboratory-work forms an important part of the course of agricultural instruction.

In schools where laboratories are not yet available, courses in elementary physical measurements such as may conveniently be carried out in ordinary class-rooms are found to afford excellent opportunities for individual practical work. Such courses were taken by about 90 classes.

As in previous years, several classes received assistance in the way of voluntary contributions in money and in kind from local bodies, agricultural associations, members of the farming community, and others. Such contributions carry a Government subsidy of £1 for £1.

Recognised classes for manual instruction were also held during the year at about twenty secondary schools. The subjects of instruction included woodwork, cookery, and various branches of science. Some particulars relating to the classes are as follows :—

The number of recognised classes for manual instruction in secondary schools was	159
The capitation on classes amounted to	£861 18s. 5d.
The average cost per class was	£5 8s. 5d.

#### *Technical Instruction.*

A review of the year's work indicates that satisfactory progress continues to be made by controlling authorities and managers of classes in the various education districts in providing and improving facilities for technical instruction. The organization of the technical schools, in the larger centres especially, is improving year by year, graded courses are becoming an essential feature of the curriculum, while every effort is being made to provide, as far as possible, courses of instruction adapted to local requirements. Considerable interest continues to be taken in the schools by local bodies and by industrial, trade, and other organizations, augmented in most cases by assistance of a practical nature in the way of monetary contributions, which, with the Government subsidy of £1 for £1 thereon, form an important source of revenue to the classes concerned. During the year over £6,000 was so contributed, indicating very clearly the attitude, generally, of local bodies and others with regard to technical education. The Government has, so far as available funds and other circumstances have permitted, favourably considered applications by controlling authorities for grants for new buildings or additions, and for necessary equipment. During the year grants for these purposes amounting to over £21,000 were distributed. New buildings have been erected at Feilding, Marton, Patea, Petone, Masterton, Napier, and Wakefield; necessary additions have been made to the technical schools at New Plymouth, Dannevirke, Nelson, Timaru, and Dunedin, and to the Christchurch Technical College; while considerable additions have been made to the equipment of the technical schools at Wanganui, Wellington, Napier, and Dunedin, and the School of Engineering attached to the Canterbury College, Christchurch.

Speaking generally, it may be said that good and useful work is, within the limits imposed by existing conditions, being done in the technical schools. Most of the

instruction continues to be given by means of evening classes, and necessarily so, until it is found practicable to effect some change in the conditions under which the schools are at present working. That what is known as the evening technical class is not an altogether adequate means of training is now being recognised by an increasing number of employers in those countries in which the value to the community of technical education is acknowledged. The means adopted by employers to induce their workpeople to attend technical schools are many and various. Not a few, for example, find it in their interests to give their employees "time off," often without loss of pay, to enable them to attend day classes at technical schools. Other means adopted are—payment of fees; refund of fees on condition of satisfactory attendance; increase of wages and special privileges; payment for, or loan of, books and apparatus; scholarships, bursaries, and prizes; increased prospects of promotion; acceptance of time spent at the technical school as part of apprenticeship. If employers elsewhere find that it pays to place as few obstacles as possible in the way of the educational advancement of their employees, it should not be too much to hope that employers in New Zealand will be moved to follow their lead when and so far as local conditions permit. Some of them, it is pleasing to record, are already doing something in one or other of the directions indicated. It is to be hoped that their example will speedily be followed by others, for it is beyond question that the advancement of technical education in New Zealand depends to no small extent on the enlightened attitude of the employer towards the technical schools. That the schools would respond to the best of their ability to reasonable requirements of employers in the matter of providing suitable courses of instruction goes without saying.

The question of the continuation of the education of young people after they have left the primary school—a question which is receiving an increasing amount of attention in other parts of the world—must also be regarded as an important factor in the solution of the problem of how best to provide for the technical education of those destined to follow industrial pursuits. The establishment of continuation schools for those who have completed their primary education, together with the raising of the age of compulsory attendance, may be cited as the chief means by which the solution of the problem is being attempted elsewhere with what seems to be a good deal of success. As to how far it is desirable to go in this direction in New Zealand is a matter for serious consideration, remembering the differences in the conditions that obtain here and in the countries in which compulsory attendance, whether obligatory or optional, has been or is proposed to be adopted.

The establishment of the following classes, leading up to classes of university rank, appears to be necessary to place technical education in New Zealand on a satisfactory basis:—

- (1.) Day preparatory classes for junior pupils.
- (2.) Day classes in continuation of these, providing full special courses for those who have not yet gone to work, and part-time courses for those who have.
- (3.) Evening classes providing such instruction as a workman does not or cannot get in the ordinary practice of his trade or craft.

The establishment in a complete form of such a scheme (parts of it are already in operation) implies among other things an agreement between the employers, the workmen, and the technical schools on many points, and possibly some alteration in the existing law.

Apart from special centres for manual instruction there are now about 45 technical schools in operation, while recognised classes were held at 122 places. Classes in places where special buildings were not available were held as usual in the local schools, or in suitable rented buildings. In several districts, but more particularly in Auckland and Wanganui, classes, in charge chiefly of itinerant instructors, were carried on in rural sub-centres with satisfactory results. This system has much to commend it, and it is hoped that it will become more general as circumstances and opportunities offer. In Auckland classes were held at 16 and in Wanganui at 28 such sub-centres.

The number of recognised technical and continuation classes in operation during the year was 1,505, as against 1,392 last year. The classes were divided as follows :—

Classes.	Number of Centres.		Number of Classes.		Average Attendance.	
	1907.	1908.	1907.	1908.	1907.	1908.
“ Special ” classes... ..	88	98	791	854	10,917	11,016
“ Associated ” classes ...	17	23	487	520	8,674	9,002
“ College ” classes ...	1	1	114	131	1,276	1,500

It will be noticed that “ special ” classes—*i.e.*, classes under an Education Board or the Board of Governors of a secondary school as controlling authority—were the most numerous and the most widely distributed. “ Associated ” classes—*i.e.*, classes conducted by managers representing the controlling authority, local and other contributing bodies—though held at a much smaller number of centres, had an average attendance of 17·3 per class, as against 14 in the case of “ special ” classes. The number of “ associated ” classes continues to increase, indicating the interest that is being taken in technical education by local bodies, industrial associations, and other similar organizations. “ College ” classes were carried on in connection with one only of the University colleges—namely, Canterbury College, Christchurch.

The following are some particulars relating to technical classes in operation during 1908 :—

The number of places at which recognised technical classes were held was .. .. .	122
The number of recognised classes was .. .. .	1,505
The average attendance at all classes was .. .. .	21,518
The capitation on attendances was .. .. .	£17,601 2s. 7d.
The rate of capitation per unit of average attendance was .. .. .	16s. 4d.

TABLE II.—AVERAGE ATTENDANCE AT AND CAPITATION ON CLASSES FOR CERTAIN SUBJECTS.

Subjects of Instruction.	Average Attendance.	Capitation.
Engineering .. .. .	1,658	£ 1,425 8 9
Lead- and wood-working .. .. .	1,897	1,810 9 7
Pure and applied art .. .. .	4,355	4,494 15 7
Experimental and natural science .. .. .	2,079	1,174 3 4
Dressmaking, cookery, &c. .. .. .	3,278	2,563 13 8
Commercial subjects .. .. .	5,549	4,198 5 6
Subjects of general education .. .. .	2,601	1,844 11 2
Wool-classing .. .. .	101	89 15 0
Totals .. .. .	21,518	17,601 2 7

Considerable attention is being given to mechanical and electrical engineering, and to lead- and wood-working—*i.e.*, to subjects related to important industries and trades. It is gratifying to note that the schools are doing a good deal to provide opportunities for instruction for those engaged in these pursuits.

Satisfactory progress is being made in connection with instruction in pure and applied art. In most of the larger centres special attention is being given to the application of art to industries. Specially qualified instructors have in some cases been imported, and, although the classes for applied art are generally speaking at present somewhat small, there is little doubt that the instruction in art has been considerably strengthened by the increased attention now being given to art crafts.

There appears to be no diminution in the demand for commercial instruction. Classes for such instruction were held at 41 centres, while the total average attendance was higher than for any other group of classes. Classes for such subjects as cookery, dressmaking, and millinery were also widely attended. The number of centres at which such classes were held was 86, the total average attendance being 3,278.

It is a matter for regret that but little progress has been made in connection with technical instruction in subjects relating to agriculture. With the exception of classes for wool sorting and classing, and training classes for teachers, very few technical classes for agriculture have been held during the year. The efforts that have been made in certain districts to establish such classes do not, generally speaking, appear to have met with the encouragement they deserve at the hands of the farming community so far as attendance at the classes is concerned. This is somewhat surprising in view of the repeated requests made by various bodies representing agricultural interests for facilities for such instruction. It is to be hoped that the interest, now becoming widespread, that is being taken in some districts in classes for instruction in wool sorting and classing may be the means of arousing farmers to the fact that there are also advantages to be derived from systematic instruction in other branches of agriculture. Provided students were forthcoming, there is little doubt that controlling authorities would, so far as was practicable, provide the necessary facilities for instruction.

About two thousand students were admitted during the year to technical schools as holders of junior or senior free places—an increase of about two hundred. Nineteen per cent. of these students held senior free places, a considerable improvement on the previous year, when the percentage was only 7.

The courses of instruction taken by free pupils were as follows :—

Courses of Instruction.	Number of Free Pupils.
Science and technology .. .. .	516
Pure and applied art .. .. .	137
Domestic economy .. .. .	277
Agriculture .. .. .	7
Commercial instruction .. .. .	1,063
<b>Total .. .. .</b>	<b>2,000</b>

Capitation payments on account of free places amounted for 1908 to £6,908 0s. 6d. being at the rate of about £3 9s. per free place.

It will be seen that, as in former years, courses of commercial instruction were attended by more free pupils than any of the other courses mentioned in the table. Last year about 60 per cent. of the free pupils attended commercial courses; this year there is a slight drop, the percentage being about 53. On the other hand, there is a decided increase in the number taking courses in science and technology. It is anticipated that in the near future there will be a considerable increase in the proportion of free pupils taking courses other than commercial courses. It is a matter for regret that the number of free pupils taking courses in agriculture still remains insignificant.

The day technical schools in the larger centres continue to be well attended, chiefly by free pupils. There seems little doubt that under existing conditions the establishment of these schools has met a distinct want so far as the larger centres are concerned. Though their curriculum is mainly secondary in character, they do not appear on that account to have adversely affected the attendance at the secondary schools in their vicinity. The opinion is expressed that a not inconsiderable number of pupils qualified to hold free places would on leaving the primary schools, have gone to work had they not been able to attend a day technical school. So far as the smaller centres are concerned it is a question whether the establishment of day technical schools would not result in undesirable overlapping. In the case of such centres the better plan to pursue would appear to be the adaptation of the courses of instruction at the secondary schools and district high schools so as to meet, as far as practicable, the needs of pupils for whom an education more or less literary in character would not afford the best preparation for their life-work.

The special grants to Education Boards for the training of teachers have been continued this year. A special feature in the arrangements made for the instruction of public-school teachers in subjects of manual instruction prescribed for school classes has been the organization of special courses in the shape of winter and summer sessions. Several such courses have been held during the year, with results that seem to suggest the expediency of adopting this method where practicable in preference to the more usual Saturday classes, especially as the training colleges, which are now in full operation in the four centres should as time goes on render Saturday classes less necessary than heretofore. At the examinations of the City and Guilds of London Institute 39 teachers passed the examination in cookery, and 15 that in woodwork.

The Science and Art Examinations of the English Board of Education, and the Technological Examinations of the City and Guilds of London Institute, were held as usual, the former at 16, the latter at 15 centres. The number of candidates at the Science and Art Examinations was 626, of whom 403 passed; while at the Technological Examinations 330 candidates presented themselves, of whom 233 passed. Although the time, May to July, at which these examinations require to be held is not altogether convenient from the point of view of the schools, the number of schools making use of these examinations is increasing every year.

The following is a summary of the expenditure by the Government during the year on manual and technical instruction:—

Capitation,—	£	s.	d.	£	s.	d.
School classes .. .. .	17,402	4	6			
Technical classes.. .. .	17,601	2	7			
Free places .. .. .	6,908	0	6			
				41,911	7	7
Subsidies on voluntary contributions,—						
School classes .. .. .	225	4	8			
Technical classes.. .. .	6,156	17	6			
				6,382	2	2
Grants for buildings, equipment, and rent,—						
School classes .. .. .	3,633	10	0			
Technical classes.. .. .	21,961	10	8			
Grants for material for technical classes .. .. .	1,535	17	3			
				27,130	17	11
Railway fares of instructors and students .. .. .				2,973	0	0
Examinations .. .. .				580	1	0
Inspection and other expenses.. .. .				1,096	5	1
Total .. .. .				£80,073	13	9

The total expenditure by the Government in the way of capitation, subsidies, and grants was—for school classes, £21,260 19s. 2d.; and for technical classes, £54,163 8s. 6d.

## No. 2.

### REPORT OF THE INSPECTORS OF TECHNICAL INSTRUCTION.

SIR,—

We have the honour to make the following report on the state and progress of manual and technical instruction in the Dominion during the year ending 31st December, 1908.

#### A. MANUAL INSTRUCTION.

Recognised school classes for instruction in various branches of manual instruction were held at 1,200 primary schools during the year. The number for the previous year was 1,134. In the lower classes of the primary schools the branches of handwork to which most attention is being given are modelling, brush drawing, paper and cardboard work, and free-arm and blackboard drawing. There is evidence of an increasing desire to correlate handwork with other suitable subjects of the syllabus. The appreciation by teachers of the value of certain forms of handwork as educational instruments referred to in previous reports is becoming more pronounced each year. There is, however, one matter in connection with the work to which we desire to call attention. In certain districts some

teachers, possibly with the view of securing the sustained interest of their pupils, have introduced too great a variety of unrelated subjects of handwork into their schools; in some it amounts almost to a different subject for each standard class. Whatever the intention may be, the practice is not calculated to enhance the value of handwork as an instrument of education. It may be conceded that the subject is of little importance provided that the method of instruction be right. Nevertheless the value of the most approved methods may be diminished by repeated change of subjects; a graded course of instruction for each standard in the ordinary subjects of the school syllabus is regarded as a necessity, and the opinion is expressed that the full benefits to be derived from a course of instruction in handwork cannot be realised unless the work is properly systematized as in other subjects of instruction.

In the higher primary classes and in the secondary classes of the district high schools the subjects most generally taken up are drawing in light and shade, elementary design, woodwork, cookery, various branches of elementary science, and elementary agriculture. The number of district high schools where well-equipped laboratories are available is increasing every year, with the result that it is now possible for pupils in such schools to receive individual practical instruction in various branches of science. The number of recognised classes for practical science in operation last year was 57. Where laboratories are not yet available a course in elementary physical measurements such as may be carried out in the ordinary class-rooms was taken by ninety-four classes, with satisfactory results in most cases. It appears, however, necessary again to point out that the practice of instructors working through a comprehensive series of experiments, with the assistance of batches of pupils is not in accordance with the regulations. A few exercises and experiments carried out by the pupils themselves will be found to be of more value educationally. It should also be remembered that the text-books on elementary physics in general use are not as a rule written for very young pupils. They are more suited for classes at secondary schools. If they are used in public schools, only those exercises and experiments that are within the comprehension of the pupils should be attempted, and the programme of work should include only experiments which can be performed with the available apparatus, and by the pupils themselves. It is generally accepted that exercises in measuring and weighing are among the best introductions to the use of physical apparatus. The difficulty of obtaining a simple, cheap, and yet approximately accurate balance appears, however, to be a serious obstacle. That good work can be done with a roughly constructed balance has been amply proved, but the question arises as to whether time spent by young pupils in making these rough balances could not be used to greater advantage if a cheap and effective balance were available. In one district this question is under consideration, and experiments are in progress with the view of producing such a balance. It is hoped that the experiments will be successful, and that it will be found practicable to manufacture suitable balances within the Dominion.

We have had repeatedly to call attention to certain defects in the instruction in cookery; it is therefore gratifying to be able to record some improvement. In most of the cookery centres and classes considerable attention is being given to principles, and while in some cases the demonstration and "the method" are still considered to be the all-important part of the instruction outside the practical work, in the majority of cases instruction in such subjects as the physiology of digestion and the relative food-values of the ordinary articles of diet is considered to be of as much importance as instruction in the preparation and cooking of food. In other words, the instruction is more educational and more closely allied to the other subjects of the school syllabus than heretofore. In one district an effort has been made to arrange a course of instruction for girls in subjects connected with home life, and, although the course cannot be regarded as complete, it is evidence of a move in the right direction.

The most marked improvement, however, is to be found in the woodwork centres, and as a result both the drawing and the practical work in the majority of districts reach a very much higher plane of excellence than in past years. Greater attention is being given by most of the instructors to the demonstration lesson and to instruction in the life-history of the trees from which most of the timber used in building and woodworking is cut. The value of the instruction would, however, be enhanced if these lessons were given in the form of brief notes which the pupils could write down instead of in the form at present adopted. The brief simple lecturette has its place in the course of instruction; but all the instruction should be given in such a way as to make it possible for a pupil to take full notes. Such notes would form a record of the work done in the class during the year, and would be useful not only to the pupil, but also to visiting officials. Notebooks are seldom used in any district. When instructors realise that time devoted to making intelligible sketches to illustrate the notes is not so much time lost from practical work, the value of the lessons as an aid to mental training will be considerably increased. It should not impose a great hardship on either pupils or instructors if the notes taken at each lesson were expanded as an exercise in English, and returned to the instructor for comment and correction at the next lesson.

The relative value of a course of instruction in elementary science and a course in woodwork has been under consideration by experts in both subjects for some time past, and the conclusions arrived at appear to be that, provided woodwork is taught as it should be, the value of the lessons from all points of view is not less than that of a course in elementary science. In advocating the value of the woodwork lessons great emphasis has been laid on points to which attention has been called in previous reports. One expert concludes his plea as follows: "The money spent on building and equipping workshops would have been spent to greater purpose in the erection and equipment of laboratories unless woodwork instructors adopt methods of teaching woodwork similar to those adopted in the modern science laboratory."

Good work continues to be done in classes for advanced needlework and elementary dressmaking. In the latter classes most satisfactory results continue to be achieved without recourse to any other mechanical aid than a tape measure and a ruler for drafting patterns. It is not apparent that the

banishment of the patented chart in connection with such classes has in any way lessened the educational value of the instruction, rather the reverse. Most of the pupils are able at the end of the course to draft fairly accurate patterns of simple garments.

The number of schools in which elementary agriculture is taught continues to increase. The number of classes in operation during the year was 460 as against 398 in the previous year. Generally speaking, good work, both theoretical and practical, has been done. The school gardens, which play an important part in the courses of instruction, are as a rule well kept, and many of them bear silent yet convincing testimony to the value of the instruction. In nearly all of the classes experiments with and rough analyses of soils from various local sources are carried out, and the results tabulated. Nor is the æsthetic side of the subject lost sight of, parts of most of the gardens during the greater part of the year being bright with flowers, planted and tended mostly by the girls. Speaking generally, there is no doubt that the best results are to be found in those districts in which the classes are supervised by itinerant instructors. In not a few cases pupils apply the knowledge they have gained at school to gardening operations at home; sufficient vegetables are grown to meet the requirements of the family, while flowers for home decoration are assiduously cultivated. Even if no other results were apparent the time given to instruction cannot, we think, be regarded as other than time well spent. The knowledge of agricultural science acquired may be comparatively small, but if that little be put to good practical use, the desire for more knowledge of the subject may be quickened and other channels discovered for the use of the knowledge gained. There is one matter which seems to call for remark, and that is the perfunctory way in which many of the pupils' notebooks are kept. These notebooks should, *inter alia*, contain a record of the work done during the course. It should be possible on looking through them to form an opinion not only of the amount of work done, but also of the method of instruction.

The following extracts from some notes issued by the English Board of Education are here inserted for the information of teachers:—

“A school garden should as a rule adjoin or be within five minutes' walk of the school. In some cases it should be fenced. The quality of the land is of little importance, as it can be improved by cultivation, but land heavily shaded by trees is unsuitable.

“For a class of fourteen scholars, 20 rods is the best area—*i.e.*, fourteen 1-rod plots or seven 2-rod plots, with fruit and seed plots, flower-border, and pathways. If the garden is cultivated as a common plot by the boys working conjointly, two-thirds of this area may suffice.

“A complete equipment of tools for fourteen scholars would include,—

(a.) Spades and forks—fourteen altogether. (The proportion of spades to forks may vary according to the character of the land—*e.g.*, more forks than spades where the land is exceptionally stiff.)

(b.) Dutch and draw hoes—fourteen altogether.

(c.) Rakes, four; trowels or weeding-forks, seven; a wheelbarrow; a watering-can, and several lines and dibbers (home-made).

“For fourteen scholars working on a common plot somewhat fewer hoes, spades, and forks would suffice, but not less than eight spades and forks together, and not less than six Dutch and draw hoes together should be provided. For fruit-culture pruning-knives will be required, and a spray-syringe. A glass frame is very useful, but not essential. While it is desirable to put a stop to really insufficient equipment of tools, it is recognised that progress towards the universal provision of thoroughly satisfactory equipment must be gradual, and latitude with a view to experiment should be allowed. It is very desirable to keep the first cost of starting gardening classes as low as possible. (The initial cost of a set of tools is from £3 10s. to £5.)

“There must be a proper tool-store, either indoors or out, with racks or rows of nails for keeping the tools in order. The tools must always be cleaned before they are put away, and the best practice is also to wipe them over with an oily rag.

“Most of the following should be grown: Broad beans, scarlet runners, dwarf beans, peas (early and late), cabbages, savoys, Brussels sprouts, curled kale, cauliflowers, broccoli, parsnips, carrots, turnips, beet, onions, leeks, potatoes (early and main crop), celery, lettuces, radishes, parsley, and, in special cases, one or two others. Rhubarb, Jerusalem artichokes, and common herbs should also be grown.

“The plan of cultivation should allow of (1) the deep autumn cultivation of a part of each plot, which should be laid up rough for the winter—at any rate if the land is heavy; (2) the production of a continuous supply of vegetables throughout the year, by means of a proper succession of crops and obtaining the greatest possible return; and (3) provision for a proper rotation of crops in successive years. For example, in a good rotation brassicas would not follow brassicas, nor legumes legumes, nor potatoes potatoes, nor would tap-rooted crops follow tap-rooted crops.

“Growing “monster” prize vegetables should be discountenanced, though there is no reason why the scholars should not compete with collections of ordinary vegetables at village shows. General excellence of the vegetables for domestic use is the object to be aimed at.

“In some cases boys provide manure and stakes for their own plots; and this should be encouraged. In manuring, as in all other operations, the value of a material used or a method adopted needs to be discussed with the scholars in order that they may work with intelligence.

“That fruit-culture should be included is in most cases desirable, but not always practicable. The fruits that should be included are gooseberries, red and black currants, raspberries, strawberries, apples, pears, plums, and damsons. Among the operations that should be included are raising from cuttings, planting, budding, grafting, pruning; grease-banding, winter-washing, and spraying against various pests.

“Either each plot should have its own flower-border, or a flower-border cultivated conjointly by the scholars should be provided. Sometimes the flower-border can be cultivated by a class of girls or



younger scholars as a part of their nature-study. In any case a succession of flowering-plants (annuals, biennials, and perennials) throughout the spring, summer, and autumn should be aimed at. The scholars should be encouraged to bring flower-seeds, plants, and bulbs for the border. When seeds are sown a practice should be made of labelling the patch.

“Practical work in the garden should be continued throughout the year, but, while two hours per week will be required in the spring and summer, one hour should suffice in the autumn and winter. The usual length of a practical gardening lesson is one hour, but in May and June shorter periods at more frequent intervals may be desirable for weeding.

“It is not necessary that the cropping of all the plots should be identical, though it is desirable that they should be sufficiently similar to make it possible to compare the merits of the workers. Scholars might be encouraged to select the particular varieties of vegetables for cultivation on their own plots. This introduces the element of individual responsibility. When the scale drawing is being prepared the teacher can best discuss with the scholar the merits of his plan.

“The scholars must be taught to hold a spade rightly, to dig a straight trench, to double-dig or bastard-trench, to use the line in digging, planting, and sowing, to sow at proper depth in trenches properly prepared, to sow not too thick or too thin, to use the hoe and rake properly, to thin and single beet, parsnips, and turnips properly (singling is often badly done), and to prune the fruit trees and bushes properly.

“The rows of vegetables should be perfectly straight, the plots and borders free from weeds, the fruit trees and bushes free from lichen, the plots edged neatly, the pathways kept in good order, the hedges clipped. Tidiness in a garden is of great industrial value, though, of course, efficiency must not be sacrificed to mere appearance.

“Each scholar should keep a rough diary in which to jot down observations on his work and matters affecting it: the preparation of the ground for a particular crop; the quantity of seed used for a given area; the depth of sowing; the date of appearance of first leaf; attacks of insects or birds, and any remedial treatment; the harvesting of the crop, and the amount of final produce, will afford proper subjects for notes.

“Some teachers are too apt to do the more difficult operations themselves. This tendency is most noticeable where the common-plot system is adopted, and should be avoided. The scholars must learn by doing even if they make mistakes. A good teacher will first get the boys round him and make them think out for themselves how a thing ought to be done.

“The teacher should habituate the scholars to note for themselves attacks of onion-fly, bean-aphis, gooseberry saw-fly, black-currant mite, mildew, slugs, birds, weeds, and other pests without any prompting. The best method of dealing with the pest can then be considered. Similarly every scholar should be able to tell from his independent observation how the onion-leaf first emerges from the ground, how beans and peas climb, why couch-grass, groundsel, and the field speedwell spread so quickly, and hence how best to eradicate them, &c. A scholar should also be able to measure the area of a plot by stepping.

“Gardening should be nature-study, but there is much to be done in the class-room in connection with it. The conditions under which seeds germinate or plants grow; the examination and description of parts of plants leading to an understanding of the grouping of plants (*e.g.*, the Brassica family, with similar seeds, seed-leaves, flowers, and fruits); weather-observations; the examination of the garden-soil, its stones, sand, and clay being correlated with its retentivity of moisture—all these need to be dealt with by simple experiment and observation in the class-room. Collections may also usefully be made of specimens showing damage done by insect pests, or illustrating the growth of plants both useful and noxious in farm as well as in garden. Observations of birds as friends or enemies of the garden should be made, and beekeeping adds greatly to the interest and educational value as well as to the profitableness of the garden.

“Accurate and careful interpretation of specimens of plant and insect life with brush or pencil should of course be associated with the nature-study, and form a necessary part of the ordinary drawing-lessons of the school. Drawings might also be made of things that want close study from a horticultural point of view, such as a prepared graft and scion, or slips prepared for planting. In the garden the scholars should sketch rough marginal illustrations in their notebooks of the toolhouse and tools used, or of a well-pruned fruit-tree—indeed, anything of interest to them in their work. Before the beginning of active work in the garden in the spring, drawings should be made to show the proposed cultivation of the plots.

“Plans of the several plots and of the whole garden should be drawn to scale from actual measurements. Produce should be weighed and measured. “Profit and loss” accounts should be kept, with approximate allowance made for labour, rent, and depreciation, and repair of tools. Numerous problems should be set, based on the cost and quantity of seed and the extent of the land cultivated, as against the value and quantity of produce.

“Composition should be connected with the gardening-work throughout the course. It should always be original—the scholar’s own thoughts, drawn from his own experience, and expressed in his own words. Every scholar should be required from time to time to write a connected account of the cultivation of some particular crop in which he has taken a practical part, using the rough notes in his diary for the purpose. Scholars should also be encouraged to read up in gardening books or periodicals the particulars of any process on which they are engaged, or any crop which they are cultivating.

“It is very desirable that arrangements should be made for saving seed. This is in itself very educational, and there is no reason why in a well-organized county the saving and exchange of seeds should not result in a large reduction of expenditure.

“A well-organized county scheme of school gardening often includes an exhibition of the produce in the summer, or a competition for a shield. While such a scheme has many advantages, it is especially necessary to ascertain that educational efficiency is not sacrificed to the desire to win a prize or trophy.”

Instruction in dairying has been confined to three districts. In some cases a combined course in agriculture and dairying is being carried out with satisfactory results.

Some particulars relating to classes for manual instruction in public schools will be found in Tables 1, 1A, and 1B, on pages 16 and 17.

In the secondary schools, twenty in number, in which recognised classes for manual instruction have been carried on, the subjects to which most attention has been given are woodwork, cookery, and various branches of natural and experimental science. Most of the schools are provided with well-equipped laboratories. The number of classes in operation during the year was 159, an increase of 10.

It is hoped that the efforts that are being made in the case of certain of the rural secondary schools to provide courses of agricultural instruction will prove successful. There are also indications of a desire in the case of some of the girls' schools to establish definite courses of domestic instruction. The movement, which has much to commend it, will be watched with interest.

Some particulars relating to classes for manual instruction in secondary schools will be found in Tables 2, 2A, and 2B, on pages 18 and 19.

### B. TECHNICAL INSTRUCTION.

Details of the work of the various technical schools and classes for the year 1908 will be found in the reports of the controlling authorities or managers, as the case may be, attached to this report. Various details relating to technical instruction are given in Tables 3 to 8, inclusive, on pages 20-33.

The progress made by the technical schools and classes during the year may be regarded as satisfactory. A good deal has been accomplished in the direction of systematizing the work, in arranging courses of instruction, and in eliminating as far as possible what may be regarded as the merely trade element. It is, we believe, now generally recognised that the teaching of trades without reference to the principles that underlie them is not, properly, one of the functions of a technical school. The hope is expressed that the type of technical school that consists of aggregations of unrelated classes, having for the most part no direct bearing on the industries of the country, will in the near future disappear altogether. Then, and only then, can something like an adequate return for the expenditure on technical education be looked for.

The number of approved classes continues to increase. In all 1,505 classes were in operation during the year at 122 places, showing increases of 113 and 21 respectively. The number of persons receiving free technical education was 2,000, an increase of 126. Junior free places were held by 1,619 persons, of whom 848 were males and 771 females, and senior free places by 381 persons, of whom 248 were males and 133 females. In 1907 the number of senior free pupils was only 146, so that there has been a very considerable and gratifying increase in the number of persons taking advantage of the regulations governing senior free places which provide for three years' free education in addition to the period (two years), for which junior free places are tenable.

Of the day technical classes conducted at various centres and providing courses of instruction in groups of related subjects for pupils most of whom are fresh from the primary schools, it may be said that they are on a sound footing. The courses of instruction, and the qualifications of the instructors go to show that the students are well provided for, and, in the majority of classes the excellent practical work done is evidence that the students are receiving a sound training in elementary principles which they are able to apply effectively in the practical work, forming part of the course. It is found that not a few of those who have completed a two-years course at the day classes and have left to take up employment return to the school and enter the evening classes for the purpose of continuing their studies. These students are found to be, from all points of view, the most satisfactory type of students in attendance at the evening classes. Having received a preliminary training they are better able to attack the more advanced work taken up in such classes. Many of them having realised to some extent the value of the instruction received, take, as a result, a more intelligent interest in their work, and attend classes on three or more evenings a week. Given such students, it is a comparatively easy matter for controlling authorities to arrange comprehensive courses of work; but it is becoming an increasingly difficult problem to arrange work for that numerous class of students who enter the schools unable, on account of lack of previous training, to take full advantage of the instruction provided, and who, further, are unwilling to attend for more than one night or at most two nights a week. The attendance of such students is also frequently irregular.

This and similar problems are, however, not confined to New Zealand. Authorities in England and elsewhere have recognised by experience that the provision of elaborate and expensive buildings and equipment does not necessarily prove an effective means of attracting students, especially students of the class referred to above. In all large centres of population there are always to be found individuals fired with the ambition to improve themselves. These find their way to the classes, but the fact remains that the bulk of the rank and file of the young workers in the majority of industries do not attend the technical schools as they should, and the problem of how to secure their attendance is engaging the attention of education authorities, who have assumed heavy pecuniary responsibilities in the matter of buildings and equipment for technical instruction. The whole question is comprehensively dealt with by Professor Sadler in his “Continuation Schools in England and Elsewhere,” a work that will well repay perusal. What are known as “continuation schools” appear to be destined to play no inconsiderable part in the solution of the problem under review. The purpose of these schools has been defined as follows: “To provide at convenient hours further instruction for those who have already

left the day-school and have entered upon the practical work of life, whether as apprentices or as independent wage-earners or in the duties of the home; to prepare students for the efficient discharge of the duties of citizenship, and to increase their power and skill in breadwinning occupations."

In the opinion of those directly concerned with the working of such schools their aim should be the making of good citizens and the training of skilled artisans and workers, including in the latter term clerks and business assistants. It appears that, while the attitude of workers towards continuation schools is at present mainly one of indifference, the interest in them is growing, and the younger men, at least, are beginning to see the advantages of technical training. A minority are always keen about it. Working-men's associations and trade-unions, in some few cases, are moving in the matter, but the majority of them, like the workers, appear to be indifferent. One reason given for this indifference is that the increased efficiency of apprentices benefits employers more than workpeople. The attitude of employers is said to be encouraging, or at least not adverse. The opinion is expressed that, while many of them are becoming more alive to the necessity for technical training for their employees, much more might be done in the direction of advising, if not compelling, the attendance of the latter at technical classes. Opinions on the question of compulsory attendance appear to be very diverse. State compulsion is generally objected to, the compulsion exercised by parents and employers being regarded as more justifiable. Other objections raised are the difficulty of enforcing attendance, the increased cost, and the strain on delicate pupils who have to work for a living. Among the suggestions offered are the raising of the compulsory age for the day-schools, as preferable to enforcing attendance at evening-schools, the shortening of the normal hours of daily work, and the following of the period of compulsory attendance immediately on the day-school course.

Viewing the question from the standpoint of a young country, the resources of which have only just begun to be exploited and whose industries are in the early stages of development, there seems to be no question as to the best way of compelling our young people to avail themselves of the advantages of technical training, and we are of the opinion that every form of compulsion should be exhausted before calling in the aid of legal enactments. That a large proportion of our employers of labour, also a fair proportion of the labour organizations, in this country are favourable to some form of technical instruction is beyond question; it would therefore seem that the time has arrived for some concerted action to be taken by those interested in our more fully developed branches of industry.

Inquiries made among upwards of two hundred companies and firms representing the chief trades and industries in England (including all the chief railway companies) show that a number of them are encouraging in various ways their employees to attend day and evening classes. The means adopted include the following: (1) Apprentices are excused from part of the day-work to enable them to attend day classes; (2) special technical schools are provided by employers for the training of their own workpeople; (3) part or the whole of the fees are paid by employers; (4) the cost of apparatus, books, &c., is found by employers; (5) scholarships, bursaries, &c., are provided; (6) special privileges, such as admission to the drawing-office, are allowed in the case of deserving students; (7) wages are increased, also opportunities for promotion. As regards "time off," in some cases one day or half a day a week is allowed, in others the "sandwich" system is adopted, the winter months being spent at the schools and the summer months at the works. Other variations are—excuse from overtime on the night of the class, and permission to leave work early or to come to work late on one day a week. In very few cases is compulsory attendance enforced; in some, attendance at approved courses is made a condition of continuous employment.

The following extract from a report dealing with the co-operation of employers and technical institutions in England shows what is being done in the matter in some of the large industrial centres:

"**BARROW-IN-FURNESS.**—Messrs. Vickers, Sons, and Maxim co-operate in the education of apprentices with the Barrow-in-Furness Technical School. All apprentices are advised to become students at the school. The inducements offered being leave to compete, under certain conditions, for entry into the drawing-office, and, if a four-years course is taken and regularly attended, extra allowances for successes in the different subjects. Those who attend evening classes are allowed to begin work one hour later in the mornings following classes for three days a week. Some 720 of the firm's apprentices attend at the technical school.

"**BOLTON.**—A certain number of apprentices attend the technical school two days a week and work three days a week in the mills. They all come from the 'Fine Spinners' Combine' and are all youths who have had a good secondary education. Their fees are paid by the company. A large number of textile and engineering firms in Bolton offer scholarships to their apprentices, tenable at evening classes in science and technology. The scholarship carries books with it for each subject taken up. Apprentices pay their own fees, but these are returned if they make 75 per cent. of the total possible attendances in each class.

"**BIRMINGHAM.**—Afternoon courses for engineering apprentices are held at the Municipal Technical School. The classes are held for three hours on each of three afternoons a week. Admission to these classes is restricted to students actually engaged by engineering firms, and recommended for admission by their employers.

"**BRADFORD.**—By arrangement with the firms composing the district branch of the Engineering Employers' Federation, apprentices who have attended the three-years day-college course are accepted by such firms to complete their workshop experience until twenty-one years of age, the time spent at the college being included as a part of their apprenticeship. A special course of instruction for apprentices in the shops of the same firms is provided. Arrangements have been made with the Bradford Technical College for apprentices to attend the college one half-day a week without loss of wages, the fees (£3 per session per student) being paid by the employers, who, in deserving cases, provide books and instruments as well. Apprentices are also required to attend on two evenings a week classes forming part of the course, the fees (10s. per session) being paid by the students, but remitted by the employers

if a satisfactory report is obtained. In other departments of the Technical College there have been instances of local firms paying fees for promising apprentices to attend day classes. At the Bradford School of Art there is a class composed of apprentices in the painting and decorating trade, in which the Association of Masters and the majority of masters take a great interest. Many send their apprentices to day classes five afternoons a week for one year. The apprentices also attend three evenings a week during the year, and until the end of their apprenticeship. The masters pay the wages of those attending day classes at the same rate as if they were in the shops, and they are admitted to day classes without fee. It is noted that apprentices who attend day classes make far greater progress than those who attend in the evening.

“**LEICESTER.**—*Boot and Shoe Trade.*—At the Leicester Technical School there is a full day course extending over two years. The departmental trade instruction is given in the afternoons, and employers send students on one, two, or even three afternoons a week for special subjects.

“*Building Trade.*—Apprentices are sent for one afternoon per week. At present carpenters and joiners only are taken, but arrangements are to be made in future for bricklayers.

“*House-painters.* Apprentices come for a full day a week during the four months when trade is slackest.

“**MANCHESTER.**—At the Manchester School of Technology a special course of day instruction has been arranged to meet the needs of engineering apprentices. The classes are held on Mondays for eight hours. They continue throughout the whole session of forty weeks. The employers pay wages as if at work. The apprentices are not expected to attend evening classes, and consequently have time for home-work and reading.”

The foregoing are typical examples of the interest which English employers are taking in the education of their apprentices, and it is to be hoped that something of a similar nature will be possible in the near future at the larger centres of population in New Zealand. If only a few employers were to combine and inaugurate a suitable scheme, others would doubtless follow. Such a step would go a long way in solving the attendance problem. There are, for example, a large number of young apprentice-mechanics employed in the Addington, Hillside, Petone, Aramoho, and Newmarket Railway Workshops, but few, if any, of them attend the well-equipped technical schools which are within easy reach of them. There is little doubt that the controlling authorities of these technical schools would gladly arrange suitable courses of instruction at convenient hours to meet their requirements. If a simple workable scheme were arranged, it would undoubtedly have the effect of giving a marked impetus to technical instruction generally throughout the Dominion.

The foregoing remarks are not intended to suggest any depreciation of the standard of work done in the several schools. They are rather to be taken as an indication of a present unavoidable element of weakness in the scheme of technical instruction.

The following extract from the *Daily News* (London and Manchester) is here inserted as bearing on another phase of the relation of technical education to employment. It deals in an interesting and instructive manner with the question of boy-labour:—

“Perhaps the gravest of all the grave facts which the Poor-law Commission has laid bare is the perpetual recruitment of the unemployable by tens of thousands of boys who, through neglect to provide them with suitable industrial training, may almost be said to graduate into unemployment as a matter of course.

“It is found that from the age of eighteen boys begin to crowd into the ranks of the unemployed at an alarming rate, and chiefly for the reason that they have no trade. When they leave school they go as van-boys, messenger-lads, errand-boys, and into warehouses and factories, where they learn nothing save, perhaps, one mechanical operation. At eighteen they are either turned adrift to make way for younger boys, or refused any further increase in salary; and then, in their own words, they chuck the job to seek for something better, which never turns up.

“The London lad frequently is without an idea up to the day he leaves school as to what he is going to be. He is always glad to get free from the discipline of school. He leaves, as a rule, on the first day the law permits. Then he looks for a job. His parents are with him in making wages the first consideration. It nearly always happens that the work that pays the highest wages to boys fresh from school is the work that leaves them stranded without industrial training at eighteen. Thus you get thousands of lads every year thrust down among the unemployed, doomed, many of them, by the very nature of their unskilled training to drift into the ranks of the unemployable. It is nothing short of a national scandal that a Government Department like the Post Office should contribute so largely as it does to this industrial demoralisation of boys. The evil might be checked either by raising the school-age, or by the establishment of compulsory continuation schools, the obligation being with employers rather than with parents. Such schools are in operation in Germany, and employers offer considerable facilities to their boys to attend the classes. It is certainly time that the evils of boy-labour in this country were faced. Something is wrong with the educational system or industrial system, or both, since shoals of lads are thrown on the industrial scrap-heap in the very prime of life.

“The better class of employers would probably welcome the change. Many already voluntarily allow not only boys, but girls, in their service to attend technical classes during factory hours. Of course, other employers would say that they could not run their factories if boys under eighteen were compelled to spend half the time in continuation schools that is now devoted to labour. This objection was offered in the early days of Factory Act reform. It was said that factories could not be run without child-labour. Experience has since brought wisdom. So probably would the experience of limiting boy-labour.

“Such schools should be largely technical in character. The apprenticeship system is dying out. It is no longer adapted to modern industrial developments. Boys are rarely taught a trade nowadays. Not that continuation schools should teach them trades. What such places should do would be to

teach craftsmanship, adaptability, self-reliance. They would teach the science of many of the things the boys deal with in their daily work. But such schools ought not to be confined to technical training only. They ought to develop a boy's general education. Physical training should form part of the curriculum.

"With all boys under eighteen compelled to spend half the day at school, and all boys under seventeen totally excluded from street trading, there would be fewer youths drifting into unemployment. More adults would also be kept at work. With the specialisation of industries going on to-day it is becoming increasingly easy to substitute boy-labour for that of men. So intensified is this tendency becoming that lads may be employed at work from which their own fathers have been dismissed. But, once it became general that boys up to eighteen had to spend half their time at school, this tendency would be checked. You would be saving the adults from losing their work, and so training the boys that when they became men they would be better fitted than they are to-day to keep work and to get work.

"The Poor-law Commission advise the setting-up of labour exchanges. The establishment of a national system of Children's Employment Committees has also been urged. These Committees could work in association with the proposed labour exchanges, and also in close connection with the elementary schools of each district. It is the absence of some such organization linking the school with the industrial world that causes many of the evils of boy-labour that remain a national menace to-day."

The following remarks have reference to the work of the technical schools as a whole during 1908 :—

*Art.*—With few exceptions the work of the art classes has reached a very much higher place than in former years. This is most apparent in those schools where a day course in art subjects for holders of free places has been arranged. These young pupils attend for about twenty-five hours a week and take a systematic course of study. Many of the pupils show signs of special aptitude in particular directions, and the progress made appears generally to be most satisfactory. It may be expected that many of our future art-craft instructors will be drawn from the ranks of those who are now holding free places in our art schools. William Morris, one of the greatest of modern art craftsmen, once said, "What I mean by 'art' is some creation of man which appeals to his emotions and his intellect by means of his senses." Probably not the least of the deprivations which the art workers and young students of this Dominion suffer is the lack of examples of those "creations" of which Morris speaks. They have few standards by which their work can be tried. Very little work of a high order is available at which to look and from which to derive inspiration and direction, and form ideals of what may be regarded as really good work and therefore great work. It is to be hoped that in the near future the equipment of our art schools will include a collection of selected examples of art-craft work by the best workers. Failing that, a set of suitable examples might be obtained for circulation among the schools providing courses in applied art. One or two typical examples of the different methods of art enamelling, a few specimens of artistic beaten work in gold and silver; art forging and metal-work; modern pottery-work, in the white and painted; stained-glass work; modern bookbinding, &c., would, it is considered, do much to elevate art-workers' ideals and provide a goal toward which they could work. There is reason to believe that the sets of casts illustrating various styles of wood-carving which were distributed to the art classes during the year have not only been appreciated by instructors and pupils, but will also assist in raising the standard of work in the carving classes. In this connection it may be pointed out that in many of the classes in wood-carving the tendency of instructors is to give the pupils too much practical assistance in their work. Many of them, in addition to providing the designs, do so much of the finishing that this part of the work cannot with truth be regarded as the student's own. The difficulty of course lies in the fact that so many of the students have had no preliminary training in freehand drawing, elementary design, and modelling. It is suggested that students before being admitted to wood-carving classes should first produce evidence of an elementary knowledge of drawing, design, and modelling. The attendance at the classes would probably fall, but it would be better in every way to have a few students working on sound lines than many students working as at present. It is a matter for regret that the carving classes are attended by so few trade students.

*Architecture and Building-construction.*—The courses of instruction and the attendance of students at these classes are most satisfactory and except in a comparatively few instances an advance in the character of the work is noticeable. There appears to be less drawing from flat copies, more drawing to scale of typical examples and of parts of buildings from models and from rough sketches previously made by the students. In some of the classes an attempt has been made to discover why certain parts of given structures are invariably shaped according to a standard pattern, and whether in the light of modern requirements and of present-day knowledge the shapes could not be improved. Many of the designs of domestic buildings prepared by students in the advanced classes are not without evidences of originality and good taste, and the attempts made in the way of departure from the prevailing style of colonial domestic architecture have been most successful. It is considered, however, that more might be done in the direction of giving students some systematic instruction in principles. It is contended that this is impossible until properly equipped mechanics' laboratories are provided for the schools, but the opinion is expressed that a large amount of valuable instruction could be imparted in the rooms at present available and with a very simple equipment of models and apparatus for carrying out the necessary experiments. Probably under present conditions, such as lack of previous training on the part of students, irregular attendance, &c., a large amount of such work cannot be expected, but surely a beginning might be made. Quantity surveying might well form part of the instruction in all advanced classes. It is gratifying to note that some of our architectural students also attend classes in the principles of design and modelling and in some branch of applied art. Such branches of study appear to be eminently suitable to the architect, as modern requirements make it necessary

for him to be able to prepare drawings for internal as well as external decorations, and at times to design internal fittings and furniture for a house. A reminder is given to those responsible for the conduct of elementary classes composed substantially of young pupils, that the preparation of a set of plans from data supplied by the instructor should not form part of the class work.

*Agriculture.*—We again have to report that very little progress has been made during the year in the extension of classes relating to agriculture and dairying. One important branch has, however, received a little more attention than formerly, and it is pleasing to be able to report an increase in the number of classes in wool-sorting. At one of the centres at which day classes are held a course of instruction in a group of subjects bearing on agriculture has been attended by nearly a dozen lads. Wool-sorting is included in this course. In one district the members of the wool-sorting classes were afforded an opportunity of putting the instruction they had received to a practical test, and incidentally to demonstrate to small sheep-farmers the advantage of classing the whole of their wool before disposing of it. Accompanied by their instructor, they visited the wool-shed of a sheep-farmer interested in their work, and classed the contents of a certain number of bales of wool ready for the London market. The returns of the sale of this wool are awaited with interest, as it is contended that the wool will bring a higher price in open market than if it had been unclassified. It is suggested that agricultural and pastoral associations might include among the very interesting series of competitions usually arranged at the several shows, competitions in wool-classing. If this were done it might have the effect of helping to focus the interest farmers are beginning to take in technical training and of giving an impetus to the formation of classes in districts where wool-growing is one of the principal industries.

*Carpentry and Joinery, Cabinetmaking, &c.*—The standard of work done in these classes is slightly higher than last year. More attention is being given to drawing, and as a consequence the work generally is more intelligently done. But at the smaller centres matters referred to in last year's report remain, generally speaking, unaltered. The classes in carpentry and joinery and cabinetmaking are mostly attended by amateurs, apprentices and workers engaged in the trade being conspicuous by their absence. The cause of this is difficult to discover. It cannot lie with the instructors, for in most cases the classes are in charge of capable mechanics, who in their daily work command the respect and confidence of their respective trades; neither can the cause be traced to lack of provision in the matter of the necessary equipment and tools, as the majority of the workshops in which the classes are held are liberally supplied with first-class tools and most of the conveniences for carrying on both elementary and advanced work. It is to be feared that the cause lies in the lack of ambition on the part of young apprentices and workers.

With regard to the classes for painting, decorating, and sign-writing, it is a matter for regret that, except in one solitary instance, no attention is being given to instruction in underlying principles. The painting classes appear to aim only at giving the students ability to grain, or, in other words, imitate special woods with pigments—notably oak. The imitation is generally of a purely mechanical type, and usually consists in merely copying some-one else's imitation. Students seldom work from selected specimens of woods, and this, together with the total absence of instruction in principles, cannot be regarded with anything but disfavour. The classes in sign-writing are thoroughly good as far as they go, but the trade element preponderates. Drawing different types of letters in different media with the brush, spacing, and adapting lettering to spaces may form a series of excellent exercises; but where the preliminary training required for this, such as instruction in freehand drawing and elementary light and shade, is overlooked or not insisted on, either the students' progress must necessarily be very slow, or both students and instructors are content with a low standard of work. To discover a remedy for this is not an easy matter. The payment of a lower rate of capitation in the case of trade classes in which instruction in principles is not included is suggested in this connection.

*Commercial Work.*—There appears to be no diminution in the demand for instruction in commercial work. From the standpoint of attendances these classes are most successful. But the success from the standpoint of national efficiency may be questioned. We are informed that the demand for young persons trained for commercial pursuits in our technical classes is greatly in excess of the supply. We can quite believe this, for the training given is on sound practical lines, and those requiring the services of young clerks find it greatly to their advantage to be relieved of the responsibility of providing the preliminary training of the office-assistants. The comparatively large proportion of young people taking up clerical work as a profession, together with the apparently increasing demand for this class of worker seems to point in the direction of the growth of economic conditions which will, unless checked, assume unnatural proportions, and prove a source of trouble in the future.

*Dressmaking, Domestic Science, &c.*—Classes in dressmaking throughout the Dominion are well attended, and the work done in most of them appears to be well adapted to the needs of the students. It is to be hoped that something may be done in the near future in the way of providing increased and better facilities for those engaged in the workrooms of the drapery and millinery establishments in the larger centres, at least, for technical instruction in dressmaking, &c. The instruction at present provided cannot, generally speaking, be regarded as altogether satisfactory, consisting as it does in most cases in the drafting of patterns by the aid of patented charts, and in the making-up of certain garments. It should not be difficult for employers and the technical schools to come to some agreement on the matter, as has been done in London and elsewhere.

Messrs. Debenham and Freebody, for example, allow certain dressmaking apprentices to attend on two afternoons a week a course of instruction at certain technical schools. The firm report that the girls are not so useful to them during the period of their apprenticeship as other girls who do not attend classes, but that, other things being equal, they are destined to do better work later on. Courses of instruction are provided at many of the London Technical Institutes for girls engaged in the dress-making trade. The courses include such subjects as instruction in the suitability of certain materials

for the processes of dressmaking, drafting patterns, calculation of quantities and cost, adaptation of styles to various figures, and in blending of colours. The aim throughout the course is to train the eye and cultivate the taste of the pupils as well as to make them efficient hand-workers.

*Mechanical and Electrical Engineering.*—Considerable progress has been made in the matter of providing the necessary equipment for the practical work connected with the study of these important subjects. Workshops containing a few of the best modern types of machine tools, are now attached to the technical schools at Auckland, Wanganui, Wellington, Christchurch, and Dunedin, and these, with the well-equipped experimental laboratories at the School of Engineering at Canterbury College, provide an equipment for elementary and advanced practical and experimental work of which we may be justly proud: in fact, it may be said that except in a few minor matters these schools can now supply a thoroughly sound training in two of the principal branches of engineering. Hitherto it has been the general practice for students in engineering at technical schools to attend for instruction in one or two of the following subjects—mechanical drawing, mathematics and geometry, theoretical and applied mechanics, and steam—but they have not, except in a few instances, taken up the study of a group of subjects related to engineering. The ideal condition would of course be for all mechanical and electrical engineering apprentices to attend at the nearest school for at least ten hours during the week, preferably at such hours as would enable them to receive most profit from the instruction. It would then be an easy matter to arrange a course of study on sound lines. These ideal conditions do not, however, appear to be possible at present. So the question is how best to arrange a course of work to meet the real needs of the average student, who only attends, at most, for five hours a week. One solution appears to lie in the direction of the hints given in our report of last year. The instruction in geometry and mathematics and elementary mechanics, as well as in drawing, should be given wherever practicable by the same instructor. The difficulty of teaching these subjects to a class of students differing in mental attainments would no doubt be considerable, and the progress of the class as a whole would necessarily be slow; but the value of the instruction would be increased. It is to be hoped that the system of instruction obtaining in some of the smaller centres, and not altogether unknown in the larger centres, which consists largely in students copying drawing from flat examples of parts of obsolete machines, will gradually disappear.

*Plumbing.*—The classes in theoretical and practical plumbing continue to do excellent work in most of the districts and call for no special comment.

*General.*—While ample provision is, generally speaking, made for the intellectual life of the students in attending technical schools, the social element appears to have been to a large extent overlooked. In one school, however, a small orchestra composed entirely of students is in course of training, and there are other signs of attempts to remedy this defect. Possibly the many facilities provided by different organizations for the social intercourse of their members—facilities which at times interfere with the attendance at technical schools—cause directors generally to refrain from moving in the matter. Every opportunity should, however, be taken to emphasize as far as possible the corporate life of the school and to create an *esprit de corps* among the students.

Classes for the training of public-school teachers in subjects of manual instruction were as usual held in most of the education districts. The subjects to which most attention was given were various branches of elementary handwork and drawing, agriculture, woodwork, and cookery. In several districts special sessions lasting generally for a fortnight have been arranged with results that have been highly satisfactory—so much so as to suggest the advisability of substituting where practicable such sessions for the usual Saturday classes. The attendance at these classes has frequently been very irregular, and in not a few cases lack of interest in the work on the part of some of the teachers has been apparent. A number of teachers sat for the examinations of the City and Guilds of London Institute in woodwork and cookery. Fifteen passed the examination in woodwork and thirty-nine that in cookery.

The Science and Art Examinations of the Board of Education, London, and the Technological Examinations of the City and Guilds of London Institute were conducted as usual by the Department. The results which are given in Tables 7 and 7A, on pages 30 and 31, may be summarised as follows: Of 626 candidates who sat for the Science and Art Examinations, 403 passed; 27 students' works were sent Home for examination in connection with art certificates, of which 8 were accepted by the examiners. The number of candidates who sat for the Technological Examinations was 330, of whom 233 passed. The examinations were held at 16 centres. Compared with last year there were 111 more candidates for both examinations and 87 more passes.

M. H. BROWNE, } Inspectors of Technical Instruction.  
E. C. ISAAC, }

The Inspector-General of Schools, Wellington.

## No. 3.

## DETAILS RELATING TO MANUAL AND TECHNICAL INSTRUCTION.

TABLE 1.—MANUAL INSTRUCTION, 1908.—PUBLIC SCHOOL CLASSES.

Controlling Authority.	Total Number of Schools.	Subjects of Instruction and Number of Classes in each Subject.													Payments up to 31st December, 1908.								
		Elementary Handwork.	Drawing in Light and Shade, Blackboard Drawing and Design.	Cookery.	Dressmaking.	Needlework.	Woodwork.	Elementary Science.	Elementary Physiology, Health, and First-aid.	Swimming and Life-saving.	Elementary Agriculture.	Dairying.	Elementary Physical Measurements.	Totals.	Capitation.	Grants for Buildings, Rent, Furniture, and Apparatus.	Pound-for-pound Subsidy on Voluntary Contributions.						
Education Board, Auckland ..	227	413	154	70	..	67	71	4	3	7	87	..	..	876	£ 3,217	s. 9	d. 0	..	..	£ 28	s. 8	d. 8	
Education Board, Taranaki ..	62	130	18	18	2	10	18	6	13	3	24	2	5	249	629	13	0	..	..	24	9	0	
Education Board, Wanganui ..	175	284	255	27	2	20	24	5	1	8	82	35	11	754	2,114	13	3	192	4	0	31	9	0
Education Board, Wellington ..	114	234	80	35	5	17	17	11	10	8	55	1	9	482	1,854	16	9	1,186	4	6	110	15	6
Education Board, Hawke's Bay ..	60	84	28	93	25	5	26	9	3	1	15	..	6	235	1,248	5	10	318	17	0	..	..	..
Education Board, Marlborough ..	32	62	12	12	..	4	10	..	1	2	13	..	1	117	265	0	0	..	..	..	..	..	..
Education Board, Nelson ..	52	56	16	12	11	12	14	..	12	14	27	..	3	177	966	15	0	163	12	1	..	..	..
Education Board, Grey ..	16	16	..	8	..	..	1	..	..	..	9	..	..	34	185	17	5	..	..	..	..	..	..
Education Board, Westland ..	13	11	..	4	..	1	2	2	..	..	5	..	..	25	75	11	10	..	..	..	..	..	..
Education Board, North Canterbury	114	230	18	39	1	29	34	5	..	32	35	..	..	423	2,058	14	7	149	12	11	..	..	..
Education Board, South Canterbury	45	80	9	16	1	14	16	11	1	3	15	..	..	166	614	19	8	29	8	9	30	2	6
Education Board, Otago ..	127	235	24	43	1	28	22	2	4	20	62	..	29	470	1,618	10	7	1,456	4	6	..	..	..
Education Board, Southland ..	163	363	68	13	24	32	15	2	3	5	31	..	30	586	1,689	19	1	..	..	..	..	..	..
Totals 1908 ..	1,200	2,198	682	330	72	239	270	57	51	103	460	38	94	4,594	16,540	6	0	3,426	3	9	225	4	8
" 1907 ..	1,135	2,152	616	303	70	230	263	44	46	75	397	26	88	4,310	12,467	1	9	2,372	19	2	419	11	9



TABLE 1A.—RECEIPTS (BY WAY OF CAPITATION) OF EDUCATION BOARDS AS CONTROLLING AUTHORITIES OF PUBLIC SCHOOL CLASSES FOR THE YEAR ENDING 31ST DECEMBER, 1908.

Education District.	Elementary Handwork.		Needlework.		Woodwork.		Cookery.		Dressmaking.		Elementary Agriculture.		Dairy-work.		Elementary Physiology.		Swimming and Life-saving.		Elementary Physical Measurements.		Elementary Science.		Totals.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Auckland ..	717	18 5	365	1 2	852	1 8	1,030	17 10	..	..	227	9 11	..	..	7	10 0	4	17 6	..	..	11	12 6	3,217	9 0
Taranaki ..	129	12 8	47	18 0	146	15 0	141	15 0	15	10 0	59	15 8	28	6 10	16	9 4	7	10 0	33	13 1	2	7 5	629	13 0
Wanganui ..	409	1 10	125	19 0	335	8 0	416	5 0	12	12 6	344	10 3	321	3 9	5	16 0	22	15 0	108	9 2	12	12 9	2,114	13 3
Wellington ..	493	10 0	96	14 9	331	2 7	611	11 9	4	10 0	162	15 8	5	0 0	56	11 6	20	12 6	61	10 0	10	18 0	1,854	16 9
Hawke's Bay ..	181	16 4	21	12 9	336	9 0	479	5 9	78	14 6	61	2 3	..	..	11	16 6	6	15 8	45	0 0	25	13 1	1,248	5 10
Marlborough ..	51	12 1	12	18 0	56	18 6	84	6 3	..	..	49	10 1	..	..	8	16 4	0	18 9	..	..	..	..	265	0 0
Nelson ..	113	15 0	87	8 9	237	0 0	212	5 0	47	10 0	106	14 6	..	..	109	19 0	35	6 8	16	16 1	..	..	966	15 0
Grey ..	29	9 9	..	..	..	..	129	10 0	..	..	26	17 8	..	..	..	..	..	..	..	..	..	..	185	17 5
Westland ..	13	6 0	6	7 6	..	..	29	5 0	..	..	14	2 4	..	..	..	..	..	..	..	..	..	..	75	11 10
North Canterbury ..	333	16 2	195	3 0	533	3 0	745	16 2	4	10 9	128	3 0	..	..	..	..	114	7 6	11	15 0	3	15 0	2,058	14 7
South Canterbury ..	33	11 3	82	4 9	191	10 6	216	0 0	..	..	45	12 9	..	..	..	..	5	12 6	..	..	28	12 11	614	19 8
Otago ..	409	0 10	170	13 9	284	1 8	456	17 0	3	15 0	130	17 11	..	..	21	14 0	9	15 4	123	18 6	7	16 7	1,618	10 7
Southland ..	308	9 8	133	0 6	450	15 0	423	15 0	93	16 1	130	12 6	..	..	11	5 6	10	12 6	124	9 0	3	3 4	1,689	19 1
Totals ..	3,225	0 0	1,345	1 11	3,763	14 11	4,977	9 9	260	18 10	1,488	4 6	354	10 7	249	18 2	239	3 11	525	10 10	110	12 7	16,540	6 0

TABLE 1B.—EXPENDITURE BY EDUCATION BOARDS AS CONTROLLING AUTHORITIES OF PUBLIC SCHOOL CLASSES FOR THE YEAR ENDING 31ST DECEMBER, 1908 (EXCLUSIVE OF EXPENDITURE OUT OF SPECIAL GRANTS FOR BUILDINGS AND EQUIPMENT).

Education District.	Elementary Handwork.		Needlework.		Woodwork.		Cookery.		Dressmaking.		Elementary Agriculture.		Dairy-work.		Elementary Physiology.		Swimming and Life-saving.		Elementary Physical Measurements.		Elementary Science.		Totals.			
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.		
Auckland ..	820	1 8	326	17 9	1,276	0 8	905	8 3	..	..	588	16 7	..	..	2	18 10	2	0 0	3	3 6	..	..	611	7 10	3,919	4 11
Taranaki ..	27	10 0	72	5 0	218	19 2	172	3 11	6	7 3	96	18 1	4	1 10	2	18 10	7	0 0	18	12 11	1	7 3	611	7 10	611	7 10
Wanganui ..	287	13 7	116	14 3	422	9 7	364	14 0	11	7 3	290	10 8	201	9 7	5	4 5	23	19 10	18	12 11	65	4 5	1,744	3 4		
Wellington ..	477	6 10	88	4 9	275	2 5	543	7 2	25	5 4	345	13 6	0	10 4	9	3 9	8	18 2	70	15 8	85	4 5	1,909	12 4		
Hawke's Bay ..	372	12 0	21	12 9	379	5 7	444	8 6	161	19 3	42	5 2	..	..	11	8 6	6	10 8	6	6 11	24	15 6	1,471	0 1		
Marlborough ..	38	17 9	12	18 0	88	4 1	123	3 10	..	..	38	4 3	..	..	29	11 7	24	7 3	53	7 1	..	..	307	14 10		
Nelson ..	73	19 8	76	17 6	270	17 5	258	3 5	95	7 3	141	12 2	..	..	..	..	..	..	..	..	..	..	1,024	3 4		
Grey ..	25	12 8	12	10 0	11	0 0	65	17 5	22	14 8	32	17 8	..	..	..	..	..	..	..	..	..	..	170	12 5		
Westland ..	13	1 4	20	5 0	8	10 0	28	4 11	..	..	11	14 6	..	..	..	..	..	..	..	..	..	..	81	15 9		
North Canterbury ..	287	17 10	193	6 0	611	19 7	760	11 11	4	10 9	170	3 1	..	..	..	..	114	9 0	..	..	6	10 3	2,149	8 5		
South Canterbury ..	42	3 3	82	6 6	221	3 0	258	12 10	..	..	96	18 3	..	..	..	..	3	12 2	48	15 10	0	2 5	704	18 5		
Otago ..	294	10 4	170	13 9	280	9 0	371	5 3	..	..	111	7 7	..	..	5	4 10	11	0 0	..	..	2	15 8	1,296	2 3		
Southland ..	306	1 0	144	16 0	270	13 6	239	2 7	5	0 0	43	10 0	..	..	..	..	7	10 0	67	2 6	..	..	1,083	15 7		
Totals ..	3,067	7 11	1,339	7 3	4,334	14 0	4,535	4 0	332	12 0	2,010	11 6	206	1 9	63	11 11	209	7 1	274	6 7	100	15 6	16,473	19 6		

TABLE 2.—MANUAL INSTRUCTION, 1908.—SECONDARY SCHOOL CLASSES.

Secondary Schools.	Subjects of Instruction and Number of Classes in each Subject.								Payments up to 31st December, 1908.		
	Drawing in Light and Shade, Perspective Drawing and Design.	Cookery.	Dressmaking.	Woodwork.	Experimental and Natural Science.	Swimming and Life-saving.	Elementary Agriculture.	Elementary Physical Measurements.	Totals.	Capitation.	Grants for Apparatus.
Thames High School ..	..	1	1	1	3	..	..	..	6	£ s. d. 52 8 10	£ s. d. ..
Whangarei High School ..	2	2	..	2	..	..	..	..	6	84 4 0	..
New Plymouth High School ..	5	..	..	..	7	..	..	..	12	73 10 8	..
Wanganui Girls' College ..	..	4	3	..	4	1	..	..	12	39 0 0	..
Palmerston North High School	3	1	..	1	6	..	1	..	12	56 14 7	..
Wellington Girls' College ..	3	..	..	..	8	..	..	..	11	..	..
Napier Girls' High School ..	..	2	..	..	..	..	..	..	2	31 10 0	..
Dannevirke High School ..	..	1	1	1	..	..	..	..	3	23 9 6	204 16 3
Marlborough High School ..	..	1	..	1	7	..	..	..	9	44 5 0	..
Nelson Girls' College ..	..	3	1	..	6	..	..	..	10	81 7 6	..
Christchurch Boys' High School	..	..	..	3	6	..	..	..	9	43 16 5	..
Christchurch Girls' High School	9	2	2	..	12	..	..	..	25	50 7 1	..
Ashburton High School ..	..	2	..	2	..	..	..	..	4	55 5 0	..
Timaru Boys' High School ..	..	..	..	2	2	1	..	..	5	51 7 6	..
Timaru Girls' High School ..	1	..	1	..	3	..	..	..	5	27 6 2	2 10 0
Waitaki High School ..	..	..	..	..	3	..	..	..	3	..	..
Otago Boys' High School ..	..	..	..	..	..	6	..	..	6	..	..
Otago Girls' High School ..	..	..	..	..	..	3	..	..	3	18 10 0	..
Southland Boys' High School ..	..	..	..	1	..	..	..	..	1	44 5 0	..
Southland Girls' High School	5	2	1	..	7	..	..	..	15	84 11 3	..
Totals, 1908 ..	28	21	10	14	74	11	1	..	159	861 18 6	207 6 3
Totals, 1907 ..	26	24	10	17	63	6	1	2	149	695 2 8	86 15 9

TABLE 2A.—RECEIPTS (BY WAY OF CAPITATION) OF GOVERNING BODIES OF CERTAIN SECONDARY SCHOOLS, AS CONTROLLING AUTHORITIES OF SECONDARY SCHOOL CLASSES, FOR THE YEAR ENDING 31ST DECEMBER, 1908.

High School Board.	Subjects of Instruction.						Totals.
	Drawing and Painting.	Science, Experimental and Natural.	Swimming and Life-saving.	Woodwork.	Cookery.	Dressmaking.	
Whangarei High School ..	£ s. d. 5 17 6	£ s. d. .. ..	£ s. d. .. ..	£ s. d. 42 0 6	£ s. d. 36 6 0	£ s. d. .. ..	£ s. d. 84 4 0
Thames High School ..	1 5 0	15 16 8	.. ..	17 1 6	13 19 0	4 6 8	52 8 10
New Plymouth High School ..	7 0 10	16 19 10	.. ..	34 10 0	15 0 0	.. ..	73 10 8
Wanganui Girls' College..	.. ..	.. ..	.. ..	.. ..	28 10 0	10 10 0	38 0 0
Palmerston North High School ..	4 18 9	22 10 10	.. ..	18 0 0	11 5 0	.. ..	58 14 7
Dannevirke High School ..	.. ..	.. ..	.. ..	18 15 0	.. ..	4 14 6	23 9 6
Napier Girls' High School ..	.. ..	.. ..	.. ..	.. ..	31 10 0	.. ..	31 10 0
Marlborough High School ..	.. ..	18 5 0	.. ..	12 10 0	13 10 0	.. ..	44 5 0
Nelson Girls' College ..	.. ..	25 17 6	.. ..	.. ..	55 10 0	.. ..	81 7 6
Christchurch Girls' High School ..	10 10 5	22 4 2	3 12 6	.. ..	9 15 0	4 5 0	50 7 1
Christchurch Boys' High School ..	5 18 9	25 17 8	.. ..	12 0 0	.. ..	.. ..	43 16 5
Ashburton High School ..	.. ..	.. ..	4 2 6	24 2 6	27 0 0	.. ..	55 5 0
Timaru Girls' High School ..	0 6 2	5 10 0	.. ..	.. ..	15 0 0	6 10 0	27 6 2
Timaru Boys' High School ..	.. ..	5 5 0	8 12 6	37 10 0	.. ..	.. ..	51 7 6
Otago Girls' High School ..	.. ..	.. ..	.. ..	.. ..	18 10 0	.. ..	18 10 0
Southland Girls' High School ..	1 16 3	14 10 0	.. ..	.. ..	64 10 0	3 15 0	84 11 3
Southland Boys' High School ..	.. ..	.. ..	.. ..	44 5 0	.. ..	.. ..	44 5 0
Totals .. ..	37 13 8	172 16 8	16 7 6	260 14 6	340 5 0	34 1 2	861 18 6

TABLE 2B.—EXPENDITURE BY GOVERNING BODIES OF CERTAIN SECONDARY SCHOOLS, AS CONTROLLING AUTHORITIES OF SCHOOL CLASSES, ON MAINTENANCE OF CLASSES FOR THE YEAR ENDING 31ST DECEMBER, 1908 (EXCLUSIVE OF EXPENDITURE OUT OF SPECIAL GRANTS FOR BUILDINGS AND EQUIPMENT).

High School Boards.	Subjects of Instruction.						Totals.
	Drawing and Painting.	Science, Experimental and Natural.	Swimming and Life-saving.	Woodwork.	Cookery.	Dressmaking.	
Whangarei High School ..	£ s. d. 5 17 6	£ s. d. .. ..	£ s. d. .. ..	£ s. d. 42 0 6	£ s. d. 36 6 0	£ s. d. .. ..	£ s. d. 84 4 0
Thames High School ..	.. ..	2 0 0	.. ..	11 11 6	11 11 6	2 0 5	27 3 5
New Plymouth High School ..	30 0 0	9 19 10	.. ..	34 10 0	15 0 0	.. ..	89 9 10
Wanganui Girls' College..	.. ..	.. ..	19 15 0	.. ..	.. ..	.. ..	19 15 0
Palmerston North High School ..	.. ..	3 1 11	.. ..	8 10 6	12 13 1	.. ..	24 5 6
Wellington Girls' College ..	60 0 0	5 0 0	3 3 0	.. ..	.. ..	.. ..	68 3 0
Dannevirke High School ..	.. ..	.. ..	.. ..	30 7 0	11 18 1	10 0 0	52 5 1
Napier Girls' High School ..	.. ..	.. ..	.. ..	.. ..	33 17 4	.. ..	33 17 4
Marlborough High School ..	.. ..	14 3 10	.. ..	15 0 0	13 10 0	.. ..	42 13 10
Nelson Girls' College ..	.. ..	.. ..	.. ..	.. ..	55 10 0	5 15 0	61 5 0
Christchurch Girls' High School ..	0 7 6	1 18 7	.. ..	.. ..	20 6 7	0 13 6	23 6 2
Christchurch Boys' High School ..	.. ..	9 16 4	.. ..	7 12 0	.. ..	.. ..	17 8 4
Ashburton High School ..	.. ..	.. ..	.. ..	24 2 6	27 0 0	.. ..	51 2 6
Timaru Girls' High School ..	.. ..	.. ..	.. ..	.. ..	15 10 3	.. ..	15 10 3
Timaru Boys' High School ..	.. ..	.. ..	.. ..	35 7 1	.. ..	.. ..	35 7 1
Otago Girls' High School ..	.. ..	.. ..	.. ..	.. ..	33 11 3	.. ..	33 11 3
Otago Boys' High School ..	.. ..	.. ..	22 9 4	.. ..	.. ..	.. ..	22 9 4
Southland Girls' High School ..	.. ..	.. ..	.. ..	.. ..	22 17 8	.. ..	22 17 8
Southland Boys' High School ..	.. ..	.. ..	.. ..	19 18 10	.. ..	.. ..	19 18 10
Totals .. ..	96 5 0	46 0 6	45 7 4	228 19 11	309 11 9	18 8 11	744 13 5





TABLE 3.—TECHNICAL INSTRUCTION, 1908—continued.

School or Classes.	Number of Classes.	Subject of Instruction and Average Attendance.													Payments up to 31st December, 1908.												
		Freehand (from the Flat and Round, Light and Shade.	Perspective and Geometrical Drawings.	Design and Ornament.	Drawing, Modelling, and Painting from Antique and Nature.	Machine-construction, Mechanical and Trade Drawing.	Architecture and Building-construction, Practical Plane and Solid Geometry.	Practical Mechanics and Mathematics, Surveying.	Mechanical and Electrical Engineering, Telegraphy and Telephony.	Experimental and Natural Science (Chemistry, Electricity, Physics, &c.).	Woodwork, Ironwork, and Metal-work.	Wood-carving, Modelling, and Repousse Work.	Carpentry and Joinery, Cabinetmaking, Painters' and Decorators' Work, Coachbuilding.	Plumbers' and Tinmiths' Work, Iron and Brass Moulding, Blacksmithing.	Cookery and Laundry-work, Dressmaking, Millinery, Tailoring.	Wool-sorting.	Commercial Subjects.	English, Latin, French, German, and Mathematics.	Music, Singing, and Recitation.	Training-classes for Teachers in Elementary Hand-making.	Training-classes for Teachers in Drawing.	Training-classes for Teachers in Elementary Agriculture, Nature study, and Science.	Totals.	Capitation.	Grants for Buildings, Furniture, and Apparatus.	Rent.	Grants for Material.
Marlborough Education Board—	15																					381	55 0 9	39 9 3		3 10 7	
Blenheim Technical School ..	4																					20	11 9 9				
Cannock Technical Classes	8																					18	18 0 0				
Havelock	3																										
Pitcon.	..																										
Nelson Education Board—	29																					300	275 19 8	398 10 0		11 17 4	
Nelson Technical School ..	14																					293	7 12 3	8 6 0			
Westport Technical Classes ..	2																					16	10 13 0	8 12 0			
Reefton	2																					13	8 8 1	408 8 6			
Wakefield	4																					5	5 4 8	16 15 3			
Biohmond.	1																					9	20 0 6	3 17 9			
Brightwater	1																					6	11 17 4	2 18 9			
Motuka	1																					12	4 4 0				
Tabaka	1																					10		5 5 0			
Millerston	1																					22		7 0 0			
Danaiton	2																					5		5 5 0			
Waimangaro	1																					5		5 5 0			
Granity	1																					18		5 5 0			
Seddonville	1																					10		5 5 0			
Grey Education Board—	6																					86	37 1 8	49 14 5		40 7 8	
Greymouth Technical Classes	1																					12					
Totara West	1																					1					
Bleekwater Continuation Classes	1																					3					
Bruner Technical Classes	1																					1					
Westland Education Board—	7																					93	26 1 9			5 14 10	
Hokitika Technical Classes	1																					16					
Kumara	1																					16					
Canterbury College Board of Governors—	67																					989	1,094 11 6	37 11 7		44 18 6	
Christchurch School of Art ..	52																					448	265 1 8	295 10 0		39 0 0	
Christchurch School of Engineering	40																					63	2 0 9				
Commercial Classes	12																					63	2 0 9				



TABLE 3.—TECHNICAL INSTRUCTION, 1908—continued.

School or Classes.	Subject of Instruction and Average Attendance.																Payments up to 31st December, 1908.																				
	Freehold (from the Flat and Round) Light and Shade.	Perspective and Geometrical Drawing.	Design and Ornament.	Drawing, Modelling, and Painting from Antique and Nature.	Machine-construction, Mechanical and Trade Drawing.	Architecture and Building-construction, Practical Plane and Solid Geometry.	Practical Mechanics and Mathematics, Surveying.	Mechanical and Electrical Engineering, Telegraphy and Telephony.	Experimental and Natural Science (Chemistry, Electricity, Physics, &c.).	Wood-work, Iron-work, and Metal-work.	Wood-carving, Modelling, and Repousse-work.	Carpentry and Joinery, Cabinetmaking, Painters and Decorators' Work.	Fumblers' and Tinsmiths' Work, Iron and Brass Moulding, Blacksmithing.	Cookery and Laundry-work, Dressmaking, Millinery, Tailoring.	Wool-sorting.	Commercial Subjects, English, Latin, French, German, Maori, Arithmetic, and Mathematics.	Musical Singing, and Elocution.	Training-classes for Teachers in Elementary Hand-work, Cookery, and Dress-making.	Training-classes for Teachers in Drawing.	Training-classes for Teachers in Physical Measurements, Elementary Agriculture, Nature-study, and Science.	Totals.	Capitation.	Grants for Buildings, Furniture, and Apparatus.	Rent.	Grants for Material.	Pound-for-pound Subsidy on Voluntary Contributions.											
Number of Classes.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.											
Otago Education Board—contd.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Dunedin Special Technical Classes	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Oamaru Special Technical Classes	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Tapanni Special Technical Classes	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Southland Education Board—	36	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Invercargill Technical School	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Gore Technical Classes	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Bluff	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Mataura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Greenhills Continuation Classes	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Makarewa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Nightcaps	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Queenstown	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Oreti Plains	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..											
Totals for 1908 ..	1505	1741	387	149	1,086	459	276	789	460	1,025	495	497	527	499	2878	101	5549	2465	186	765	440	1,054	21518	17601	2	721156	9	10905	0	10	1585	17	3	6156	17	6	
Totals for 1907 ..	1892	1951	137	179	717	506	337	668	628	850	367	274	484	385	2470	107	5238	2969	143	379	810	1,273	20867	13602	3	5	19449	13	10953	2	4	1008	11	2	12857	19	8



TABLE 3A.—CAPITATION PAYMENTS UP TO 31st December, 1908, to Controlling Authorities of Special, Associated, and College Classes on account of certain Subjects of Technical Instruction.

Subjects of Instruction.	Auckland Education Board.		Managers of the "Elam" School of Art.		Taranaki Education Board.		Wanganui Education Board.		Board of Governors, Palmerston North High School.		Wellington Education Board.		Managers of the Masterton Technical School.		Hawke's Bay Education Board.		Board of Governors, Gisborne High School.		Board of Governors, Dannevirke High School.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Freehand, blackboard, model, light and shade, and brush drawing	249	3 9	254	13 0	20	14 9	83	18 3	37	18 0	649	9 0	16	3 6	13	0 9				
Geometrical drawing, perspective, plane and solid geometry, handwork	200	2 0	25	6 0	7	9 0	40	19 6	6	11 6	50	12 3	6	8 0	16	19 6				
Design and ornament	50	15 9	88	19 9	3	4 6	16	13 0	60	9 9	29	0 0	5	14 0						
Drawing, modelling, and painting from nature and antique	23	14 3			1	8 6	263	19 6	3	19 0	192	9 9	7	1 0						
Architecture and building construction and drawing, quantity surveying	64	18 6			1	5 6	37	4 3	3	19 0	101	15 6	7	1 0						
Mechanical drawing, machine construction and drawing	222	0 9					19	15 6			105	14 0								
Practical mechanics, practical mathematics, surveying	70	7 0					17	3 3	2	3 6	151	6 9								
Mechanical and electrical engineering, steam, workshop practice, wiremen's work	209	9 0			9	17 3	62	9 6	10	9 6	122	13 6								
Experimental science (chemistry, physics, magnetism and electricity, telegraphy, physical measurements)	206	7 10			20	2 4	106	6 6	4	5 9	30	3 6								
Natural science (botany, nature-study, agriculture, physiology, horticulture, etc.)											72	14 7								
Photography and process work	82	9 3			8	3 0	17	3 6	2	13 6	42	14 3	23	10 0	16	9 6				
Woodwork and ironwork			54	13 3	17	17 3	126	2 0	11	3 0	26	11 6	5	17 0						
Wood-carving							5	0 0			9	18 0								
Repoussé and jewellery work	56	4 6			4	19 6	44	1 6	6	14 0	258	6 9								
Carpentry and joinery, cabinetmaking, and coachbuilding							24	14 0			20	15 0	3	13 0						
House and coach painting and decorating, signwriting	42	1 9			19	3 3	79	2 9	43	6 0	158	13 6	7	6 0						
Plumbing	77	7 3					7	4 0			16	5 0								
Metal work, tinsmiths' work, iron and brass moulding, &c.																				
Compositors' work																				
Bootmaking	63	6 3			27	6 6	48	12 6			10	10 0								
Cookery and laundry-work	263	14 1			66	11 3	634	5 3	34	8 0	74	16 7	38	5 0	78	11 6				
Dressmaking, millinery, tailoring, needlework, &c.							7	6 9							19	1 3				
Home nursing																				
Wool-sorting	805	12 3			36	0 3	470	1 6	33	16 0	1,584	10 10	49	5 9						
Commercial subjects	224	1 3			12	10 2	82	5 3	9	7 0	64	11 0	9	18 9						
Languages	299	2 0			12	3 5	52	8 5	21	13 3	461	5 0	9	18 9						
Arithmetic and mathematics, syllabus subjects	2	2 0					11	5 10	5	14 7										
Vocal music, elocution																				
Totals for 1908	3,212	19 5	418	12 0	268	16 5	2,390	16 0	297	14 4	4,839	6 6	183	0 9	224	10 10	25	8 6	24	4 6
Totals for 1907	2,933	6 2	401	13 0	127	14 10	537	13 5	169	11 1	3,990	14 1	93	15 9	199	5 7	37	19 6	30	17 9

TABLE 3A.—CAPITATION PAYMENTS, &c.—continued.

Subjects of Instruction.	Marlborough Education Board.	Nelson Education Board.	Grey Education Board.	Westland Education Board.	Board of Governors, Canterbury College.	North Canterbury Education Board.	South Canterbury Education Board.	Otago Education Board.	Southland Education Board.	Totals.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Freehand, blackboard, model, light and shade, and brush drawing	12 17 0	25 12 9	4 5 6	..	243 2 0	63 12 3	20 18 3	198 15 6	61 17 4	1,956 1 7
Geometrical drawing, perspective, plane and solid geometry, handwork	..	..	..	..	92 10 9	98 19 9	..	71 5 0	..	612 3 3
Design and ornament ..	..	31 2 6	..	..	124 9 6	..	..	12 8 9	..	182 11 3
Drawing, modelling, and painting from nature and antique	..	5 13 0	..	..	488 8 0	..	12 5 3	97 16 9	21 7 3	1,327 7 3
Architecture and building construction and drawing, quantity surveying	..	3 15 6	..	..	36 11 5	10 14 6	4 9 6	28 4 6	17 6 6	285 13 8
Mechanical drawing, machine construction and drawing	..	..	..	..	104 2 0	4 13 9	..	19 4 9	18 10 6	349 12 0
Practical mechanics, practical mathematics, surveying	..	..	..	..	28 1 6	79 19 9	..	23 11 3	2 9 0	524 12 3
Mechanical and electrical engineering, steam, workshop practice, wiremen's work	..	..	..	..	89 19 6	..	..	39 15 6	5 12 6	480 6 3
Experimental science (chemistry, physics, magnetism and electricity, telegraphy, physical measurements)	..	..	..	..	12 9 0	135 10 6	14 1 3	44 9 4	23 7 1	552 5 11
Natural science (botany, nature-study, agriculture, physiology, horticulture, physiology)	20 11 6	14 4 9	..	6 1 3	..	39 7 3	11 11 3	58 8 0	13 2 11	596 13 11
Photography and process work ..	..	26 11 6	..	..	3 12 6	..	..	..	1 14 0	25 3 6
Woodwork and ironwork ..	8 9 6	8 16 0	3 12 6	..	12 18 6	49 7 0	3 19 0	..	..	314 14 9
Wood-carving ..	..	..	..	..	23 18 6	23 18 9	24 1 6	26 10 0	23 13 3	378 18 6
Repoussé and jewellery work ..	..	..	..	..	22 15 9	..	..	..	..	37 13 9
Carpentry and joinery, cabinetmaking and coachbuilding	..	5 19 3	..	..	4 1 6	212 0 0	15 19 6	11 15 7	7 15 9	680 9 10
House and coach painting and decorating, signwriting	..	..	..	..	12 17 4	31 1 6	..	4 5 0	..	97 5 10
Plumbing ..	..	13 3 3	..	..	..	37 14 3	9 5 0	47 14 3	..	482 5 6
Metal work, tinmiths' work, iron and brass moulding	..	..	..	..	..	16 7 6	..	..	..	117 3 9
Compositors' work ..	..	..	..	..	..	3 14 6	..	..	..	3 14 6
Bookmaking ..	..	..	..	..	..	..	..	..	..	10 10 0
Cookery and laundry work ..	15 2 0	4 11 0	29 3 3	23 0 6	..	208 5 3	61 13 10	50 6 6	7 3 6	716 12 10
Dressmaking, millinery, tailoring, needlework	..	65 10 4	..	..	..	294 7 7	77 5 0	192 7 9	58 0 3	1,829 4 1
Home nursing ..	..	..	..	..	..	..	..	..	..	7 6 9
Wool-sorting ..	..	..	..	..	..	..	..	..	..	..
Commercial subjects ..	9 17 2	93 4 3	..	..	25 0 9	70 6 9	16 6 3	334 4 9	32 18 1	89 15 0
Languages ..	8 15 5	18 2 6	..	..	..	635 11 3	72 17 4	99 10 3	39 12 8	4,198 5 6
Arithmetic and mathematics, syllabus subjects	8 17 11	27 7 6	..	..	..	133 14 4	5 7 11	53 3 8	45 10 11	633 12 0
Vocal music, elocution ..	..	..	..	..	..	..	12 16 0	5 12 3	36 15 8	1,133 14 1
Totals for 1908	84 10 6	343 14 1	37 1 3	29 1 9	1,324 13 6	2,190 13 5	369 12 4	1,419 9 4	416 17 2	17,601 2 7
Totals for 1907	51 5 8	307 17 10	..	42 12 0	1,324 1 6	1,207 11 3	441 8 0	1,150 17 2	563 14 10	13,602 3 5

Continuation classes

TABLE 4.—RECEIPTS OF AND EXPENDITURE BY EDUCATION BOARDS AS CONTROLLING AUTHORITIES OF CLASSES FOR MANUAL AND TECHNICAL INSTRUCTION FOR THE YEAR ENDING 31ST DECEMBER, 1908.

Education Districts.	Receipts.											Expenditure.																		
	From Government.					From Local Sources.			Maintenance.			Buildings and Equipment.				Payments to Managers of Associated Classes.		Other Expenses.												
	Capitation on Classes.	Capitation on Free Places.	Grants for Material.	Subsidies on Voluntary Contributions.	Grants for Buildings and Equipment.	Fees.	Voluntary Contributions.	Other Receipts.	School Classes.	Special Classes.	Special Classes.	School Classes.	Special Classes.	Special Classes.	Southland.	Otago.	North Canterbury.	South Canterbury.	Westland.	Grey.	Nelson.	Marlborough.	Hawke's Bay.	Wellington.	Wanganui.	Taranaki.	Auckland.	Totals.		
Auckland	£ 6,489 4 5	£ 2,066 19 9	£ 119 17 7	£ 56 18 8	£ 754 0 8	£ 1,088 11 7	£ 63 15 0	£ 2 14 0	£ 3,919 4 11	£ 5,039 17 5	£ 5 8 3	£ 2,415 7 9	£ 201 12 4	£ 1,464 19 6																
Taranaki	£ 898 9 5	£ 23 17 6	£ 59 13 7	£ 138 1 11	£ 732 10 1	£ 247 0 6	£ 152 11 3	£ 68 9 3	£ 611 7 10	£ 724 7 5	£ 60 9 11	£ 201 12 4	£ 219 8 3																	
Wanganui	£ 4,163 16 6	£ 386 8 0	£ 111 10 11	£ 891 13 7	£ 5,503 11 7	£ 1,604 9 0	£ 733 16 11	£ 45 16 5	£ 1,641 11 9	£ 4,619 9 2	£ 333 17 11	£ 6,087 15 9	£ 188 3 3																	
Wellington	£ 6,191 12 11	£ 1,640 19 8	£ 622 15 6	£ 712 3 9	£ 5,261 5 4	£ 299 9 6	£ 132 3 9	£ 32 5 8	£ 1,909 12 4	£ 17 1 11	£ 715 2 1	£ 8 3 0	£ 11,165 18 9																	
Hawke's Bay	£ 1,472 16 8	£ 3 19 3	£ 115 6 7	£ 85 3 6	£ 1,439 19 5	£ 299 9 6	£ 135 3 6	£ 613 7 8	£ 1,471 0 1	£ 1,453 4 9	£ 205 6 8	£ 1,417 1 2	£ 19 1 3																	
Marlborough	£ 358 11 6	£ 3 19 3	£ 11 17 4	£ 4 10 0	£ 4 10 0	£ 35 16 8	£ 10 0 0	£ 5 11 2	£ 292 10 5	£ 124 11 8	£ 23 18 6	£ 5 5 6																		
Nelson	£ 1,411 11 7	£ 53 14 0	£ 40 7 8	£ 222 18 8	£ 1,028 16 3	£ 238 5 2	£ 66 6 2	£ 620 8 4	£ 1,024 3 4	£ 1,091 19 7	£ 60 16 0	£ 1,118 6 9	£ 6 0 0																	
Grey	£ 97 3 5	£ 3 5	£ 5 14 0	£ 7 10 0	£ 49 14 5	£ 31 12 0	£ 66 11 5	£ 8 14 6	£ 74 14 8	£ 208 2 3	£ 3 12 7	£ 10 0 0	£ 1 11 4																	
Westland	£ 4,139 18 9	£ 1,131 7 3	£ 74 15 4	£ 1,192 18 4	£ 3,163 15 5	£ 13 10 0	£ 25 0 0	£ 0 300 11 6	£ 1,979 5 4	£ 223 6 4	£ 914 13 5	£ 66 11 4	£ 170 3 1																	
North Canterbury	£ 984 12 0	£ 110 4 0	£ 202 9 0	£ 2,248 2 0	£ 2,248 2 0	£ 2 0 0	£ 32 9 6	£ 72 4 6	£ 897 2 1	£ 122 11 3	£ 24 19 6	£ 25 18 8	£ 32 17 6																	
South Canterbury	£ 3,108 0 5	£ 574 5 0	£ 9 6 2	£ 274 7 6	£ 3,129 3 8	£ 263 11 3	£ 22 17 0	£ 0 0 0	£ 1,296 2 3	£ 1,063 1 4	£ 2,158 14 7	£ 25 18 8	£ 32 17 6																	
Otago	£ 1,983 6 3	£ 258 15 6	£ 55 14 1	£ 81 7 6	£ 360 18 5	£ 339 19 2	£ 144 11 5	£ 76 15 10	£ 1,083 15 7	£ 944 17 8	£ 117 5 3	£ 66 15 3	£ 2,544 0 9																	
Southland	£ 31,522 2 6	£ 6,250 9 11	£ 1,226 18 9	£ 3,635 3 9	£ 23,683 17 3	£ 4,180 16 3	£ 1,518 14 10	£ 958 16 1	£ 16,352 19 0	£ 15,877 19 11	£ 4,634 9 1	£ 11,487 15 9	£ 23,717 7 1	£ 2,083 2 11																
Totals	£ 9,487 1 1	£ 1,852 12 6	£ 11,057 0 7	£ 14,428 17 2	£ 3,113 6 2	£ 367 0 9	£ 2,505 19 2	£ 231 3 0	£ 110 7 5	£ 9,702 15 1	£ 3,545 7 0	£ 7,095 2 9	£ 2,740 1 9	£ 966,318 12 2																
Receipts from Government	£ 1,105 0 7	£ 468 1 0	£ 2,384 2 4	£ 164 9 5	£ 572 1 11	£ 61 7 10	£ 512 16 0	£ 66 11 5	£ 40 6 6	£ 339 1 6	£ 106 14 0	£ 286 8 3	£ 561 6 5	£ 6,658 7 2																
Receipts from local sources	£ 10,592 1 8	£ 2,320 13 6	£ 13,441 2 11	£ 14,593 6 7	£ 3,685 8 1	£ 418 8 7	£ 3,018 15 2	£ 2,379 12 2	£ 150 13 11	£ 10,041 16 7	£ 3,652 1 0	£ 7,381 11 0	£ 3,301 8 8	£ 272,976 19 4																
Total receipts	£ 12,844 17 10	£ 1,817 5 9	£ 12,870 17 10	£ 13,815 18 1	£ 4,565 13 11	£ 446 6 1	£ 3,295 5 8	£ 479 0 3	£ 298 0 10	£ 10,483 5 10	£ 3,936 10 4	£ 7,087 17 7	£ 2,212 13 9	£ 974,153 13 9																
Expenditure	£ 10,592 1 8	£ 2,320 13 6	£ 13,441 2 11	£ 14,593 6 7	£ 3,685 8 1	£ 418 8 7	£ 3,018 15 2	£ 2,379 12 2	£ 150 13 11	£ 10,041 16 7	£ 3,652 1 0	£ 7,381 11 0	£ 3,301 8 8	£ 272,976 19 4																
Total expenditure	£ 10,592 1 8	£ 2,320 13 6	£ 13,441 2 11	£ 14,593 6 7	£ 3,685 8 1	£ 418 8 7	£ 3,018 15 2	£ 2,379 12 2	£ 150 13 11	£ 10,041 16 7	£ 3,652 1 0	£ 7,381 11 0	£ 3,301 8 8	£ 272,976 19 4																

SUMMARY.

TABLE 5.—COURSES TAKEN BY STUDENTS HOLDING JUNIOR AND SENIOR FREE PLACES AT TECHNICAL SCHOOLS OR CLASSES, 1908.

[" J. " represents Junior; " S. " Senior.]

School or Classes.	Courses of Instruction and Number of Students.												Contribution for the Year ending 31st December, 1908.						
	Science and Techno- logical.		Pure and Applied Art.		Domestic Economy.		Agricul- tural.		Com- mercial.		Totals.								
	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.	J.	S.							
Auckland Education Board—																			
Technical College, Auckland .. ..	130	48	11	1	50	18	..	..	152	43	343	110	£	s.	d.	1,887	6	3	
Technical Classes, Whangarei .. ..	1	..	7	..	..	..	..	..	2	..	10	..	55	6	0	..	..	..	
"    Thames .. ..	..	1	..	..	5	1	..	..	19	5	24	7	124	7	6	..	..	..	
"    Waihi .. ..	7	..	..	..	..	..	..	..	19	..	26	..	..	..	..	..	..	..	
Taranaki Education Board—																			
Technical School, New Plymouth .. ..	4	1	..	..	2	..	..	..	2	..	8	1	10	16	6	..	..	..	
Technical Classes, Stratford .. ..	..	..	..	..	..	..	..	..	4	..	4	..	13	1	0	..	..	..	
Wanganui Education Board—																			
Technical School, Wanganui .. ..	14	9	..	..	22	2	..	..	33	6	69	17	258	18	9	..	..	..	
"    Feilding .. ..	2	..	..	..	3	..	..	..	2	..	7	..	52	4	6	..	..	..	
"    Eltham .. ..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	
"    Marton .. ..	..	..	..	..	..	..	..	..	..	..	..	..	11	6	0	..	..	..	
Technical Classes, Ashhurst .. ..	..	..	..	..	4	..	..	..	8	..	12	..	28	4	3	..	..	..	
"    Apiti .. ..	..	..	..	..	..	..	..	..	11	..	11	..	10	0	6	..	..	..	
"    Halcombe .. ..	..	..	..	..	..	..	..	..	12	..	12	..	6	8	9	..	..	..	
"    Pohangina .. ..	..	..	..	..	..	..	..	..	6	..	6	..	8	11	3	..	..	..	
"    Manaiā .. ..	..	..	1	..	9	..	..	..	4	..	14	..	..	..	..	..	..	..	
"    Bull's .. ..	..	..	..	..	..	..	..	..	..	..	..	..	10	14	0	..	..	..	
Palmerston North High School Board—																			
Technical School, Palmerston North .. ..	7	..	..	..	3	..	1	1	4	..	15	1	43	12	6	..	..	..	
Wellington Education Board—																			
Technical School, Wellington .. ..	68	64	15	12	7	3	..	..	196	97	286	176	1,738	19	5	0	..	..	..
"    Petone .. ..	3	..	2	..	..	..	..	..	8	1	13	1	53	5	0	..	..	..	
Technical Classes, Carterton .. ..	..	..	..	..	..	..	..	..	..	..	..	..	9	5	3	..	..	..	
Masteron Technical Classes Association	3	2	4	..	13	..	..	..	15	2	35	4	92	19	0	..	..	..	
Hawke's Bay Education Board—																			
Technical School, Napier .. ..	21	..	..	..	17	..	..	..	9	..	47	..	..	..	..	..	..	..	
Marlborough Education Board—																			
Technical Classes, Canvastown .. ..	..	..	..	..	..	..	..	..	4	..	4	..	3	19	3	..	..	..	
"    Havelock .. ..	..	..	..	..	..	..	..	..	3	..	3	..	..	..	..	..	..	..	
Nelson Education Board—																			
Technical School, Nelson .. ..	2	..	8	..	1	..	..	..	16	4	27	4	154	16	6	..	..	..	
North Canterbury Education Board—																			
Technical College, Christchurch .. ..	54	3	4	..	49	..	5	..	109	14	221	17	1,131	7	3	..	..	..	
Canterbury College Board of Governors—																			
School of Art, Christchurch .. ..	..	..	31	..	..	..	..	..	..	..	31	..	189	6	1	..	..	..	
South Canterbury Education Board—																			
Technical School, Timaru .. ..	6	..	..	..	1	..	..	..	15	..	22	..	110	4	0	..	..	..	
Otago Education Board—																			
Technical School, Dunedin .. ..	35	14	27	2	53	3	..	..	158	23	273	42	601	4	0	..	..	..	
"    Oamaru .. ..	3	..	..	..	4	..	..	..	19	1	26	1	43	1	6	..	..	..	
Southland Education Board—																			
Technical School, Invercargill .. ..	10	..	7	..	3	..	..	..	13	..	33	..	195	4	6	..	..	..	
Technical Classes, Bluff .. ..	1	..	5	..	1	..	..	..	7	..	14	..	31	4	0	..	..	..	
"    Gore .. ..	3	..	..	..	3	..	..	..	15	..	21	..	32	7	0	..	..	..	
Totals for 1908 .. ..	374	142	122	15	250	27	6	1	867	196	1,619	381	6,908	0	6	..	..	..	
Totals for 1907 .. ..	305	47	245	9	225	24	..	..	953	86	1,728	146	4,131	11	2	..	..	..	





TABLE 7A.—CITY AND GUILDS OF LONDON INSTITUTE.—TECHNOLOGICAL EXAMINATIONS, 1908.  
C. represents candidates; "P." passes.]

Subjects of Examination.	Auckland.		Whangarei.		Thames.		Waikato.		Wanganui.		Palmerston N.		Wellington.		Masterton.		Napier.		Gisborne.		Blenheim.		Nelson.		Grey-mouth.		Christchurch.		Dunedin.		Totals.		
	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.	C.	P.			
Plumbers' work (preliminary)	12	11																													20	17	
Principles of plumbing (ordinary)	1	1																													19	5	
" (honours)	3	3																													5	5	
Plumbers' work, practical (ordinary)	3	2																													22	18	
" (honours)	3	0																													4	0	
Plumbers' work (ordinary)	14	13																													33	26	
" (honours)	3	2																													5	2	
Carpentry and joinery (preliminary)	8	3																													16	7	
" (ordinary)	3	3																													11	7	
" (honours)	2	2																													3	3	
Cabinetmaking (ordinary)																																1	1
" (honours)																																3	3
Mechanical engineering (ordinary), Part I	1	0																													1	1	
" (honours)																																1	1
Mechanical engineering (ordinary), Part II	1	0																														3	2
Electrical engineering (elementary)	10	9																														6	4
" (ordinary)																																4	19
Electric wiremen's work (1st year)	2	2																														4	2
Motor-car engineering (ordinary)	1	1																														1	1
Telegraphy (ordinary)	1	1																														1	3
" (honours)																																3	3
Telephony (ordinary)																																1	4
" (honours)																																1	4
Gas engineering (ordinary)																																1	0
" (honours)																																1	0
Gas supply (ordinary)	7	3																														31	19
Woodwork	3	3																														11	82
Cookery	3	3																														5	11
Dressmaking	6	6																														9	6
Totals	94	65	11	8	7	5	4	4	23	19	24	13	50	29	16	9	20	16	7	7	12	6	13	7	1	1	27	20	31	24	330	233	

TABLE 8.—RETURN OF STAFFS OF TECHNICAL SCHOOLS AND CLASSES conducted by the Undermentioned Bodies as Controlling Authorities or Managers, as the case may be, during the Year ending 31st December, 1908.

**Auckland Education Board,—**  
 Department of Technical Education and Manual Training.—Director, £600. Assistant Director, £364 1s. 2d. Instructor in Agriculture, £400. Chief Clerk, £200. Assistant Registrar, £93 16s. 4d. Three typistes, 1 at £50, 1 at £40, 1 at £30. Clerk, £40.  
 Auckland Technical College.—Thirty-five instructors, at salaries or allowances ranging from £345 to £7 11s. 3d. Caretaker, £127 2s. Messenger, £25.  
 Manual Training Centres, Auckland.—Seven instructors, at salaries or allowances ranging from £200 to £91 18s. 9d. Caretakers, £118 7s.  
 Thames Technical Classes.—Superintendent (also instructor), £30. Six instructors, at salaries or allowances ranging from £37 10s. to £10.  
 Thames Manual Training School.—Three instructors, at salaries or allowances ranging from £200 to £41 13s. 4d. Caretaker, £26 8s. 0d.  
 Whangarei Technical Classes.—Three instructors, at salaries or allowances ranging from £62 6s. 9d. to £5 10s. 9d. Whangarei Manual Training Centres.—Superintendent (also instructor), £200. Instructor, £195.  
 Sundry country classes.—Nine instructors, at salaries or allowances ranging from £50 to £4 6s.  
 Managers of the "Elam" School of Art.—Director, £450. Three instructors, at salaries or allowances ranging from £100 to £75. Two attendants, 1 at £39, 1 at £26.

**Taranaki Education Board,—**  
 New Plymouth Technical School.—Director (also Inspector of Schools) £75. Assistant, £18 15s. Clerk, £33 18s. 7d. Sixteen instructors, at salaries or allowances ranging from £56 13s. 4d. to £4.  
 Stratford Technical School.—Superintendent, £16. Secretary, £5. Seven instructors, at salaries or allowances ranging from £6 14s. 6d. to £1.  
 Inglewood Technical Classes.—Two instructors, 1 at £18, 1 at £7 9s. 6d.  
 Training Classes for Teachers at various Centres.—Eight instructors, at salaries or allowances ranging from £10 to £1 10s.  
 Itinerant Instructors.—Woodwork, £183 14s. Cookery, £140. Agriculture, £63 11s. Dressmaking, £39 19s. 6d.

**Wanganui Education Board.—**Superintendent, Northern District (also instructor in dairy-work), £263 2s. 6d.  
 Wanganui Technical School.—Director, £350. Thirty-four instructors, at salaries or allowances ranging from £200 to £1.  
 Hawera Technical Classes.—Five instructors, at salaries or allowances ranging from £23 15s. to £1 7s.  
 Feilding Technical Classes.—Director (also instructor in woodwork), £140 19s. 5d. Eight instructors, at salaries or allowances ranging from £38 to £6.  
 Eltham Technical Classes.—Seven instructors, at salaries or allowances ranging from £33 10s. 6d. to £4 10s.  
 Marton Technical Classes.—Nine instructors, at salaries or allowances ranging from £24 6s. 3d. to £1 10s.  
 Manaia Technical Classes.—Six instructors, at salaries or allowances ranging from £37 8s. 10d. to £4.  
 Patea Technical Classes.—Four instructors, at salaries or allowances ranging from £22 8s. 3d. to £5.  
 Technical Classes at Sundry (Fifteen) Country Centres.—Thirty instructors, at salaries or allowances ranging from £62 to £3 10s.  
 Other Instructors.—Agriculture, 1 at £300. Woodwork (2 instructors), 1 at £238 10s., 1 at £182. Cookery (2 instructors), 1 at £153 10s., 1 at £130; 3 assistants, at salaries or allowances ranging from £55 to £11. Commercial, 1 at £220 8s. Art, 1 at £110.

**Board of Governors, Palmerston North High School,—**  
 Palmerston North Technical School.—Director, £250. Art Master, £240. Twenty-seven instructors, at salaries or allowances ranging from £33 12s. to £4 4s.

**Wellington Education Board,—**  
 Wellington Technical School.—Director, £650. Registrar, £150. Clerk, £80. Librarian, £52. Forty-eight instructors, at salaries or allowances ranging from £340 to £5.  
 Carterton Technical Classes.—Secretary, £6 6s. Two instructors, each at £5.  
 Petone Technical School.—Secretary, £10 10s. Eight instructors, at salaries or allowances ranging from £60 to £18 18s.  
 Special Instructors.—Cookery, 1 at £140, 1 at £110, 1 at £35. Woodwork, 1 at £220, 1 at £14 15s. Agriculture, 1 at £300.

**Managers of the Masterton Technical School.—**Secretary, £45. Thirteen instructors, at salaries or allowances ranging from £105 15s. to £2 10s.

**Hawke's Bay Education Board,—**  
 Napier Technical School.—Director, £325. Secretary, £15. Two clerks, 1 at £30 16s. 8d., 1 at £5. Seventeen instructors, at salaries or allowances ranging from £180 to £2 12s. 6d.

**Board of Governors, Gisborne High School,—**  
 Gisborne Technical School.—Nine instructors, at salaries or allowances ranging from £145 11s. 6d. to £5 5s.

**Board of Governors, Dannevirke High School,—**  
 Dannevirke Technical School.—Ten instructors, at various allowances based on fees and capitation.

**Marlborough Education Board,—**  
 Blenheim Technical School.—Five instructors, at salaries or allowances ranging from £93 6s. 8d. to £5.  
 Teachers' Classes.—One instructor in agriculture, £100 (also instructor for Nelson, Grey, and Westland Boards); one instructor in dressmaking, £9 5s.  
 Canvastown Technical Classes.—One instructor, at £23 5s. 4d.  
 Havelock Technical Classes.—One instructor, at £9 0s. 2d.

**Nelson Education Board.—**Director, £250.  
 Special Instructors.—Cookery, 1 at £150. Woodwork, 1 at £160. Agriculture, 1 at £200 (see Marlborough).  
 Nelson Technical School.—Ten instructors, at allowances based on fees and capitation.  
 Westport Technical Classes.—Three instructors, at allowances based on fees and capitation.  
 Reefton Technical Classes.—Three instructors, at allowances based on fees and capitation.  
 Other Country Centres.—Two instructors, at allowances based on fees and capitation.

**Grey Education Board,—**  
 Greymouth Technical School.—Director (also Inspector of Schools, £25). Instructor in agriculture, £50 (see Marlborough). Five instructors, at salaries or allowances ranging from £90 to £3 5s.

**Westland Education Board.—**Instructor in agriculture, £50 (see Marlborough). Three instructors, at salaries or allowances ranging from £40 to £16 16s.

**North Canterbury Education Board.—**Director of School Cookery and Woodwork Classes (also Director Christchurch Technical College), £100. Two instructors in agriculture, 1 at £200 and 1 at £41 13s. 4d. Clerk, £30. Two instructors in woodwork, 1 at £157 15s. 2d. and 1 at £162 10s. Instructor in cookery, £131 9s. 4d.

**Christchurch Technical College.—**Director, £600. Registrar, £120. Assistant Secretary, £60. Thirty-one instructors, at salaries or allowances ranging from £215 to £10 9s.  
 Kaiapoi Technical Classes.—Five instructors, at salaries or allowances ranging from £29 10s. to £21.  
 Rangiora Technical Classes.—Three instructors, at salaries or allowances ranging from £42 to £28 10s.  
 Lyttelton Technical Classes.—Two instructors, 1 at £17 2s. and 1 at £15.  
 Akaroa Technical Classes.—Four instructors, at salaries ranging from £30 to £10.  
 Ashburton Technical Classes.—Director and Secretary, £50. Ten instructors, at salaries ranging from £83 14s. to £1 10s.  
 Other Country Centres.—Nine instructors, at salaries or allowances ranging from £30 to £6.



- Canterbury College Board of Governors,—  
 School of Engineering. Professor in Charge, £800. Office boy, £40. Caretaker, £35. Twelve instructors, at salaries or allowances ranging from £450 to £30.  
 School of Art.—Director, £500. Caretaker, £120. Twelve instructors, at salaries or allowances ranging from £200 to £20.
- South Canterbury Education Board.—Director, £300 3s. 6d. Special instructor for woodwork, £210 2s. 6d.; assistant, £10. Cookery (2 instructors), 1 at £150, 1 at £100.
- Timaru Technical School.—Sixteen instructors, at salaries or allowances ranging from £42 6s. to £5. Caretaker, £15.
- Temuka Technical Classes.—Director, £50. Nine instructors, at salaries or allowances ranging from £18 to £6.
- Waimate Technical Classes.—Director, £20. Nine instructors, at salaries or allowances ranging from £14 14s. to £2 2s. Caretaker, £12.
- Pleasant Point Technical Classes.—One instructor, at £12 12s.
- Fairlie Technical Classes.—Director, £7 10s. Two instructors, 1 at £23 5s., 1 at £6.
- Otago Education Board.—Special instructor for cookery, £130; for woodwork, 1 at £154, 1 at £24, 1 at £10.
- School of Art.—Principal, £400. Six instructors, at salaries or allowances ranging from £120 to £29.
- Dunedin Technical School and Sub-centres.—Director and Secretary, £175. Registrar, £30. Thirty-eight instructors, at salaries and allowances ranging from £121 10s. to £8.
- Oamaru Technical School.—Secretary, £95. Eleven instructors, at salaries or allowances ranging from £30 to £9 14s.
- Southland Education Board.—Director (also architect to Education Board) £50. Clerk, £75. Special instructor in woodwork, £240; in cookery, £109 5s. 8d. Caretaker, £20.
- Invercargill Technical School.—Thirty instructors, at salaries or allowances ranging from £40 10s. to £1 1s.
- Gore Technical Classes.—Secretary, £7 7s. Ten instructors, at salaries or allowances ranging from £15 7s. 6d. to £5.
- Bluff Technical Classes.—Eleven instructors, at salaries or allowances ranging from £20 10s. to £7 15s.
- Mataura Technical Classes.—Two instructors, 1 at £10 15s. and 1 at £10 12s. 6d.

#### No 4.

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

#### AUCKLAND.

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

The number of individual students in attendance at the Auckland Technical College last year was 1,086, of which number 186 were attending the special day classes in commerce, domestic science, science and technology, and engineering.

During the present session about 1,200 students have been enrolled. Instruction in cookery and woodwork has been given to the pupils of the upper standards of the primary schools at the three manual-training schools at Auckland and those at Thames and Whangarei. During 1908 the number of schools in which classes for manual instruction were held was as follows: handwork, 151; agriculture, 91; and swimming and life-saving, 12. During the year 93 teachers attended special classes for instruction in nature-study and agriculture. Great difficulty is experienced in providing accommodation for the students attending the Auckland Technical College. Tenders are now being invited for a Technical College building, and it is hoped that the building will be completed and ready for occupation next year.

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

Of the teaching of elementary agriculture and practical work in school gardens, most of the Inspectors this year say nothing. I have no reason to think there has been any special improvement in this part of the school-work, but it receives a fair share of time and attention, and were a definite practicable syllabus available for the guidance of teachers, decided progress would, I think, soon be evident. We badly want, from some one who has proved its practicability, a modest but definite and detailed programme of lessons that would suit the smaller country schools. Is there no teacher in the Dominion able to give us this boon? It can come only from some one who has done the work and has thoroughly tested its practicability. Writing of the North Central District, Mr. Crowe reports as follows: "This district does not contain very many school gardens. Nature-study and agriculture are not taken up with enthusiasm. This is a pity, for no district in the Auckland Province contains more poor land in proportion to the widely scattered population. The lack of interest displayed by parents and committees is mostly to blame for this state of affairs. I think it is a generous estimate to say that there are altogether a dozen school gardens worthy of the name. It is however only fair to add that most of the schools are below Grade 5, and the teachers have not much time to spare from the essential requirements of the syllabus." In connection with this I may point out that "elementary agriculture" is taught as a "school class" subject under the Technical Instruction Act, that a capitation payment is made on account of it, and that one hour a week must be devoted to the instruction. The fact that female teachers, and in many cases new and inexperienced male teachers, are so commonly placed in charge of small schools is, I consider, largely responsible for the want of enthusiasm to which Mr. Crowe draws attention. A great deal of special knowledge is necessary if teachers are to handle this work well, and few women teachers or beginners, I fear, possess it. It could hardly be otherwise. Hence the value of a detailed definite practicable course of work such as I have mentioned above. Mr. V. W. Jackson,

B.A., has for the past three years laboured with great zeal to develop good lines of work in nature-study and elementary agriculture, and has issued, through the technical Department, a large number of useful and suggestive leaflets on various aspects of these subjects. The preparation and issue of a definite practicable course of work for small schools would perhaps have been of more service than these. In spite of the unavoidable shortness of the special courses of instruction he has been able to give in various districts, and of other serious obstacles, his work has been valuable and in great measure successful. The instruction given in woodwork is in general efficient, and as far as I can judge the instruction given in cookery is also satisfactory. Notes of the simple science lessons given in connection with cookery need to be available for examination when wanted.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL EDUCATION.

*Handwork in the Primary Schools.*—The number of schools in which handwork, such as brush drawing, paper-folding, cardboard-modelling, free-arm drawing, plasticine modelling, &c., were taught was 151, and in those where the teachers had received special training for the teaching of this important branch of primary education excellent work was done. The Board's experts, Mr. Harry Wallace and Mr. F. C. J. Cockburn, as in previous years, visited many of the schools to give help and advice to the teachers, and their assistance in this direction was much appreciated. For the teaching of needlework in schools below Grade 4, having no female teacher on the staff, an annual payment of 10s. per unit of average attendance (with a minimum payment of £6 per annum in the case of any one school) is made by the Department under the Manual and Technical Instruction Act in the case of pupils receiving two hours' instruction per week by an external teacher. The importance of girls being taught how to use their needles is generally recognised by teachers, and last year in ninety-three schools sewing was taught under the above provision. The decision of the Board last year to pay over to the teacher of a swimming and life-saving class under the Manual and Technical Instruction Regulations 75 per cent. of the capitation earned by the class, no doubt proved an incentive to teachers to take up the teaching of this important subject, and last year swimming and life-saving was taught in twelve schools, as against two in 1907. Classes in cookery and woodwork for the pupils of the upper standards of the primary schools were conducted, as in the previous year, at the Newmarket, Newton, Ponsonby, Thames, and Whangarei Manual-training Schools. Woodwork was also taught by the headmasters of Bombay and Mayfield Public Schools respectively in their own schools. During the year grants were made by the Department towards the cost of erection of manual-training schools at Cambridge, Hamilton, and Otahuhu (woodwork-room only), and the ratepayers of Waihi voted a sum of £500 towards the cost of a similar school there, so that it is hoped that during the present year all these schools will be erected. Considerable progress was made during the year in the teaching of elementary agriculture. Those teachers who have had the advantage of attending a course of training under the agricultural expert, Mr. V. W. Jackson, B.A., have been, as a rule, keen in taking the subject up, and in 1908 the number of schools in which elementary agriculture was taught was ninety-one. Every possible help in the way of apparatus, advice, &c., was accorded to enthusiastic teachers, and the following bulletins and pamphlets were issued during the year: "Leaflet K: How Nature maintains a Virgin Soil; or, Natural Fertility and Food-cycles." "Wall-card L: The Cream-separator." "Wall-card M: Mixing Manures." "Leaflet N: How to find the Proportion of Essentials in Manures." Pamphlet: "The Water Culture of Plants." "Leaflet O: Examination Answers in Nature-study and Agriculture." "Wall-card P: The Codlin-moth Parasite." "Leaflet Q: A Nature-study of a Hakea Hedge." "Leaflet R: How seeds germinate." Pamphlet: "Some Problems in Agriculture for the Auckland Rural Schools."

A book for teachers on nature-study and elementary agriculture, embodying Mr. Jackson's experience in the Auckland schools during the past three years, has been written, and will be published during the present year. I regret to say that the prizes offered by the Board for the encouragement of nature-study and elementary agriculture in the Auckland public schools were practically not competed for. At some schools headmasters make every effort to beautify their school-grounds, whilst at others the ground around the school is allowed to become a perfect wilderness. Pakuranga School is an example of how schools can be improved. The headmaster, Mr. John Green, is one of the most enthusiastic teachers of nature-study that I have ever met. Whilst I was in England I was authorised by the Board to purchase a hundred sets of Babeock milk-testers. These have now come to hand, and will shortly be distributed to those schools who are taking up "milk experiments" as part of their school course in elementary agriculture.

*Training of Teachers.*—Classes in art and handwork for teachers in the service of the Board were conducted, as in previous years, in the evenings and on Saturday mornings at the Auckland Technical College. Classes in cookery and woodwork were held for teachers in Whangarei and in Thames, and in these subjects as well as in dressmaking at Auckland. The classes in hygiene and physiology for teachers in Auckland were again well attended. As in the previous year, the teachers in training at the Auckland Training College attended special classes in cookery, woodwork, elementary agriculture, art, and handwork at the Technical College. Summer schools were held at the Technical College during January for teachers from remote country schools. The art and handwork course was held for a fortnight, and was attended by fifty-eight teachers, whilst the course in elementary agriculture was held for three weeks, the number of teachers in attendance being twenty-two. The falling-off in the number of teachers attending these summer schools was due to the fact that in previous years the Board gave an extra week's holiday to those who attended, but last year no holiday was granted. It is to be hoped that the Board will see its way to go back to the old arrangement for next year. Special courses in nature-study and elementary agriculture for teachers were conducted at Aoroa, Te Kopuru, Dargaville, and Te Awamutu, in addition to the summer school and the course for teachers at the Auckland Training College. All these classes were most successful, and much appreciated by the teachers. It is

greatly to be regretted that Mr. Jackson, at the expiration of his three-years engagement with the Board, for family reasons felt himself compelled to return to Canada. The value of the work that he has done in Auckland cannot be overestimated.

*Continuation and Technical Classes in Country Centres.*—During the year continuation and technical classes were held at Thames, Whangarei, and Waihi. Various other centres were also visited by itinerant instructors in dressmaking and millinery respectively.

Thames: The following classes were held at the Manual-training School, and at the Kauaeranga Public School: Commercial arithmetic, commercial English, commercial correspondence and *précis*-writing, commercial geography, shorthand, typewriting, book-keeping, household cookery, millinery, dressmaking, practical mathematics, trade drawing, practical geometry, machine construction and drawing, carpentry and joinery, plumbing. The number of individual students in attendance was seventy-six, and the number of class entries was 243. Amongst the most successful work done was that of the dressmaking classes. The number of papers worked at Thames at the examinations held in November was ninety-seven, and the number of successes recorded was seventy-eight. The local superintendent, Mr. W. H. P. Marsdon, was as zealous as ever in the discharge of his duties.

Whangarei: At Whangarei the following classes were conducted: Commercial English, commercial arithmetic, French, German, book-keeping, practical mathematics, practical geometry, scale drawing, drawing for carpenters, trade drawing, carpentry and joinery, preliminary woodwork, drawing and painting, brushwork. The number of individual students in attendance was 104, and the number of class entries 173. At the end of the session thirty-eight students entered for the examinations, and twenty-two passed. The local superintendent and woodwork instructor, Mr. David Grant, resigned his position at the end of the year to return to England. During the three years and a half he was in Whangarei Mr. Grant did excellent service, and Whangarei has suffered a distinct loss by his leaving.

Waihi: During the year the following classes were inaugurated at Waihi: Commercial English, commercial arithmetic, book-keeping, practical mathematics, woodwork, trade drawing, practical geometry. These were conducted at the Waihi Central School and in a rented building. The number of individual students attending the classes was eighty-seven, and the number of class entries was 238. The work suffered a considerable set-back soon after the opening of the classes by the illness of the local superintendent, Mr. S. H. Macky. During his absence from duties Mr. J. W. Smith, however, rendered valuable assistance. The people of Waihi voted a sum of £500 out of the rates towards the cost of erection of a technical and manual-training school for Waihi. This, with subsidy thereon and a grant from the Government, should provide a suitable building to meet the local requirements.

At Pukekohe, Cambridge, Te Aroha, and Waihi classes in dressmaking, and at Buckland, Ngaruahia, and Hamilton classes in millinery were conducted, as in the previous session. The Dressmaking classes at Cambridge were attended by no less than forty pupils, which is a remarkable number, considering the size of the place, and reflects great credit upon the local School Committee, who used every effort to make the classes known.

#### *Auckland Technical College.*

The day technical classes for boys and girls who have passed through the primary schools continued to be as popular as ever, the number of individual students in attendance having increased from 133 to 186. A domestic science or "home-makers" course for girls was inaugurated, and this proved an unqualified success. The woodwork class for boys of the Jubilee Institute for the Blind was attended by eleven students, and excellent work was done. As in previous years, evening classes were carried on in temporary buildings. Considering the unsuitability of most of these buildings for technical work, it is astonishing that students attend in such large numbers. It is with a feeling of profound relief that I am at last able to state that a tender for a portion of the new Technical College has at last been accepted, and that within eighteen months the work will probably have been completed. The total number of individual students in attendance at the College last session was 1,086.

Considerable success was obtained by the students of the College at the examinations of the City and Guilds of London Institute, and of the English Board of Education, London, held in June and July last. The continuation classes held at the Normal School, Wellesley Street, to enable students who have left the primary school without passing the Sixth Standard to attend and improve their general education and pass this standard, so that they may become eligible for admission to the Technical College, were attended by no less than sixty-three pupils. At the end of the year forty-one of these went up for examination for certificates of proficiency, and, of these, twelve obtained certificates of proficiency, and five certificates of competency.

GEORGE GEORGE, F.I.C., F.C.S., Director.

#### *Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted at the Auckland Technical College.*

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Balance at beginning of year	..	17,387	3	9	Salaries of instructors	..	3,447	3	2
Capitation on special classes	..	2,736	4	2	Office expenses (including salaries, stationery, &c.)	..	151	15	7
Capitation on account of free places	..	1,887	6	3	Advertising and printing	..	168	4	10
Rent	..	200	0	0	Lighting and heating	..	116	6	2
Furniture, fittings, apparatus	..	172	1	2	Insurance and repairs	..	21	5	6
Material	..	119	17	7	Rent	..	434	17	8
Subsidies on voluntary contributions	..	228	18	6	Material for class use	..	321	18	1
Fees	..	687	13	6	Contracts (new buildings, additions, &c.)	..	1,350	0	0
Voluntary contributions	..	150	0	0	Furniture, fittings, and apparatus	..	574	15	0
Government grant for training of teachers	..	500	0	0	Balance	..	18,120	3	10
Rents from site	..	17	9	6					
Interest on fixed deposits	..	619	15	5					
		<u>£24,706</u>	<u>9</u>	<u>10</u>			<u>£24,706</u>	<u>9</u>	<u>10</u>

R. CROWE, Secretary.

## Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Technical and Continuation Classes in Country Districts.

Centre.	Receipts.										Expenditure.						
	Balance at Beginning of Year.	Grants from Government.					Other Receipts.			Totals.	Balance at End of Year.	Administration.				Totals.	
		Capitation on Special Classes.	Capitation on Free Places.	Furniture, Fittings, and Apparatus.	Material and Rent.	Subsidies on Voluntary Contributions.	Fees.	Voluntary Contributions.	Salaries of Instructors.			Advertising and Printing and Lighting and Heating.	Material and Rent.	Furniture, Fittings, and Apparatus.	Balance at End of Year.		
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	
Whangarei	184 15 9	122 2 1	55 6 0	..	1 10 0	109 12 7	29 19 6	..	..	116 3 6	20 0 2	4 3 11	4 0 0	360 7 10	504 15 5	5 5	
Waihi	..	..	..	..	..	16 5 0	..	..	..	..	3 0 9	17 7 8	12 14 8	18 6 8	51 8 6	6 6	
Waikato	42 12 6	87 4 1	..	44 2 0	..	142 18 0	..	..	..	175 4 6	7 16 10	68 4 8	..	70 11 0	316 16 7	7 7	
Hamilton	..	..	..	29 18 7	..	18 15 0	..	..	..	..	0 13 9	24 18 7	29 13 7	..	55 5 11	11 11	
Dargaville	22 19 10	12 8 1	..	1 6 0	..	..	..	..	..	16 13 5	0 4 0	1 6 0	..	18 10 6	36 13 11	11 11	
Hikurangi	43 16 5	21 15 0	..	1 16 0	..	..	..	..	..	11 9 11	1 0 0	2 8 0	..	52 9 6	67 7 5	5 5	
Thames	171 19 4	146 6 6	124 7 6	..	2 0 0	68 7 6	12 12 0	..	..	188 5 0	31 8 11	9 8 5	2 15 6	300 15 0	527 12 10	10 10	
Totals	466 3 10	389 15 9	179 13 6	29 18 7	3 10 0	350 18 1	42 11 6	3 7 4	..	502 16 4	64 4 5	122 16 5	49 3 4	821 0 1	1,560 0 7	0 7	

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

The total number of attendances registered for the year was 33,785, being an increase on that of the preceding year of 2,174. The number of students on the roll at the present time is 327. Of these forty-five are students who pay fees, the rest being admitted free under the "Elam" bequest. The quality of the work produced is well maintained, and the report of the Government Inspector of Technical Education expresses satisfaction at the work done. The following extract from this gentleman's report will be of interest both to the Managers and to the public:—

Speaking generally, the work throughout the school reaches a high plane of merit. . . . Excellent results are obtained in such subjects as still life, and drawing and painting from life, largely due to the thorough grounding in elementary drawing and light and shade the pupils receive. The spontaneity and freshness of much of the work in these subjects show that students are encouraged to express themselves in any given medium by direct and unlaboured methods. The instruction throughout is described by the Inspector as "very good," and the progress made by students in every class is marked as "good." The number of the classes in drawing and painting from life, which have been carried on under the supervision of Mr. A. F. Nicoll, of Christchurch, who joined the staff of the school this year, has increased, although there is not a large number of students yet in Auckland who are qualified for this branch of work. Much excellent work, however, has been done in this "life" section, both from the nude, from heads, and from costume studies. The number of students attending the wood-carving and modelling classes is forty, and the attendances registered during the year have been 4,483, which is a considerable increase on the number registered in 1907, while the quality of the work produced reflects great credit on the instructor, as on the students themselves. Early in December a small exhibition of students' works was held in the City Council Chamber, by the kind permission of His Worship the Mayor. Some 350 works in all branches were displayed, and although the exhibition was only open three days, about 2,000 people visited it.

E. W. PAYTON, Director.

Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Associated Classes conducted at Auckland by the Managers of the "Elam" School of Art.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year ..	109	1 6	Salaries of instructors ..	715	0 0
Capitation on associated classes ..	418	12 0	Office expenses (including salaries, stationery, &c.) ..	76	14 9
Rent ..	20	0 0	Advertising and printing ..	7	8 0
Furniture, fittings, apparatus ..	8	19 3	Lighting and heating ..	22	16 5
Material ..	6	19 10	Insurance and repairs ..	1	1 11
Subsidies on voluntary contributions ..	200	0 0	Material for class use ..	17	1 10
Fees ..	54	17 0	Models ..	16	6 6
From the trustees for the "Elam" School of Art ..	248	18 1	Various expenses ..	5	16 0
			Furniture, fittings, and apparatus ..	18	9 0
			Balance at end of year ..	186	13 3
	£1,067	7 8		£1,067	7 8

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

TARANAKI.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Elementary handwork was taken at forty-six schools, and sewing under the Regulations for Manual and Technical Instruction at seven. In addition to the above, manual work, as defined by clauses 22-27 of the above regulations, was recognised in eighty-four cases; the subjects embracing woodwork, cookery, botany, dairying, advanced needlework, elementary agriculture, swimming and life-saving, physical measurements, chemistry, and elementary physiology. Considerable progress has been made in technical education, especially agriculture.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL INSTRUCTION.

*School Classes.*—During the year there were eighty-one schools in operation in the Taranaki District, and, of these, sixty-three took up handwork in some form or other. In addition to the ordinary handwork subjects, classes were carried on in woodwork, cookery, agriculture, physical measurements, dairying, botany, chemistry, physiology and first aid, swimming and life-saving, and advanced needlework. The classes in woodwork and cookery were again well attended, and the success already met with fully justifies the action of the Board in establishing these classes and appointing specially qualified instructors. Elementary agriculture was conducted in twenty-four schools, an increase of three. The course followed was much on the same lines as last year, and Mr. Morison, the Board's instructor, reports that in most cases very satisfactory work has been done. So far the Stratford School is the only one to take up dairying. This is a most important subject as far as the Taranaki District is concerned, and should receive greater attention at the hands of our teachers. Provision has now been made by the Department whereby instruction in dairy-work may be combined with the instruction in elementary agriculture, provided that not less than twenty hours' instruction in each subject is given to the class during the school year. This is a wise provision, for where this course is adopted teachers will be enabled to give instruction in dairy-work during the period of the year when very little agriculture can be done.

In order that our teachers may be better fitted to take up a course in dairying, it is intended during the coming year to establish at Stratford and New Plymouth a course of lessons in this subject at the Teachers' Saturday Classes.

*Teachers' Training Classes.*—Saturday classes were again held during the year at New Plymouth and Stratford, and instruction given in cookery, drawing, cardboard-work, nature-work, botany, physiology and first aid, physiography, and agricultural chemistry. The number on the roll of the several classes must be considered fairly satisfactory, forty being in attendance at New Plymouth and twenty at Stratford, but the regularity, especially towards the end of the session, fell off considerably. At the close of the session six teachers came up for the examination in physiology and first aid, conducted under the St. John's Ambulance Association by Drs. Blackley and Wylie, and four gained the certificate awarded by the society. Examinations in handwork were also conducted at New Plymouth and Stratford by the Education Department's Inspector, and several of our teachers came up for examination. I should again like to impress on teachers the advisability of sitting for such examinations as the City and Guilds and the South Kensington Examinations. Certificates from such institutions are recognised in every part of the world; and it is only reasonable to expect that in a few years' time the Department, instead of appointing special instructors, will require public-school teachers to give instruction in subjects such as cookery, woodwork, &c.; and in making appointments the various Boards will perforce give preference to candidates holding certificates in these subjects.

*Technical Classes.*

Technical classes were held during the year at New Plymouth, Stratford, and Inglewood. Two hundred and thirty students were enrolled at New Plymouth, 86 at Stratford, and 15 at Inglewood, as compared with 181, 75, and 40 in 1907. This is very gratifying, and indicates that the training afforded by the classes is fully appreciated by the students. As far as possible the course of instruction is mapped out to meet the requirements of the City and Guilds, the South Kensington, the Teachers' D and C, the Matriculation and the Civil Service Examinations. The work undertaken comprised the class preparing for Standard VI, and classes for commercial arithmetic, English (junior and senior), Latin, drawing, painting, building and machine-construction, mathematics, plumbing, dressmaking, cookery, millinery, wood-carving, carpentry and joinery, book-keeping, shorthand, commercial law, electricity, chemistry, and agriculture. Of these classes special mention might be made of the classes recently established in commercial law, millinery, and chemistry of agriculture, which were well attended, and proved both interesting and popular with the students. An examination in plumbing was again conducted at Stratford by the Health Department, when eight students from Eltham, Stratford, and New Plymouth presented themselves. Five of these secured the full pass and two a partial pass. The successes gained in the special examinations and in the examinations conducted by the instructors at the close of the session give a fairly true indication that during the past year good sound work has been done, and that the classes are fulfilling to some extent the object for which they were established.

W. A. BALLANTYNE, Director.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted at New Plymouth.*

<i>Receipts.</i>	£	s.	d.	<i>Expenditure.</i>	£	s.	d.
Capitation on special classes .. ..	84	15	3	Balance at beginning of year .. ..	512	5	7
Capitation on account of free places ..	10	16	6	Salaries of instructors .. ..	284	19	4
Buildings .. ..	317	8	0	Office expenses (including salaries, stationery, &c.) .. ..	46	12	3
Rent .. ..	9	15	0	Advertising and printing .. ..	27	13	0
Furniture, fittings, apparatus .. ..	329	2	5	Lighting and heating .. ..	11	14	0
Material .. ..	44	16	5	Insurance and repairs .. ..	13	5	4
Subsidies on voluntary contributions ..	103	12	11	Examinations, &c. .. ..	2	2	0
Fees .. ..	176	10	0	Material for class use .. ..	32	17	4
Voluntary contributions .. ..	70	17	10	Caretaker .. ..	18	12	6
Deposit fees .. ..	21	17	0	Refunds .. ..	16	17	0
Goods sold .. ..	0	17	6	Library books .. ..	5	19	8
Refunds, &c. .. ..	14	1	4	Improving grounds .. ..	124	14	11
				Furniture, fittings, and apparatus ..	59	18	0
				Balance at end of year .. ..	76	19	3
	<u>£1,184</u>	<u>10</u>	<u>2</u>		<u>£1,184</u>	<u>10</u>	<u>2</u>

R. G. WHETTER, for Secretary.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted at Stratford.*

<i>Receipts.</i>	£	s.	d.	<i>Expenditure.</i>	£	s.	d.
Capitation on special classes .. ..	113	9	6	Balance at beginning of year .. ..	155	1	8
Capitation on account of free places ..	13	1	0	Administration and maintenance—			
Buildings .. ..	20	0	0	Salaries of instructors .. ..	52	1	6
Rent .. ..	6	5	0	Office expenses (including salaries, stationery, &c.) ..	51	0	5
Furniture, fittings, apparatus .. ..	65	19	8	Advertising and printing .. ..	7	7	9
Material .. ..	9	2	8	Lighting and heating .. ..	0	19	10
Subsidies on voluntary contributions ..	10	0	0	Insurance and repairs .. ..	0	1	6
Fees .. ..	50	13	0	Examinations, &c. .. ..	5	5	0
Voluntary contributions .. ..	10	0	0	Material for class use .. ..	5	2	6
Deposit fees .. ..	2	10	0	Caretaker .. ..	8	15	0
Goods sold .. ..	2	2	3	Refunds .. ..	0	4	2
Rent of rooms .. ..	3	0	0	Library books .. ..	0	10	0
				Fencing .. ..	0	17	6
				Furniture, fittings, and apparatus ..	4	10	10
				Balance at end of year .. ..	14	5	5
	<u>£306</u>	<u>3</u>	<u>1</u>		<u>£306</u>	<u>3</u>	<u>1</u>

R. G. WHETTER, for Secretary.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted at Inglewood.*

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Capitation on special classes .. .. .	28	2 10	Balance at beginning of year .. .. .	0	2 10
Fees .. .. .	19	17 6	Salaries of instructors .. .. .	26	0 6
Refund, petty cash .. .. .	0	17 7	Office expenses (including salaries, stationery, &c.) .. .. .	4	17 6
			Lighting and heating .. .. .	1	10 0
			Carstaker .. .. .	1	12 0
			Refund of deposit fees .. .. .	1	19 0
			Furniture, fittings, and apparatus .. .. .	0	18 0
			Balance at end of year .. .. .	11	18 1
	<u>£48</u>	<u>17 11</u>		<u>£48</u>	<u>17 11</u>

R. G. WHETTER, for Secretary.

WANGANUI.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

*Manual and Technical Instruction.*—The nature and extent of the work carried on in this department may be gathered from the various reports herewith presented. The number of technical buildings in the district is seven, and another (at Hawera) is in the course of erection. The buildings at Patea and Eltham were opened by the Hon. the Premier on the 25th and 26th May respectively, and the Feilding building by the Hon. the Minister of Education on the 11th March. Classes were held in twenty-one centres, and 2,857 pupils were in attendance. The day classes in engineering at the Wanganui Technical School were entirely successful under the direction of Mr. Steele, B.Sc., who has returned to his old College as Senior Demonstrator. Mr. E. Crow (Mechanical and Civil Engineer, Junior Member, A.S.C.E., A.I.M.E., Honours in Mechanical Engineering, City and Guilds of London Institute) has been appointed to fill the vacancy caused by Mr. Steele's resignation, and another successful year's work may be looked for. It is proposed to start day classes in art under the direction of Mr. Seaward, and there can be no doubt that there is room for such classes. The summaries furnished by the Superintendent in his report show that a reasonable amount of success has been attained at the different schools and centres. It may indeed be said with reference to the Wanganui School that the success is unparalleled in a town of similar population in the Dominion. No one who visited the very fine exhibition of work held at the end of the year could hesitate to say so. It appears from the Superintendent's report that an effort is being made to weld into a compact system the practical as well as the theoretical instruction given at the primary schools with that given at the technical schools, so that all may effectively converge on the actual employment of the pupil. If the schools fail in this they will fail in everything; but in view of the actual results the Board does not contemplate failure. True, the students do not rush the schools, but that of itself need not be disconcerting; the best things have not always the most votaries. Nevertheless the Board cannot be satisfied till a larger number of those who ought to come do come, and it is not afraid to advocate a reasonable amount of compulsion, in which it is supported by the great majority of the Boards of the Dominion. Surely a State that does so much for its subjects may reasonably require that its subjects may make an effort to do their best for the State.

*Training of Teachers.*—Saturday classes for the training of teachers were held continuously through the year—at Palmerston North, woodwork, cookery, handwork, and drawing; at Feilding, chemistry, cookery, and drawing; at Wanganui, handwork, cookery, biology, nature-study, and drawing. A remarkable feature in this connection was the general disinclination on the part of teachers to take up the study of science. Mr. Grant had a good class in biology, and Mr. Browne a good class in nature-study at Wanganui, but at the other centres little or no interest was manifested in scientific subjects. It is proposed during the present year to establish training classes at Taihape for the benefit of those teachers who have hitherto found it impossible to attend such classes. At the Wanganui Technical School, in the month of September, a series of art lessons was given to a number of teachers who gave up their autumn holiday for the purpose, by Mr. Seaward, A.R.C.A. According to the Inspectors who attended the lessons, Mr. Seaward's revelations of the possibilities of the brush in the primary school elicited interest and enthusiasm.

*Agriculture and Dairywork.*—The Board recognises the value of the work done by Mr. Grant and Mr. Browne in these departments of instruction, and also the excellent work done by many of the head teachers of the schools. Nothing could be better, for example, than the gardens at Ruahine, Cheltenham, Halcombe, and Taonui Schools, which, in open competition under the auspices of the Feilding Agricultural and Pastoral Society, were awarded by the examiner, F. Y. Lethbridge, Esq., 179, 158, 149, and 161 marks respectively, out of a possible 200

EXTRACT FROM THE REPORT OF THE SUPERINTENDENT OF TECHNICAL INSTRUCTION.

I have the honour to submit herewith the reports of the instructors and Supervisors of the technical department. Classes for instruction in elementary handwork were held in connection with 160 schools, while instruction in cookery, dressmaking, woodwork, physical measurements, elementary physics, chemistry, agriculture, dairy-work, physiology, and first aid, and swimming and life-saving was given in connection with ninety-six schools.

The school handwork subjects are intended to develop deftness of touch, the sense of proportion, and a love for the beautiful. It is proposed that for the future all the girls in town schools shall take brushwork during their progress through the standards. It would thus be possible for them to attain a high degree of proficiency in one branch of handwork. The town school technical subjects have, in addition to the objects aimed at by the handwork classes, an indirect bearing on the pupils' capacity for productive work in actual employment. The boys take woodwork and physical measurements, and the girls cookery, with the elementary scientific principles underlying the art of cookery. Hitherto every boy and every girl in Standards V and VI has been required to take these practical classes; but it is a question whether, in cases of exceptional literary ability, attendance at such classes should not be excused. This step should be taken only in individual cases, and then after consultation with the Inspector. There is not a shadow of doubt but that a practical training is of the utmost use to every boy and girl, but exceptional treatment is due to exceptional ability. The country school technical classes have a direct bearing on the occupations of the people. If the principles of agriculture and dairying are to be thoroughly known by the farming community, they must, in their beginnings, be acquired at the primary school. When once a pupil has left school for the land there is little time to think about principles. It is proposed that during the present year (1909) the district high schools shall undertake a thorough course in elementary agriculture. A rounded course of instruction during the entire school course of our best pupils could thus be undertaken. For the district high schools there will be drawn up a more advanced scheme than that prescribed for the standard classes, so that the work done will prepare pupils for the Civil Service Junior and Matriculation Examinations, and, in the case of those not desiring to pass examinations, will supply a body of principles that may be applied and put to the proof in agricultural operations. The arrangement whereby Mr. Browne will relieve Mr. Grant of the instruction and supervision of the agriculture and dairying classes in the north will lead to greater efficiency throughout the entire district in these most important subjects of public instruction. This paragraph may not be inaptly concluded with a quotation from the pen of Professor D. S. Jordan: "Training of the hand," says the Professor in the *Educational Review*, "is really training of the brain. This is a motor world we live in—a world in which men do things. We of America are pre-eminently a motor people. We do things. What can I do with it? is the first interest of every child. And to learn to do things with the hand is of greater value as mental training than the disentanglement of phrases or the memorising of irregular verbs. The development of manual training of some sort for all boys and girls will represent the greatest immediate forward step in secondary education. But the purpose of this training must be intellectual, not to teach a trade, and only secondarily to fit for the engineering courses of the universities."

Continuation and technical classes were held at twenty-one centres, of which seven were in the Northern District, six in the Central District, and eight in the Southern District. Concerning the work done by the classes at the various schools and centres, the Supervisors by their reports speak for themselves. There are, however, certain general considerations to which I may be allowed to refer. An attempt is being made to reduce to a system all practical work whether done at the primary schools, the secondary departments of the district high schools, or at the technical schools. This, of course, is not the achievement of a day, and therefore there must be much adjustment before the system is anything like complete. So far as purely technical instruction is concerned, the Board's efforts have been directed towards securing the interest of the people, who to all intents and purposes have the administration of technical affairs, outside the primary and district high schools, entirely in their own hands. At each of the technical schools there is a local director who acts as the executive officer of the local Committee, the Supervisor for the district being the medium of communication between the Committee and the Board. This arrangement has worked well. Work bearing on technical instruction first takes practical shape in the infant department under the guise of kindergarten, and it is continued in various forms of handwork throughout the school course. The Board's expert in handwork has this year been instructed to visit the larger schools to show the bearing of practical drawing, cardboard work, and woodwork on the other school subjects, notably on practical arithmetic and physical measurements. With the practical skill acquired during their primary training, such of the pupils as do not take up a purely literary course proceed to various branches of employment, except those that attend the technical day classes at Wanganui. It is just here, where all connection with educative influences is apt to be snapped, that the instruction given at the various technical schools and classes becomes invaluable; and if pupils do not or cannot attend technical or continuation classes the effect of much of the instruction given at the primary schools will be irretrievably lost. It is thought by some that technical training is being foisted upon an unwilling people for no better reason than its vogue in other lands. Such do not reflect on the dangers of a purely literary education (by which is here meant education solely through the medium of books), else they would view the matter in a different light. What is the main cause of the present dissatisfaction in India? It is very largely the result of misdirected education. Why is it that the "unemployed" question is always with us in a more or less acute form—in a terribly acute form in Britain at the present time? It is the result of misdirected education to a very large extent. Were people taught to use their hands in conjunction with their brains in their youth, they would not in their manhood readily become helpless appendages to machinery, or cease to be real factors in the development of the State. Whence come the flotsam and jetsam of society—the wastrels, the ne'er-do-weels, and the "Weary Willies"? They are to a large extent the product of misdirected or incomplete education. If people were alive to their own interests they would welcome practical and technical instruction in every shape and form, and parents would encourage their young people to bend their necks to the yoke for a time—if they cannot look upon attendance at the technical schools as a pleasure; so that through this salutary discipline they may learn to look forward with confidence to filling an honourable position in society. President Roosevelt, who presumably knows something of statesmanship, says that a hundred good citizens



are of more worth to the state than any single genius. If we turn to Denmark, a country by the universal consent of travellers and statesmen, prosperous and happy, it will be seen that she has secured her standard of citizenship by a wise adaptation of her education system to the needs of her people. Of course, technical instruction, like every other form of instruction, has its limitations. It is not a panacea for all the ills that nations are heir to, nor will it by any inherent virtue make or keep the heart of a nation sound; but if the capital of our people—their thews, sinews, and native ability—as well as the material resources of our country, is to contribute adequately to the production of the wealth necessary for the national comfort and safety, then the worth of technical instruction in our system of education must be fully realised. We in this Dominion of ours may accordingly well pray for the day when every youth of both sexes will continue his or her education till the age of seventeen is reached, and thereafter devote a definite period of time to training for the defence of the State—surely there is here a niche for young women—and so win at the age of twenty-one the laurel wreath of true manhood or true womanhood.

G. D. BRAIK, Superintendent.

#### INSTRUCTORS' REPORTS.

##### *Agriculture (Mr. Grant).*

At the close of the year 1907 the number of school classes in elementary agriculture was eighty-one, the number of pupils receiving instruction being 1,870; at the close of 1908, the number of school classes is eighty-seven, the number of pupils receiving instruction being 1,988. As a whole the teaching of elementary agriculture has been conducted on sound lines. In some of the schools some very good experimental work was done, the pupils setting out their work very nicely. In a few cases the work is carried on without any ideal. The pupils merely dig or perform some other garden operation. They have no problems set to which they can obtain an answer. The results are a badly kept garden and dull pupils. If a proper scheme of work is drawn up at the beginning of the season, the interest of the pupils would be much increased. Bad work is generally associated with faulty plans. I am pleased to report that some of the gardens are laid out with considerable taste. Of those I visited this year, Ohakea has the most merit in this direction. In the care of tools much remains to be learned. Though the number of badly kept tools is small, yet the number of well-kept tools is not large. In several schools, notably Beaconsfield, Awahuri, and Riverlea, all that can reasonably be expected is done. The tools in these schools should last for at least a dozen years. During the last three years tools to the value of £36 17s. 3d. have been destroyed. The fire at the District High School was responsible for more than one-third of the damage. People living near some of the schools are getting into the habit of borrowing the school tools. No one besides the school-children has any right to the use of these tools. I hope this practice will cease. A number of very carefully conducted experiments have been spoiled through the school gardens being robbed during the school holidays. It seems very hard that the work of the pupils should be spoiled in this way. As in former years, the Manawatu and West Coast Agricultural and Pastoral Association, the Feilding Agricultural and Pastoral Association, and the Wanganui Horticultural Society have done their part in the encouraging of the study of practical elementary agriculture by offering substantial prizes for various phases of garden-work.

##### *Dairy-work (Mr. Browne).*

Of the schools in which dairy-work was taken last year, the following continued the course this year under the headmasters: Okaiawa, Kapuni, Kaponga, Stoney Creek, Bunnythorpe, Colyton, Taonui, Awahuri, Lytton Street, and Cheltenham. Work was begun at Kakaramea. I had intended visiting these schools during the second half-year, but could not do so owing to my taking up technical work in the Northern District. For the first half-year classes were regularly taken by myself in the Feilding district at Bull's (two), Halcombe, Linton, Pohangina, Ashhurst, Hiwinui, Glen Oroua, Carnarvon, and Himitangi, and also occasionally at Lytton Street, Stanway, and Ohakea. A successful class for adults was also taken at Pohangina. The position now is, that with the exception of Apiti and Kimbolton, dairy-work has been taken in all readily accessible schools in suitable districts south of the Rangitikei River. In the northern district technical duties did not permit so much time to be given to dairy-work. Classes were taken in the following schools: Otakeho, Normanby, Alton, Whenuakura, and Kaitoke, with occasional visits to Rata. On Saturdays a teacher's class in nature-study was taken in Wanganui. Without exception, all schools taking dairy-work have shown a keen interest in the subject, and this has made the work of instruction a very pleasant one. Next year I hope to be able to give more time to visiting those schools in which classes have already been established. Too much time was this year spent in long train journeys to give an occasional lesson.

##### *Woodwork (Wanganui, Hawera, and Eltham), (Mr. Clark).*

*Work and Progress:* The work has, on the whole, been as satisfactory as in 1907. Quantity, as represented by the number of models made, has been a less important consideration than the pedagogic value of the manual training involved. Owing to the instructor's absence at Gisborne on the occasion of Mr. E. C. Isaac's first visit during the year, and to the fact that the various classes had completed their courses before his second visit, they have not had the benefit of his inspection and criticism. *Attendance:* The attendance generally has been good. In two of the Hawera classes and most of the Wanganui classes it has been excellent. One or two classes have been small, one at Hawera especially so, but this seems to have been unavoidable. In such cases as these it might be possible to admit a contingent from another school to fill the class. The change from the hour-and-a-half lesson to the two-hour lesson has not made any appreciable difference in the working of the classes. The conduct of the pupils has been good, with one or two inconsiderable exceptions in the case of individuals. As

is previous years, I have to thank the various head teachers and their assistants for the moral support they have afforded me in the matter of control, by taking a lively interest in the work of the classes. They are further to be thanked for varying their time-tables during the year to suit the convenience of the handwork classes. *Teachers' Classes*: A class in woodwork was carried on at Wanganui during the earlier part of the year, and three of the teachers sat for the City and Guilds of London Examination. Two of them passed the preliminary, and one obtained a first-class final certificate. A note on the classes in cardboard-modelling may perhaps be added. The attendance at these is not so good as the general importance of the subject would warrant, and it is to be regretted that those teachers who have the best opportunity of employing it as an educational method take the least trouble to learn how this may best be done.

*Woodwork (Palmerston North and Marton) (Mr. Bannister).*

The work throughout the year has been an improvement on the last, though we still see room for further advancement, especially in drawing. The difficulties will be reduced in Palmerston North when the new workshop is available, as there will then be room for drawing-benches.

*Cookery (Misses Mollison and Grant).*

The usual classes have been held in Wanganui and Hawera, the College classes added to the Wanganui work, and new centres opened in Patea and Eltham. In each centre the interest has been well maintained, and the conduct of the pupils has been satisfactory. A new departure has been made this year—each centre being worked for twenty weeks only. This enables more work to be done, and, as far as the instructors are concerned, has proved quite satisfactory. The new rooms at Patea and Eltham give every satisfaction, the only drawback being the want of gas. To facilitate the work, the instructors recommend the purchase of two or three small kerosene-stoves for each centre. In conclusion, we should like to pay a tribute of thanks to the headmasters of the different schools, who, without exception, have met our wishes in every possible way, in some cases at inconvenience to themselves.

*Cookery (Miss Fergus).*

Classes have been held in the following centres—Marton, Feilding, and Palmerston; and in each centre the attendance has been satisfactory. Teachers' classes have been held in Feilding and Palmerston. In December an exhibition of work done during the year was held at the Technical School, Feilding, and among the exhibits was a display of cooking made by school classes. I would strongly recommend that gas-rings be supplied in Marton cookery room.

*Commercial Instruction (Mr. Cox).*

Evening classes have been conducted weekly in Feilding, Marton, Eltham, Hawera, and Wanganui, and afternoon classes at Feilding and Wanganui (two.) *Feilding*: Both classes here were for junior book-keeping, the day being found unsuitable to those who would have taken accountancy. To remedy this, I propose to visit Feilding on Tuesday, instead of Monday as at present. The work of all students here was good. In the evening class a number of the original members found themselves unable, for various reasons, to continue, but a fair number were still attending at the close of the year. Included in the classes were several D.H.S. pupils taking the subject for Junior Civil Service. *Marton*: This class was for junior work, and on its formation the number enrolled was good. Several did not continue after the first time, however, and towards the end of the year the attendance was small, including several D.H.S. pupils intending to sit for Junior Civil Service. Those who continued for any length of time showed very satisfactory progress. *Eltham*: Classes were conducted here in shorthand and book-keeping, and several were also taken for senior book-keeping. The attendances for the whole period were good, and the whole of the students satisfactory. It was noticeable that all who attended for shorthand and junior book-keeping were girls, so that there should be others who could take advantage of the classes. *Hawera*: In the first term three classes were taken here—viz., shorthand, junior book-keeping, and advanced book-keeping, the latter consisting, however, of only three, of whom two did not continue to the end of the period. Owing to the only available time for shorthand (5 to 6) being insufficient and unsuitable, the subject was taken by another instructor on a different night. In the junior book-keeping the attendance was fairly good, and the work throughout the period was particularly satisfactory, some half-dozen of the students making the best progress of any for the year. *Wanganui*: The afternoon classes in junior commercial work were well attended through the whole period, and the students showed very good progress in their work. The evening class in junior book-keeping was divided into two (Thursday and Friday), and the former was taken by Mr. Varney. The chief reason for this was the necessity of changing the original night to suit my travelling; but in any case the number of students was too large for a single class, and I think it probable that sufficient students will be forthcoming next year to make a second night advisable. The students took a keen interest in their work and got on well. The average roll-numbers at country classes have not been as high as might have been anticipated, but the first term commenced late, and next year (when the classes will also be better known) should make a better showing in this respect. The work of students has generally been very satisfactory, and practically all who finished the year signified their intention of continuing when the schools reopen.

The following reports of experiments on potato-growing are here inserted for the information of teachers taking up agriculture in their schools. Similar reports were received from six other schools in the Wanganui District.

Kakaramea School.

Potatoes.	Size of Plots.	Date of Planting.	Date of Gathering.	Quantity of Seed per Plot.	Manures.	Quantity of Manure per Plot.	Quantity of Manure per Acre.	Produce per Plot.	Produce per Acre.	Remarks.
				lb.			cwt.	lb. oz.	Tons cwt. qr. lb.	
<b>EXPERIMENTS A.</b>										
1. Northern Star	12 ft. x 6 ft.	16/9/07	10/2/08	2½	None .. ..	..	..	12 8	3 7 1 14	Control experiment.
2. "	12 ft. x 6 ft.	16/9/07	10/2/08	2½	Superphosphate ..	6 oz.	2	16 15	4 11 1 .8	A good all-round manure; forces growth at first.
3. "	12 ft. x 6 ft.	16/9/07	10/2/08	2½	Superphosphate and nitrate of soda	3 oz. of each	2	18 0	4 17 0 26	A mixture satisfactory on this soil.
4. "	12 ft. x 6 ft.	16/9/07	10/2/08	2½	Sulphate of ammonia ..	6 oz.	2	9 8	2 11 1 8	Disappointing, but drought no doubt cause of poor yield.
5. "	12 ft. x 6 ft.	16/9/07	10/2/08	2	Dried blood .. ..	6 oz.	2	3 8	0 18 3 18	A slowly acting manure.
<b>EXPERIMENTS B.</b>										
6. Northern Star	15 ft. x 6 ft.	7/10/07	10/2/08	3½	None .. ..	..	..	50 0	10 16 1 20	New ground; trenched 20 in.; good result and good sample.
7. "	15 ft. x 6 ft.	7/10/07	10/2/08	3½	Special potato ..	7 oz. 6 dr	2	25 0	5 8 0 24	Manure had little chance. Owing to drought, potatoes very small.
8. "	15 ft. x 9 ft.	7/10/07	10/2/08	5	Bonedust .. ..	11 oz. 1 dr.	2	15 0	3 4 3 8	Came away well at first; after that no growth at root.

NOTES ON EXPERIMENT A.—Garden in decidedly unfavourable position. Slopes away from the sun—south-east to north-west. Is in close proximity to *Pinus insignis* plantation. In early spring liable to be swamped with heavy rainfall. Soil of poor quality. Sandy loam; very friable; holds little moisture; sandy subsoil. Manures did not act as they should, no doubt owing to the drought following their application, consequently did not get washed into the soil. Climate: Late wet spring; dry summer; disease-laden autumn. Average yearly temperature, 54° (9.30 a.m.). District subject to north-west and south-east winds, also salt sprays in March and September. Sheltered on west side, *Pinus insignis* plantation. Elevation 200 ft.

## Taihape School.

Potatoes.	Size of Plots.	Date of Planting.	Date of Gathering.	Quantity of Seed per Plot.	Manures.	Quantity of Manure per Plot.	Quantity of Manure per Acre.	Produce per Plot.	Produce per Acre.	Remarks.
				lb.		oz.	Tons cwt. lb.	lb.	Tons.	
1. Scotia . . .	75 sq. ft.	4/9/07	3/2/08	4	Superphosphate	12	0 3 99	12½	3¼	Seed from Halcombe School garden.
2. Edward VII	"	4/9/07	3/2/08	7	Blood manure	12	0 3 99	20½	5¼	"
3. Warrior	"	4/9/07	3/2/08	4½	"	12	0 3 99	24½	6¼	"
4. Springfield	"	4/9/07	4/2/08	6	Nitrate of soda	12	0 3 99	26	6¾	"
5. Eureka	"	16/10/07	3/2/08	6	Stable-manure	20	5 3 80	44	11½	Seed from local store.
6. Beauty of Hebron	"	18/9/07	4/2/08	4	Potato-manure	12	0 3 99	34	8¾	Seed from Taihape School garden.
7. " "	"	4/9/07	4/2/08	3½	Blood manure	12	0 3 99	38	9¾	"
8. British Queen	"	12/9/07	4/2/08	5	Superphosphate	12	0 3 99	43	11¼	"
9. " "	"	4/9/07	4/2/08	3½	Potato-manure	12	0 3 99	20	5½	"
10. Dakota Red	"	18/9/07	4/2/08	5	Superphosphate	12	0 3 99	26	6¾	Seed from local store.
11. " "	"	18/9/07	4/-/08	7	Sulphate of ammonia	12	0 3 99	15	3¾	"
12. Ash-leaf Kidney	"	4/9/07	4/2/08	3½	"	12	0 3 99	24	6¼	"
13. Eldorado	"	4/9/07	3/2/08	1½	Potato-manure	12	0 3 99	11	2¾	"
14. Bruce . . .	"	18/9/07	4/2/08	4½	Blood manure	12	0 3 99	24	6¼	Seed from a local farmer.

NORRES.—Soil: Light, sandy, and sloping away from the sun. Weather: Most of the potatoes were planted early in September, when the weather was very wet and cold. The Eureka seed was planted a month later, yet by December the plants were the largest and most regular in the garden. We considered that the warmer weather which followed the planting of these potatoes was one of the reasons for their quick, strong growth. On the 17th January, 1908, there was a very heavy frost which completely cut down and killed all the tops of the potatoes. We attribute the failure of the crop principally to the long spell of dry weather from the end of December to the end of February. Time of digging: Although the potatoes were not ripe, we dug them in February, as we were advised that they would start growing again when the rain came. Spraying: The potatoes were sprayed on the 13th December. They were periodically examined, but they showed no signs of blight.

## SUPERVISORS' REPORTS.

*Central District (Mr. Varney).*

**WANGANUI.—Art.**—At the close of 1907 Mr. D. Hutton, art master, resigned, and Mr. Seaward, A.R.C.A., was appointed in London by the High Commissioner for New Zealand. Few classes were organized until Mr. Seaward's arrival in April. Then Mr. Seaward's qualifications were such as enabled us to provide a more thorough course than we had previously been able to do. The life-drawing class was resuscitated, and a special class was added for more advanced work in figure-composition and design. These classes have met with much success, especially the former. Mr. Seaward's methods were entirely new to our students, but through his tact, courtesy, and enthusiasm, without the slightest friction, the old order has changed, yielding place to the new. It has been a source of gratification to find this important branch of our work raised to the high level to which Mr. Seaward has been able to raise it. Students are now evincing a desire to take up a course of work, aiming at thoroughly equipping themselves in the elementary subjects before venturing on more advanced branches of study. Some few students fail to gain the best out of the classes through their desire to arrive at the end almost as soon as a beginning has been made. This is one of the fruitful sources of failure. Would that we could teach our students to be patient, and trust more in the superior knowledge of their teachers. The teachers' art classes must have been distinctly beneficial to those who have had the privilege of studying with Mr. Seaward. A new ideal has been placed before them. An art school for teachers during the spring vacation proved most interesting to the eighteen who voluntarily gave up their holiday to the pursuit of knowledge. We have to thank the trustees of the Wanganui Museum for the privilege of using the Museum for the purpose of study.

**Applied Art.**—In this department marked progress has been made during the year. Leather-embossing and metal-work have been added to the curriculum, and in each class much fine work has been done. The wood-carving classes have done good work, and the attendance has been satisfactory. In the new subjects the number of pupils has not been so large as anticipated, but we feel sure that there is a fine future before both classes. Mr. Andrews, fresh from his visit to the Old Country, has at all times worked most assiduously for the welfare of the school. The modelling class was well attended all through the year, and capital work was done, especially by the advanced students.

A most interesting experiment in this department is worthy of note. Twelve children from the public schools were taken through a graduated course of elementary design, modelling, and wood-carving. The pupils first modelled and studied some plant-form; then they planned an original design, which they transferred to their wood, and worked out in incised carving. Afterwards the design was modelled in clay and carved in relief. The pupils showed a lively interest in their work.

**Engineering.**—The day course in engineering commenced with eleven students. Mr. S. Steele, B.Sc. in Engineering, resigned in July to take up an appointment in the Canterbury School of Engineering. Mr. J. Dawes and Mr. M. Stanley carried on the work of the classes in an efficient manner until Mr. Crow's arrival on the 13th August. Since Mr. Crow's advent the work of the Department has advanced by leaps and bounds, the enthusiasm of both instructors and students being much to be commended, and the classes have become deservedly popular. As the year advanced it became more and more apparent that further accommodation would be necessary if the best work was to be had out of the pupils, the crowded state of the workshop militating against successful work. Plans for new workshops have been submitted which it is hoped will meet with the approval of both the Board and the Education Department. It is a matter for surprise that the Government, which does so much for technical education, evidently recognising its importance, does not make some arrangement whereby its own employes at the Eastown workshops could be encouraged to take advantage of the opportunities afforded.

**Artisan Classes.**—These classes have, as usual, been well attended, and much excellent work has been done, especially in the practical classes. A marked feature of these classes is the interest shown in the apprentices' work by the various masters' associations. The plumbers have done exceptionally good work under Mr. Aughton in bossing and wiping, but there is room for much improvement in the theoretical classes, consequently each examination tells the same tale—very good practical work, indifferent theoretical. In the examination last December the percentage marks in the former was seventy and in the latter fifty-five, notwithstanding that one apprentice obtained full marks. The same position, to a certain extent, holds good in regard to the carpenters' classes; excellent practical work, and very fair drawing and building-construction.

**Domestic Classes.**—The dressmaking and millinery classes produced work of a very high order, and Miss Bohan is to be commended for the interest she displayed in her work and for the results achieved. The home nursing class suffered a change of teacher during the year, Nurse Pitt resigning and Nurse Creech being appointed in her place. Such a useful and interesting course of instruction should be of inestimable benefit to the students. The evening cookery classes were not so popular as in former years. We are much hampered for accommodation in the domestic side of our work, a room for dress-making and millinery being much needed.

**Commercial Classes.**—The classes in this section have, as usual, been popular, and much good work has been done. Now that the Board has appointed an expert in Mr. Cox, A.N.Z.A.A., we may in the future look for much more solid work than in the past. There is not such a tendency for boys to rush these classes as formerly, more taking advantage of the trade courses. During the year Mr. J. Butler, F.I.A.N.Z., resigned his position as instructor of advanced book-keeping and accountancy. He has served the Board splendidly for six years, and his loss will be much felt.

**Wool-classing.**—A class in this important branch of farm-work was opened in September last. On account of the proximity of the shearing season and the intervention of agricultural shows the course of lessons was not completed before Christmas, but we hope to finish this course and commence a new

one in the near future. A lively interest was taken in the class, many farmers voluntarily donating fleeces. Thirty students enrolled. The success of this class should be an encouragement to provide further instruction for farmers. It is probable that a winter school for young farmers would be successful here.

Mr. E. C. Isaac, Organizing Inspector for the Education Department, visited the school in November. In December an exhibition of school-work was opened by F. Pirani, Esq., Chairman of the Wanganui Education Board. This was in every way successful, the small charge for admission clearing all expenses, and its main object, that of making the work of the school better known, was achieved. Voluntary contributions to the school have during 1908 amounted to £173 12s. 3d. This includes the amount gained from the annual concert. The total number of individual students enrolled during the year has been 813.

MARTON.—Classes have been held here in vocal music, dressmaking, millinery, wood-carving, woodwork, book-keeping, and commercial law, with a fair amount of success. It is hoped that the young people of the township during 1909 will in large numbers show their appreciation of the establishment of a technical school in their midst.

BULL'S.—Successful dressmaking and millinery classes were conducted here, but, owing to lack of accommodation, no further classes were held. The new building is now ready, and better results should be reported during this year.

TAIHAPE.—Only wood-carving classes were conducted in this township for the same reason as in Bull's. Here again a forward movement will be made.

HUNTERVILLE.—The following successful classes have met during the year: Wood-carving, vocal music, dressmaking, and millinery.

TURAKINA.—A home nursing class, attended, among others, by many Maori girls, should prove beneficial to the future life of those privileged to have worked under Nurses Pitt and Creech.

I have to thank the staff, who have at all times and under all circumstances worked so well; the students, who, almost without exception, have conducted themselves admirably; and the Press for its readiness to make the school known.

*Northern District (Mr. Browne).*

The names on the rolls in the various centres of the Northern District numbered 808 for the year. The individual students numbered 598. It will be seen from the numbers given that the domestic-course subjects are well attended, particularly the dressmaking classes. However, that 40 per cent. of students take dressmaking is hardly a subject for congratulation, and a strong effort is being made to put subjects of the agricultural course on a better footing. Until we succeed in this we cannot consider our technical classes as supplying the needs of a district such as this. On the whole, the fees were distinctly too low. Owing to the dearth of suitable instructors in the various centres, the travelling-expenses of those employed amount to a considerable sum. No change has taken place during the year in the matter of buildings. Thoroughly up-to-date technical schools are in use at Eltham and Patea, and it is hoped that early in the new year Hawera and Manaia will be similarly provided for. I could not conclude this report without referring to the splendid way in which the local directors have worked to make the classes a success. They have given themselves whole-heartedly to the work.

*Southern District (Mr. Fossey).*

The Fielding Technical School was opened on the 11th March by the Hon. George Fowlds, Minister of Education and Health; but, on account of lack of fittings and the building itself being incomplete, classes were not opened till the 16th April. The building contains the following rooms: Main building, ground floor: Cookery room, commercial room, girls' room and lavatory, and Director's office. First floor: Chemical laboratory, balance room, art room, and mechanical-drawing room. Auxiliary building: Woodwork and plumbing workshop. These rooms, however, are not fully equipped at the present time, as it is only during the present month that the Department has supplied funds which will enable the Board to furnish the art room with seats and desks, the room still lacking teaching-models of machinery details. For the first term the following classes were opened and very successfully carried on: Plumbing, book-keeping, shorthand, painting, English, arithmetic, metal-work, wood-carving, dressmaking, chemistry, and mathematics—these classes being attended by 119 students. In June the following additional classes were commenced: Machine-drawing, cabinet-making, geometry and model-drawing, cookery, book-keeping and commercial arithmetic, Maori, and a matriculation class, which classes were again augmented in September by classes in cabinetmaking and typewriting, which were attended by 190 pupils.

The number of pupils actually admitted during the year was 192 individuals, and the average attendance for the year was 130. During the month of November a course of lectures on subjects dealing with agriculture was arranged for and delivered by the following gentlemen: Fruit-growing, 30th October, Mr. Boucher; poultry-keeping, 6th November, Mr. Hyde; milk, 13th November, Dr. Mason; improvements of pasture lands, 20th November, Mr. Gillanders. These lectures were attended by an average attendance of thirty persons, and were very greatly appreciated by those who were able to attend, and, in my opinion, this is the best means of reaching the farming community on matters affecting the improvements of methods of farming. *Attendance:* The attendance of students at all the classes (except cookery, which class fell off altogether at the end of the first term) was very satisfactory, the average attendance for the last month of the term being 132, as compared with 138 for the month of August, which was the highest average for the year. *Woodwork Classes:* Five classes of boys attended this school for this subject: District High School, three classes; Lytton Street, one class; and one

class from the Feilding Catholic School. The attendance and conduct were very good. The practical work done by the pupils was quite up to the "Home" standard, but I was somewhat disappointed with the drawing, which was not so good as it might be; and I would suggest that a little more practice might be given in the lower classes to a scheme of drawing that involved the use of a pencil, ruler, and set-square, particular attention being paid by the teacher to the class of pencil used ("H") and the condition of the point. I would also suggest that a "drill" in drawing fine lines be taken for a few minutes at the commencement of the earlier lessons in the lower standards. *Country Classes*: Classes were commenced at Ashhurst, Apiti, Kimbolton, Foxton, Rangiwahia, Pohangina, and Halcombe, which continued throughout the year, except at Ashhurst, which finished in October, and Foxton, which did not commence till September, the attendance in all cases being good and maintained right up to the last. The value of the work done is very considerable, and is also keenly appreciated by the people in these remote districts, and reflects very great credit on all the teachers concerned. In conclusion, I desire to extend my sincere thanks to the members of the staff, especially Mr. Ritchie, M.A., who has been most indefatigable in assisting me at all times, for the keen interest displayed by them in the welfare of the school in this the first year of its existence, necessarily a most difficult time; also to Mr. J. Grant, B.A., for so ably arranging the scheme of work at the commencement of the year; to the members of the Committee for at all times being ready to assist me with advice with reference to the need of the district; and to the proprietors of the *Feilding Star* for the valuable aid, always ungrudgingly given, in advertising and making known the work of the school.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted at Alton, Apiti, Ashhurst, Bull's, Bunnythorpe, Elham, Feilding, Foxton, Halcombe, Hawera, Hunterville, Kaponga, Kapuni, Kimbolton, Manaia, Mangatoki, Marton, Matapu, Normanby, Okaiawa, Patea, Pohangina, Rongotea, Taihape, Turakina, Waitotara, Waverley, and Wanganui.*

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Capitation on special classes ..	..	2,390	16	0	Balance at beginning of year ..	..	4,480	16	9
Capitation on account of free places ..	..	386	8	0	Salaries of instructors (including travelling expenses) ..	..	3,951	10	7
Buildings .. .. .	..	2,807	12	3	Office expenses (including salaries, stationery, &c.) ..	..	10	0	0
Rent .. .. .	..	9	12	0	Advertising, printing, and stationery ..	..	117	7	2
Furniture, fittings, and apparatus ..	..	2,288	15	9	Lighting, heating, and cleaning ..	..	241	12	5
Material .. .. .	..	111	10	11	Insurance and repairs ..	..	44	18	3
Subsidies on voluntary contributions ..	..	860	4	7	Material for class use ..	..	245	14	4
Training of teachers .. .. .	..	395	0	0	Miscellaneous .. .. .	..	19	11	10
Fees .. .. .	..	1,524	16	3	Telephone .. .. .	..	8	15	6
Voluntary contributions .. .. .	..	694	3	11	Fees refunded .. .. .	..	3	15	0
Rent .. .. .	..	1	5	0	Library and prizes .. .. .	..	16	7	4
Furniture sold .. .. .	..	2	15	0	Administration — Transfer for office administration (1906-7-8) ..	..	278	6	2
Material sold .. .. .	..	11	18	6	Contracts (new buildings, additions, &c.) and rent .. .. .	..	3,633	5	0
Refunds—					Furniture, fittings, and apparatus ..	..	2,454	10	9
Rent .. .. .	..	7	15	0					
Material .. .. .	..	0	19	9					
Apparatus .. .. .	..	5	12	7					
Balance at end of year .. .. .	..	4,007	5	7					
		<u>£15,506</u>	<u>11</u>	<u>1</u>			<u>£15,506</u>	<u>11</u>	<u>1</u>

W. J. CARSON, Secretary.

EXTRACT FROM THE REPORT OF THE CONTROLLING AUTHORITY OF THE PALMERSTON NORTH TECHNICAL SCHOOL.

The year 1908 has been one of steady progress and development in all classes of the school. Being the first year in which the classes have run for three terms, the work, as a result, shows to better advantage. The free-place students, however, show an inclination to drop off after filling in the prescribed number of attendances. This is not a good thing, as it shows a lack of desire to get the full value of the advantages given. The paying students, however, are more earnest in their desire to get on and make the most of their opportunities, and no doubt in time all will realise the necessity for steady application, if desirous of succeeding in life. During the year new classes have been formed in millinery, ladies' tailoring, practical tailoring, agriculture, singing, typewriting, motor-car engineering, German, and wool-classing, and have all proved successful. The number of classes in operation for the year was thirty-nine and the average roll for the year was 420, as against 235 in twenty-nine classes for two terms last year.

*Artisans' Classes.*—The carriage-drafting class has done exceptionally good work, and the attendance has been excellent. In the building-construction and staircasing classes, however, there is lack of interest. One or two only keep up their interest and attendance. In a place like Palmerston North these classes should be well patronised. The plumbers' class is well attended, and good work has been done. In June last sixteen students presented themselves for the City and Guilds of London examination in plumbing. A scholarship for plumbers' apprentices has been established, being supported by most of the master plumbers of Palmerston North. This provides a two-years free place in the plumbing classes for the successful candidate.

The wool-classing and agriculture classes were very successful, and were well attended, the majority of the students in the latter being teachers preparing for the teachers' C and D Certificate Examinations. The wool-classing class put their knowledge to a practical use by visiting Mr. Hugh Akers' farm, and skirting, rolling, classing, and baling several hundred fleeces. A special report is to be solicited from the English buyers and forwarded to the Technical School, in order that we may prove to the farmers that it pays them to class their wool.

*Commercial Classes.*—These classes have been well attended, especially the English, shorthand, book-keeping, and arithmetic. Examinations have been held and certificates issued to those who have shown proficiency. Students, however, will unfortunately not remain long enough in the class to become thoroughly proficient.

The general class for standards V and VI is one of the most successful in the school. Providing as it does for those who left school before passing the higher standards, it enables them to work for and to be examined by an Education Board Inspector for proficiency certificates.

The dressmaking and millinery classes have also been a feature of the school, good work having been done, and the average attendance having been good.

The *Art Classes*, during the absence of Mr. Elliott, have been very successfully conducted by Mr. W. Greene.

Mr. E. C. Isaac, Organizing Inspector for Manual and Technical Education, visited the school in June, and expressed himself well satisfied with the quality of the work being done. Provision is being made for classes in applied mechanics, mechanical drawing, ticket-writing, graining and marbling, and commercial geography for next year.

The public and the Press of Palmerston North have shown great interest in the classes, and their assistance from time to time has been much appreciated.

F. D. OPIE, Director.  
W. RUTHERFORD, Chairman.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted at Palmerston North by the Palmerston North High School Board.*

<i>Receipts.</i>			<i>Expenditure.</i>			
	£	s. d.				
Capitation on special classes .. ..	297	14 4	Balance .. ..	..	16	6 2
Capitation on account of free places .. ..	43	12 6	Salaries of instructors .. ..	..	623	1 4
Rent .. ..	112	18 4	Office expenses (including salaries, stationery, &c.) .. ..	..	244	0 3
Furniture, fittings, and apparatus .. ..	73	19 8	Advertising and printing .. ..	..	73	2 9
Material .. ..	85	16 0	Lighting and heating .. ..	..	39	13 4
Subsidies on voluntary contributions .. ..	930	12 5	Insurance, repairs, &c. .. ..	..	32	4 10
Fees .. ..	431	1 2	Rent .. ..	..	75	15 0
Voluntary contributions .. ..	884	19 11	Examinations, &c. .. ..	..	19	3 0
Sale of lead and sundry receipts .. ..	32	2 1	Material for class use .. ..	..	110	12 4
Refund from High School Account for art master's salary .. ..	50	0 0	for secondary-school classes .. ..	..	47	5 8
Payments on account of secondary-school classes .. ..	56	14 7	Freights, cartage, and petty expenses .. ..	..	20	0 8
			Lighting and heating, secondary-school classes .. ..	..	9	8 11
			Furniture, fittings, and apparatus .. ..	..	59	2 2
			Purchase of new Technical School site .. ..	..	1,450	0 0
			Rates on sites .. ..	..	6	14 7
			Balance at end of year .. ..	..	172	19 7
	<u>£2,999</u>	<u>10 7</u>			<u>£2,999</u>	<u>10 7</u>

WILLIAM HUNTER, Secretary.

WELLINGTON.

EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

During the year capitation, under the Regulations for Manual and Technical Instruction was earned by 121 schools, as compared with 116 in 1907 and 120 in 1906. Instruction in cookery has been given at Thorndon and Newtown in Wellington, at Levin and Otaki, and at various Wairarapa centres. The most considerable increase in numbers under instruction was in handwork, agriculture, physiology, swimming and life-saving, and woodwork. Instruction in woodwork is still confined to Wellington and suburban schools, but will, it is proposed, shortly be extended to Petone and Hutt. The Board views with pleasure the completion of the fine new Technical School at Petone, which it trusts will fully justify its establishment.

The Board was enabled to arrange during the year for courses of instruction at Wellington, Masterton, and Greytown, in drawing, handwork, agriculture, cookery, woodwork, and cardboard-work, for teachers, and the response of the teachers both in attendance and in enthusiasm must have been very gratifying to the instructors. At the schools of instruction in agriculture, three in number, held at Greytown in January and at the term holidays, each for a fortnight's continuous work, there were enrolled fifty-six teachers, who each surrendered a week's holiday in order to attend. The Inspectors are of opinion that a distinct improvement of the work in many schools is observable, as one result of the earnest efforts put forth by teachers to fit themselves for this new department of school-work.

EXTRACT FROM THE REPORT OF THE INSPECTORS OF SCHOOLS.

*Elementary Agriculture.*—In practically one-third of our schools elementary agriculture and school gardening form regular subjects of instruction, and our teachers deserve special commendation for the zeal they have displayed in fitting themselves for the new work. Attendance at Mr. Davies' classes, private study, and practical gardening-work have all been willingly used as a means to this end. The result has been a direct gain to our scholars, and both the Press and the general public are showing a



most hopeful interest in what they rightly consider a practical outcome of our nature-study and science-teaching. We know of many instances where the school experiments are being keenly watched and criticized by the farmers of the district. We are further pleased to report that in some two dozen schools the work of beautifying the grounds has been made a special feature. In the matter of the instruction of teachers, Mr. Davies says, "The work this year has been carried out by means of periodical schools, three in number, held at Greytown in February, May, and September. The total number attending during the year has been fifty-six, and there is every reason to feel gratified at the interest and energy displayed by the students. That this interest shows no sign of abating is evidenced by the large number of applications for admission to the summer school, commencing on the 25th January. I have to acknowledge with thanks the valuable assistance rendered by the officers of the Agricultural Department."

*Manual and Technical.*—During the year 121 schools earned capitation under the Manual and Technical Regulations. In addition to the usual school subjects for classes below Standard V, grants were earned for agriculture, dairying, physical measurements, chemistry, botany, physiology and "first aid," woodwork, cookery, dressmaking, swimming and life-saving. In woodwork fourteen classes were held at the South Wellington and Thorndon centres, under the instruction of Mr. Howe. The average attendance for each class was twenty-eight, and the boys took a keen interest in their work. As it will be necessary to extend the operation of these classes, the services of an assistant will be required. The usual school classes in cookery were carried on by Mrs. Wakelin in Wellington, and by Miss Talbot in the Wairarapa, and classes were established at Levin and Otaki. Provision will have to be made for instruction in cookery and woodwork at the Hutt and Petone during the coming year. In none of the grant-earning classes visited by the Technical Inspector was the quality of the instruction marked as less than "good," and some were reported as "very good" and "excellent." Saturday classes for teachers in woodwork, cookery, drawing, and handwork were held at Wellington, and in cookery at Masterton.

#### EXTRACT FROM THE REPORT OF THE INSTRUCTOR OF AGRICULTURE.

In connection with the instruction of teachers in elementary agriculture, three sessions, each of a fortnight's duration, were held at Greytown during 1908—the summer, autumn, and spring schools—the number of teachers in attendance at each respectively being 18, 18, and 20. The summer class consisted of teachers in sole charge of small country schools, while the other two were devoted to head teachers and assistants from larger schools. The following are the leading features of the programmes carried out:—Summer School: Lectures and laboratory practice; the chemistry of air and water; plant-structure and physiology; the plant in its relation (a) to the atmosphere, (b) to the soil; rocks, their constituent minerals and decomposition to form soil. Autumn school: Plant-structure and physiology, and relation of plants to the atmosphere and soil; grasses and their identification; identification of grass-seeds and their impurities; propagation of plants by cuttings; pruning fruit-trees; instruction in drawing from nature. Spring school: Rocks and the formation of soil; mechanical analysis of soils; texture and physical properties of soils; soil-moisture, soil-temperature, soil-improvement (physical); identification and classification of the leading weeds of the district; special nature-studies in plant-life for assistant teachers. Assistance in the work of instruction was given by the Board's Inspectors, Mr. T. W. Kirk, Government Biologist, who gave a talk on grasses, and Mr. Nottage, of the Agricultural Department's staff, who was responsible for a pruning demonstration. The students participating in these courses entered enthusiastically into the work, which should produce good results in the schools during the coming year.

W. C. DAVIES.

#### EXTRACT FROM THE REPORT ON SPECIAL CLASSES AT CARTERTON.

Increasing difficulties in securing pupils for these classes caused them to be abandoned. Classes were commenced for English, arithmetic, and commercial subjects; but, as a sufficient number of pupils did not attend to enable the classes to pay for themselves, the Committee decided after the first term that their funds would not bear the strain of a heavy deficiency for another term.

RICHARD J. CHAPMAN, Secretary.

#### Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Technical and Continuation Classes in Country Districts.

##### Receipts.

Centre.	Balance at Beginning of Year.	Grants from Government.			Other Receipts.		Balance at End of Year.	Totals.
		Capitation on Special Classes.	Capitation on Free Places.	Subsidies on Voluntary Contributions.	Fees.	Sale of Material.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Masterton .. ..	.. ..	2 13 0	.. ..	.. ..	.. ..	0 10 10	8 6 10	11 10 8
Carterton .. ..	8 4 7	6 6 8	9 5 3	.. ..	1 7 6	.. ..	.. ..	25 4 0
Greytown .. ..	3 4 0	6 3 9	.. ..	5 0 0	.. ..	.. ..	.. ..	14 7 9
Eketahuna .. ..	.. ..	4 12 3	.. ..	.. ..	.. ..	.. ..	.. ..	4 12 3
Totals .. ..	11 8 7	19 15 8	9 5 3	5 0 0	1 7 6	0 10 10	8 6 10	55 14 8

*Expenditure.*

Centre.	Balance at Beginning of Year.	Administration.			Furniture, Fittings, and Apparatus.	Balance at End of Year.	Totals.
		Salaries of Instructors.	Incidental Expenses.	Advertising, Printing, Lighting, and Heating.			
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Masterton .. ..	11 10 8	.. ..	.. ..	.. ..	.. ..	.. ..	11 10 8
Carterton .. ..	.. ..	10 0 0	6 6 0	2 0 9	.. ..	6 17 3	25 4 0
Greytown .. ..	.. ..	.. ..	.. ..	.. ..	5 0 0	9 7 9	14 7 9
Eketahuna .. ..	3 2 3	1 10 0	.. ..	.. ..	.. ..	.. ..	4 12 3
<b>Totals .. ..</b>	<b>14 12 11</b>	<b>11 10 0</b>	<b>6 6 0</b>	<b>2 0 9</b>	<b>5 0 0</b>	<b>16 5 0</b>	<b>55 14 8</b>

## EXTRACT FROM THE REPORT OF THE DIRECTOR OF THE WELLINGTON TECHNICAL SCHOOL:

The average numbers attending were about the same as in 1907, being in both years considerably above any former year. A falling-off in the numbers of students, greater than usually occurs, took place towards the end of the year, due apparently to slackness of trade in the town. Many students, in resigning their places at the school, complained that they were compelled to go into the country to seek work. The same cause operated in the case of day technical students, several being transferred from the day to the evening classes\* in order to start wage-earning. The numbers attending were, however, considerably beyond the normal capacity of the school buildings. The average number of students receiving instruction was somewhat over 1,100, of whom about 440 held junior or senior free places. The attendance of students at class was for the most part fairly satisfactory. In the day classes the attendance was very good, in the evening classes it was somewhat irregular, especially that of junior free-place students in the compulsory subjects. There was a marked increase in the number of free evening students, both junior and senior, accompanied by a slight decrease in the number of free day students. The growing attendance of junior free-place students of tender years at the evening classes, while a natural accompaniment of dull times, is much to be regretted, as there can be no doubt that the best results are obtained when the two years as junior free student are spent in day classes.

The year 1908 has been one of steady progress in most branches of the school-work. The art classes generally have been well attended, and the work shows greater promise than in former years. The life classes especially, which had been stationary for some time under temporary teachers, are now making marked progress under Mr. Richardson. The art crafts classes have been carefully and intelligently carried on, and some excellent work done. In the South Kensington Art Examinations the students were very successful, and also in winning awards in the competitions for technical schools at the Agricultural and Pastoral Show at Palmerston North. The art staff is now very strong, and all the work is being done conscientiously, and by sound methods. The electrical and mechanical engineering classes have done some good work, but are still sadly hampered by lack of necessary laboratory room and equipment, besides being handicapped by irregularity of attendance, due to students working overtime or on night shift. The most pressing problem in these as in other classes for industrial workers is that of so arranging the courses for apprentices as to provide all the training which they should receive at the school without unduly interfering with their ordinary work as breadwinners. Our experience in this school points to the necessity for making the attendance of apprentices and other learners at technical classes compulsory, especially in the case of free students.

Considering how the system of free compulsory education in the primary schools tends to diminish the authority of the parent by substituting the authority of the State, it would appear to be a weakness of the present arrangements that the sole authority of the parent in relation to further training should be invoked at a juncture in the child's life when change of occupation and early adolescence tend to make it specially intractable. For children proceeding from primary to secondary or day technical schools the matter is not very serious, but for those who go to work and have no other incentive to evening studies than their parents' authority and their own often limited interest and somewhat shadowy ambitions, the position is very unsatisfactory. Considering how closely the welfare of the State depends on the complete and profitable development of the individual, there seems to be some reason for moving in the direction of enforcing attendance at continuation and technical classes on all those who are likely to benefit the State by being specially trained. The oft-repeated plea that those who do not of their own free-will attend evening classes to improve their acquaintance with the principles and practice of their trade or profession are not worth compulsion, while it had great weight in the case of men and women of mature years, has practically no value when made in relation to those who, though perhaps earning their own livelihood, are yet in matters of judgment and experience as much infants as in matters of law—liable to punishment for their faults, but incompetent to make their own contracts.

The evening classes are specially distasteful to the rank and file of the tradesmen apprentices, and we have almost daily evidence of the difficulties which parents and employers experience in trying to make the young worker attend classes after the ordinary day's work is done. In addition, the young worker not seldom labours under disadvantages arising from his being obliged to work overtime or on night shifts which prevent him making regular attendance, however anxious he may be to seize every opportunity of advancing himself.

For those who have already completed the main portion of their training the evening class is an excellent means of consolidating and extending their knowledge. We have many such students at the

present time, and their progress is very satisfactory; but, on the whole, we cannot, through the necessity of meeting the needs of the younger student and on account of our plentiful lack of necessary rooms and equipment, offer special facilities for this kind of work in all branches taken at the school, or for the more advanced and extremely important work of original investigation in applied art or applied science.

The classes in general science and mathematics have been well attended, largely by students preparing for Matriculation and Civil Service Examinations, with satisfactory results.

These classes should be much more largely attended by the young artisan, but he is usually fully occupied in the evenings with special trade classes in which the instructors introduce the minimum amount of mathematics and science to enable their students to solve the various practical problems that arise. While this method has its advantages in the present conditions, it cannot be accepted as more than a temporary expedient to be replaced by a more systematic arrangement when the young apprentice is given more time for training at the Technical School. The class in practical mathematics is an exception to the above statement, but the numbers attending were small compared with the total numbers in the trade classes.

The building-trades classes were well attended during the year, and good work was done in many of them. There is gratifying evidence in these as in other classes of the benefits arising from the establishment of day classes for those preparing for various trades. In the yearly examination in building-construction, for example, the first five places were filled by old day students.

In the commercial section the progress has been great, a large majority of the students taking connected courses and doing satisfactory work. It is, however, to be regretted that a very large proportion of the free students prefer these classes to those connected with mechanical trades or domestic science.

The classes in domestic-science subjects have not developed so rapidly as they should have done, but there are signs of improvement, and it is hoped that they will become a prominent feature of the school-work.

Apart from changes in detail in the running of the various classes, the main change during 1908 has been in the establishment of special courses in electrical fitting and electrical wiring for those wishing to qualify for the certificate of the school or the City and Guilds of London certificates to enable them to obtain licenses under the City Council. The city by-laws render it necessary for wiremen and fitters to obtain licenses, renewable yearly, and granted on the production of satisfactory evidence of training and ability, before doing work in the city. The Council has arranged for the Technical School to provide the necessary courses in theory and practice, and to conduct qualifying examinations. The courses have been based on the new syllabus for similar work of the City and Guilds of London, except that candidates who have gone through the full course at the school will be required to produce in the fitters' examination duly certified specimens of work which they have done in class as well as work done in course of examination. Certificates were granted only to those candidates who have completed a satisfactory workshop apprenticeship with a reputable electrical-engineering firm in addition to passing the certificate examination. So far, the arrangements made are working satisfactorily—many of our keenest students in these classes being old day students who had spent two or three years in preparatory work at the school before joining an electrical-engineering establishment.

The Managers have conducted classes for the Education Board in drawing and manual training for teachers, and for the Governors of Wellington College and the Girls' High School in drawing and woodwork for boys and drawing and design for girls. The work done in these classes has been very satisfactory. It seems to be unfortunate in some respects that the connection between this institution and the Education Board is so slender. In a general way, a closer connection between the central technical school of the district and the institutions managed by the Board of Education would, I think, be of advantage to both sides in allowing greater elasticity in the whole system and greater uniformity of aim. Teachers, for example, come to the school to attend classes in drawing and design, &c., but the instructors of these classes have no direct connection with the work done in the schools, and are therefore in some degree working in the dark. At the same time there is abundant evidence that the association of the City Council and Industrial Association with the Technical School is of direct and enormous benefit to the cause of technical education in the city.

The buildings have been maintained in good order and condition during the past year. The equipment has been increased in many departments, notably in the engineering workshop, which is now fairly representative of its class. The present buildings and site are both eminently unsuitable for technical purposes, and the Managers spent considerable time during 1908 in seeking for a suitable site for a permanent home of technology in this city. It was finally decided to ask for the co-operation of the City Council in the matter, and after visiting and discussing various proposed areas, a site of about 1½ acres at the top of John Street was finally chosen as being the most suitable and accessible. The site can easily be extended if necessary. The frontages total about 1,100 ft., and the lighting is exceptionally good. A large area—some 50 acres—of Town Belt faces the section, and some 10 acres will in a few years be converted into a level recreation-ground exactly across the road from the proposed school-site. At the direction of the Managers, sketch-plans were prepared by me, including all that is urgently necessary at the present time in the way of buildings. The plans are arranged to allow for easy extension when required. The total cost of buildings would be about £30,000. There is no doubt that the inadequacy of the present buildings militates greatly against the usefulness of the school, and that a change to a convenient and central site must be made sooner or later. The Managers are now moving to secure the site chosen, and it is hoped that the Board will soon be able to dispose of its present property and build a permanent school. The staff has worked loyally and enthusiastically during the year, and has maintained a high standard of work.

W. S. LA TROBE, Director.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Associated Classes conducted at the Wellington Technical School.*

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year .. ..	46	10 3	Salaries of instructors .. ..	5,913	16 0
Capitation on associated classes .. ..	4,061	2 9	Office expenses .. ..	49	14 7
Capitation on account of free places .. ..	1,791	12 11	Advertising and printing .. ..	122	19 0
Furniture, fittings, and apparatus .. ..	940	19 4	Lighting and heating .. ..	237	8 5
Material .. ..	581	8 10	Insurance and repairs .. ..	35	15 9
Subsidies on voluntary contributions .. ..	358	5 0	Rent .. ..	40	1 0
Fees .. ..	1,330	13 6	Examinations, &c. .. ..	84	3 6
Voluntary contributions .. ..	326	5 0	Material for class use .. ..	556	0 7
Salaries .. ..	220	0 0	Library .. ..	76	9 2
Refunds .. ..	109	11 6	Travelling-expenses .. ..	64	6 1
Plumbing examination, expenses .. ..	23	0 9	Sundries .. ..	126	8 3
Prizes .. ..	5	5 0	Furniture, fittings, and apparatus .. ..	163	2 3
Sundries .. ..	1	1 0	Balance at end of year .. ..	2,325	11 3
	<u>£9,795</u>	<u>15 10</u>		<u>£9,795</u>	<u>15 10</u>

JOHN P. LUKE, Chairman } of Managers.  
W. S. LA TROBE, Secretary }

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

The Managers, in issuing their fifth annual report, are pleased to state that, considering the disadvantages of working without a fully equipped building, satisfactory progress has been made during the year. Now that a thoroughly modern Technical School has been provided by the Education Department, the Managers hope that the local loyalty of parents and young people will result in enthusiastic support and attendance in connection with the classes already established. A large number of students continue to avail themselves of the "free place" privilege granted by the Government, and it is hoped that there will be a considerable increase in that number when parents of the Hutt Valley understand what varied subjects of instruction are provided for. The new building now being opened has rooms specially fitted up so as to give the best results in carpentry, plumbing, cookery, drawing, and science. These are ample in size, and, with no overcrowding of classes, each student can feel assured of a good share of individual instruction. The number of students who attended the school during the year was 136, made up as follows: English, 18; mathematics, 21; Latin, 1; book-keeping, 1; geometry, 10; dressmaking, 7; carpentry and architectural drawing, 21; shorthand, typewriting, and correspondence, 13; art, 9; electricity and magnetism, 4; plumbing, 24; mechanical drawing and machine-construction, 7. The following extracts are taken from instructors' reports for the past year: The carpentry class (Mr. George L. Hooper) has had an attendance above the average of previous years, and the interest taken in the work has been very satisfactory. Instruction has been given in the various classes of work connected with the building trade, also the steps taken in the erection and completion of a dwellinghouse, including setting out the posts, squaring building, placing of piles, erection of framework, setting out various kinds of roofs, lengths of hips and valleys, also outside and inside finishing, with calculation for the various classes of work. The progress made by the pupils in this work has been very satisfactory. Very creditable work has been done from instruction given in the various details of building-construction, foundations, bonds in brickwork, brick arches, calculations for loads on buildings, and architectural drawing. The continuation classes (Mr. E. King, M.A., B.Sc.) had a satisfactory attendance. Since last year's report one student passed Matriculation, and one passed the Medical Preliminary. Two passed in Plumbers' Geometry, and one in Civil Service Junior. A primary-school pupil who had gone to work was able to continue his studies so that he gained a Standard VI. proficiency certificate. In magnetism and electricity (Mr. S. G. Walsh), the attendance and behaviour of the few pupils have been good, and their progress has shown marked improvement. One pupil has passed the City and Guilds Wiremen's Examination, held last June at Wellington. Another pupil, who was attending the Petone class the first year and went to Wellington for his second year, obtained his highest marks on his first-year subjects at the same examination for Electrical Engineering Preparatory. In the plumbing classes (Mr. J. T. Hopkins, R.P.C.), slackness of trade militated against attendance, but nevertheless twenty-six pupils attended. The work has been very good, and, with the new workshop to work in and better appliances, we hope to turn out still better work. In the Wellington Examination for Plumbers, held in August, we sent three students for practical work, and obtained one pass. We also sent six for theory, and obtained five first-class and one second. In May last we sent two students for the much-coveted City and Guilds of London Institute Examination, and both passed in theory and practice. The drawing and painting classes (Mr. F. W. Clayton) show good work, and several pupils have promised to attend next term. The work done compares favourably with the work of the Wellington school. The lighting of the room was bad, but this is expected to be remedied in the new quarters. In mechanical drawing and machine-construction (Mr. J. H. Burn) the attendance was small in comparison with that of former years, but the work done was indeed very satisfactory. Several intending pupils have expressed their desire to resume studies when the new school opens. Typewriting, shorthand, and correspondence (Mr. W. Rowden) had a smaller number of students than in the preceding year, but the attendance was well maintained throughout. The progress of the pupils on the whole was good. The work done by the free-place pupils is not as satisfactory as it might be, this no doubt being due to the fact that the time necessary to be devoted to the "winged art" is taken up with their other studies. If a rearrangement of time-table were possible, this difficulty of preparation would probably be remedied. The dressmaking and cutting class (Miss K. Stewart) was smaller than usual, but attendance was regular. The advan-



year, and, as an indication as to how this is to be done, it may here be stated that one of the first schemes to be dealt with as soon as the preliminary arrangements are completed will be the establishment of classes in wool-sorting. There is also every reason to believe that classes in other subjects will be formed in accordance with demand and as opportunities permit. A glance at the accompanying statement of receipts and expenditure for the year ended 31st December, 1908, shows the receipts to have amounted to £4,193 7s. 5d., whilst the expenditure for the same period was £4,171 14s., thus leaving a credit balance of £21 13s. 5d. at the end of the year. These figures are, however, abnormal, as after allowing for the moneys specially acquired for building purposes the receipts from all sources are seen to amount to £788 12s. 5d., a sum sufficient, however, to have enabled the Managers to carry on the work of the year. In conclusion, the Managers desire to take this opportunity of heartily thanking the Education Department, the Masterton Trust Lands Trust, the Masterton Borough Council, and the subscribers to the Seddon Memorial Technical School Fund for the liberal assistance given to the cause of technical education in Masterton. As a result of the magnificent help thus rendered and the energy of the promoters, Masterton can now claim to possess one of the most complete technical schools in any country district in the Dominion, and one which it is the earnest hope of the Managers may for many years prove of distinct benefit to the town and district.

EDWIN FEIST, Chairman.

N. D. BUNTING, Secretary.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Associated Classes conducted by the Managers of the Masterton Technical School.*

<i>Receipts.</i>		£	s.	d.	<i>Expenditure.</i>		£	s.	d.
Capitation on associated classes ..	..	183	0	9	Balance at beginning of year ..	..	91	12	5
Capitation on account of free places ..	..	92	19	0	Salaries of instructors ..	..	489	17	9
Buildings ..	..	1,000	0	0	Office expenses (including salaries, stationery, &c.) ..	..	47	0	3
Subsidies on voluntary contributions ..	..	1,352	7	6	Advertising and printing ..	..	19	15	6
Fees ..	..	164	3	0	Lighting and heating ..	..	27	18	7
Voluntary contributions to general funds ..	..	150	0	0	Insurance and repairs ..	..	4	17	2
Voluntary contributions to Seddon Memorial Fund ..	..	1,202	7	6	Rent ..	..	26	0	0
Interest on Seddon Memorial Fund ..	..	38	9	8	Examinations, &c. ..	..	9	18	9
Refund, gas used at South Kensington Examinations ..	..	1	0	0	Material for class use ..	..	10	9	3
Rent of rooms for examination purposes ..	..	9	0	0	Caretaker, postages, petty expenses ..	..	22	6	2
					Bank charges ..	..	2	15	0
					Cartage, labour, and sundries ..	..	14	5	10
					Refund of fees ..	..	1	10	0
					Contracts (new buildings, additions, &c.) ..	..	3,039	18	8
					Architect and legal expenses ..	..	151	19	0
					Furniture, fittings, and apparatus ..	..	211	9	8
					Balance at end of year ..	..	21	13	5
		<u>£4,193</u>	<u>7</u>	<u>5</u>			<u>£4,193</u>	<u>7</u>	<u>5</u>

EDWIN FEIST, Chairman }  
N. D. BUNTING, Secretary } of Managers.

### HAWKE'S BAY.

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

The course of instruction arranged for teachers on Saturdays embraced the following subjects: Drawing and handwork, cookery and woodwork. Classes were held at Dannevirke, Waipawa, Napier, and Gisborne. Special training classes were held at Gisborne during the winter vacation, and a fortnight's valuable work was accomplished. Day classes were held in handwork, agriculture, voice-culture, and nature-study. In the evenings lectures on kindred subjects were attended. The Wanganui Education Board very kindly lent the services of its instructors, Messrs Grant and Clarke, to whose valuable and untiring efforts the success of the classes was to a large extent due. Some sixty-five teachers attended the classes.

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

All the larger schools now take up some form of handwork under the Regulations for Manual and Technical Instruction. Application for the recognition of classes is not always made by teachers, but there are few schools where at least one subject is not taken. Instruction in cookery, dressmaking, woodwork, swimming and life-saving, and physical measurements is given to 1,200 or more of the senior children, and nearly 6,000 more receive instruction either in elementary agriculture, brushwork, carton-work, or other forms of manual training suitable for younger pupils. Complaint is sometimes made that manual instruction absorbs too much of the time of the senior children; but the question is one of good grounding in the lower classes, for where this has been sound and fairly wide manual instruction becomes little more than a form of relaxation to senior pupils from their more serious studies.

The winter school for teachers that was held in Gisborne during August proved a great attraction to the teachers in the northern portion of the district. Between sixty and seventy teachers attended, and the classes held by Messrs. Grant and Clarke, instructors under the Wanganui Education Board, were of special benefit to the teachers who take elementary agriculture and carton-work in their schools. So, too, were the scientific lectures given by Dr. Kennedy, of Meeanee; Dr. de Lisle, of the Health Department; Mr. Gilruth and Mr. Bayliss, of the Agricultural Department; Mr. A. Hamilton, of the

Dominion Museum; and the Inspector-General of Schools. Local bodies and the people generally were much interested, and showed their appreciation by subscribing nearly £100 towards meeting the expenses of teachers who attended from the remotest parts of the district. The work attempted may be set down as real progress in training teachers, and it would be a great thing in the way of advancing the work of education were similar classes held in other parts of the district in alternate years.

EXTRACT FROM THE REPORT OF THE DIRECTOR OF TECHNICAL INSTRUCTION.

During 1908 school classes for manual instruction have been held in the following subjects: Brush drawing, stick-laying, brick-laying, paper-folding, carton-work, modelling in cardboard, modelling in plasticine, chemistry, physical measurements, physiology, swimming and life-saving, and agriculture. The majority of the schools have taken brush drawing as a subject, and very satisfactory work has been done. The exhibit of brush drawing and of woodwork which was made at the November show of the Agricultural and Pastoral Society was much admired. It is now intended that such classes shall be brought into a system under which those schools whose higher classes take woodwork shall follow a graduated course of training which shall best prepare for it, while those which take agriculture in the upper standards will take those subjects in the lower which may be of the most benefit in such a course. The schools which took agriculture have in many cases done very encouraging work, and it is intended that in future all the rural schools of the district shall take this subject. To assist teachers in dealing with agriculture and the kindred subject of dairying, the Board has decided to appoint an itinerant instructor in agriculture, who shall visit the various schools, give lessons, and assist the teachers in the working of these classes. Classes for training of teachers in agriculture will also be established in the central technical schools of the district. Under these conditions it is expected that a great impetus will be given to this most important branch of our education system.

Instruction in woodwork has been given in the schools of the district by Mr. Levy at Gisborne, and by Messrs. Gardiner and Smart in the middle and southern portions of the district. The centres in which this instruction has been given are Gisborne, Napier, Hastings, Waipawa, and Dannevirke. Specially equipped rooms are now in use at these centres, and the results have justified their erection. The public schools from the surrounding districts send their pupils to these classes, where they are taught by itinerant instructors. Classes in cookery and dressmaking have also been held at these centres. In addition, classes in these subjects have also been held in Waipukurau and in Woodville. They have been conducted under the same arrangement as the woodwork classes, Miss Millington and Miss Loualey having taught cookery, while Miss Higgens and Miss Thomas taught dressmaking. In order to bring the work of these classes and of the special technical classes more in line with a domestic-science course, and in order to facilitate the Board's administration, it has been decided that in future instructors shall be qualified to teach both cookery and dressmaking, and where possible hygiene and physiology.

The practice of admitting pupils below Standard VI to these classes has been discontinued as far as possible, as it was found that in many cases they were too small to reach up to the benches or tables for their practical work. They are to be engaged for the future on more elementary handwork, which will prove of greater benefit for them, and prepare them to do better work in the woodwork class when they are admitted to it. The same may be said of dressmaking. Many pupils in Standard V were not sufficiently advanced in ordinary plain needlework, and it was thought desirable that they should have another year at this before they were admitted to classes in dressmaking.

At Napier special evening technical and continuation classes have been carried on in the following subjects: Building construction and drawing, machine construction and drawing, practical plumbing, arithmetic and mensuration, English, book-keeping, shorthand, geometrical drawing, cookery, dressmaking, needlework, painting and decorating, carpentry and joinery, and art. A class was also formed to enable those who had not obtained their Standard VI certificate at the primary school to qualify for it at the evening classes. The attendance was for the most part fairly good, but a much more successful result is anticipated for the coming year. Local interest in the work of the school has been aroused, and the various local bodies have contributed £350 towards the expenses of the school for the coming year, electing representatives for the Board of Managers. This, together with the increased interest shown in the institution by employers of labour and by trades-unions augurs well for its future. It is proposed to extend the work which has been done in the Napier School to Hastings, and a class in plumbing has been started in a well-equipped room. This class will be continued during 1909, and will be supplemented by various others, for the success of which there is every reason to be sanguine. It is proposed that classes in wool-sorting and agricultural chemistry, or any other subjects connected with local interests, will be placed on the lists of classes for the coming year, and it is hoped that they will receive satisfactory support. Sufficient is already promised to insure the success of classes in wool-sorting, which should be of the greatest benefit to this the leading wool-producing district of the Dominion. Special day technical classes were held at Napier during the year in the new Technical School, and these were attended by forty pupils, the number admitted by the Board for the first year's work. Owing to the fact that the apparatus and equipment of the school was not complete, it was not found possible to give more than a general course in the school, and this naturally had a leaning to what might be termed commercial work. At the end of the year an exhibition of school-work was held at the Napier Technical School, and was well attended by the public, who showed great interest in the work exhibited. Napier has one of the largest engineering-works in the Dominion, several smaller engineering firms, and a Government Railway Workshop, and there seems to be a desire among the youths to follow mechanical pursuits. This tendency is increased by the port's large general shipping and coastal shipping trade, which brings the youth of the district into contact with machinery of one





EXTRACT FROM THE REPORT ON CLASSES CONDUCTED BY THE GISBORNE HIGH SCHOOL BOARD OF GOVERNORS.

During the year, under arrangement with the Hawke's Bay Education Board, school classes in woodwork (under Mr. Levey), cooking (Miss Lousley), and dressmaking (Mrs. Thomas) were carried on at Gisborne with a fair amount of success. The pupils from the following schools attended free of cost: Gisborne, Kaiti, Mangapapa, Makauri, Waerenga-a-hika, Ormond, Kaiteratahi, Patutahi, Te Arai, Maractahei and Matawhero, and Te Karaka. The work done was very satisfactory, and was favourably commented on by Mr. Isaac (Technical Inspector), who visited Gisborne during the year. This class of instruction appears to be getting more popular. There is a desire for some instruction in subjects pertaining to farm life. We understand that efforts are being made by the Education Board to procure an itinerant instructor, which should in a measure meet the want.

Special classes in woodwork, plumbing both practical and theoretical, English, book-keeping, shorthand, and drawing were also carried on, and again we must express our disappointment at the meagre attendance at the various classes. We feel sure that, if employers of boys and girls realised the great good to be derived by attendance at these classes, they would see to it that apprentices, at all events, attended. Here again Mr. Isaac expressed himself satisfied with the work being done. The class for teachers in woodwork on Saturdays was very poorly attended, the teachers objecting to attend on Saturday. The class in cookery was better attended.

An examination in cookery under the auspices of the City and Guilds of London Institute was held during the year. Seven teachers entered; of these, four passed first class, and three second class. Our thanks are due to the various teachers for their attention to the work. The Borough Council again gave us practical assistance in the shape of a donation to the funds.

W. MORGAN, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted by the Gisborne High School Board of Governors.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year .. ..	0	16 0	Salaries of instructors .. ..	331	3 6
Capitation on special classes .. ..	25	8 6	Office expenses (including salaries, stationery, &c.) .. ..	1	3 0
Subsidies on voluntary contributions .. ..	20	0 0	Advertising and printing .. ..	12	13 6
Fees .. ..	61	19 3	Lighting and heating .. ..	16	14 11
Voluntary contributions .. ..	20	0 0	Insurance and repairs .. ..	1	14 6
Sale of material .. ..	6	14 4	Material for class use .. ..	53	18 9
Received from Hawke's Bay Education Board—			Caretaker and cleaning .. ..	34	4 0
Capitation on school and teachers' classes ..	387	16 2	Fares of instructors .. ..	2	9 3
Grant towards salary of instructor of teachers' classes .. ..	25	0 0	Coach fares to and from classes .. ..	40	11 6
			Balance at end of year .. ..	53	1 4
	£547	14 3		£547	14 3

W. MORGAN, Secretary.

EXTRACT FROM THE REPORT ON CLASSES CONDUCTED BY THE BOARD OF GOVERNORS OF THE DANNEVIRKE HIGH SCHOOL.

School Classes: The woodwork class (26 pupils), under Mr. Gardiner, and the dressmaking and cookery classes (24 pupils), under Mrs. Thomas and Miss Lousley respectively, consisted of High School pupils, and were regularly attended and did satisfactory work.

Technical classes in plumbing (8 pupils), dressmaking (15 pupils), painting and drawing (46 pupils), English language and literature (11 pupils), book-keeping (7 pupils), typewriting (15 pupils), and physiology and first-aid (9 pupils) were also conducted. The attendance in dressmaking, and painting and drawing, was very good; in English and plumbing, good; and in the others, from fair to unsatisfactory.

The total number of pupils enrolled was—School classes, 50; other classes, 111. This is a decided advance on previous years, but there is still much room for improvement both in numbers and attendance.

T. MACALLAN, Secretary.

Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted by the Dannevirke High School Board of Governors.

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Capitation on special classes .. ..	24	4 6	Balance at beginning of year .. ..	123	0 3
Buildings .. ..	617	19 0	Salaries of instructors .. ..	162	19 6
Rent .. ..	8	7 6	Printing .. ..	1	10 0
Material .. ..	12	14 0	Lighting and heating .. ..	3	16 9
Subsidies on voluntary contributions .. ..	40	0 0	Insurance and repairs .. ..	0	17 4
Fees .. ..	120	10 0	Material for class use .. ..	23	2 6
Voluntary contributions .. ..	40	0 0	Contracts (new buildings, additions, &c.) ..	606	18 0
Balance at end of year .. ..	80	15 5	Architect &c. .. ..	11	1 0
			Furniture, fittings, and apparatus .. ..	11	5 1
	£944	10 5		£944	10 5

THOMAS MACALLAN, Secretary.

## MARLBOROUGH.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

*Manual and Technical.*—Practically every school in the district is now taking some branch of handwork. Following is a list of the subjects taught: Cookery, woodwork, elementary agriculture, elementary physical measurements, swimming and life-saving, elementary physiology and first aid, needlework, modelling in plasticine, paper-folding, stick-laying, cardboard modelling and brick-laying. Owing to the reduction of the capitation payable on cookery classes, the Board has had to make a corresponding reduction in the salaries of the special instructor in this subject. The attempt to conduct evening classes in connection with the Blenheim Technical School has had to be abandoned, owing to the insufficient number of students offering.

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

In 1908 special classes for teachers were held during Easter week. Six hours a day were devoted to the work. Eighty-four teachers, including several from private schools and some monitors, were in attendance. Mr. G. Hogben, M.A., Inspector-General of Schools, delivered lectures on education in Europe and America; Mr. J. S. Tennant, M.A., B.Sc., Inspector of Schools, Wellington (nature-study and botany), Miss Igglesden, Nelson, (model-drawing and design), Dr. Bennett (first aid and ambulance), Mr. D. A. Sturrock (singing), Mr. James Bruce (agricultural chemistry). Additional interest was given by an exhibition of school-work covering all such parts of the course as could be reduced to paper or to the concrete (writing, drawing in various forms—freehand, model, scale, geometric, design, brush drawing and mapping—tablet-laying, paper-plaiting, paper-folding, stick-laying, exhibits in cartridge paper and carton, needlework, weather charts, models in plasticine correlating with arithmetic, geography, geometric drawing, design and nature-study, woodwork, cookery, products of school gardens, children's collections of shells, eggs, stones, leaves, &c., essays, sheets of conversation lessons on nature-study, and teachers' helps in geography). The exhibition had an educational value that was in itself equal to many lectures. Advantage was also taken of the opportunity to make a display of educational literature of a most comprehensive character. This confluence of teachers from all parts of the education district, with its facilities for comparing notes and for gauging attainment by comparison with that realised elsewhere, has an invisible yet very potent influence in making and cementing friendship, and thus aiding a benevolent emulation, broadening the outlook, and tying the bonds of professional spirit, all of which have reflex influences tending to the advancement of the education of the province. In the end the teachers go forth to their several localities, apparently lost in remote regions, yet inspired to fresh effort, silent and all-pervasive missionaries bringing the effects of fresh air to the atmosphere of adults and children alike. Whatever enlightens the teacher is ultimately a benefit to his whole neighbourhood. At the close of the classes certificates were issued to all that had attended the full course. The Department aided greatly the success of the course by providing free transit on the railway, material for the classes, and capitation on the attendance; and Mr. Hogben by his presence further gave his sympathy and encouragement to the movement.

Fifty-three schools include handwork of some description in their programmes. Many examples of plasticine modelling and brush drawing seen at the schools were of high merit. Classes from the following schools attended at the Blenheim centre for instruction in cookery and woodwork: Blenheim, Springlands, Grovetown, Tuamarina, Waitohi, Picton, Renwick, Marlborough High School, St. Mary's and St. Joseph's Convent Schools. The aggregate roll was—in woodwork, 205; average, 161; in cookery, 183; average, 149; total roll, 388; average, 310. These cover all classes—school, technical, and teachers. The school classes were—roll, 306; average, 249; as compared with 256 and 183 respectively in 1907. The average attendance has improved. These figures prove that the provision made by the Department is appreciated and availed of as greatly as possible. Some of the pupils walk to the Technical School, some come by rail, and some by special conveyance. In cookery, programmes of work have been formed covering in four years the course for the diploma of the City and Guilds of London Institute. The insufficiency of the capitation compelled the Board to terminate the engagement of the cookery instructress. Fresh arrangements are, however, made for continuing the classes. The cookery classes can register the minimum attendance in twenty weeks, the woodwork in thirty weeks. This disparity causes some difficulty in schools. The insufficiency of the capitation prevents the extension of the cookery instruction to thirty weeks. There are gardens at thirty-nine public and three private schools. They are mostly under the supervision of Mr. Bruce. At the smaller schools, though the children have gardens, agriculture is not taught. The pupils are, however, learning the lessons of which experience is a good teacher. With them the subject may be called nature-study. Grovetown won the prize for producing the greatest weight of vegetables from a given area. The garden at that school was considered by Mr. Bruce the best of the year. Picton and Marlborough-town deserve mention of good work done in breaking up and preparing fresh ground. In quite a number of cases that have come to my knowledge the pupils, having learnt to cultivate gardens at the schools, carry their enthusiasm to their homes and form gardens there. The horticultural gardens would be improved if some attempt were made at classification. At Havelock each child has for his gardening a notebook, into which details of operations are entered. In American colleges, where entrance examinations are at a discount, the production of such note books is compulsory in various subjects. The horticultural societies display a gratifying interest in the work of the children. The Board adopted the recommendation to grant the teacher three-fourths of the capitation earned by classes for learning swimming. Teachers' classes in agriculture, needlework, cookery, and woodwork have operated on Saturdays. Two first and three second class awards were made by the City and Guilds of London Institute to candidates in cookery. In 1907 twenty-one diplomas in cookery were awarded



frequently done much towards beautifying the surroundings of the school, an effort worth every encouragement, for who can tell how far-reaching in its effect upon the plastic minds of the young may be the little touch of beauty that will enable them in after-life to cherish the memory of their old school as the seat of refinement as well as of enlightenment! The Instructor has made a new departure this year in instituting a course of itinerant lectures to farmers, which have been given in the Waimeas, Moutere, Dovedale, and Takaka, and have been highly appreciated. If their only success is to get farmers interested in agricultural education much will be gained, as local interest may be a powerful stimulus to progress in any educational movement. Another suggestion already made to the Board by the Instructor of Agriculture has our most cordial approval. He proposes that the small laboratory shortly to be established in connection with Motueka High School be equipped with a view to specialising in horticulture, so that, for example, the microscopic investigation of insect and fungoid diseases might be undertaken. To one of the chief fruit-growing centres of the Dominion such a study would be particularly applicable. Classes for the instruction of teachers were held at Nelson and Westport, the subjects taken up being model, geometrical, blackboard, and brush drawing, elementary physiology, dressmaking, woodwork, botany, and agriculture. A summer school for the training of teachers was held at Westport during December, our schools in the Buller Valley and along the West Coast being closed for the midsummer holidays a week earlier than usual to enable the teachers to attend. This, our first experiment in this direction, was much appreciated, especially as no technical school has as yet been erected in the neighbourhood, and opportunities for self-improvement are few. We are particularly indebted to Mr. Clark, of Wanganui, for able assistance in handwork subjects. We hope that his efforts and the work of the school will give a much-needed filip to the teaching of manual subjects in the schools concerned.

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

At least one branch of elementary handwork has been taught regularly throughout the year in thirty-six of the schools of the district, modelling in plasticene having been most in favour with the teachers. There are evidences, however, that paper-folding and cardboard-modelling, with the great assistance they lend in the teaching of arithmetic and geometry, will, in future years take prominent places among the handwork subjects adopted by the Board's teachers.

Decided progress has been made during the year in the provision for adequate training in several branches of manual training. The equipment of the woodwork shops in Nelson, Reefton, and Wakefield has been brought up to date, and considerable additional fittings and apparatus have been provided for the cookery centres at Nelson, Richmond, and Wakefield, while provision is also being made for special rooms at Motueka and Takaka District High Schools for the teaching of chemistry. It is in the appointment of a special staff, however, that the greatest advance has been made. Previous to 1908 the Board secured, with the co-operation of the Marlborough, Grey, and Westland Boards, the services of an agricultural expert, the arrangement being such that Mr. Bruce's services to the Nelson Board were confined to about five months annually. By a new arrangement coming into force at the end of the year, the agricultural instructor will remain in this district for nine months annually, and will thus be of greater service to schools and the agricultural community than the time at his disposal has permitted heretofore. In March last Miss Joan Sutherland-Smith (first-class honours in cookery and laundrywork, City and Guilds of London), of Auckland Technical College, was appointed teacher of cookery, and in December Mr. A. G. Thompson, of Christchurch Technical College, was chosen from forty applicants to occupy the post of instructor of woodwork, &c., at Nelson and Wakefield centres, at a salary of £200 per annum. Applications are at present being called upon for an instructor in ironwork at the Westport Manual Training Centre, so that in 1909 the various training centres, now fully equipped and under the charge of a fully trained staff, should be able to produce much better work than has been possible in former times. The previous system of control of handwork and manual-training capitation grants has been abolished, the earnings of all classes now being retained in the office, a detailed account in connection with each school being kept, and various appliances supplied through the Board on requisition by the teacher. This system will insure uniformity of supply to schools at moderate rates, and will enable the Board to see more readily that the moneys earned are expended in the manner intended by the Department. Woodwork has been taken by the boys of Nelson Central, Stoke, Richmond, Hope, Brightwater, Spring Grove, Wakefield, Wai-iti, Foxhill, and Reefton Schools, details being given in the table below; Mr. R. Simpson (Nelson and Wakefield Centres) and Mr. R. Tudehope (Reefton Centre) being the instructors. During the coming year facilities will be given for Ranzau and Black's Point boys to attend, and special facilities will be provided for the taking of two classes at Stoke Orphanage. Cookery classes were attended by girls from Nelson Central, Richmond, Spring Grove, Brightwater, Wakefield, Foxhill, Wai-iti, and Reefton Schools. Prior to Miss Sutherland-Smith's arrival the classes at Nelson, Richmond, and Wakefield Centres were capably conducted by Miss Bond, of the Nelson Girls' School, while the Reefton classes were taken by Miss D. Harkness. Owing to special buildings not being completed, no cookery classes were held at Westport. Attention may well be drawn here to the irregularity of the attendance at cookery classes at Wakefield Centre. Dressmaking classes were taken by the girls of Stoke, Richmond, Brightwater, Spring Grove, Wakefield, Wai-iti, Foxhill, and Motueka Schools (under Mrs. Moynihan), Westport District High School (under Mrs. Gambitzki), and Reefton (under Miss Hodgson). In many cases, however, the work undertaken has been found to be unsuitable for junior members of the classes, and during the coming year dressmaking as a subject in primary schools, under special instructors, will be abandoned. Elementary physiology and first aid was taken in eighteen schools, but, owing to claiming more than the maximum allowance, several schools had their capitation claims for this district disallowed. Swimming and life-saving was taught in fifteen schools. In August the Board passed a resolution that 70 per cent. of the capitation earned in swimming classes would be forwarded on appli-

cation to teachers, to enable them to procure any necessary books or articles for school use beyond what could be claimed as manual and technical apparatus. Physical measurements was taught in only three schools. However, as teachers' classes in this subject will be taken early in 1909, a considerable increase in the number of children taking physical measurements may be anticipated. Elementary agriculture was taken in thirty schools, an increase of five over the previous year's total. Initial grants for the proper equipment of classes have been received during the year for four schools. In the past teachers and School Committees have in many cases devoted so much of the initial grant towards the fencing of an experimental plot that insufficient money has remained to provide not only garden tools, but also the chemical equipment necessary for the proper teaching of the subject. While a well-fenced garden is certainly necessary in most districts, it should be borne in mind by those interested that, where future initial grants for elementary agriculture are concerned, the full amounts will be devoted to the procuring of equipment for outdoor and class-room work, and that the cost of fencing must be borne locally, amounts contributed carrying a pound-for-pound subsidy from the Government.

The completion of the Westport Technical School will during 1909 provide adequate facilities for manual instruction for pupils of the District High and surrounding schools. A feature of the manual training at Westport will be the substitution of ironwork for woodwork as the special subject for boys. The Westport ironwork classes will apparently be the only ones of their kind in the Dominion, and, while their adoption is certainly an experiment of which time alone will prove the value, I feel sanguine that, under a capable instructor, and viewed from their probable effect on the industries of the district, these classes must prove a decided success.

For convenience in administration the Board's district has for the purposes of technical instruction been divided into five subdistricts—(1) Nelson City; (2) Waimea District, including the Waimea Valley and the settlement on the railway-line to Tadmor; (3) Bay District, including the Motueka and Takaka Valleys and Collingwood; (4) Westport District, embracing the settlement on and adjacent to the railway-line as far as Seddonville; (5) Reefton District.

In previous years little in the way of technical instruction has been attempted outside of Nelson City, and, though during the past year several new classes were inaugurated on the West Coast, there yet remains a big field for the development of instruction throughout the district, provided such instruction is in the hands of capable teachers, and on lines suited to the requirements of the district. As in many other parts of the Dominion, the chief obstacle to progress has been the dearth of capable instructors. Of the twenty-one teachers of technical classes employed either temporarily or permanently by the Board during 1908, all, I believe, entered into their work with commendable enthusiasm, but my observations have led me to conclude that only a proportion possessed that special faculty of imparting instruction which is so necessary to produce the best educational results from any course of work. In making these remarks I do not in any way wish to reflect on a body of teachers who have so whole-heartedly assisted in the development of technical work during the year, but I desire to emphasize the fact that to produce the most satisfactory result in any branch of work requires the trained teacher, for whom there is a demand throughout both Islands—a demand in many branches much ahead of the supply. Some scheme of training whereby we could be assured of securing persons qualified both in knowledge and in methods of imparting it would do more for the advancement of technical instruction in districts such as ours than has been accomplished by the many beneficial regulations introduced during the past few years. There is scope for still further increase in the permanent staff, for, provided a trained instructress in cookery and dressmaking were procurable, the revenue derived from such classes on the West Coast would easily enable the payment of a satisfactory salary.

The following remarks apply to the work conducted in the various centres :—

*Nelson.*—The possession of a building of eight rooms, more or less satisfactorily designed and equipped for special work, has naturally led to special development of technical work in this centre, where various classes have now been conducted for several years, often under disadvantageous conditions. On taking charge of the school in May last, I found a number of continuation, art, and commercial classes in operation, and doing satisfactory work, the chief disadvantages they laboured under being lack of equipment, and want of such definite schemes of work as would encourage a student to pursue a course of study over such a period of time as would enable him to reap full advantage of it. However, requests to the Department met with favourable consideration, and enabled the apparatus of the carpentry and plumbing workshops, and of the cookery, art, and class rooms, to be brought more up to date. Financial assistance from various sources led to the formation of a small technical library for use of technical students and school-teachers. I trust that from this small beginning the library will increase in size and usefulness each year. I did not deem it advisable to remodel the work of classes half-way through a session, so, with the exception of establishing classes in building and machine-construction, little was done in the way of improvement of the curriculum. For the coming year, however, I hope to adopt such classification as will enable students to start on definite courses of work extending over fixed periods, with examinations covering the work of these courses at their conclusion. The principal improvement during the year at Nelson Technical School has been the erection of a commodious room for laboratory purposes. The fitting and equipping of this room for chemical work has just been completed under the personal supervision of Mr. Bruce, who was also responsible for designing the excellent interior arrangements, which are as up to date as any in the Dominion.

*Waimea District.*—Dressmaking classes have been held at Richmond, Brightwater, and Wakefield, with but moderate success. A class in agriculture at Wakefield produced good results, and similar classes at the same centre are assured of good support in the future. There is scope for considerable increase in technical work throughout this district, and, with the staff available for the coming year, I hope to see a great improvement both in the classes provided and the quality of the instruction.

*Bay District.*—A dressmaking class at Motueka and a short course in agriculture comprised the total work in this district, in which the primary interests to be catered for are agricultural. In order

to provide facilities for necessary agricultural instruction, the local bodies at Motueka, Riwaka, and Takaka were approached, and responded so willingly with financial help that tenders are now being called for the erection of a laboratory at Motueka, while a similar room at Takaka will be provided within the year.

*Westport District.*—After some years of agitation and correspondence the proposed Technical School for Westport has at last materialised, and a brick building costing £1,385 is now approaching completion. Of this cost, £1,000 was granted by the Department and £100 subscribed by the Westport Harbour Board, Borough Council, and Buller County Council. In consideration of the requirements of the district, the building will be used mainly for instruction in mechanical engineering, in which subject both day and evening classes will be conducted by the special permanent teacher engaged by the Board. It is in the establishment during the coming year of what is virtually an engineering secondary school for boys between thirteen and eighteen years of age that the main development of technical education in the district may be looked for. A grant of £325 has already been made by the Department for mechanical workshop fittings, which are now on their way from England. During the past year dressmaking, commercial, and art classes have been held at Westport; dressmaking classes at Waimangaroa, Denniston, Millerton, and Seddonville; and a class in mechanical drawing at Denniston; at all of which fairly satisfactory attendances have been made.

*Reefton District.*—During the year a departmental grant enabled the Board to complete the equipment of the woodwork room at this centre; but, with the exception of classes in drawing and dressmaking, no move was made in the extension of instruction for adults. In the arrangement of schemes for the advancement of technical instruction throughout the district the Board has met with whole-hearted assistance from many local bodies. To place agricultural instruction on a sound financial basis and to provide special facilities for practical work, local bodies at Motueka subscribed £60, Takaka County Council voted £20, and Collingwood County Council £10. £100 was donated in the Westport district towards the establishment of the Westport Engineering School, and Inangahua County Council granted £15 and Richmond Borough Council £5 towards the upkeep of manual-training centres in their districts. Only at Nelson, where the greatest facilities are provided, is the work carried on without municipal support. The system adopted in the past has resulted in the Nelson Technical School being carried on at a loss that has been borne by other parts of the district, but with the reorganization of the work the school must pay its own way before further developments can take place, and such developments are impossible without outside assistance. Of the instruction imparted throughout the district, it is gratifying to notice that art classes are being conducted on proper principles, though it is difficult to make students appreciate the benefit of taking courses of instruction in design. The various trades classes have done satisfactory work, but here the need of the specially trained instructor is evident. It cannot be said that any of the dressmaking classes throughout the province have quite fulfilled their educational functions. The same remark applies to all of the commercial classes. It is difficult to secure both instructors and students who can appreciate the difference between the making of dresses and instruction in dressmaking, or the teaching of shorthand, typing, &c., and the taking of a course of commercial instruction. These points require attention during the coming year. Continuation classes generally have for obvious reasons produced better work than technical ones. The agreement entered into by free-place holders that 80 per cent. of attendances must be made throughout the whole year has done much to improve the attendance and the quality of the work.

Owing to the limited time during which Mr. Bruce's services were available for the Nelson Board, little could be done in the way of agricultural classes for farmers. Courses were successfully carried on at Takaka and Wakefield, and single lectures delivered at a few centres, but the demand for instruction by Mr. Bruce was more than he could undertake. This led to the determination of the agreement with Westland and Grey Boards, and an arrangement whereby Mr. Bruce's services are now available in this district for nine months annually. This will give opportunity for the extension of courses of instruction for farmers which they have previously been denied. It is anticipated that, with a number of classes being conducted during 1909 and the generous assistance of local bodies, no additional strain will be thrown on the Board's finances, despite the extra liability incurred through the cutting-out of the two West Coast Boards from the agricultural arrangement.

Saturday classes for the instruction of teachers were held both at Westport and Nelson. At the former place they received such poor support from the teachers, and were so irregularly attended, that a continuance of the system in future years on the Coast would not be warranted without some previously guaranteed support.

At Nelson, drawing, agriculture, botany, and woodwork classes were conducted, but of these I consider only the first-named justified, by support and by work accomplished, its formation. The botany and agriculture classes conducted by Mr. Bruce certainly deserved a much better attendance than was given them by teachers. During the third week in December an innovation in the training of teachers was made by the holding of a summer school at Westport. This was attended by fifty-six teachers, who came from as far away as Murchison, Reefton, and Karamea; and, though the school may not have fulfilled all that the most sanguine expected of it, yet I believe the handwork course alone was enough to justify the cost and the temporary disorganization of school-work. I would point out that it is only by such special schools of instruction that we can reach the teacher remote from the railway-line, and it is usually that teacher, isolated from such associations as will furnish the latest ideas, and working under many difficulties, to whom the instruction is of most benefit.

Throughout the year all requisitions made by the Board to the Department have received most prompt and fair consideration, the central authority having plainly shown that it is prepared to help wherever steps are taken to provide manual or technical instruction in accord with the requirements of the district. In conclusion, I desire to express my thanks to the Board's Inspectors and Secretary for the ready help they have rendered in many ways, and to my technical staff for their enthusiastic work during the year.

A. A. HINTZ, Director.

EXTRACT FROM THE REPORT OF THE INSTRUCTOR IN AGRICULTURE.

The year's itinerary under the four Education Boards was the same as originally arranged—viz., six months in the Nelson District—January, April, May, June, August, and November; three months in the Marlborough District—July, September, and December; three months in Grey and Westland—February, March, and October.

In view of my early severance from the Grey and Westland Districts this year, an additional three months will be available for the Nelson Education District: this should give me time to visit parts of the district that I have so far not been able to get to—viz., Collingwood, Karamea, Murchison, Inangahua, Reefton, and Westport.

At the end of 1907 the number of recognised school classes in elementary agriculture in the Nelson Education District was twenty-five; during the year the number has increased by five, making thirty in all. Gardens have been established at all these schools.

The work done during the year is of a very encouraging nature, and in nearly every case shows a marked improvement on the previous years. The crops grown are chiefly vegetables, and the common flowers usually found in small gardens; the instruction, too, has been co-ordinated with some branch of the ordinary school-work.

For the future development and improvement of the schools gardens, I would strongly recommend specialisation adapted in some way to the needs of various parts of the district. Such specialisations might take the form of growing collections of grasses under varying conditions, and finding out the most suitable to the soil and climate of a special locality, or it might take the line of dealing with other crops such as fodder-plants and cereals in the same way. Then, again, in certain parts of the district this specialisation might be in the way of growing varieties of fruit-trees, or even grape-vines, as a test of suitability. On these lines, the school garden might in a small way be made of much wider educational value than at present, and might become a valuable means to an end that would result in material advantage to the district; all might be done in addition to what has already been undertaken. Samples of grass-seed I might be able to supply, and probably some cuttings of vines on requisition. Fruit-trees, of course, would have to be purchased. Already some sixty apple-stocks have been distributed to fifteen schools, and should be available for grafting next spring. The equipment of schools in which elementary agriculture is taken up with some apparatus, such as is necessary for performing simple experiments in natural science bearing on agriculture and every-day life, would prove of much advantage to both pupils and teacher. Classes for farmers were inaugurated in Wakefield, Richmond, Nelson, and Takaka. In Takaka these classes were a decided success, but were not well taken up in the other centres. Probably the break in the course, due to my absence at intervals in other districts, prevented the interest from being sustained; and I am of opinion that a continuous course of, say, six or eight lectures in one centre at one time, might be more effective than the longer course. Further, it would seem to me that the farmers were not so desirous of giving themselves up to a course of lessons as of attending on occasions to get hints and special knowledge suited to their own requirements and surroundings. This is in accordance with the experience of other countries and other parts of the Dominion, and was strikingly instanced when I attended at certain places and lectured on special branches, when as many as thirty were in attendance on one night. These lectures were given at Stoke, Waimea West, Dovedale, and Upper Moutere. The subjects were dealt with entirely from a practical standpoint, and so were of general interest. With regard to future classes, I am of opinion that new centres should be taken each year, as a second year's course does not seem to meet with the same amount of support in the way of attendance. A Saturday class for teachers in nature-study and elementary botany, with outdoor excursions, was again conducted in Nelson, and was on the whole satisfactorily attended. The laboratory in connection with the Nelson Technical School is now practically finished, and should be of use for botanical and physical as well as chemical experiments, while it will for the first time provide students in the district with a suitable means of doing individual practical work. From a good general knowledge of other similar rooms in the Dominion, I can safely say that, so far as up-to-date working conditions are concerned, it should be second to none. I should like to further suggest that the proposed laboratory at Motueka should be so fitted as to be available for botanical as well as chemical work, bearing on the horticultural industry of the district. In regard to the building at Takaka, it should also be fitted up with a similar aim in view. In conclusion, I wish to express my thanks to the officers of the Board for valuable assistance and advice, and to Mr. Hale, nurseryman, Nelson, who generously provided the teachers' botany class with plant-specimens and the use of his nursery for outdoor lessons.

JAMES BRUCE.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted in the Nelson District by the Nelson Education Board.*

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Capitation on special classes .. ..	232	17 1	Balance at beginning of year .. ..	652	6 0
Capitation on account of free places .. ..	53	14 0	Salaries of instructors .. ..	646	14 6
Buildings .. ..	610	7 0	Office expenses (including salaries, station- ery, &c.) .. ..	81	15 10
Furniture, fittings, apparatus .. ..	418	9 3	Advertising and printing .. ..	31	1 10
Material .. ..	11	17 4	Lighting and heating .. ..	56	11 11
Fees .. ..	223	16 2	Insurance and repairs .. ..	10	9 9
Voluntary contributions .. ..	74	2 0	Rent .. ..	6	2 0
Sale of material .. ..	4	19 4	Examinations, &c. .. ..	1	10 0
Examination fees .. ..	1	10 0	Material for class use .. ..	75	1 5
Exhibition receipts .. ..	5	3 0	Expenses, exhibition .. ..	36	13 0
Contributions to agricultural instruction from Marlborough, Grey, and Westland Boards .. ..	199	15 0	Travelling-expenses, director .. ..	36	12 2
Balance at end of year .. ..	1,796	19 3	Contracts (new buildings, additions, &c.) ..	1,400	1 3
			Furniture, fittings, and apparatus .. ..	598	9 9
	<u>£3,633</u>	<u>9 5</u>		<u>£3,633</u>	<u>9 5</u>

N. R. WILLIAMS, Secretary.

## GREY.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

Special classes for teachers were held in cookery, agriculture, chemistry, and wood-carving. Eight school and two special classes were held in cookery and four in dressmaking; eight schools conducted classes in elementary agriculture; and at the various schools 890 children received instruction in elementary handwork. At Blackball the headmaster of the school successfully conducted two continuation classes.

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

Every girl in the Fifth and Sixth Standards in this district has now had an opportunity of obtaining a two-years course of cookery under Miss Dillon. Dressmaking classes under Mrs. Malcolm Potts were started this year, and will be continued during the coming year. The woodwork class under Mr. Austin, of the Grey District High School, continues to do excellent work. Agriculture, under Mr. Bruce, is taken at various schools with fair measure of success, and the usual classes in paper-folding, carton-work, &c., are taken in the larger schools. Altogether as much manual instruction is being done as we can afford time for without seriously impairing the efficiency of our schools in other subjects, and in proportion to the number of our pupils we are doing as much as most towns in the Dominion.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted at Greymouth.*

<i>Receipts.</i>		<i>£ s. d.</i>	<i>Expenditure.</i>		<i>£ s. d.</i>
Capitation on special classes	.. ..	37 1 3	Balance, at beginning of year	.. ..	163 0 7
Furniture, fittings, apparatus	.. ..	49 14 5	Salaries of instructors	.. ..	140 0 0
Material	.. ..	40 7 8	Office expenses (including salaries, stationery, &c.)	.. ..	50 5 0
Fees	.. ..	32 15 0	Advertising and printing	.. ..	6 17 6
Teachers' training grant	.. ..	195 0 0	Lighting and heating	.. ..	10 11 8
Sale of material	.. ..	4 10 10	Material for class use	.. ..	51 10 0
Balance at end of year	.. ..	150 3 10	Caretaker and cleaning	.. ..	23 6 8
			Coach fares of teachers attending classes	.. ..	11 16 0
			Furniture, fittings, and apparatus	.. ..	52 5 7
		<u>£509 13 0</u>			<u>£509 13 0</u>

P. F. DANIEL, Secretary.

## WESTLAND.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

The following classes for manual and technical instruction have been in operation during the year:—Elementary agriculture and school gardens: A teachers' class has been held at intervals during the year under the direction of Mr. J. Bruce. Seven sessions have been held, including two outdoor excursions in nature-study. Thirty teachers have taken part in these lessons. Cookery: Two school classes and one special class have been held for two quarters each, and, in addition, a class for teachers has been in operation for fifteen weeks. The total number of students was seventy-one. Under the instruction of Miss Dillon the success of the previous years has been continued. Dressmaking: For two quarters special classes have been conducted under the instruction of Mrs. A. M. Potts. For the first quarter three classes in Hokitika and one in Kumara were carried on, the total number of students being seventy-six. For the second quarter the classes in Hokitika were reduced to one, with twenty-one students, while the class at Kumara was continued with twelve students. The total number of students receiving instruction during the year was eighty-two. Design-drawing and brush work: A class of twenty-seven teachers in these branches was conducted with success for sixteen weeks under instruction by Mr. H. R. Barrett. The following school classes have also been in operation during the year: Woodwork (Hokitika), practical chemistry and physics (Hokitika), elementary agriculture (Arahura Road, Humphreys, Koiterangi, Lower Kokatahi, Ross, and Stafford), elementary handwork (eight schools), needlework, with extra teacher (two schools).

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted at Hokitika and Kumara by the Westland Education Board.*

<i>Receipts.</i>		<i>£ s. d.</i>	<i>Expenditure.</i>		<i>£ s. d.</i>
Capitation on special classes	.. ..	29 1 9	Balance at beginning of year	.. ..	22 13 11
Material	.. ..	5 14 10	Salaries of instructors	.. ..	123 1 2
Fees	.. ..	31 12 0	Office expenses (including salaries, stationery, &c.)	.. ..	26 7 0
Grant for training of teachers	.. ..	195 0 0	Advertising and printing	.. ..	6 1 3
Sales	.. ..	2 3 0	Lighting and heating	.. ..	16 9 2
Transfer from Board's Building Fund	.. ..	27 6 4	Material for class use	.. ..	15 10 8
			Teacher's travelling-expenses	.. ..	47 0 0
			Furniture, fittings, and apparatus	.. ..	11 11 4
			Balance at end of year	.. ..	22 3 5
		<u>£290 17 11</u>			<u>£290 17 11</u>

CHAS. KIRK.



## NORTH CANTERBURY.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

*Manual and Technical Instruction.*—As will be seen from the report of its Director, great activity has continued to be displayed by the Board of Managers of the Christchurch Technical College, a large number of classes, covering a wide range of subjects, having been held. At the Ashburton centre, too, considerable developments have taken place under the local management. At Akaroa, where a new building has been erected and equipped with the necessary furniture and appliances, progress commensurate with the expenditure incurred will no doubt be made, the same remark applying to Rangiora, where a new building in brick is now in course of erection. At the remaining centres special classes have been carried on in the subjects finding most favour, such as cookery, dressmaking, and woodwork. During the year the Amberley centre was reopened, and is now in active operation. From Mr. Howell's report on the Board's school classes it will be seen that the total average attendance for both boys and girls for the year 1908 was 1,268, as against 1,203 in the previous year, and that the financial statement indicates a satisfactory balance on the year's working. In addition to cookery the girls will now receive instruction in laundry-work, a subject of no little importance to those who later on in life will probably be engaged in domestic duties. The Board feels that its Director is to be congratulated on the good results secured, to which the loyal support given by headmasters has contributed in no small degree. In sixty of the Board's schools recognised handwork classes, consisting mainly of brush drawing and modelling (both plasticine and carton) have been carried on. The continuity of the Board's work in agriculture and nature-study has been somewhat broken by the retirement of the Instructor, Mr. G. Rennie, whose resignation took effect at the end of August, 1908. The Board has placed on record its appreciation of the valuable services rendered by Mr. Rennie in doing pioneer work in connection with the school-garden movement and the teaching of elementary agriculture. The Board has been able to secure the part-time services of Mr. E. Wilkinson as supervisor of school gardens, so that in this branch of the work further progress has been made. During the year negotiations were opened up with the Board of Managers of the Christchurch Technical Classes, with the view of the joint appointment of an instructor having the necessary scientific attainment and an intimate knowledge of practical agriculture. There were, however, difficulties in the way which led to a temporary postponement of the matter.

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

In the larger centres throughout the district provision for manual and technical training through the medium of instruction in woodwork for boys of Standards V and VI, and in cooking and laundry-work for girls at the same stages, yields further evidence of new influences at work in the field of education, and of a genuine desire to promote individual welfare while paying due regard to the wider interests of the State.

The establishment of school gardens as a development ancillary to nature-study has enlisted the sympathy and support of citizens truly disinterested in their regard for the public weal, and practical in their efforts for its promotion. For what has been accomplished in this direction we desire officially to express warm appreciation, and personally to tender sincere thanks.

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

This has been the first year in which it has been possible to carry out in its entirety the scheme for the extension of manual training that was formulated by the Inspectors, and the Board is therefore in a better position to judge of both its educational and financial prospects. Its success on the one hand is shown by the favourable report of the Inspector on the work, and by the exhibits which the pupils were able to make at the close of the year, whilst on the other the financial statement, already presented to the Board, indicates a satisfactory balance on the year's working, although the attendances, and consequently the capitation receipts, have been less than were anticipated. Miss Evans and Mr. Wentzel, the instructors obtained at Home through Dr. Garnett, were unable to reach Christchurch in time to commence their classes with the school year, but entered upon their duties on the 24th February. Classes were also formed for teachers in woodwork and cookery, and for students from the Training College in cookery only. The numbers in attendance during the year were as follows: Cookery—Teachers' class 39, students' class 32; woodwork—Teachers' class 15. In addition to the above, twelve teachers attended a class in needlework held at the Technical College on Friday evenings. Twenty-one primary-school classes for cookery and twenty for woodwork were conducted at the manual-training centres. The total average attendance for both boys and girls for 1907 amounted to 1,203, whilst for 1908 it was 1,268. I am pleased to be able to report that, as far as the city schools are concerned, the attendances have been in general very good, and I should like to express my appreciation of the loyal support given to the work by the headmasters, to which this result is mainly due. Compared with last year the attendance for both boys and girls has increased, the improvement being more marked in the case of the girls. The new cookery centre which has been erected at the Normal School was not ready until the end of November, and consequently the previous arrangements had to be continued throughout the year. The difficulties and inconveniences were accentuated by the growth of the Technical College, and the work of the latter was to some extent retarded by the lack of adequate accommodation. As regards the cookery classes, there should be considerable improvement this year, but it is very desirable that another woodwork centre should be provided either in the south or east, not merely to provide more accommodation, but also to diminish the size of the classes. When a centre is provided in connection with or near to a large school it is unnecessary that the pupils should

be accompanied by the form teacher, and therefore the class can be divided into two sections, and the ordinary school lesson repeated without any further disturbance of the time-table than occurs at present. This gives the school-teacher a small class for four periods in the week, whilst the same manual-training instructor can be responsible for the whole of the work done in the school. Though it is an undoubted convenience at times to be able to accommodate from thirty to forty boys under two instructors, yet it is very desirable that as far as possible each class should contain not more than twenty-six, and be under the control of one teacher. By dividing the school classes in the manner indicated, arrangements have been made for a much greater use of the West Christchurch Centre this year, and thus some lightening of the work at the Normal Centre can be effected. I regret to say that the appeal to the School Committees for contributions towards prizes did not meet with as general a response as last year, and in consequence the prizes awarded to the non-contributing schools were an inadequate recognition of the perseverance and good work shown by the pupils. I have again to thank the Committees of the Richmond, Papanui, and Elmwood Schools for their generous donations, and can only express the hope that this year their good example will be emulated by the Committees of the other schools. An exhibition of the work done in both cookery and woodwork classes was held at the Technical College in December, and was inspected and admired by a large number of visitors. Such an exhibition would be more stimulating to the pupils if a time was set apart when all the pupils who have been receiving instruction in these subjects could attend and see the work that has been done by the best of their schoolfellows. They would then realise what good work is possible. I hope that in future arrangements can be made for such a visit to take place. The Inspector-General, in his valuable report on educational institutions, has pointed out the great importance attached to manual training in America, its extension to all grades, and its co-relation with the rest of the work; and, as a result, he states that "school life becomes more interesting to the pupil, thoroughness and culture are not sacrificed, and 'social efficiency' is secured much more certainly for most pupils than by time-honoured subjects and methods that have no practical outlook upon life." I can only express the hope that this is an indication that the time is not far distant when manual subjects will be compulsory for all schools for which such training is available. The educational value of this work has been too generally overlooked because its utility is so apparent. Under a wise teacher manual training not only enlarges the mental outlook, but gives new moral conceptions. Professor James, of Harvard, has said that in order to promote a good moral tone in a school he would "enormously increase" the amount of time given to manual work—a remarkable testimony from one of the foremost of living psychologists to the intrinsic value of subjects still sometimes regarded as undesirable intruders in our primary-school curriculum.

JOHN W. HOWELL, Director.

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

This institution has, for the first time in its history, been working under thoroughly satisfactory conditions, and I feel sure that the Department, the contributing bodies, and the general public will be alike assured that it is meeting a great and growing need. I am bound to say that, if the College were not successful, it would show either that the people of this district were not yet alive to the importance of technical education, or else that the management was bad and the staff incompetent. Through the far-seeing policy of the Education Board we are provided with a good site in a most convenient neighbourhood. The Department has given us not sumptuous buildings, it is true, but simple in arrangement and admirably adapted for their purpose. It has further supplied us with the furniture and apparatus that the demands of our classes have rendered necessary. The opportunities thus given us have been largely appreciated and, on the whole, well used. Much has yet to be done to make the work of the College known, and each one of us who is concerned in it hopes to do better work yet, but we have at least made a good start in this the first complete year of its existence. I am glad to be able to state that the support received from public bodies has been well maintained, and it is to this and to the live interest which their members have shown in our work that our success is so largely due, for it would otherwise happen that our efforts would be cramped by want of the means just necessary for their success. The contributions received have been as follows: City Council, £300; Selwyn County Council, £25; Sumner Borough Council, £10; New Brighton Borough Council, £5 5s.; Trades and Labour Council, £10; Woolston Borough Council, £12 10s.; Riccarton Road Board, £10; Schools Committees' Association, £2 2s.; Canterbury Employers' Association, £10; Chamber of Commerce, £10; Canterbury Agricultural and Pastoral Association, £20; trades-unions, £15 2s.; Christchurch Drainage Board, £10; Industrial Association, £10: Making a total of £449 19s.

During the year two additions have been made to our buildings—the Seddon Memorial Hall and the workshop for fitting and turning, the former being erected at a cost of about £1,450 and the latter about £400. The Seddon Hall is a most valuable adjunct to the day-school—indeed, the efficiency of our work would be seriously impaired without it—and it will next session be much appreciated as a reading-room by the students of our evening school. Now that we have a habitation for it, the Board hopes that a real advance will be made with the library of technical handbooks, which is slowly being established and is greatly needed in Christchurch. Good use has already been made of our fitting and turning workshop, even in the half-session during which it has been available, and in spite of the fact that we have been seriously hampered by the extraordinary dilatoriness of the Home firms in supplying equipment.

There has been a very gratifying increase in the numbers of our students. The largest total of entries that we have ever had before was in the third term of 1907, and a comparison, therefore, with this period will be instructive. In the purely trades classes last year the average number of entries for the three terms was 427, while for the last term of 1907 it was 319, an increase of 34 per cent. In

the commercial department the corresponding numbers were 705 and 509, or an increase of 38 per cent. In the day-school the numbers on the roll for 1907 were 100; for 1908, 158; while at the School of Domestic Instruction, the control of which was taken over by the Board at the end of 1907, the average number of entries for the three terms of last year was 289. An even greater testimony to the earnestness of the instructors and the appreciation of their efforts by the students is given by the average attendance at our evening classes. In considering these it must be borne in mind that practically the whole of our students are engaged in trade or business, that not infrequently they have to work overtime, or even to go into the country for weeks or months at a time, and that the regular non-attendance of a single student in every ten will reduce the average attendance by 10 per cent. Now, in the first term of the year, out of every 100 possible attendances at the trade classes 92 actual attendances were made; in the commercial, out of every 100 possible attendances there were 88 actual; and in the School of Domestic Instruction, out of every 100 possible there were 93 actual. During the last term of the session, out of 100 possible there were 75 actual in the trade classes, and 74 in the commercial; and, though this may seem a considerable falling-off from the first term, yet, when it is remembered that a session of thirty-eight weeks is a severe test of the enthusiasm of students at work all the day, and that the longer evenings of October and November present many temptations, I am sure it will be admitted that these figures reflect very great credit indeed on students and instructors alike. The growth of the work is perhaps shown even more strikingly by the amount earned as capitation. In the year 1906, when the institution was first placed under the control of the present contributing bodies, the amount of capitation earned was £459; in 1907, £1,255; and in 1908, £2,107. It will be a source of satisfaction to the Department and to the public to know that this largely increased instruction is being given at a considerably reduced relative cost; for, while the ordinary expenditure last year was only two and one-third times what it was two years before, the amount of instruction given is four and a half times as great. This year, for the first time, our students have entered for the City and Guilds of London Examination, and for those of the English Board of Education in building-construction and drawing. The number of candidates was very small, but we have had difficulty in persuading our students both that these certificates are of worldwide value and that examinations are not really a serious ordeal. Now that the first batch of candidates has done so well, we hope that a much larger number will enter next year. The results are as follows: Cabinetmaking, ordinary grade (four candidates), three first-class certificates; building-construction and architectural drawing (three candidates), three first-class certificates. In the commercial department the examinations are at present conducted by the instructors and myself, but in the trades department we have the advantage of the assistance of gentlemen unconnected with the College, who are of eminence in each of the particular trades. The reports of the Honorary Examiners have been published in the Press and circulated among the contributing bodies. They may be summarised in one sentence: "In each case there has been a marked improvement on the work of the previous year, both in the quality and the amount of the work submitted." As the reports of last year were also in general very commendatory, this will be seen to be high praise. No College diploma has yet been awarded, and the Board, recognising the value that is everywhere attached to the examinations held by the City and Guilds of London, has decided that in the trades department the diploma shall only be granted where in addition to the College certificates the student has obtained the honours certificate of the above institute. The Education Department has made arrangements for holding examinations in the skilled trades and in the arts in connection with the English Board of Education and the City and Guilds of London; and it would seem very desirable that, in order to test the commercial work done in our technical institutions, similar arrangements should be made with the London Chamber of Commerce or the Society of Arts. These would provide for us the same tests that are applied at Home, and would give to our work in these branches a higher value in the eyes of the public.

J. H. HOWELL, Director.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Associated Classes conducted at the Christchurch Technical College.*

<i>Receipts.</i>			<i>Expenditure.</i>		
	£	s. d.		£	s. d.
Balance at beginning of year .. ..	493	3 5	Salaries of instructors .. ..	2,905	4 1
Capitation on associated classes .. ..	1,757	3 2	Office and working expenses (including salaries, stationery, &c.) .. ..	461	12 4
Capitation on account of free places .. ..	1,131	7 3	Advertising and printing .. ..	113	19 7
Buildings .. ..	769	18 10	Lighting and heating .. ..	317	2 8
Rent .. ..	100	0 0	Insurance and repairs .. ..	34	12 11
Furniture, fittings, and apparatus .. ..	1,290	8 6	Rent .. ..	200	0 0
Material .. ..	68	14 3	Material for class use .. ..	394	2 7
Subsidies on voluntary contributions .. ..	1,125	19 4	Seddon Memorial Hall .. ..	1,399	15 6
Fees .. ..	756	6 10	Prize Fund .. ..	20	9 7
Voluntary contributions .. ..	450	9 0	Sales, books, &c. .. ..	286	10 7
Sales, books, &c. .. ..	301	18 3	Contracts (new buildings, additions, &c.) .. ..	1,016	2 8
Deposits for breakages .. ..	9	2 6	Furniture, fittings, and apparatus .. ..	1,265	19 1
Prize Fund subscriptions .. ..	23	12 6	Balance at end of year .. ..	346	0 2
Salaries .. ..	89	18 9			
Lighting and cleaning .. ..	30	16 6			
Working expenses (refund) .. ..	0	5 0			
Received from North Canterbury Education Board on account of teachers' and school classes .. ..	362	7 8			
	<u>£8,761</u>	<u>11 9</u>		<u>£8,761</u>	<u>11 9</u>

JAMES HIGHT, Chairman }  
JOHN H. HOWELL, Secretary } of Managers.

## EXTRACT FROM THE REPORT OF THE MANAGERS OF THE ASHBURTON ASSOCIATED CLASSES.

In submitting this report, the Board of Managers have pleasure in stating that the past year has been a very successful one, most of the technical and continuation classes being well attended, whilst the numbers attending the school classes have been highly satisfactory. Marked progress has been made, and the keenest interest has been displayed in the work of the various classes, for which thanks are due mainly to an efficient and enthusiastic staff of instructors. The attendances at the various classes for each term were as follows: Cookery 29, 28, 26; dressmaking (4 centres), 78, 45, 10; woodwork, 3, 7; shorthand, 34, 20, 22; book-keeping 12, 4; building-construction, 5, 3; commercial arithmetic, 8, 4; commercial English, 8, 4; wool-sorting, 20, 15; elocution, 2. In addition, five school woodwork classes and five school cookery classes were held, with attendances of one hundred and one and eighty-eight respectively. The new classes for dressmaking at Rakaia and Methven proved very successful, while that at Hinds, though commencing fairly satisfactorily, had to be abandoned at the end of the second term, owing mainly to the impossibility of securing suitable premises in which to conduct the classes. The main difficulty with which the Board of Managers has to contend is that of proper accommodation for the classes, that provided by the old High School buildings being quite inadequate; and had it not been for the courtesy of Messrs. Friedlander Bros. (Limited) and the Ashburton Borough Council, who allowed us the use of two large rooms for wool-sorting and dressmaking, the work could not have been carried out with success. New and convenient buildings in a central position would add greatly to the popularity of all the classes. The Board trusts that, as the Borough Council is now prepared to grant us a long lease of a valuable reserve of an acre in the centre of the town at a peppercorn rental, it will not be long before the Department will make a grant towards the erection of suitable buildings. The thanks of the Association are due to the Ashburton County Council, Ashburton Borough Council, Ashburton Agricultural and Pastoral Association, High School Board, Borough and Hampstead School Committees, and to private subscribers for generous financial assistance.

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

## Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Associated Classes conducted by the Ashburton Technical Association.

Receipts.		£	s.	d.	Expenditure.		£	s.	d.
Balance at beginning of year	.. ..	77	14	10	Salaries of instructors	.. ..	396	10	4
Capitation on associated classes	.. ..	89	2	2	Office expenses (including salaries, stationery, &c.)	.. ..	58	11	4
Buildings	.. ..	12	16	1	Advertising and printing	.. ..	11	6	6
Rent	.. ..	1	16	0	Lighting and heating	.. ..	17	7	0
Furniture, fittings, apparatus	.. ..	3	7	9	Insurance and repairs	.. ..	11	4	9
Material	.. ..	6	1	1	Rent	.. ..	12	6	6
Subsidies on voluntary contributions	.. ..	31	19	0	Material for class use	.. ..	69	7	3
Fees	.. ..	129	1	6	Caretaker	.. ..	17	12	6
Voluntary contributions	.. ..	72	18	0	High School Board—Grant for apparatus	.. ..	25	0	0
High School Board, on account of school classes	.. ..	51	2	6	Sundries	.. ..	8	14	3
Interest on deposit	.. ..	2	5	10	Cartage, labour, &c.	.. ..	6	0	0
Proceeds breaking-up ceremony	.. ..	9	0	7	Architect, &c.	.. ..	3	3	0
Sales, &c.	.. ..	19	0	3	Furniture, fittings, and apparatus	.. ..	20	6	3
From North Canterbury Education Board— Capitation on account of school classes	.. ..	66	7	6					
Balance at end of year	.. ..	24	16	7					
		<u>£597</u>	<u>9</u>	<u>8</u>			<u>£597</u>	<u>9</u>	<u>8</u>

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

## EXTRACT FROM THE REPORT OF THE BANKS PENINSULA ASSOCIATED CLASSES.

The Managers have to congratulate the Technical Association on another year's successful work. Classes for cookery, woodwork, dressmaking, and wool-sorting were held. The classes were opened in April and continued until October, except the cookery class, which was not opened until June. Both teachers and pupils took a keen interest in their classes, and during the year some excellent work was done. As formerly, the teachers were handicapped by the unsuitableness of the building; but this has been remedied by the erection of a new Technical School. The foundation-stone was laid by the Hon. G. Fowlds, Minister of Education, on which occasion the luncheon provided was the work of pupils of the cookery class. The building is in every way most suitable for the work that has to be done. Great credit is due to Mr. G. Penlington, the Clerk of Works to the Education Board, for designing the building, and to Mr. G. Haylock for the efficient way in which he carried out his contract. There was a financial loss on the work for the year; but this was owing to the comparative lack of interest taken in the wool-sorting class. We have at considerable expense engaged the best obtainable expert from Christchurch, and it is much to be regretted that the farmers in the district do not take more advantage of the class. It is proposed this year to have a class in laundry-work.

A. GRAY, Secretary.







A number of appointments were obtained by students during the year. The most important was that of Assistant Professor of Mechanical Engineering at Syracuse University, U.S.A., for which Mr. A. R. Acheson was selected from a large number of American applicants. Mr. Acheson completed his course here in 1906, and did not subsequently attend any other educational institution. Other appointments have been—Assistant Engineer, Bengal Railways; County Engineer, Selwyn County Council; outside manager at Edinburgh for Messrs. Siemens Bros., electrical engineers; assistant engineer, Waihi Gold-mining Company; Demonstrator, Canterbury College; engineer to Messrs. Turnbull and Jones; Surveyor, Dunedin Drainage Board; Draftsman, Lyttelton Harbour Board; Draftsman, Dunedin Drainage Board; Draftsman and Surveyor, Christchurch City Council; Draftsman, Lyttelton Borough Council; Lecturer in Mechanical Engineering, Wanganui; Testing Engineer to Auckland Harbour Board. The Public Works Department applied to the school for two scientifically trained men capable of doing higher designing-work. Messrs. Cotton and Ponsonby were recommended for and were appointed to the positions. Two students have entered into partnership in engineering business on their own account. It is gratifying to find that in nearly all cases where past students have received promotion from the positions occupied by them their places have been filled by their juniors from the School of Engineering.

During the year a large number of tests have been made. These include a complete test of the suction-gas electric pumping plant recently installed by the Christchurch Drainage Board; tests of bricks and tailing products for the Under-Secretary of Mines; tests of stone for the Geological Survey; of iron and copper for the Westport-Stockton Mine; steel for ferro-concrete work for the Wellington and also for the Otago Harbour Board; steel, bricks, and lubricating-oils for the Government Railways; lubricating-oils for the Christchurch Tramways; and a large number of cement, stone, and iron and steel tests for private individuals. The plant of the school has been carefully upkept and is in good order, and a small amount of new apparatus has been procured, the principal items of which are a vacuum-gauge test pump with mercury column, a test pump for hydraulic gauges with standard hydraulic gauge, a McLeod vacuum gauge, a mercury interrupter, 5 tachometers, a combined portable ammeter and voltmeter, 4 ammeters, 3 voltmeters, 4 carbon rheostats, a frequency indicator, a non-magnetisable clock, 6 thermometers, steel grips for testing-machine, a saturator, instrument-stands, and laboratory tools. Contracts were also let for the supply of £2,400 of experimental plant for the equipment of the Hydraulics Laboratory.

I have to record with regret the resignation of Mr. J. E. L. Cull, B.Sc. in Mechanical Engineering, an old student of the school, who for six years and a half occupied the position of Demonstrator in Mechanical Engineering, he having left to develop an iron-smelting process of which he is the patentee. Mr. S. Steele, B.Sc. in Mechanical Engineering, has returned from the Wanganui Technical School to occupy the position vacated by Mr. Cull. I have also to record with regret the resignation of Mr. R. J. McKay, B.Sc. in Electrical Engineering, who has left to engage in the practice of his profession.

ROBT. J. SCOTT, M.I.C.E., M.I.M.E., M.A.Inst.E.E.,  
Professor in Charge.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908.*

<i>Receipts.</i>		<i>£ s. d.</i>		<i>Expenditure.</i>		<i>£ s. d.</i>	
Balance, 1st January, 1908 .. ..	1,660	1	9	Salaries .. ..	2,661	19	2
Contribution from Museum, Library, and School of Technical Science Endowment .. ..	800	0	0	Apparatus for surveying, civil engineering, &c. .. ..	8	0	5
Contribution from superior-education reserves (College) .. ..	850	0	0	Rent of building (College) .. ..	130	0	0
Contribution from superior-education reserves (exhibitions) .. ..	60	0	0	Exhibitions .. ..	60	0	0
Government grants—				Contribution towards expenses of Registrar's office .. ..	120	0	0
For specialisation .. ..	2,000	0	0	Gas and electric light .. ..	118	6	10
For technical instruction .. ..	265	1	9	Insurance .. ..	35	13	3
For material and apparatus .. ..	269	0	0	Printing and stationery .. ..	50	6	11
For buildings .. ..	59	10	0	Advertising .. ..	27	13	0
Students' fees .. ..	828	3	6	Fuel (coal and gas) .. ..	16	5	10
Students' fines .. ..	0	13	0	Laboratory stores .. ..	27	0	8
Share of testing-fees .. ..	51	17	3	Cleaning machinery .. ..	138	19	11
Fees for certificate of associate .. ..	5	5	0	Experimental work and apparatus (applied mechanics and mechanical engineering) .. ..	123	3	10
Interest .. ..	89	3	2	Experimental work and apparatus (electricity and electrical engineering) .. ..	106	10	10
				Stores and chemicals (electricity and electrical engineering) .. ..	18	0	2
				Upkeep of plant, repairs to machinery .. ..	103	17	8
				General expenses .. ..	19	13	6
				Apparatus, hydraulic, &c. .. ..	943	11	10
				Hydraulic Laboratory building (balance) .. ..	29	7	6
				Technical chemistry (lectures) .. ..	75	0	0
				Technical chemistry (apparatus) .. ..	15	0	0
				Share of rent of section in Hereford Street .. ..	20	0	0
				Official stamps .. ..	5	10	0
				Balance .. ..	2,084	13	1
	<u>£6,938</u>	<u>14</u>	<u>5</u>		<u>£6,938</u>	<u>14</u>	<u>5</u>

SCHOOL OF ART.

I have the honour to report that the quality of the work of the students has considerably improved during the year 1908. The students in attendance during the year 1908 numbered 1,160, an increase of 75 students over the year 1907. In connection with the Advanced Art Examinations held by the Board of Education, South Kensington, London, twenty-eight students received pass certificates, and





## SOUTH CANTERBURY.

## EXTRACT FROM THE REPORT OF THE EDUCATION BOARD.

The year 1908 was marked by the erection of substantial additions to the Timaru Technical School at a cost of about £3,500. It is hoped that the new structure will afford proper accommodation for the various trade, art, commercial, and domestic-instruction classes. The building has been arranged to provide also for new Board offices.

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

In nature-study and elementary science a great deal of splendid work is done, and the enthusiasm of many of the teachers for this work is deserving of the highest praise. In fourteen schools elementary agriculture has been taken as one of the subjects for which grants are earned under the Manual and Technical Instruction Acts. School gardens for experimental work are increasing in number, and the competition for the Hurdley Shield was keener than ever. The shield is held for the year by the school that gains most points for its exhibit at the Timaru Horticultural Society's Show, the judges taking into account the value of the exhibit from an educational standpoint. The competing gardens are visited by a professional gardener, whose report on the state of the gardens at the time of his visit is taken into account in awarding the prize. At the Saturday classes for teachers this year, Dr. Hilgendorf, of the Lincoln Agricultural College, gave a course of twelve lessons on elementary agriculture suitable for the instruction of children attending the primary schools. The attendance was excellent, and the keenest interest was taken in Dr. Hilgendorf's masterly handling of his subject. The course of lessons has been published in a pamphlet, and Dr. Hilgendorf's reputation as a teacher is a guarantee of its value. In the larger schools the forms of handwork taken in the infant classes and Standards I and II are modelling in plasticine, stick-laying, brick-laying, and paper-folding. In Standards III and IV modelling in plasticine is continued, with modelling in carton or in cardboard, and designing with coloured paper. In fifteen schools the boys of Standards V and VI are making very good progress in isometric drawing and woodwork under their instructor, Mr. Chaplin; while the girls at the same stage enjoy the privilege of a splendid training in cookery from Miss Wilson and Miss Rennie, both teachers of exceptional merit. In many of the smaller schools various forms of handwork find a place in the programmes of work for the lower classes. The girls of all schools are instructed in needlework, the estimate of the work done generally ranging from "good" to "excellent."

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

Various branches of handwork were taken up in all the large schools in the district, and also where practicable in some of the smaller ones. In all the large schools where woodwork and cookery were taken a definite course of instruction has been adopted from the infant department right up to Standard VI. This course included paper-folding, stick-laying, or brick-laying in the infant classes, modelling or paper-folding in Standard I, modelling or brush drawing in Standard II, carton-work in Standard III, cardboard modelling in Standard IV, woodwork and cookery in Standards V and VI. In some of the smaller schools with only one teacher, handwork was taken up in the lower standards, but had to be discontinued in the upper standards. Possibly with the increased staffing now allowed by the new regulations, these schools will be enabled to continue handwork in the upper standards. Besides those mentioned above, the following subjects were also taught: Elementary agriculture, advanced plain needlework, swimming and life-saving, chemistry, botany, electricity, and elementary design. Last year fifteen sole-charge schools having no female teacher availed themselves of the financial assistance given under the Regulations for Manual and Technical Instruction, and appointed sewing-mistresses.

In this country, where water plays such an important part, it is absolutely essential that every boy and girl should not only be able to swim, but should know some of the principles of giving assistance in cases of drowning. In this district I am glad to state that much has been done in this direction during the past year. Regular instruction was given to boys and girls in the art of swimming and life-saving at Timaru, Waimate, Temuka, Geraldine, and Winchester, the principal difficulty with regard to the smaller schools being that there are no suitable bathing-pools in close proximity to the schools. The annual swimming competition conducted by the Board took place in February. Besides the competition amongst the schools for the Challenge Shield, the Board donated prizes to individual swimmers, and the South Canterbury Swimming Centre gave two silver medals for the championship of South Canterbury. The sports showed a marked improvement on previous years, both in the quality of the swimming and the number of competitors. Timaru Main again succeeded in winning the Championship Shield.

Elementary agriculture as a school subject was taken up at fourteen different schools in this district during the year, and the experimental work done at some of the schools was of a high order. It is not necessary here to enlarge on the benefits likely to accrue to an agricultural district like South Canterbury from the teaching of elementary agriculture in our public schools, and there is no reason why nearly every school in the district should not have its school garden. The Department makes a liberal grant for the initial cost of providing tools, and also gives a capitation grant of so much per head on the number of lessons given, besides subsidising any moneys raised by Committees for the purpose of improving the school gardens. In this way the sum of £64 was raised in this district last year. The handsome Challenge Shield donated by Mr. Hurdley for the best school garden was won last year by the Hilton School. Cookery classes were conducted at five different centres during the year—viz., Timaru, Waimate, Temuka, Pleasant Point, and Fairlie. The work at Pleasant Point and Fairlie was carried on under great difficulties, as no suitable rooms could be found at those places. At Pleasant Point a new cookery room has been erected, and it is hoped that for the future both instructor

and pupils will be able to work under more favourable circumstances. Woodwork classes were also conducted in conjunction with the cookery classes at Timaru, Temuka, and Waimate. Wherever it was possible, pupils from country schools received the same benefits as the town pupils by being conveyed by rail to receive instruction in the above subjects. In order that the work taken in connection with cookery and woodwork should correlate as far as possible with the other class subjects, a programme of instruction was issued at the beginning of the year to head teachers of schools in which the pupils took woodwork and cookery. The average attendance at cookery classes for the year was 350, and for woodwork 265. On the recommendation of the Teachers' Institute, classes for teachers were conducted at Timaru in blackboard drawing and agriculture. Mr. James Balfour, art designer, from Christchurch, had charge of the blackboard drawing, and Dr. Hilgendorf, from Lincoln College, the classes in elementary agriculture. The course of instruction by Dr. Hilgendorf was exceptionally well attended, and teachers were most enthusiastic. The work done in connection with this class was of a practical kind, and field-work was taken on several days. No doubt the instruction given in both of the above subjects proved useful and beneficial to teachers in connection with their ordinary school-work. In conclusion, I may state that teachers of handwork classes have all worked enthusiastically during the year. They have been ready at all times to adopt the latest and most approved methods. The classes have been self-supporting, and, while there has been no stint in the supply of material and apparatus, still there has been no waste. The provision of a room in the new Education Offices will be a great benefit in the way of providing a place for storing technical material, and for exhibiting to teachers the latest ideas in connection with handwork classes.

RITCHINGS GRANT, Director.

*Statement of Receipts and Expenditure in respect of School, Special, and Associated Classes for the Year ending 31st December, 1908.*

Receipts.		£	s.	d.	Expenditure.		£	s.	d.
Grants from Government,—					Balance, 1907 .. .. .				
Capitation—					School classes—				
School classes .. .. .					Maintenance and salaries .. .. .				
Associated classes—					Furniture, fittings, and apparatus .. .. .				
Timaru .. .. .					Special classes—				
Temuka .. .. .					Maintenance and salaries .. .. .				
Waimate .. .. .					Material .. .. .				
Fairlie .. .. .					Furniture, fittings, and apparatus .. .. .				
Free places—Timaru Technical .. .. .					Associated classes—				
Special .. .. .					Buildings, &c.—				
Subsidies on voluntary contributions—					Timaru .. .. .				
School classes—					Temuka .. .. .				
Winchester .. .. .					Waimate .. .. .				
St. Andrew's .. .. .					Fairlie .. .. .				
Fairlie .. .. .					Capitation, grants, &c.—				
Associated classes—					Timaru .. .. .				
Timaru .. .. .					Temuka .. .. .				
Temuka .. .. .					Waimate .. .. .				
Fairlie .. .. .					Fairlie .. .. .				
Buildings, furniture, fittings, and apparatus—					Timaru .. .. .				
School classes .. .. .					Temuka .. .. .				
Associated classes—					Waimate .. .. .				
Timaru .. .. .					Fairlie .. .. .				
Temuka .. .. .					Receipts from other sources—				
Waimate .. .. .					Voluntary contributions—				
Fairlie .. .. .					School classes .. .. .				
Receipts from other sources—					Cookery sales .. .. .				
Voluntary contributions—					Refund carving material .. .. .				
School classes .. .. .					Sale of cooking range .. .. .				
Cookery sales .. .. .					Fees paid in by Morven classes .. .. .				
Refund carving material .. .. .					High School Board—				
Sale of cooking range .. .. .					Woodwork instructor .. .. .				
Fees paid in by Morven classes .. .. .					Cookery instructor .. .. .				
High School Board—					Balance .. .. .				
Woodwork instructor .. .. .									
Cookery instructor .. .. .									
Balance .. .. .									
					£3,954 8 8				
					£3,954 8 8				

EXTRACT FROM THE REPORT OF THE TIMARU TECHNICAL CLASSES ASSOCIATION.

The Managers have much pleasure in presenting the eighth annual report, dealing with the working of the school for the year 1908. The 1908 session began on the 30th March, and lasted for twenty-six weeks, making two terms of thirteen weeks each. The Managers would like to see the session extended for a longer period each year, but experience has proved that students will not attend during the long evenings, and to carry on classes with reduced attendance means financial loss to the Association. The course of instruction last year was much the same as in former years, as the aim of the Managers has always been to provide facilities for self-improvement for those engaged in earning their livelihood during the day. On account of want of proper accommodation and apparatus, it was decided not to carry on the engineering and electricity classes last year; but new classes were started in first aid and home nursing, and elocution. The first-aid class was ably conducted by Dr. Thomas, and proved very popular, but the elocution class was not so well attended as the excellent instruction given by Mr. De Spong warranted. During the year eighteen classes were conducted by nineteen teachers. The following gives the list of classes and number of students enrolled in each class: Building-construction, 15; cookery, 28; typing (two classes), 33; shorthand (Pitman's), 25; carving, 9; woodwork, 7;







## OTAGO.

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

During the period over which this report extends—viz., the 4th February to the 14th December—the total number of individual students who received instruction was 498. This number includes 174 teachers and pupil-teachers, 76 students of the Training College, 105 students who attended the day classes, and 143 students who attended the evening classes. The school was open daily from 9.30 a.m. to 4 p.m., and from 5.45 p.m. to 9 p.m., and on Saturday from 9.30 a.m. to 12 noon. The courses of instruction in the various classes were on lines similar to those of last year. The junior class received instruction in freehand and model drawing, brushwork, and the arranging of floral forms to fill given geometrical figures. The pupils were regular in their attendance and were very painstaking in their work. Day classes for drawing and painting: Most of the work done by students attending these classes was from models, common and natural objects, plants, still life, and landscape-painting from nature. Outdoor sketching was practised when the weather was favourable. Design: The elementary students of this class have been trained to draw and colour plant-form and natural objects, and elementary design, while the more advanced ones who have had preparatory training in this subject have been encouraged to study that branch of design more immediately connected with their work. This has been a most popular class. The students worked earnestly, and produced a large amount of satisfactory work during the session. Modelling: The students attending this class worked from plant-form, natural objects, the figure, and their own designs, casting from waste and piece moulds. The quality of the work executed by the students has been highly satisfactory. Training College: The courses of instruction for students attending the junior division of the Training College included freehand and model drawing, blackboard drawing, and practical geometry. The senior division studied brushwork, design, modelling, and blackboard drawing. The students took keen interest in their work, and on the whole did good work. Classes for head teachers, assistants, and pupil-teachers were held in the evenings and on Saturday morning. The attendance was much too large for the accommodation at our disposal. Frequently the crowded state of the rooms interfered considerably with the work. The subjects of instruction were freehand and model drawing, light and shade, plant-form and design in colour, modelling, plant-form, design, casting from waste and piece moulds, blackboard drawing, geometrical drawing, and perspective. The majority of the teachers took two or three subjects, while the pupil-teachers devoted their attention to the subjects necessary for the D certificate. During the session excellent work, especially in brushwork and modelling from original designs, was done. Science classes: The courses of instruction were very similar to those of last year, and comprised practical plane and solid geometry, building-construction, and machine construction and drawing. The students worked very earnestly, and the standard of work has been well maintained. Mr. Armstrong, who has so long filled the position of instructor in machine construction and drawing, resigned, and Mr. Wales, a highly qualified gentleman, took his place.

D. C. HUTTON, Principal.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Special Classes conducted at Dunedin by the Otago Education Board.*

Receipts.	£	s.	d.	Expenditure.	£	s.	d.
Capitation on special classes ..	465	18	3	Balance at beginning of year ..	746	5	7
Capitation on account of free places ..	46	0	3	Salaries of instructors ..	896	11	4
Technical instruction of teachers..	300	0	0	Office expenses (including salaries, stationery, &c.) ..	30	0	0
Fees ..	263	11	8	Advertising and printing ..	56	5	10
Balance at end of year ..	706	6	3	Lighting and heating ..	29	17	8
				Material for class use ..	22	15	7
	<u>£1,781</u>	<u>16</u>	<u>0</u>		<u>£1,781</u>	<u>16</u>	<u>0</u>

P. G. PRYDE, Secretary.

## EXTRACT FROM THE REPORT OF THE MANAGERS OF THE DUNEDIN TECHNICAL CLASSES ASSOCIATION.

The Managers have pleasure in submitting the twentieth annual report. At the beginning of the year the Minister of Education increased the number of Managers to fourteen, and the associated bodies elected representatives as follows: Otago Education Board—Hon. T. Fergus, Rev. P. B. Fraser, M.A., and Messrs. G. C. Israel, William Scott, and James Mitchell. Technical Classes Association—Messrs. J. F. Arnold, M.P., A. Burt, D. R. Eunson, A. Sligo, G. M. Thomson, M.P., F.L.S. Dunedin City Council—Messrs. J. Loudon, T. Scott, J. Small, and J. H. Walker. Early in the year Messrs. J. Loudon and J. Small were replaced by Councillors J. B. Shacklock and R. W. Rutherford. At the first meeting Mr. Thomson was re-elected Chairman and Mr. Silgo Treasurer.

The Director's report shows that during the year eighty-six classes were held, seventy-nine being held at Dunedin and seven at country centres. The number of enrolments during the year was 1087 (Dunedin 994, country centres 93).

Last year the Education Department agreed to grant £1,100, the sum required to complete the building and provide the rooms necessary for the teaching of mechanical engineering, but early in the year it was found that at least an additional £700 would be required for the purpose. The Chairman and

the Secretary were sent to Wellington to interview the Minister of Education in support of the application for a further grant. They were favourably received, and within a few days the amount was promised. The building was at once begun and the machinery ordered, with the result that we have now special rooms for the engineering department, including a well-equipped machinery room. A number of our students sat for the examination held in connection with the City and Guilds of London Institute, and the successes attained show that the school still maintains a very creditable position among those of the Dominion. The results in cookery, electricity, engineering, and mechanical engineering were particularly good. To meet a felt want, afternoon classes have now been carried on for the past two years. These have been attended chiefly by students from the country (from Clinton in the south to Moeraki in the north), but only isolated subjects and no definite courses have so far been followed. However, provision is now being made for definite courses of work for such students. It will be possible to arrange only for afternoon classes during the incoming session, but it is intended to next year have a definite series of day classes covering all the principal departments of the Association's work. The attendance of those pupils who, by virtue of holding proficiency certificates, are entitled to free places has not been altogether satisfactory in the past. The grant receivable by the Board is contingent upon their regular and punctual attendance, and the necessity of securing this led to a legal opinion on the matter being taken. In future, parents or guardians of the pupils will have to sign a bond holding themselves responsible in case of Government allowances being lost through failure of pupils to attend regularly. This Board has long been desirous of coming to some agreement with the Education Board as to the technical instruction given at the School of Art, so as to insure efficiency of work and avoidance of overlap. With this object conferences were held between the two Boards, and an agreement was practically arrived at by which the School of Art was to be brought under the control of the Board of Management of the Technical School, special provision being made for art subjects and for teachers' classes. Unfortunately, the Education Board at the last meeting in 1908 failed to ratify this agreement. The question of working out a full technical course and appointing a Director to control the whole was postponed till these conferences had been held, but as nothing resulted from them the Technical Board decided to appoint a Director of its own. Mr. Marshall, the former Superintendent, having sent in his resignation at the beginning of the year, applications for the position of Director at a salary of £500 per annum were invited from New Zealand, Sydney, and Melbourne, and in response forty were received. After full consideration of these applications, our former Superintendent (Mr. Angus Marshall) was appointed Director. Finances: The balance-sheet appended herewith shows a credit balance of £517 10s. 6d., and a substantial amount has since come to hand. There are still, however, accounts outstanding against buildings and machinery which will probably exceed by £250 the amount granted by the Government. Professors Black, Shand, and Gilray continue to grant free places to our leading students in chemistry, physics, and English respectively, and in recognition of this generous action they are recommended for life-membership. The Board, the teaching staff, and the students are all alike under obligation to those ladies and gentlemen who give their services as examiners. The names of these friends of the Association are in themselves a guarantee of the work done in the various classes.

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

At the beginning of each year there are generally several changes in the teaching staff, and this year was no exception. Mr. T. B. Hamilton, M.A., M.Sc., handed over the chemistry class to Dr. Don; Mr. G. D. Ross having accepted a position in a commercial college, Miss A. M. Robertson became teacher of typewriting; Mr. R. Menzies was appointed teacher of shorthand in place of Mr. Norris Falla (resigned); Misses M. E. Crawley and I. Gibson were added to the staff as assistant teachers of cookery. During the session Mr. G. F. Booth, B.A., having been promoted to the rectorship of the Port Chalmers School, resigned his position as teacher of the Latin classes, and was succeeded by Mr. J. G. Paterson, M.A. At the beginning of the second term Mr. D. Thomson asked to be relieved, and Mr. H. Halliday thereafter acted as assistant to Dr. Don. The staff throughout the session consisted of thirty-eight teachers. During the year eighty-six separate classes recognised by the Education Department were conducted by the Association. Seven of these, attended by a total of ninety-three students, were held at country centres (Balclutha, Kaitangata, and Seacliff). The 79 classes at Dunedin were registered as follows: Continuation, 17; commercial, 27; technical, 35. The total number of individual pupils enrolled at Dunedin was 994, the figures for the previous year being 966. Quite a number of those applying for free places, having had two years free tuition at the high schools, were ineligible, and their applications had to be refused. The number of such places granted and actually entered upon was 347, the figures being practically identical with those for 1907. Partial or total remission of fees was granted to twenty-nine other students. The attendance at the afternoon classes was not so great as last year, the proportion of country scholars being less. The suggestion is again made that better provision should be made to meet the requirements of this special class. It here seems a fitting place to direct attention to the unsuitability of the railway time-table for evening pupils travelling by the Port Chalmers train. The school closes just after 9 o'clock, and students for Ravensbourne and Port Chalmers require to wait at the Dunedin Railway-station till a quarter past 10. Owing to the poor support accorded the class for tailors' cutting and fitting, it was considered inadvisable to continue, and the class was therefore abandoned. There were several other classes at which the attendance, especially during the second quarter, could hardly be regarded as satisfactory. Those for painters' work, carpentry, practical electricity, and physiology showed the greatest falling off. Students of plumbing have still a strong aversion to instruction in the theory of the subject, and are more often



than not absent from that part of the course. When both branches of plumbing are taught on the same evenings there will be no opportunity of attending the practical work and evading the study of the principles. From the recently published University lists it is seen that the Technical School scholars granted free places by the professors have gained very creditable positions in their respective classes. This of itself indicates that these ex-students of our school are in a position to benefit by the opportunities so generously given by Professors Black, Gilray, and Shand. To these gentlemen for their continued offer the Association owes some expression of appreciation. This year William Martin wins the free place in chemistry, Hugh R. Robertson that in physics, while Brenda Morris and Fanny Hubbard are equal for the English. The honorary examiners are also entitled to credit for much work performed, often at great personal sacrifice and inconvenience. The class lists are published separately. Several classes—namely, those for practical plumbing, carpentry, physiology, and horticulture—were not examined for certificates. In conclusion, I have to thank members of the staff for ready and valuable assistance rendered me on all occasions.

A. MARSHALL, Director.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Associated Classes conducted by the Dunedin Technical Classes Association.*

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year ..	392	17 10	Salaries of instructors .. ..	1,634	15 0
Capitation on associated classes ..	861	14 6	Office expenses (including salaries, stationery, &c.) .. ..	147	14 0
Capitation on account of free places ..	555	8 9	Advertising and printing .. ..	64	11 9
Furniture, fittings, and apparatus ..	664	2 5	Lighting and heating .. ..	79	4 4
Material .. ..	7	9 4	Insurance and repairs .. ..	29	17 8
Subsidies on voluntary contributions ..	192	10 6	Material for class use .. ..	80	17 1
Fees .. ..	512	3 0	Janitor .. ..	98	0 0
Voluntary contributions .. ..	303	19 6	Rates .. ..	10	10 0
From Education Board on account of janitor	30	0 0	Furniture, fittings, and apparatus ..	857	0 6
			Balance at end of year .. ..	517	10 6
	£3,520	0 10		£3,520	0 10

GEO. M. THOMSON, Chairman } of Managers.  
ANGUS MARSHALL, Secretary }

*EXTRACT FROM THE REPORT OF THE OAMARU TECHNICAL CLASSES ASSOCIATION.*

The Managers have to report that the year has been one of progress and the work good, and it is noted with satisfaction that most of the pupils who attended gave marked evidence of their desire to take advantage of the benefits offering. The number of students enrolled was 403, divided into seventeen classes—plumbing, elocution, carpentry, dressmaking, typewriting, shorthand, book-keeping, penmanship and business methods, commercial arithmetic senior and junior, English senior and junior, sick-room cookery. During the year a carpentry and plumbing workshop was added to the main building, which will supply a long-felt want. The Managers have to thank the Minister for assistance in this direction. Mr. E. C. Isaac, Technical Inspector, visited the school during the year. The thanks of the Association are due to the local bodies and citizens who contributed to the funds, to the examiners who conducted the examinations gratuitously, and to the Press. The finances of the Association are sound, but it should be pointed out that without the voluntary contributions of the public and the various contributing bodies, the school could not exist. In conclusion, the Managers are pleased to record an increasing interest in the school, and are hopeful that the 1909 session will be the most successful in the history of the Association.

T. WILLIAMSON, Chairman.

*Statement of Receipts and Expenditure for the Year ending 31st December, 1908, in respect of Associated Classes conducted by the Oamaru Technical Classes Association.*

Receipts.			Expenditure.		
	£	s. d.		£	s. d.
Balance at beginning of year ..	5	6 9	Salaries of instructors .. ..	220	8 0
Capitation on associated classes ..	88	15 7	Office expenses (including salaries, stationery, &c.) .. ..	102	7 9
Capitation on account of free places ..	43	1 6	Advertising and printing .. ..	6	4 6
Rent .. ..	40	0 0	Lighting and heating .. ..	20	8 8
Material .. ..	9	6 2	Insurance and repairs .. ..	3	15 0
Subsidies on voluntary contributions ..	81	17 0	Rent .. ..	41	0 0
Fees .. ..	95	5 0	Material for class use .. ..	14	16 3
Voluntary contributions .. ..	78	1 6	Rates .. ..	3	2 0
Sales .. ..	10	18 6	Refunds .. ..	0	10 0
Refunds .. ..	0	12 6	Balance at end of year .. ..	40	12 4
	£453	4 6		£453	4 6

T. W. WILLIAMSON, Chairman } of Managers.  
A. MCKINNON, Secretary }

## SOUTHLAND.

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

The majority of the schools which took up the subject of elementary physical measurements did really good work. The temptation of former years to attempt too much work, and that of too difficult a kind, was resisted successfully, to the undoubted benefit of the classes. The classes in elementary agriculture now number thirty-three, and there is a hope of further increase. Steps have been taken to add to the efficiency of these classes by a circular of instructions addressed to teachers, and by furnishing them with the supplies which last year's experience showed to be necessary. A large extension of the woodwork classes to other centres besides Invercargill is under consideration. We shall be glad to hear that it has been deemed practicable to carry out this extension, so thoroughly convinced are we of the value of this branch of school-work.

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

*School Classes.*—Relatively to the school population the number of hand and eye classes conducted in the schools in Southland is large, and the work done is becoming increasingly satisfactory as teachers more fully realise the purpose and place of manual work in our schools. Plasticine modelling, paper-folding, cardboard modelling, and brush drawing are the subjects most extensively practised in the lower standards, and the work is being fairly well co-ordinated with the other subjects in the curriculum. In the upper standards, elementary physical measurements, elementary agriculture, advanced needlework, cookery, and woodwork are all taught—physical measurements in twenty-four schools, agriculture in thirty-three schools, needlework in twenty schools, and cookery and woodwork in the town and suburban schools, and at Gore, East Gore, and Bluff. In four schools lessons in swimming and life-saving were given; physiology and first-aid classes were conducted in three schools; and botany and physics were taught in one school each. In all, out of the 168 schools in operation throughout the district only eight are not to a greater or lesser extent, according to the circumstances, carrying on some form of manual and technical work. In view of the fact, however, that the Standard VI proficiency examination is reckoned the crucial test of the teacher's work, and that in that examination little credit is given for proficiency in manual subjects, teachers can hardly be expected to introduce into their daily duties any further innovations which curtail the time at their disposal for literary instruction. What is now required is the solidifying and rendering more efficient the work already undertaken. Certain subjects already taught in our larger schools, a knowledge of which is of immense importance and value to the young people, may with advantage be extended to more of our country schools. Chief of these subjects are woodwork, cookery, and agriculture. In woodwork and cookery the Board is fortunate in having instructors equal to the best in the Dominion, but, owing to the fact that efficient instruction cannot be given except in properly equipped centres, only the schools of Invercargill and suburbs, Gore, East Gore, and Bluff have hitherto been able to take advantage of the benefits to be derived from attendance at these classes. For the current year, however, the Board has elaborated a scheme whereby pupils in Standards IV, V, and VI in all schools adjacent to the railway-lines throughout Southland will be able to attend for instruction at properly equipped centres; a group of some fifty-four schools in this district will benefit by this extension. The carrying of a scheme to a successful issue will mean some measure of self-denial on the part of teachers, parents, and pupils, but the counterbalancing gains so far outweigh the disadvantages that it is anticipated the heartiest support will be accorded the movement.

The question of the extension of elementary agriculture classes in the larger schools in the district has received careful attention during the year. In 1907 the subject was taught in thirteen schools; in 1908 the number increased to thirty-three. At each of these schools there are to be found small parcels of land laid off into experimental plots, where work of greater or less value is being done under the guidance of enthusiastic teachers. In order that the practical work might be systematic and thorough, a special circular was prepared in the early spring and issued to teachers, while the necessary seeds and manures were generously donated by Messrs. Sutton and Sons (Limited), per Tothill Limited, and the Southland Frozen Meat and Produce Export Company, respectively, to which firms the hearty thanks of the Board were tendered. It is intended to equip each school with a small tool-shed in which to house the tools supplied by the Education Department, and it is hoped that this may be accomplished during the coming year. In carrying on this work, teachers have been encouraged not to exalt unduly the horticultural and kitchen-garden point of view, but rather to train the observation and personal powers of the children as a part of general education, so that their schooling may correspond with their environment, and so that ultimately they may be the better fitted to engage in rural pursuits with profit and be less influenced by the glamour of the town. In order that teachers may be as fully equipped as possible, the necessary apparatus for indoor experiments during the winter months will be supplied. It is further proposed to establish for the benefit of teachers a series of Saturday classes under the instruction of some thoroughly competent expert in agricultural science.

*Training of Teachers.*—Early in the year teachers' Saturday training classes were established as under: For uncertificated teachers—English, geography, mathematics, school method and blackboard drawing. For certificated teachers—Elementary physical measurements, elocution, music, physiology and home nursing, and physical drill. With the exception of blackboard drawing, the classes for the uncertificated teachers not being "school classes" as defined in the manual and technical instruction clauses of the Education Act, the Board generously provided out of the ordinary funds financial assistance towards the payment of the instructors. These classes were established expressly with a view to assisting the younger members of the profession who were preparing for the

Department's examinations, and were conducted by the most competent of our experienced teachers, who in the interests of their co-teachers cheerfully sacrificed a considerable portion of their leisure time, and throughout the whole course maintained a whole-hearted interest in the work intrusted to them. The classes were well attended, and the majority of the students evinced a praiseworthy appreciation of the facilities for self-improvement placed within their reach. As a finale to the work of the term, Mr. J. Crosby Smith, F.L.S., delivered a most interesting lecture, illustrated by a large number of lantern views, on "The Plant-life of New Zealand."

*Evening Classes.*—Invercargill: The evening classes in Invercargill were conducted on much the same lines as in previous years. At the end of the session the returns showed that there had been a decrease in the average attendance as compared with 1907 of nearly 50 per cent. Why this was so it was impossible to say. The attendance at the classes in 1907 was the highest on record—this year again the numbers may resume normal proportions. The principal falling-away was in the number of free students; the number of paying students remaining much the same as in former years. At Gore, Bluff, and Maitua successful classes were conducted. At these centres, too, the numbers in attendance showed a slight decrease as compared with the previous year; but, as this was the second year of the existence of these classes, the decrease was not to be wondered at. Through the kindness of the Board, Inspector Hendry and I were granted permission to visit the technical schools in the North Island, and on our return we reported specially on what we had learned regarding technical and continuation classes at other centres, and detailed our own requirements. A copy of this report is herewith attached. At the beginning of the usual winter session a circular was forwarded to all teachers in the district inviting them, if they could conveniently do so, to organize and conduct evening technical or continuation classes in their schools. In response, classes were established as under: Greenhills, freehand and model drawing; Nightcaps, elementary physical measurements for mining students and arithmetic; and Makarewa, Standards V and VI work. It is a difficult, indeed an almost impossible task, to establish successful evening classes in districts remote from fairly large centres of population.

*Exhibition of Work.*—At the end of the session an exhibition of the work performed by the students attending the Invercargill classes in art, building-construction, architectural drawing, mechanical drawing, wood-carving, carpentry and joinery, cookery, and millinery was held in the Technical School, and attracted a large number of visitors. In conjunction therewith there was exhibited a collection of work performed by school classes throughout the district in freehand drawing, cardboard modelling, paper-folding, woodwork, &c. There was also exhibited a splendid collection of brush drawings from the schools in the Auckland District, kindly procured by Inspector Isaac, of the Education Department, and also a number of works from American schools. This exhibition proved exceedingly interesting and instructive, and a great stimulus to our teachers.

*Examinations.*—Several students were successful at the annual examinations in art subjects under the Board of Education, South Kensington, and in technological subjects under the City and Guilds of London Institute.

I have again to acknowledge the fairness with which the Central Department at Wellington met all claims for capitation and grants made during the past year. I have also to acknowledge with gratitude the kindly consideration shown by teachers and by all others concerned while I have been engaged in carrying out the duties of my office.

W. A. McCaw, Director.

#### REPORT OF THE CHIEF INSPECTOR AND DIRECTOR OF TECHNICAL INSTRUCTION ON THEIR VISIT TO THE TECHNICAL CLASSES IN THE NORTHERN DISTRICTS.

The Inspectors and the Director of Technical Instruction, who are responsible to the Board for the organization and administration of technical instruction in this district, have from time to time discussed the feasibility of certain proposals for enlarging our field of operations under the Manual and Technical Instruction Act, but have found themselves, from financial considerations, unable to give effect to some of the more important of these proposals. Hitherto the various classes established in this district have been carried on without monetary assistance from the Board, the income accruing from fees and capitation being sufficient for the classes now in existence, though totally inadequate for any substantial extension.

In order to learn specially how the financial difficulty is dealt with by other Boards and controlling authorities whose operations under the Act cover a wider field than in Southland, and to investigate generally how the Act is administered elsewhere, we were granted leave of absence by the Board to visit such other educational districts as we considered advisable for the purpose in view.

During our absence from Invercargill we visited technical schools in the following places: Palmerston North, Feilding, Marton, Wanganui, New Plymouth, Auckland, Napier, Hastings, Masterton, Wellington, Christchurch, Timaru, Waimate, and Dunedin. We were present at a teachers' class in elementary agriculture then sitting at Greytown, and we further took the opportunity of visiting a considerable number of schools that have taken up this subject, and in connection therewith have established school gardens. We interviewed the Inspectors of Schools in the various districts visited, the Directors of the Technical Schools, members of Education Boards and Technical Committees, instructors in agriculture, dairying, &c., certain officers (including Mr. T. W. Kirk) of the Agricultural Department—in short, we laid under contribution all who could in any way assist us by furnishing such

information as we were in search of. We gratefully acknowledge the uniform courtesy and kindness with which we were everywhere treated, and the cheerful readiness with which our inquiries were answered and information was furnished.

We propose to report on the work of technical education under two divisions—(1) school classes, and (2) special and continuation classes.

*School Classes.*—(a.) Hand and eye classes: In regard to school classes established under the Manual and Technical Instruction Act, we have no reason to be dissatisfied with the position attained by Southland. Although it is desirable that the provisions of the Act should be more largely taken advantage of in certain types of schools, still, relatively to our school population the number of classes is large and the work done is becoming increasingly satisfactory as teachers more fully realise the purpose and place of manual work in our schools. On the whole, Southland is well abreast, and in some respects ahead, of the work accomplished in other school districts of the Dominion. Auckland has specialised in brushwork, and the work done is of a very high order. Here, however, there are two qualified instructors specially engaged to train the teachers through the medium of Saturday classes and by periodical visits to the schools. In Hawke's Bay, too, this subject is well taught, and the results are good. The plasticine modelling, the cardboard modelling, and the paper-folding classes as carried on in our own schools are quite equal to the best we saw elsewhere. Free-arm drawing is more extensively practised in the northern schools than in ours. If effective work in this subject is to be done, an extensive alteration of our class-rooms and the provision of a rather expensive equipment are necessary. In consequence this work is only being gradually introduced into our curriculum.

(b.) Elementary physical measurements: This subject, from what we could gather, is quite as well taught and, in proportion to our population, finds a place in as large a number of schools, as in any other district. The course of lectures recently given by Mr. Inglis, M.A., M.Sc., to our teachers was equal to the best course delivered in any part of the Dominion; indeed, we might go further, and say that in no other centre have the requirements of teachers been better cared for than in our own. When a more complete and perfect equipment is provided—which it is our intention shall be provided with the capitation earned during this current year by the classes in operation—Southland will maintain her lead in this branch of school-work.

(c.) Cookery and woodwork classes: We inspected the cookery and woodwork rooms at all the centres visited, saw several of the classes in session, and examined the work executed by the pupils. We believe that in this department, too, Southland has no need to feel ashamed of her own achievements. We are fortunate in having, in these subjects, instructors equal to the best in the Dominion. The only question for serious consideration is that of the extension of the teaching of these subjects in other schools. It has long been our wish to establish a centre at Gore, where there is already in existence a partly equipped Technical School, and at which centre the children from the surrounding schools might attend for the purpose and receive instruction in these most important and useful branches of education. In the meantime only the boys and girls in the Gore High School, the Gore, and the East Gore Schools, are in receipt of this training. For three years past our Invercargill instructors have visited Gore every Tuesday for forty weeks each year for the purpose of conducting classes. We should like, when the permanent manual-training rooms which are to form part of the High School are erected, that cookery and woodwork instructors should be appointed to this centre. The question of finance is, however, a difficult matter.

If this centre is to earn sufficient capitation to pay its instructors an adequate salary apart from any contribution towards the central administration fund, it is necessary that all the boys and girls in the Fourth, Fifth, and Sixth Standards from every school near the railway-line between Wyndham and Lumsden should attend at Gore on one day a fortnight during the school year. Were there a sufficient number of pupils in and around Riverton to maintain the financial stability of the undertaking, a manual-training school might be established at this centre also, but such is not the case at the present time.

(d.) Elementary agriculture: The teaching of agriculture in the primary schools engaged our careful attention. Special instructors have been appointed in Auckland, Wanganui, Wellington, and Taranaki, while one officer distributes his energies over Marlborough, Nelson, and Grey. The instructor in the North Canterbury District resigned his position some time ago, but the Board has not so far taken steps to appoint his successor. Broadly stated, the duties of these officers include the organizing of the teaching of nature-study and elementary agriculture in their various districts, the supervision of the operations in the school gardens, and the conducting of the training classes for teachers. Further, some of these instructors carry on classes in technical schools and in various rural centres for persons engaged in agriculture or dairying. In passing, it may be noted that the attendance at the last-named classes has not hitherto been entirely encouraging.

In Auckland, teachers within reasonable reach of certain centres (four in number) are permitted by the Board to close their schools on two days a week for three consecutive months, and are thus enabled to attend classes for instruction for a total period of twenty-six whole days. In January and February a summer course, extending over twenty-four days, is provided for teachers who are resident in remote parts of the province and who cannot attend one or other of the centres referred to above. To enable these backblocks teachers to avail themselves of the full course, the Board extends their summer vacation for a fortnight. In June and July, 1907, a winter school for dairymen was held in the Auckland Technical College, and in August a short course for students in training was conducted at the Training College.

The various engagements of the Auckland instructor would appear to leave him little time for visiting schools; he keeps himself in touch with teachers by issuing from time to time pamphlets, bulletins, and leaflets containing helpful suggestions as to garden operations, apparatus, various phases of nature-study, &c.

The Wanganui Board has appointed two special instructors, one in agriculture, the other dairying. Besides visiting schools for the purpose of advising teachers and giving demonstrations in their respective subjects, these officers conduct at various centres Saturday classes for teachers as well as for farmers.

In Wellington, as in Auckland, it is felt that the instruction of teachers in such a subject as elementary agriculture cannot be successfully carried out by means of Saturday classes; the Board has consequently made arrangements by which a limited number of teachers may attend, for a fortnight at a time, one or other of the centres. When not engaged with these teachers' classes, the instructor visits the schools that have included elementary agriculture in their scheme of study.

The salaries of the special instructors are paid from various sources. In Auckland the classes in operation earn sufficient capitation to meet the total of Mr. Jackson's salary. In Wanganui the remuneration paid to Mr. Grant is £300. Towards this sum the amount of £20 from the grant for the training of teachers was appropriated last year; the capitation earned amounted to £150 1s. 2d.; the balance had to be made good by the Board. For the year 1907 the loss on the year's operations amounted to £168 7s. 2d. In New Plymouth the instructor has no stated salary, but receives £1 5s. per school visited, and he has twenty schools to look after. He is a nursery-gardener by trade, he lives in the country, uses his own buggy when visiting the schools, and stays with friends. In addition, he conducts teachers' Saturday classes in elementary agriculture, and for this service receives a fee of £1 1s. per day. In Wellington Mr. Davies receives a salary of £300 per annum. Last year £175 of the teachers' training grant was devoted towards the salary, about £100 was received in capitation on the forty classes under instruction, and the balance of about £40 (including expenses) was met out of the Board's funds. In Southland the number of schools carrying on classes in agriculture at the end of 1907 was fifteen. The total capitation received on account of the 179 scholars in average attendance at these classes amounted to £22 2s. 6d. This year the number of classes has increased to thirty-two, and the estimated capitation thereon will amount to somewhere about £60.

We have on other occasions endeavoured to make clear to the Board what, in our opinion, is connoted by the phrase "elementary agriculture in primary schools" (see Inspectors' report for 1907), and what is the function and purpose of a school garden. In an article in the *Nineteenth Century* of recent date, Mr. J. C. Mead, an authority of repute in England, emphasizes the proposition that the aim of the school garden and of all teaching connected therewith is educational, not technical. "Any attempt," he writes, "to remodel the curriculum of the village school from the agricultural standpoint alone is wrong in principle, and certain to result in disappointment. The schools have to provide for thousands who under no circumstances will be concerned with the cultivation of the soil, and their function is to stimulate intelligence, application, self-reliance, and adaptability in all the pupils indiscriminately. These qualities are as necessary in the factory as in the farm. The most that can reasonably be expected from making the schooling of country children correspond with their environment is that their minds will not be diverted from rural pursuits, that they will be better fitted to engage in them with profit, and that they will be less influenced by the glamour of the town. . . . The function of the school is to educate—not to prepare for any trade or industry. Wide general knowledge is an essential antecedent to all specialisation, whether it relates to the farm, the workshop, the factory, or the office." And Mr. Hogben, in an address delivered before the Hawke's Bay Farmers' Union, expresses similar views: "I note especially," he says, "the stress laid by Mr. Hall on the necessity for sound preliminary work in the primary schools—such work to include nature-study and the keeping of school gardens—not so much with the view of imparting technical knowledge in agriculture, but rather as a part of general education, to train the observation and other personal powers of the children. . . . Very little instruction that can in the strict sense be called technical—i.e., bearing directly upon the principles that underlie a given trade or trades—can be given, or ought to be attempted, at a school, least of all at a primary school."

As our visit to the northern centres was made at a time when active work in the school gardens was suspended, and when the gardens themselves were in a more or less neglected condition, the data gathered by us may probably be regarded as insufficient to warrant us in pronouncing a definite opinion as to the quality and value of the work done in connection therewith. There was evidence, however, that many teachers have sufficiently realised the possibilities as well as the limitations of elementary agriculture as a school subject, and have properly appreciated its place in the school curriculum. On the other hand, the conviction is forced upon us that in many cases the purpose of the school garden is entirely misunderstood: the instruction is too technical, too much is attempted, and there appears to be a tendency to exalt unduly the horticultural and kitchen-garden point of view—to grow the finest bloom and the biggest turnip for exhibition at the local flower or agriculture show. Several Inspectors and teachers whom we interviewed expressed similar convictions; and other Inspectors have, in their reports, recorded opinions equally emphatic. In short, our investigations have furnished us with no valid reason for revising the opinion we have on other occasions conveyed to the Board, that for the successful treatment of elementary agriculture in our primary schools it is unnecessary to have a special instructor, and we are the more strongly confirmed in this opinion from observations we previously had opportunity of making in an education district where no such instructor has been appointed. We can say unreservedly that, in the district referred to, the work done by the teachers without the supervision and advice of an expert in agriculture reaches a high standard of excellence;

and we see no reason why equally good results may not be achieved in Southland, the teachers of which are no less intelligent, capable, and enthusiastic than those who labour in other parts of the Dominion. Most of the Southland teachers who have already taken up or who contemplate taking up this subject, are men and women of considerable experience in their profession, and all of them have furnished evidence that they are possessed of some practical knowledge of and a liking for cottage-gardening. The Board has already done something to equip its teachers more fully for this special work in that it has established classes the instruction in which has more or less direct reference to the teaching of agriculture. Amongst these may be mentioned the classes in botany (conducted by Mr. G. M. Thomson), agricultural chemistry (Mr. G. D. MacIndoe), and practical gardening (Mr. Sampson). The last-named class was established last year in order to enable candidates for a departmental certificate to comply with a provision of the regulations governing the examination of teachers. This provision required from a candidate, who wishes to be examined in elementary agriculture a preliminary certificate showing that he has satisfactorily completed an approved course of instruction in the subject. The purpose of the provision, it is explained, is to secure that the basis of the examination shall be intelligently directed practice of a suitable kind, and not mere book-work. We are confident that we shall be able to make from year to year such arrangements for providing this practice as shall be satisfactory to the Department, the cost being charged against the grant for the training of teachers. In Southland there are now, as we stated above, thirty-two classes in elementary agriculture conducted at the larger schools in the district. Not a few of the School Committees manifest a lively interest in the classes, and render assistance in fencing the plots, in providing cereals, and in other ways. The local mercantile firms in town have also become interested, and, recognising the value of this form of instruction, have signified their willingness to assist in the successful establishment of the classes by valuable donations. For instance, the Southland Frozen Meat and Export Company donated all the manures, while Messrs. Sutton and Sons, per Mr. Tothill, donated all the garden and field seeds required for this season's operations. An effort is being made to erect a small tool-house in connection with each garden, in order that the tools provided by the Education Department may be suitably housed and cared for. Towards this object the New Zealand Pine Company have promised a considerable quantity of the timber required, and other firms are being approached for assistance. We are hopeful that before the end of the season every garden will be provided with this necessary convenience.

*Special and Continuation Classes.*—A comparison of the prospectus of evening classes conducted in this district under the Manual and Technical Instruction Act with prospectuses issued elsewhere will show that, when all the circumstances conditioning our operations are considered, Southland does not lag behind other centres in regard to the number of classes; and the comparison is equally satisfactory in respect of the number of students and the quality of the work accomplished. But in certain centres technical instruction has been extended to a degree hitherto found unattainable in this district, and this extension, in some cases at least, has been rendered possible by the fact that there appears to be some sort of relation between the attitude of the people towards technical education and their latitude: the further north one goes the better disposed do the public seem to be towards technical schools and their work, and the easier it is for the directors of such schools to collect contributions in support thereof. And as these carry a subsidy of £1 for £1 from the Department, a controlling authority may have at its disposal from this source a very substantial sum in addition to the income accruing from capitation and fees.

The following subsidies on voluntary contributions were paid by the Department to various centres for 1907: Otago, £358 17s.; South Canterbury, £450 6s.; North Canterbury, £626 11s.; Wellington, £653 8s.; Wanganui, £1,083 19s. 9d. (including £506 subsidy on contributions for buildings); Auckland, £10,713 4s. 2d. (including £10,000 subsidy on contributions from Savings-bank Trustees). By the aid, in large measure, of voluntary contributions and the subsidies thereon, there has been established in each of the city centres, Auckland, Napier, Wanganui, Wellington, and Christchurch, a technical day school which is specially intended for the free education of those pupils who have obtained certificates of proficiency, and which serves as a stepping-stone between the primary school and the technical evening school.

In these schools courses are available in some or all of the following—Commerce, domestic pursuits, trades and industries, art and agriculture; while instruction is also provided in advanced English and mathematics (as for Standard VII). The school terms and the school hours in most cases closely coincide with those of the primary schools—*i.e.*, from twenty-five to thirty hours a week for from forty to forty-two weeks a year. A junior free place in a technical day school is tenable for two years, and, conditionally on his passing the qualifying examination at the end of this period, the holder of a junior free place becomes entitled to free education for a further period of three years either at the day school or at the evening technical school. The income derived from capitation may amount to about £15 per free pupil per year. The most popular, and, by consequence, the largest grant-earning courses are the commercial and the domestic—*i.e.*, the course providing instruction in such subjects as book-keeping, typewriting, shorthand, commercial history, commercial geography, commercial correspondence and *précis*-writing, business method and office routine, &c., and the course providing instruction in such subjects as cookery, needlework, dressmaking, laundry-work, hygiene, &c. It appeared to us that in some of the technical schools the curricula arranged for the pupils taking these two courses were almost exact replicas of those found in some secondary schools, the most material difference being that the syllabus of the technical day school makes no provision for the study of any language besides English. Having previously given some consideration to the question of establishing a technical day school in Invercargill (see report of Director of Technical Instruction for 1904), we took occasion to interview the Inspector-General of Schools in order to learn what prospect there was that a proposal to this effect would receive departmental sanction. Mr. Hogben's reply was unfavourable. The Depart-

ment is quite aware of the overlapping above referred to, and intends to take steps to remedy what it considers a most undesirable condition. Indeed, it has already done something in this direction by reducing the grants in commercial and domestic courses, which reduction has seriously hampered controlling authorities in carrying out engagements entered into on the basis of the original capitation-rate. Without the income earned by pupils taking these two courses, a technical day school in Invercargill could not be carried on, and the project must, we fear, be abandoned—with some regret on our part, we have to admit. We believe that many pupils now attending high schools would profit more from attendance at a day technical school; moreover, at and near all the larger centres there are considerable numbers of pupils holding proficiency certificates whom the local high schools fail to attract, or for whom they do not provide suitable courses of instruction. Some of these pupils remain for longer or shorter periods in the primary schools as Standard VII pupils, doing work of a more or less (generally less) useful kind. But a very much larger proportion of these pupils leave school and engage in various temporary occupations until they reach the age when they may enter upon their chosen industry or pursuit. The period from fourteen to sixteen, during which the young people might, and should, make valuable preparation for industrial pursuits concurrently with the extension and deepening of their general education, is almost entirely wasted because we have at present no means, or quite inadequate means, for supplying this preparation and checking the economic waste. In the technical day school the course of instruction, while providing a sound general education, is definitely arranged to prepare pupils for the careers for which they are intended and for which they will afterwards specialise in the evening technical school. And if it is true (as we are assured it is) that the attendance at high schools in the towns in which there are day technical schools has not only not been prejudicially affected but has actually increased since the establishment of the latter, it would almost appear that, in the larger centres at least, there is for each of the institutions a province that it may profitably occupy. In this connection it may be noted that in the State of Victoria, where secondary education has been left hitherto almost entirely to private enterprise, there is now before Parliament a Bill which embodies the recommendations of Mr. Tate, Director of Education—the outcome of his observations during a recent visit to European countries and to America—and which provides for the establishment of a large number of high or intermediate schools intended to be largely technical in character. These schools will, we presume, closely correspond in function to the day technical schools of New Zealand.

We made special inquiry regarding the control of the technical and continuation classes in the various centres throughout the Dominion, and we found that at all the principal centres the local bodies had associated themselves with the Education Board as controlling authority, and that the work was being administered by a separate Technical Committee consisting of representatives from the Education Board and the contributing local bodies. The advantage of this system of control lies in the fact that an increased interest appears to be taken by the local bodies in technical education; and, as a result, they contribute somewhat liberally of their funds to the support of the schools in their midst.

Hitherto the work in Invercargill has been controlled by the Education Board alone, and no assistance has been asked from or given by the various local bodies in support of the classes, except in one instance when the Builders' Association generously contributed £12 10s. towards the equipment of the building-construction class-room. At Gore the Borough Council has contributed £25 per annum for the past two years in support of the classes at that centre, while at Bluff a number of private contributions were made last year. The fact that no such outside support has been asked for or received in Invercargill has not detracted from the success of the classes, as the returns compare most favourably with those in the centres where associated classes are the rule. But no extension of any magnitude—if such extension is at all possible—can take place unless the local bodies contribute towards the support of the classes, or the Board itself out of its ordinary funds is willing to provide a fairly substantial amount. The Government capitation is insufficient of itself to meet the expenditure, even under the present economical administration. As a matter of fact, the evening classes are not self-supporting. Since 1901—the year in which the Board took over the control of the classes from the Technical Classes Association—to the end of last year, the net receipts, not including the building account, have not equalled the expenditure by the sum of £414 16s. The deficiency has been met out of the capitation earned by the school classes, and constitutes a somewhat heavy and unfair tax on the school fund, which is entirely separate from the technical fund. As during all these years the cost of administration has been only £98 11s. 2d., the position is apparent. We know that the officers of the Education Department hold the opinion that the formation of associated classes should be encouraged, and we therefore submit the proposition to the Board. If the local bodies would pledge themselves not only to increase their interest in the classes, but also to provide half of the necessary amount to pay the Director a sufficient salary, the other half being obtained from the Education Department by way of pound-for-pound subsidy, then the experiment might be made. There is a danger, however, that the Department might at any moment reduce the capitation now being paid (as has already been done on more than one occasion), or the local bodies might withhold their donations, or both contingencies might have to be faced, and the situation would then be somewhat serious. We wish it to be distinctly understood that these remarks refer only to the control of the evening classes. The school classes are entirely self-supporting, and must be kept directly under the control of the Board, as at present. We have to express our grateful thanks to the Board for its kindness in allowing us the opportunity of making these investigations. We gained much valuable information not only in an enlarged conception of the best methods of carrying on the work in our own district, but also in learning what to avoid.

JAMES HENDRY  
W. A. McCaw.

Balance-sheet for the Year ending 31st December, 1908.

<i>Receipts.</i>	<i>£ s. d.</i>	<i>Expenditure.</i>	<i>£ s. d.</i>
Balance from year 1907 .. ..	369 12 9	Central Account—	£ s. d.
Central Account—		Salaries of instructors .. ..	278 11 6
Students' fees.. .. .	117 5 0	Material and apparatus .. ..	17 17 9
Capitation—		Furniture and fittings .. ..	22 19 0
Special classes .. .. .	117 12 10	Advertising and printing .. ..	35 13 1
Free places .. .. .	195 4 6	Rent of section .. .. .	2 10 0
Grants for material .. .. .	60 15 2	Janitor and lighting .. .. .	20 14 8
Grants for furniture and fittings .. ..	137 11 5	Administration .. .. .	33 15 0
Voluntary contributions .. .. .	32 4 6	Country Continuation Account—	
Country Continuation Account—Capitation	39 10 1	Capitation paid to teachers .. ..	12 8 3
Schools Technical Account—		Schools Technical Account—	
Capitation .. .. .	1,124 18 11	Salaries of instructors .. .. .	353 5 1
Refund for material .. .. .	124 18 3	Material .. .. .	204 18 10
Grant for rent .. .. .	65 0 0	Apparatus .. .. .	118 14 2
Grant for apparatus .. .. .	123 10 0	Rent of woodwork room .. .. .	32 10 0
Voluntary contributions .. .. .	2 6 0	Conveyance of children .. .. .	17 6 10
Schools Standard Account—		Janitor .. .. .	10 0 0
Capitation .. .. .	308 9 8	Administration .. .. .	67 10 0
Needlework capitation .. .. .	133 0 6	Schools Standard Account—	
Teachers' Training Account—		Material .. .. .	228 7 3
Government grant .. .. .	175 0 0	Needlework, salaries .. .. .	141 16 0
Donations .. .. .	91 17 8	Administration .. .. .	33 15 0
Refund on material .. .. .	5 7 9	Teachers' Training Account—	
Capitation .. .. .	77 11 1	Salaries of instructors .. .. .	134 16 0
Gore Account—		Material .. .. .	30 15 8
Students' fees .. .. .	37 15 0	Administration .. .. .	30 0 0
Voluntary contributions .. .. .	50 0 0	Gore Account—	
Subsidy on contributions .. .. .	50 0 0	Salaries of instructors .. .. .	109 12 6
Grant for furniture .. .. .	2 10 0	Furniture (machines) .. .. .	5 0 0
Capitation—		Lighting, fittings, &c. .. ..	53 17 8
Special classes .. .. .	42 12 0	Administration .. .. .	7 7 0
Free places .. .. .	32 7 0	Bluff Account—	
Bluff Account—		Salaries of instructors .. .. .	146 15 0
Students' fees .. .. .	93 5 0	Incidental expenses .. .. .	28 18 6
Voluntary contributions .. .. .	18 17 6	Rent of buildings .. .. .	10 0 0
Subsidy on contributions .. .. .	18 17 6	Mataura Account—	
Grant in aid of rent .. .. .	10 0 0	Salaries of instructors .. .. .	21 7 6
Grant in aid of material .. .. .	0 15 8	Printing and advertising .. .. .	1 11 6
Grant in aid of furniture .. .. .	2 10 0	Balance .. .. .	1,633 7 2
Capitation—			
Special classes .. .. .	128 5 0		
Free places .. .. .	31 4 0		
Mataura Account—			
Students' fees .. .. .	11 10 0		
Capitation—Special classes .. .. .	11 6 2		
Grant for fittings .. .. .	2 10 0		
	<u>£3,846 0 11</u>		<u>£3,846 0 11</u>

*Approximate Cost of Paper.*—Preparation, not given; printing (3'200 copies), £106 14s. 6d.

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