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Secondary School Agricultural Education

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1. The source of supply of post primary pupils is the Primary School. The destination of primary school leavers (boys only) has varied during the years, as shown in this table.

Destination	1927				1939				1951	
	With P.S.C.	Without P.S.C.	Total	%	With P.S.C.	Without P.S.C.	Total	%	Total	%
Post-primary	5857	120	5977	50.3	7391	170	7561	64.7	10986	89.4
Commercial	447	154	601	5.0	402	140	542	4.6	116	.9
Trades	554	262	816	6.9	463	205	668	5.7	321	2.6
Home	508	397	905	7.6	245	213	458	3.9		
Others and Unknown	627	584	1211	10.2	447	400	847	7.3	373	3.0
Agricultural	1284	1098	2382	20	909	702	1611	13.8	500	4.1
Totals			11892				11687		12296	

Figures are for European State Schools; they include Intermediates, but exclude Maori and Private Schools.

2. THE SECONDARY SCHOOL CURRICULUM:

For many years, there has been some departmental control over the curriculum, at least in State schools where the holding of a free place might be in question. This has generally concerned the teaching of fundamental subjects, some attention to English, Arithmetic or Mathematics, and History or Civics being required. Beyond that, the Principal was very largely free to develop such subjects and courses as he thought necessary or suitable. But the story of the development of post-primary education records on the one hand, the overwhelming influence of Matriculation, and in earlier days, about the beginning of the century, the reluctance of Principals to move very far from the traditional curriculum.

About 1944-45, there were several developments of the greatest significance. First, the School leaving age was raised to 15, and the tenure of a free place was automatically extended to include both the old Junior and Senior free places, i.e., to 19 years of age. Second, School Certificate and University Entrance were separated by making the latter a Sixth form, and the former a Fifth form examination. Third, a new post-primary curriculum was introduced. This took note of the fact that the great majority of children would receive some secondary education, which must, therefore, be adjusted to suit all requirements, and it laid down a common core of studies to be taken by every one: a core which was designed to be the basis of a sound education for citizenship in a democratic community. The requirements include attention to English and Social Studies, to elementary Mathematics and General Science, and to Physical Education, Art, Crafts and Music. These requirements are so tied to the School Certificate examination that private as well as State schools are obliged to comply with them.

The Secondary School course may be conveniently thought of as covering three periods, each of two years' duration. In the first period, the common core is most important, for at this stage we have to deal with many pupils who will not advance to the next stage. These short course pupils, whether in town or country schools, receive most benefit from the common core elements; but they also spend some time on studies of a more vocational nature. There is a growing

tendency for these pupils to complete two years; apprenticeship requires it in many cases. But there is an inevitable falling away of pupils in the second half of the year, in answer to the demands of trade and agricultural pursuits for labour.

The second two-year stage takes pupils on to School Certificate, which is still for most a four-year course, though there is a strong tendency for the examination to be attempted after three years. The common core is not allowed to lapse; but more and more attention is given to the four or five subjects (including English) required for the examination. It is now possible for a boy to concentrate solidly on agricultural subjects: for matters are so arranged that he can pass School Certificate in English and three Agricultural subjects, his general education being taken care of by the compulsory common core.

The third two-year stage is in the Sixth Form, in preparation for University work. Until a few years ago Agriculture was a subject at both the Entrance and Scholarship levels, but it was dropped from both, not merely because of a lack of interest in it, but because the subject was not regarded as a satisfactory introduction to a Degree, or even a Diploma, course in Agriculture. There is again some agitation for the inclusion of Agriculture at Entrance level, on the grounds that pupils who have come up through the Agricultural course to School Certificate are handicapped in their attempt to gain University Entrance by the dropping of their special subject. This argument loses sight of the fact that School Certificate is intended to be an end in itself; that those who are going on to the University should, at an earlier stage than post-School Certificate have entered a more academic course. Though School Certificate is generally a stage in the student's progress towards Entrance, it need not be. School Certificate is the end of a broad highway, beyond which is the narrower and more rigorous path to University entrance and the heights beyond.

3. Against this background, it will be of some interest to note the proportion of post-primary pupils that take Agricultural subjects. It is not easy to get accurate and intelligible figures. The larger city schools have fairly clear-cut courses; but even here, there is a growing tendency to break up the courses and to group pupils according to ability in English and other Core subjects; and to segregate them only for special subjects. In district high schools, which are very numerous and which naturally cater largely for country pupils, it has always been difficult to organise clear-cut courses, and to staff them. The following table gives some relevant information.

Pupils in Agricultural Courses in Post-Primary Schools (Secondary, Technical and Combined), not including District High Schools or Private Schools.

Year.	Total No. of Pupils.	% of all Pupils.	No. of Schools at which Agricultural Course Taken.
1945	1423	7.9	29
1948	1897	9.8	37
1951	2019	9.2	37

The number of pupils varies from school to school; e.g., Feilding (162 in 1951), to Thames (8 in 1951).

These figures may be compared with figures showing "farming" as the destination of pupils leaving primary and post-primary schools.

Destination Farming (Boys Only).

Year.	Primary and Intermediate School.		Public Post-Primary Schools.	
	No.	% of all Leavers*	No.	% of all Leavers.
1945	807	36.2	1924	23
1948	611	38.7	1825	22.1
1951	500	35.5	2031	21.6

*Excluding those going on to post-primary education.

4. These figures show that the numbers going farming are about the same as the numbers following an agricultural course; but as the length of stay is probably, on the average, between one and two years, it is clear that many go farming from some other kind of course. The position in district high schools is more obscure, because no figures are available showing the numbers following particular courses. It is known, however, that in 1951, 581 boys left these schools for farming pursuits; about 35% of all boy leavers.

Such figures, however, give no information about the quality of the instruction. A discussion on this point can best be introduced by an analysis of the content of some agricultural courses.

Analysis of Agricultural courses according to number of 40-minute periods in Forms 3, 4, and 5.

Subjects.	School A			School B			School C			School D		
	3	4	5	3	4	5	3	4	5	3	4	5
Field Husbandry	2	2	4	2	3	5	3	3	3	3	3	6
Animal Husbandry	2	2	5	2	2	7	1	2	2	2	4	4
Veterinary Hygiene	2											
Anatomy & Physiology	2											
Nutrition			2									
Genetics			2									
Farm Management	2	2	3									
General Science	2	2		6	5		2	2	2	4	3	
Farm Accounts	2	2	2	2	2					4		
Workshops	6	6	7	6	3	5	7	5	7	2	4	4
Dairying					4		2	2	2	2		4
Practical				5	5							
Wool Classing										2	2	2
Totals	18	18	25	18	20	26	15	14	16	19	16	20

Points to Note:

(1) There are 35 periods in the week, of which two or three may be given to drill and games; the balance is required by the Common Core.

(2) In Schools C and D, the term used is Agriculture, not Field Husbandry.

(3) School B has a farm, and gives a liberal amount of time to practical work on the farm after Form 3.

(4) School A also has a farm but restricts practical work to outside school hours except:

- (i) for regular essential work of a few boys at a time, and
- (ii) for certain seasonal work, particularly shearing, which is restricted to senior boys.

(5) School D has good facilities for Woolclassing.

There is considerable variety among these courses, and still more variety could be quoted. The fact is that the nature of each course depends largely on the facilities available, but partly on the attitude of the Headmaster.

5. AGRICULTURAL SUBJECTS IN SCHOOL CERTIFICATE EXAMINATION.

As mentioned earlier, it is possible for a boy to enter for School Certificate in English and three (or four) Agricultural subjects. The numbers who do so are relatively not great, because by far the larger number of Agricultural pupils drop out before School Certificate standard is reached. The following table may be of interest.

Number of candidates in Agricultural subjects in School Certificate Examination.

Year.	English.	General		Horticulture.
		Agriculture.	Animal Husbandry.	
1946	7497	267	110	51
1949	8723	306	134	139
1952	10562	329	155	119

6. GENERAL COMMENTS.

In the days when post-primary schools were dominated by University Entrance, as they undoubtedly were, there was little enthusiasm for Agricultural courses, which became a refuge for the mentally halt and blind. The most notable exception was Feilding, which built up a reputation, not only for itself, but for the soundness of a solid Agricultural course. Some attempts were made to force Agriculture into schools, and for many years it was compulsory for every boy in district high schools of small and medium size (roll under 70), to take Agriculture as a subject. The inevitable result was that in these and some other schools, Agriculture became the required Science subject for University Entrance; and there was a uniform syllabus, supported by a well-known text-book, from Tuatapere to Kaitaia. The short-course pupils picked up what they could of the Agricultural crumbs from the University Entrance table.

The position is now much better. Inspectors have observed that a better type of pupil is offering for the Agricultural course, and he is much keener than his predecessor on the type of work presented to him. There has also been recruitment of young, keen and well-qualified teachers of Agriculture, so that both subject-matter and teaching methods are improving. Other Government departments have helped to make this possible by the mass of literature on rural topics that they have produced. Practical craft subjects have also been much strengthened of recent years, and have also helped to improve rural courses.

There remains for discussion the question of the most suitable content of our Agricultural courses at post-primary level. Teachers and inspectors have no hesitation in recommending pupils who propose to go on to a University to enter a professional course and to leave Agricultural subjects in favour of pure Science and Mathematics. In this they will have the support of University authorities, who prefer such a preparation for any student who comes to them, whether in Degree or Diploma course. It is still true, however, that by far the greatest proportion of country youths end their formal education at the post-primary stage; and so there is every justification for giving them an elementary introduction to topics that are commonly included in General Agriculture, Animal Husbandry, and so on. The School Certificate prescriptions then become a useful guide to such studies.

A still unsolved problem is the question of practical work. The average farmer is probably not very enthusiastic about his son going to school to plough and fence; and teachers will, in the main, agree with him. The school farm is, in any case, far too great a responsibility for teacher or Board. In the very few cases where school farms are economically successful and educationally valuable, they are the result of a concentration of energy and purpose supplied by one man: and there is very little justification for even a successful farm, unless the driving force is provided by a teacher. The possibility of success is obviously limited, as a teacher has a full-time job in the School. It has therefore been recognised that a school farm is not so much a medium for providing opportunities for practical work—though it does so in limited amounts for each pupil—as a normal environment for a boy whose present and future interests are largely in farming. It can provide endless material for lessons, and is therefore to some extent comparable to a laboratory: but a dynamic laboratory, where the experimental materials are alive and growing.

There is, however, plenty of scope for practical experience in plot and laboratory work at the school, and in regular supervised and prepared visits to good farms in the neighbourhood of the School. There is promise of sound developments of that kind.