

18. When do you think the specialisation ought to begin in the child's life?—It ought to begin at the primary schools.

19. I should like to know your reason for saying that?—A child can be more easily impressed at that particular age than at any other period of its life. If you impress it when it is a child with a love of nature and the surroundings in the country you will encourage it to remain there. If, on the other hand, you teach the whole of the children in New Zealand in the same groove up to a certain age you will have them all growing up with the same thoughts. You see, in education you have two things to do—you have to teach certain things, and also to train the mind. Well, why should you not take up subjects by studying which the mind would have exactly the same training, and which would have special reference to the child's future life? I think it ought to begin in the primary schools.

20. Before you go any further, will you tell us what you mean by "specialisation," because the whole thing depends upon that? Let me put it in this way: do you mean specialisation with regard to the child's future occupation?—More or less—yes. Take, for instance, the exercises that the child would do. The teacher should take up, say, this book that I have here. He would take, say, Exercise 30, which is in relation to the country, or any other.

21. What is that exercise about?—The teeth of domestic animals. I should say that the teacher could show the child the advantages of knowing something about the teeth of animals. Here is an exercise on removing dirt and grease. This one, again, is about clothing on fire. And so they go on. I do not want to specialise professionally. I do not want to do it in the same way that you differentiate between medicine and law, or anything of that kind. I do not want to make it so complete as that. I want to make it more general. For the law there are special classes and there is the University to go to. You are trying to specialise in the different universities as to the degrees even.

22. Have we not in New Zealand a special college for agriculture—Lincoln College?—No. Canterbury has.

23. What is it, then?—It is quite beyond the means of most people to attend.

24. But it is there?—Yes.

25. It is practically a college specialising in agriculture?—Yes, that is for extended agricultural knowledge; and a very valuable institution it is. I have everything to say in its favour, and I think we are very fortunate in having it.

26. Do you think the children should begin to learn agriculture in the primary schools?—I do not want to say that they ought to be taught agriculture there.

27. I want to get at what "specialisation" is?—I want to direct the child's mind in the direction of agriculture.

28. Can that not be done by ordinary nature-study and pure science?—It could be done by nature-study, very largely.

29. And pure science?—Yes.

30. Which might be made general for all children up to a certain age?—No. Specialised in the sense that you would take up primary agriculture, say, in the country, and education more of a commercial nature in towns.

31. Do you think it is advisable for the children in the primary schools to be taught about manures?—Yes.

32. Do you not think it would be better to give them elementary lessons in chemistry instead?—Very well. You can teach them elementary chemistry by teaching them about the composition of manures.

33. I want to know whether you think the actual specialisation for a child's future occupation should begin at the primary school or later on?—I say, take the subject of manures up. It should be done in the garden. I have shown you where they have experiments with regard to manures. The children are taught that certain potash manures have certain effects on plants, and they see the effects. You can teach children better by showing than in any other way. I do not see that you need go into the chemistry of manures at all; but I should say the teacher would show the effect of manures on certain plants.

34. Yes; but the effect of manure as seen by the eye and the effect as judged from the chemical point of view are two different things?—You cannot teach the children, perhaps, the minutiae of all the constituents of manures; but you can teach them generally the result of the application of potash, of nitrogen, or of phosphates, and you can show them that certain plants are affected in a certain way by the use of these manures. And you can go a little further with the higher children, and make experiments in the laboratory, and so on. But these, of course, are all details.

35. With regard to the books now in use by the Department, are you aware what books are already authorised by the Department upon agriculture and nature-study?—I have only got that text-book of Captain Hutton's on nature-study.

36. These papers that I have here, which have been received from the Department, show the books that are recommended and those that are in use. The marks in the columns show which Boards use the different books. [Papers handed to witness.] Will you read the list of books on agriculture and nature-study, please, that are recommended for the new list?—Yes. Whitcombe and Tombs's "Agriculture," "Principles of Agriculture" (Blackie and Sons), "Elementary Agriculture" (Whitcombe and Tombs). That is one that I have put before you. "Plant-life in Field and Garden" (Cassell), "Trees and Shrubs." Now come the books on nature-study. "Nature in New Zealand"—that is one that I have shown you. Miall's "Object-lessons from Nature" (Cassell and Co.), "McMillan's Science Primer." Marlborough uses the first and last of these three.