

56. These University schools, which before the war managed to provide for all students who wished to attend, found themselves disorganized when, after the outbreak of war, they made some of their facilities available to the Service Departments. With the war still unfinished there began an influx into the schools as students returned to take up uncompleted courses. Moreover, the generous policy of the Rehabilitation Department gave to many an opportunity of qualifying for a career that, in the ordinary course of events, may have been beyond their financial resources. The special problems of the schools of engineering will be dealt with in more detail in Section 10, but here it must be mentioned that the major difficulty—lack of accommodation—has been almost impossible of solution except by the provision of further temporary buildings. The principal difficulty is that the same problem of influx of students that has embarrassed the schools of engineering is being faced in every faculty in every University institution in this country and that the accommodation problem is one not peculiar to the University. Student rolls are double the pre-war figure and, if the experience of the last war is any guide, the rolls for the University colleges as a whole will stabilize not very far below the peak period. The School of Engineering at Auckland University College is solving its accommodation problem for the time being by moving to the R.N.Z.A.F. station at Ardmore. The National School of Engineering at Canterbury University College has obtained partial relief by adding temporary buildings. So far the staff have carried on under adverse conditions with some loss of efficiency, a loss which will increase unless conditions are improved.

57. The Committee has heard evidence suggesting the desirability of restricting the entrants to the National School, based on the argument that it is better to handle a restricted number efficiently than a large number indifferently. It soon became evident to the Committee that, while this would ensure the maintenance of a high standard it would not provide the necessary numbers nor would it provide a complete solution to the problem. The weight of evidence makes it clear that, far from limiting entry, effective measures must be taken to encourage a greater number of capable young men to enter the profession. While some easing off in the total roll at the National School of Engineering is envisaged, it will be necessary for it to continue to train far more engineers than it did at any time in the pre-war period. A forecast of future requirements is set out in Section 8 dealing with supply and demand. If sufficient students can be drawn into the engineering profession to meet the requirements indicated in that section, and it will be a serious matter for this country if they are not, then everything possible must be done to provide additional facilities for their education.

58. A good deal of evidence was heard by the Committee about the qualifications for entry to the profession. This is considered in Section 9.

59. Although the Committee is firmly convinced of the desirability of offering every encouragement for prospective professional engineers to qualify through the University it nevertheless decided to make provision for those who for one reason or another cannot undertake a full-time University course. Some of these will already have begun study for the examinations leading to corporate membership of one of the British Institutions of Engineers. Their case is considered in Section 11.

60. However, the evidence presented to the Committee suggested another alternative. The growth of the system of national diplomas and certificates in engineering in Great Britain is indicative of the willingness of the British Institutions of Engineers to grant exemptions from their own examinations to applicants for corporate membership who have completed approved courses conducted by other authorities. The Institutions, too, encourage the Dominions to develop courses better designed to suit local conditions. The Committee therefore has decided to recommend the establishment of a system of diplomas in professional engineering. It is hoped that these diplomas will be accepted by the British Institutions of Engineers and that the courses and examinations will in time supersede the Institution examinations in New Zealand. This matter is discussed in Section 12, and the detailed courses and prescriptions are set out in Part IV.