

much stress has been placed on the passing of a written test, and too little attention given to the course followed by the candidate. That this is an undesirable practice is recognized both by the Engineering Institutions in the United Kingdom and by those making submissions to the Committee. Hitherto the Institutions have not required that the student shall have undertaken a properly organized course of study. Students in this country have obtained their instruction in the best way they could, by attendance at University and technical school classes, through the Education Department's Correspondence School, or through private correspondence schools. The limit of absurdity is reached when students pass (as they frequently have done) in practical subjects without doing any laboratory work in these subjects.

204. A further, though less objectionable, weakness in the present system lies in the fact that the prescriptions laid down for Institution Membership Examinations, though probably suitable for conditions in the United Kingdom, do not always meet fully New Zealand needs.

(2) DIPLOMAS

205. Both these weaknesses could be remedied by the development of properly co-ordinated courses of study for which adequate instruction was available. To be effective, however, such courses should reach in all subjects a standard at least equal to that of the Institution Membership Examinations. The Committee has little doubt that if this standard were reached and maintained the professional Institutions would be prepared to recognize the courses and the examinations to which they would lead as a substitute for the examinations set by the Institutions themselves.

206. While agreeing with the general principle, the Committee does not favour the establishment in New Zealand of full-time courses. As has been made clear in previous sections, any student able to undertake a full-time course should endeavour to qualify by way of a degree course in engineering. At the present time, however, there is a real need for an alternative method of qualifying as a professional engineer, and it is likely that this need will continue for at least some years. Indeed, the Committee thinks that this "second door" to the profession should not be closed. What is considered necessary is the establishment of diploma courses, which will be mainly part-time courses, but will include at least one year of full-time study. Without this full-time year the course is likely to be unduly long. One of the objections to the present means of reaching professional qualifications is the great length of time over which the student is compelled to spread his programme of studies.

207. In using the term "diploma" for the course which it recommends, the Committee is departing from British practice, where this term is applied only to full-time courses. It is desirable, however, to use this term in preference to the term "certificate" so as to avoid confusion with the recently established New Zealand Trade Certificates.

208. The "diploma courses," then, will be provided in certain technical schools, but it is not intended that each school approved for this purpose should set its own standard of examination. In order to obtain uniformity of standard and ensure ready recognition of the diploma by the Engineers Registration Board and the various professional bodies, the Committee considers that examination-papers in all subjects should be set, moderated, and marked by examiners appointed by the Education Department.

209. The nature of the proposed diploma courses, the subjects suggested, and the content of those subjects are set out fully in Part III. They have been arranged so far as possible to allow for gradual development of a properly grouped course spread over five years. In translating these prescriptions into vivid purposeful teaching it will