

### (7) RELATION WITH THE PROFESSION

225. It must be emphasized that the diploma courses will derive much of their importance from the fact that students will be drawn from those who are already engaged in some branch of engineering, whether in a Government Department, a local government authority, or in a private firm. Such students will require a somewhat different method of teaching from that suitable for University students. For one thing, they will be critical of theory that does not have relation to engineering practice as they know it. It is of the utmost importance for this, if for no other reason, that the courses should be constantly geared to the requirements of engineering occupations. There are other sound educational reasons for having such technical courses of study continuously under review. Engineering is a rapidly developing profession, and teachers who become immersed in the problems of teaching can easily lose touch with reality. Though this would be bad at the University level, it is much worse when the classes are composed of those who have some personal experience of the practice of engineering. Further, the courses that the Committee recommends can be undertaken satisfactorily only if employers are prepared to release selected employees for some hours each week. They cannot be expected to do so with any enthusiasm unless they have confidence in the courses laid down and the teachers to whom their employees will be sent.

226. The technical schools offering diploma courses should have the assistance of advisory committees on which there should be strong representation of leading engineers in touch with many fields of engineering. The Seddon Memorial Technical College and the Wellington Technical College, to give two examples, have active committees. An extension and strengthening of this practice is strongly recommended; indeed, your Committee would go so far as to recommend that the setting-up of such advisory committees be a condition of the approval of diploma courses by the Education Department.

227. Advisory committees should be free to make representations to the governing body of each approved school on any matters relating to diploma courses, and their advice should be sought on all matters pertaining to the correlation of theoretical instruction with the practical training of the young engineers attending the school.

#### RECOMMENDATION—

*That it be a condition of the recognition of a technical school for purposes of diploma courses that it set up one or more functional advisory committees for the branches of engineering covered by its courses.*

228. In Section 10, while discussing degree courses, the Committee stressed the necessity of providing some means whereby both the degree and diploma courses should be kept under review, and for this purpose advocated the setting-up of a Council of Engineering Education. The constitution and functions of this Council are set out in Section 14. Here it is only necessary to add that the Council should be brought into being as soon as possible, preferably not later than the date at which the diploma courses are commenced.

### (8) RECOGNITION OF DIPLOMAS

229. The Committee is definitely of the opinion that the successful establishment of the diploma system is contingent upon the recognition of diplomas by the Engineers Registration Board. Before giving this recognition the Board would naturally wish to be completely satisfied with the courses, the subject prescriptions, the conditions, and the examination standards. The Committee recommends, therefore, that there should be the closest association between the Education Department and the Engineers Registration Board in all matters relating to diplomas in professional engineering, that the necessary regulations should be approved by the Engineers Registration Board before being gazetted, but that the diplomas be issued under the authority of the Education Department.