

The estimate of the total number of graduates not available for scientific employment is dependent largely upon the 7 per cent. replacement which took place during 1947. The same figure was used in estimating wastage between 1948 and 1952. There is certainly a loss of graduates overseas and to non-scientific employment. The latter is probably not a serious factor, but the former demands some attention. In an attempt to answer this question we sought the opinion of a number of prominent scientists by questionnaire. From the views expressed by these gentlemen (see Section XI) we are of the opinion that the net excess of outflows over inflows is not serious numerically. The qualitative aspect of this loss is discussed in Section XI.

We think that the allowance of 10 per cent. made in Table E for graduates who do not find their way into the scientific labour force is not likely to be exceeded, and that the apparent excess of scientists and agricultural scientists as disclosed in Table E may be actually greater than the figures indicate.

After a careful study of the whole question of the supply and demand for scientists we conclude that—

- (a) By the year 1952 the supply of scientists and agricultural scientists will be sufficient to meet the Dominion's known requirement at that date.
- (b) Trends in home science indicate that the present shortage of graduates is likely to continue.

The Committee considers, however, in view of the importance of this question to the country as a whole, that a Scientific Man-power Standing Committee should be set up in order that the matter may be kept constantly under review. This is particularly necessary in view of the heavy enrolments in University classes over the past few years and the need for watching future trends in demand and supply. It must be remembered that it takes many years to train men for work at the highest levels of research, and that long-term planning is therefore the more necessary.

VI. THE QUALITY OF SCIENCE STUDENTS

One of the most difficult tasks confronting the Committee was that of obtaining a satisfactory measure of the quality of science students when compared with students in other faculties. After many attempts, we found two ways of obtaining a partial answer to our problem; the answer cannot, unfortunately, be complete. We considered first the available information on the quality of students entering on science courses, and then proceeded to compare the success of science students in their University examination with that of students presenting themselves for examination in other faculties. It is admitted quite frankly, for reasons that will appear later in this section, that neither of these methods, using available data, is entirely satisfactory. Taken together, however, our results point, we think, to the direction in which the correct answer may reasonably be expected to lie.

There is unfortunately, no common standard whereby the quality or ability of students entering University for the first time may be judged. University colleges do not make use of standardized tests of intelligence or even of such tests of general attainment. It is generally admitted, however, that winners of University Entrance Scholarships are, by and large, the ablest students from our post-primary schools. An analysis