

*Education Standards*

A marked characteristic of this expansion of higher education has been the difference in the growth rate of particular disciplines. The distribution of students a decade ago was quite different from today. Expansion in the fields of pure science and education has been striking. Enrolments in these fields increased by about 450 per cent between 1957 and 1967. Arts enrolments have also enlarged greatly, from 26,000 in 1957 to 94,000 in 1967.

Lack of growth, however, is apparent in the fields of medicine and engineering. Only 300 more students were enrolled in medicine in 1967 compared with 1957, an increase of 7 per cent. In engineering in 1967, enrolments were 18,498 compared with 13,050 ten years previously, an increase of 42 per cent. A similar trend in growth is found in the number of students receiving bachelor and first professional degrees.

A different pattern of growth emerges from an analysis of post-graduate degrees. The largest percentage increase from 1957 to 1967 in both masters and doctorate graduations has been in engineering. The former was 403 per cent greater in 1967 than in 1957, and the latter was 741 per cent greater. The proportion of engineering graduates to total graduates at the doctorate level increased from 4 per cent in 1957 to 13 per cent in 1967. This contrasts sharply with the very small growth in first degrees of engineering students.

The social sciences had the largest share of masters degrees, while the biological and physical sciences accounted for almost 60 per cent of all doctorates awarded in 1967. The smallest growth was exhibited in the biological sciences, where graduations in 1967 were not quite 100 per cent greater than those in 1957 compared with an average 170 per cent increase for all fields.

The new supply of highly qualified manpower will tend to follow this growth pattern. However, the number of graduates by no means represents the actual domestic inflow into the stock. There are a number of leakages from the system which will tend to decrease the number of new entrants. There are a large number of foreign students who after receiving education in Canada return to their home country to seek employment.

In 1967 there were 12,900 foreign students enrolled in Canadian universities. This represents approximately 5.6 per cent of total enrolments. While we know that many of these students emigrate after graduation, at present we have no data on just how large this group might be. Similarly, many Canadian students choose, rather than enter the Canadian labour force after graduation, to seek employment outside Canada. Others prefer to continue their studies either within the domestic system or outside the country.

Eventually some of these migrants return and add to the flow into the system. Again we have no estimates of the magnitude of these inflows. We do, however, have some idea of the stock from which this flow might come. In 1967 there were some 12,000 Canadians studying in universities in the United States, and 600 in Britain. Growth of enrolments at universities in the United States has not matched the rapid increase in enrolments at Canadian universities. In the former, enrolments in 1966-67 were 166 per cent greater than in 1952-53. In

Canada, total enrolments were 266 per cent greater over the same period.

Interestingly enough, however, the pattern of growth by field of study was similar at home and abroad. For Canadians in the United States, as in Canada, the proportion studying engineering and health professions particularly medicine, declined. Growth in the social sciences was the most striking. Enrolments in the social sciences in 1968 were five times greater than in 1964. This rapid expansion most probably reflects a growing interest in the relatively new discipline of social science.

The flow of foreign, professional manpower into Canada has grown rapidly in the last decade at approximately the same rate as the domestic educational system. In 1950, 4.2 per cent of all immigrants were professional. By 1960, this percentage increased to 14 per cent, and in 1967 it was 26 per cent. Over this 17-year period the absolute number of professional immigrants increased from 1,686 in 1950 to 30,853 in 1967.

While there has been an ever-increasing inflow of highly qualified manpower both from the educational system and from abroad, the outflow of this type of manpower, at least to the United States, has been remarkably constant. The number of professionals emigrating to the U.S. has varied little in the last decade. In 1956, 5,277 professionals left Canada to take employment in the United States. In 1961, 5,285 left and in 1967 the number was 6,386. The net loss to Canada is probably less than the figures show because residents returning to Canada from the United States are not recorded.

**Mr. Chas. L. Caccia (Parliamentary Secretary to Minister of Manpower and Immigration):** Mr. Speaker, in reply to the request made by the hon. member for Parry Sound-Muskoka (Mr. Aiken) as to why this report cannot be tabled, may I say it is due to the fact that the study was provided by officials of a foreign government on a confidential basis. It was obtained after the commitment was given by our officials that at least part of the contents of the study would not be made public. Having given this commitment, it is obvious that it is not appropriate for the department or for the government to make public the contents of this document. It is perhaps regrettable but it is a fact. It is the respecting of an undertaking made in good faith. I think that any member of the House who had made such an undertaking would respect it.

• (5:50 p.m.)

It was a document prepared for the very good reasons that were put forward by the hon. member for Parry-Sound-Muskoka. It was designed to develop guidelines by which Canadian equivalence might be established for degrees and diplomas gained in other countries. It was an attempt to evaluate degrees obtained in certain foreign countries in terms of Canadian degrees in the same disciplines, and it covered arts and sciences and all licensed professions.

Evaluating the preparation which an applicant's education gives him for employment in a specialized field in Canada does pose a problem, and this evaluation plays a