training and with the ability to adapt to a continually changing work environment. A look at what has been happening to occupations points clearly to the growing need for more education and training. Estimates prepared by the federal Department of Labour show that in the period 1958-59 skilled, professional, and 'white-collar' jobs represented about 54 p.c. of employment in Canada, and that semi-skilled and unskilled occupations constituted some 30 p.c. Furthermore, the fastest growing occupations were those requiring higher levels of education and training. In the period 1949-59, professional occupations had increased by 71 p.c., skilled occupations by 38 p.c., and white-collar occupations by 34 p.c., while semi-skilled and unskilled occupations increased by only 24 p.c.

At the same time as the shift in occupations has been occurring, Canada has been faced with the serious problem of young people leaving school too early. The majority of youths who have been entering the labour force have not had sufficient education and training to meet the needs of industry. About one third of the young people who have entered elementary schools in recent years have left school at or before grade 8. Another third have left before completing high school.

In this regard, Canada faces an even greater problem in the next decade. The population in the age group 15-19 will increase by an estimated one quarter of a million persons over the period 1960-65 and in the last half of the decade the numbers will be even greater. It is essential, therefore, that these young people be provided with the kinds of education and training that will serve as effective paths to satisfying working careers in tomorrow's world.

The level of education and training of those already in the labour force is also cause for concern. About 43 p.c. of the work force in 1960 had an education of grade 8 or less, yet technological change has generated a need for workers with higher levels of education and training. Training programs in industry have not been increasing at a sufficient rate to meet either the growing demand for skilled people or the urgent demand for training facilities. Between 1946 and 1956, of the 280,000 skilled workers added to the labour force, 110,000 came from abroad. The heavy reliance on immigration as a major source for skilled and technical workers means that development of Canada's own manpower resources has been neglected to a considerable extent. Canada can no longer depend on immigration as a main source of trained manpower because the countries from which such manpower has traditionally been drawn also have a strong demand for skilled workers.

A recognition of all these factors culminated in the Technical and Vocational Training Assistance Act of December 1960, thus altering decisively the course of technical and vocational training. Essentially, the new legislation provided for greatly expanded assistance to the provinces to allow them more effectively to meet Canada's urgent need to train both the youth and adult populations.

The Pattern of Vocational Education and Training.—The pattern of vocational education and training in Canada varies from province to province and there are also variations within the provinces. There are basically three types of institutions offering vocational education—trade schools, secondary (or high) schools, and post-secondary technical institutes. Courses at the trade level do not usually require high school graduation; the grade level demanded, which varies according to province or trade, ranges from grade 8 to grade 11 or even grade 12. On the other hand, enrolment in technical institutes presupposes high school graduation or at least high school standing in such relevant subjects as mathematics and the sciences. Training in schools is basically a provincial responsibility. Thus, most of the trade schools and institutes of technology across Canada are provincially operated, but many municipal school boards provide vocational courses as part of the regular high school program in technical or composite type schools.

Vocational education is also carried out under a system of apprenticeship training. A main feature of apprenticeship is that training is done mainly on the job with concurrent attendance in classes either during the evening or on a full-time basis during the day for periods ranging from three to ten weeks a year.