

there is little doubt that other departments and private firms would follow. The Railway Department has a large number of youths in its employment in the workshops at Newmarket, Napier, East Town, Petone, Addington, and Hillside, and there are well-equipped and efficiently staffed technical colleges within easy reach of all of them. Nearly forty years ago the superintendent engineer of an important English railway, knowing the value of trained workmen and the value of technical training, made attendance compulsory at certain technical classes specified in the indentures for all apprentices at the main railway workshops, and provided the class-rooms, the necessary material, and the instructors. Surely, with our present-day fuller knowledge a similar enlightened policy might with advantage be followed.

TECHNICAL HIGH SCHOOLS.

Since the inception of this type of school the general organization and courses of instruction have to some extent been in a state of flux, largely due to the fact that the adaptation of the instruction to business and trade requirements has only been possible as these became more fully known to those responsible for shaping the courses, and to the difficulty of providing a staff of instructors for each course having a sound technical knowledge of their subject and the power to impart it to others. It is gratifying to be able to state that the future craftsmen and workers in the principal centres of the Dominion can now, if they choose, enter upon a course of foundation study of the craft or trade they have selected, well adapted, from the technical standpoint, to their needs. The several subjects of each course are in charge, for the most part, of instructors having an intimate knowledge of their subject, and the instruction is given in class-rooms, laboratories, or workshops, as the case may be, equipped with most of the apparatus that modern teaching demands. It is considered that a complete adjustment of the organization of the technical high schools can only be accomplished when the work done therein receives a wider trade recognition. The value of the training given both to the individual and to the nation has passed beyond the debatable stage, and it is now generally acknowledged that quickened intelligence, broader outlook, and clearer insight combined with manual dexterity are valuable assets to both employers and employees; and if any one of these are gained by lads passing through the technical high school it has a monetary value to the employer, and should be recognized by either increased wages or by counting the three school years as some part of apprenticeship. The recognition by the Marine Department of time spent in an approved course in engineering as counting towards the qualifications for a third-class marine engineer's certificate is already having a salutary effect upon the engineering course, and as soon as employers satisfy themselves that it is to their pecuniary interest for apprentices to have had some preliminary theoretical and practical training before entering the workshop, and recognize in a practical way that the theoretical training must continue during the period of apprenticeship, the question of the supply of intelligent and well-trained workmen should be practically settled.

The European war has, among other things, directed attention in the Homeland to the necessity for a review of fundamentals in education, and one conclusion already arrived at is that the study of science has been too long neglected; and, further, that if the nation is to regain and hold the commercial supremacy it once had, the study of science in its application to industries must take a very much more important place in our system of education than it has hitherto. That science has not in the past received adequate attention in this country is a matter of common knowledge. It is therefore all the more gratifying to report that, speaking generally, the time devoted to science and principles at the technical high schools is in relation to their importance, and although the opportunities of making any direct application of science to industry are obviously limited, a lad showing originality or predilections for research is not likely to go undiscovered; and when the organized industries of the Dominion attain the position which demands the employment of scientists as well as mechanics we should be in the position to meet the need and not be compelled to rely solely on external sources of supply.

The courses provided at the technical high schools are related to commercial, domestic, industrial, and agricultural life, and the following short comment on each course is intended to indicate, in a general way, what is being done.

Commercial Course.—This course is attended by an increasing number of pupils, and is arranged to provide instruction in the fundamentals of modern office methods and work; and while in the earlier stages the course of instruction is necessarily somewhat academic, it is, in the main, so closely related to everyday business practice that students on entering the office have nothing to unlearn, but can at once apply the principles and practice acquired at the technical high school. In this connection the question arises whether the function of the course should be limited to the preparation of junior office assistants. There appears to be substantial reasons why something higher should be aimed at, particularly for apt pupils who may be encouraged to continue their studies as holders of senior free places with a view to matriculation and the degree in commerce. The difficulty of obtaining trained instructors having a sound knowledge of the principles and history of commerce and an intimate acquaintance with business methods appears to be a cogent reason for encouraging likely students to continue their studies.

Domestic Course.—Many reasons may be assigned for the small proportion (about 30 per cent.) of the girls attending this course, the principal being the opening of so many other avenues of employment for girls. The course of instruction is thoroughly practical, with a sufficient training in the scientific principles to give interest to the practical work. A pleasing feature of this course is the number of instructors in domestic subjects in various parts of the Dominion who have received their preliminary training at one or other of the technical colleges; and with the facilities now provided for the continuance of the study of domestic science up to University standard, the hope is expressed that, with the view of preparing students for the higher work, and insuring a supply of