relieves schools of the burden of selling to individual buyers. Since by this arrangement the schools have to deal with but one buyer at a time, no accounting difficulties are likely to arise. Also, when the articles are ready for sale they need not be allowed to accumulate in the salesroom of the division, but they can be displayed to the public by the local dealer.

COÖPERATION OF SCHOOL AND LOCAL INDUSTRIES.

By WM, S. FICKES, Division Superintendent of Schools, Iba, Zambales.

The town of Olongapo, situated in the southern part of Zambales Province, derives almost its entire income from the salaries of those employed in the shops of the United States navy yard. Being a Federal Government reservation, the municipal administration is conducted by detached naval officers who regard honest work as the duty of every normal man. Since only able-bodied men are employed in the yard, and all male residents not engaged in business are required to work or leave the reservation, there is a notable absence of indolence and unemployment.

As the fathers of almost all the school children are men doing manual labor and earning from \$1.50 to \$8\$ per day, they are highly interested in having their sons receive training that will be advantageous to them in securing advanced positions in the navy yard. The naval authorities are in constant need of trained men, and the schools have been in need of facilities for giving the boys such training as will be of greatest benefit to them in afterlife.

The conditions being so favorable, steps were taken toward the establishment of cooperative industrial work between the schools and the navy yard. The preliminary arrangements were concluded with the commandant, Capt. Benjamin Tappan, as to the courses to be followed, the nature of the work to be taken up, and the time for giving the instruction. Early in August, the boys of the fifth grade began their industrial training in the shops of the navy yard.

There was a question as to the best method of arranging the academic work so that the boys might be able to complete the intermediate course as outlined by the Bureau of Education. The class was divided into two groups of eleven boys each. These groups were assigned to alternate weeks in the shop and in the school from 7.30 a. m. to 12 m., Sundays and holidays being excepted. This allowed full time in school for one half of the boys during every other week. The academic work missed by the section in the shop was made up by taking double

periods in the morning class work when the section returned to school. The problem of completing the academic work was made more difficult on account of both boys and girls being enrolled in the class with but one teacher. It is clear that had this been a one-sex school the task of giving academic instruction would have offered less difficulty. It was found to be a satisfactory arrangement to have the girls do their industrial work in the morning. The afternoons from 2 to 4.20 were devoted entirely to classroom work with all present.

Groups one and two were further subdivided in the shop into those taking ironworking and those taking woodworking. Both of these departments are under the direct supervision of an American foreman with many years of practical experience. One of the greatest advantages to the student apprentice consists in his having access to the best and most modern equipment. Nothing is made in this crafts shop that does not have a specific use as a part of the wide scheme of repair and construction carried on in the navy yard. As this scheme has been in operation for a period of only one school year, statements as to the benefits derived by the navy yard or by the boys of the community, must be cautiously made. But a considerable amount of valuable work has been done by the boys for the navy yard. They have in turn received a vast amount of practical instruction which will be of worth to them later. The purpose of our schools has been demonstrated to the people, who in turn have awakened to the fact that the aim in education is not to raise up a generation of men and women professionally academic, but to elevate the standard of each individual as a citizen, whether he be a mechanic, an engineer, or a painter.

The work of preparing these boys for employment in the navy yard presents fewer difficulties to the naval authorities than if they were being trained as regular apprentices. While a longer time will be necessary to bring them to the place where they may be classed as skilled workmen, yet their alertness of mind and knowledge of English makes them superior to the class of uneducated boys usually applying for admission to apprenticeships. And their mental ability will be a great asset making for efficiency when they have attained eligibility to employment as skilled workmen.

It is not believed that such cooperation should be attempted except in communities where there are modern industrial plants. To send a class of boys off to an establishment having poor facilities for their training would not be in accord with the present day demand for advancement.