

school—in many sections ‘from two to three years’ Government officials say. What statistics we have in the United States go to prove the same thing: in the agricultural high schools of Alabama, Wisconsin, and Minnesota there is constantly a large percentage of students who would have dropped out of school with only an elementary education had there not been the opportunity to learn of the things in which they were naturally interested. Agricultural high schools would be worth all they cost if they were attended only by those young people who otherwise would have dropped out of school.

“The economic value of up-to-date instruction in agriculture may seem to be so well recognised as to demand little more than a statement of its importance. But the essential thing to note is that our schools for the children of rural districts have not kept up with the wonderful progress made in agriculture. The workers in our experiment stations have discovered facts of the greatest importance to the masses of farmers, but the new truths are surprisingly slow in seeping down into the soil needing enrichment. Every farmer-boy ought to be taught how to choose the best seed-corn, but it has been impossible to get this information to the people of Iowa and neighbouring States through the public schools. Hence the railroads came to the rescue, and they are freely furnishing trains to carry over their lines agricultural-college lecturers who shall teach the farmers how to raise a fifth more corn through the careful selection of seed, and Iowa has already added \$8,000,000 a year to her income as a result. Many boys’ agricultural clubs are studying the selection of seed-corn, with the consequence that some Illinois boys are selling their corn for five times as much as their fathers are able to get for theirs.

“Our better agricultural colleges are not satisfied to train men to be able to produce more grain to the acre, or more pounds of meat from a suitably balanced ration, but the students are being shown how they may best become leaders among their fellows; how they may ‘make agriculture a live, progressive art, which in the future shall provide a more stable and satisfactory basis for thrifty, intelligent, refined, and happy rural communities, as well as a stronger guarantee for the manufactures, commerce, literature, art, and science of a higher civilisation.’”

The writer concludes a very interesting and instructive monograph as follows:—

“So far as experience has gone it has shown that,—

“1. Nature-study has already infused new life into our school system, and, when made a study of the relations of man to nature and to its forces, it produces that great educational result—viz., the proper response of the individual to his environment.

“2. Nature-study, better than any other study in the school curriculum, allows the teacher and the pupil to meet on the same plane, and really to know and to understand each other.

“3. The child himself becomes a lifelong economic force in nature as soon as he learns to look at it with understanding eyes.

“4. The ethical value of producing something cannot be overestimated; in this lies the only road to altruism open to the child, as well as a guarantee of his respect for the products of others.

“5. ‘The sentiments on which the highest religion rests are best trained in the children on the noblest objects of nature.’

“6. Neither the educational, the ethical, nor the economic value of nature-study overshadows its æsthetic value—its effect on the sentiments of the child. The psychological genesis of a genuine love of nature is the crowning result of nature-study.

“7. School gardens furnish to children the best possible means of giving expression to their thoughts through motor channels.

“8. Children having the advantages of gardening do much better work—as much as a third better in some cities, it is said—in their other studies than do other children in the same school.

“9. School gardens teach, among other things, private care for public property, economy, honesty, application, concentration, justice, the dignity of labour, and love for the beauties of nature.

“10. Nature-study and school gardens serve better than other agencies to ‘cultivate the critical discernment of beauty and excellence in nature and in human nature,’ as President Eliot has pointed out.

“11. School gardens have the advantage over all other school work of promoting the health of the child, especially in the case of incipient tuberculosis.

“12. In a number of our larger cities school gardens have transformed districts in the slums morally, socially, and æsthetically.

“13. Although half of the school-children of the United States receive all their instruction in the country schools, the education given them does not suitably prepare them for their lifework.

“14. Agriculture furnishes admirable subject-matter for many of the other school studies.

“15. In rural schools where other forms of manual training are perhaps out of the question for the present, practical agricultural work supplies the motor training needed by all and essential to the motor-minded.

“16. In at least two foreign countries the introduction of agricultural education has raised the age of leaving school between two and three years, and the same effect is observable in some of our own States. With this there is also an increased average attendance of the total school enrolment.

“17. The economic value of an agricultural education is seen on every hand. It is this which has materially increased, and in many cases doubled or tripled, the amount produced by the same land, numerous instances of which may be seen in every State of our country. More patent still, it is such an education which enables the smaller countries of northern Europe to compete with our American farmers.