DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1917, No. 20

WORK OF SCHOOL CHILDREN DURING OUT-OF-SCHOOL HOURS

BY

C. D. JARVIS

WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, April 16, 1917.

SIR: The conditions facing the people of the United States because of the entrance of this country into the world war have greatly stimulated general interest in the work of school children during out-of-school hours and in the plans which this bureau has devised for such work as will be useful both economically and educationally for the millions of school children between the ages of 9 or 10 and 14 or 15. This increase of general interest in this subject makes timely the publication of the manuscript submitted herewith, and I recommend that it be published as a bulletin of the Bureau of Education.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

The SECRETARY OF THE INTERIOR.

WORK OF SCHOOL CHILDREN DURING OUT-OF-SCHOOL HOURS.

INTRODUCTION.

The investigation reported in this bulletin was undertaken for the purpose of making available a volume of evidence on questions concerning the early elimination of children during out-of-school hours. The inquiry was confined to the children of the sixth, seventh, and eighth grades. Information concerning the following points has been collected and is here presented:

1. The proportion of school children who work during out-of-school hours.
2. The amount and money value of the work.
3. The nature of the work performed.
4. How school children spend their leisure hours.
5. Why children leave school at an early age.
6. To what extent can gardening replace less desirable forms of employment.

The investigation covers the activities of 14,391 children—7,120 boys and 7,271 girls. The children are those of urban communities and distributed over 11 States, as follows:

States and children included in the investigation.

States.	Boys.	Girls.	Total.	States.	Boys.	Girls.	Total.
Alabama	182	209	391	Ohio	1,041	1,096	2,137
Arkansas	132	113	245	Pennsylvania	2,282	2,117	4,399
Connecticut	559	579	1,138	Utah	86	79	165
Delaware	21	38	59	Washington	28	44	72
Iowa	971	1,116	2,087				
Michigan	1,561	1,572	3,133	Total	7,120	7,271	14,391
Missouri	257	308	565				

The initial step consisted in sending a copy of an investigation sheet to the principals of approximately 2,500 schools. With the inquiry sheet was inclosed a letter soliciting the cooperation of the principal and a postal card for the reply. At the same time a letter was sent to the superintendents concerned, inclosing a copy of the letter sent to principals. As a result 317 principals volunteered to obtain the desired information in their respective schools. To each of these was forwarded the number of investigation sheets requested, and with each lot was sent a brief letter of explanation and a return frank envelope.

EMPLOYMENT OF SCHOOL CHILDREN.

Of the total number of children investigated, 5,181, or 36 per cent, are employed during summer vacation, and 3,864, or 27 per cent, are employed during out-of-school hours throughout the school year. (See Table 1, p. 26.) The amount of employment varies greatly. During summer vacation some children work only a few days or weeks, while others put in full time, and the earnings range from $1 to $150. During the school year, likewise, the amount of work varies from a few odd jobs to fairly regular employment both before and after school and sometimes at noon.

It is interesting to note the total income and the average income from such employment, and it should be remembered that these are children of the sixth, seventh, and eighth grades only. Those who were employed during summer vacation earned $68,342.04. Assuming that the same proportion of children in these grades throughout the United States earn as much, the annual income from their employment amounts to approximately $60,000,000. The average earnings of the children amount to $13.19, but 362 children, or 7 per cent, averaged $69.01. The average weekly earnings of those who work during out-of-school hours amount to $1.51. Many children earn remarkably large amounts; 117, or 3 per cent, earned an average of $6.27 per week. One boy earns $25 per week in running a paper business.

Michigan, Ohio, and Iowa show the largest proportion of summer workers. These are conspicuous agricultural States, and many schoolboys work in the country during the summer. Utah also shows a high percentage, but the number of children investigated is not sufficient to warrant conclusions. None of the other States exceeds the average. Michigan shows a high proportion of workers and a low average income. Washington, Missouri, and Alabama show the largest proportion of high incomes—$50 or over.

From the standpoint of weekly earnings while school is in session, Alabama, Missouri, and Washington show the highest average earnings. Since the number of children investigated from these States is small, the average income is likely to be affected by a few high individual records. For example, a boy in Alabama runs a large paper business from which he makes $25 per week. Another earns $12 per week. If these two conspicuous records were eliminated the average earnings would be conspicuously reduced. Of those States having large numbers represented, Pennsylvania and Iowa show the highest weekly earnings.

NATURE OF CHILDREN'S EMPLOYMENT.

In Table 2 (p. 26) will be found a classification of the various kinds of employment in which school children are engaged during out-of-school hours, including summer vacation. Information has been obtained with regard to the nature of the employment of 4,526 children. The table requires no explanation. In most States the law forbids the employment of children under a minimum age, which is usually 14. Few States, however, have laws preventing children from entering into any kind of legitimate business on their own responsibility. Boys and girls may engage in the selling of papers, which requires their time in early morning and late at night, but so long as they attend school no one seems to object. It is argued that children often become so fatigued by this work that they can not keep up with their school studies, and that as a result they are frequently dwarfed in mind as well as in body. It has also been said that children who engage in money-earning employment while attending school are more likely to become discouraged from their inability to keep up with their studies. This, coupled with the consciousness that they can earn a living, causes a good many to leave school earlier than they otherwise would.

These are sound arguments and justify the efforts of the welfare workers in their recent attemps to solve this problem. There is, however, another side to the argument. In many cases parents are able to keep their children in school only as a result of the latter's earnings. Furthermore, it should be remembered that the evils attending idleness may greatly exceed those attending most kinds of employment during out-of-school hours. Much of such employment is voluntary on the part of the children, and supplies an opportunity to satisfy the restless spirit of youth. While few of the common forms of children's employment have any technical educational value, wholesome work has some value in itself. All children should learn to work and should learn the value of money as expressed by toil. In order to understand the problem it is desirable to consider the various occupations individually. It is well in such a study to keep in mind the following points:

(*a*) Time and energy required;
(*b*) Environmental conditions;
(*c*) Educational or vocational value.

1. *Farm work.*—The various kinds of farm work attract many children, both boys and girls. It is an occupation for summer vacation rather than for employment in the mornings and evenings while school is in session. Of the total number of workers, nearly 33 per cent of the boys and 26 per cent of the girls performed farm work for pay. The nature of the work varies and includes picking fruit,

weeding, hoeing, and cultivating crops, and caring for poultry, horses, or other live stock. The work of the girls consists largely of picking fruit and working in gardens, although a few care for poultry. Where boys hire out to farmers the hours of labor are sometimes long, but as a rule children are not overworked on the farm. Some of the work, such as hoeing and weeding, may be fatiguing if persisted in many hours at a time, but much of the farm work done by children is in the form of odd jobs, chores, and piecework, like picking berries, which is not necessarily irksome.

The environmental conditions are usually of the best. The children work mostly in the fresh air, and those who move to the farm for the summer get a good supply of wholesome food and return to the city much stronger from their experience. Many of the children are engaged by their parents to perform various kinds of garden work at home. Such conditions are most favorable from an environmental standpoint.

From the standpoint of educational opportunities farm work ranks high. Children gain skill from working with the hands, and such varied experiences as are offered on the farm furnish abundant opportunity for an all-round development of the senses. They also have a good opportunity to observe some of the wonderful workings of nature, a knowledge of which should make people broader, better, and more contented. From the vocational standpoint, also, children engaged in farm work are able to learn many things that may be of use to them in later life. Ability to grow plants is valuable from both the vocational and avocational standpoints.

2. *Housework.*—Over 50 per cent of the working schoolgirls, according to the table, are engaged in housework, either at home or for some other family. Nearly half of these are working for some one other than their parents. The character of the work in each case is about the same, although environmental conditions may differ. No one should doubt that girls should assist in home duties, and if their help is not needed at home and if conditions are favorable there should be no serious objection to girls assisting in other homes. There are types of work, of course, such as washing and scrubbing, that should not be given to young girls. A large proportion of those who work away from home are engaged in the care of younger children, an occupation very suitable to girls, and one in which most girls take pleasure.

The hours of service, either at home or away from home, usually are not objectionably long, although there are doubtless many cases where the time should be shortened. The environmental conditions, with few exceptions, are favorable. Children at home and those employed as nurse girls usually have abundant opportunity for recreation in the open air. Some others are not so favorably em-

ployed. Home activities should offer good training facilities, and most girls are better for the experience.

3. *Work in factories, mills, and mines.*—In view of the strict laws regarding the employment of children, only a small proportion—less than 2 per cent—are engaged in factories, mills, and mines. Only 11 are known to work in mills and 3 in mines. Canning factories claim a large proportion of those listed in this group. Most of the factory work done by children is done during summer vacation. From the standpoint of time and energy required, there is little objection to this kind of work, for most of it is on a piecework basis, and the children, except those of indiscreet parents, can stop whenever they like. From the environmental and educational standpoints there is nothing to commend this kind of employment for children of school age.

4. *Work in stores.*—About 9 per cent of the boys and over 3 per cent of the girls work in stores. Much of such employment represents Saturday work and consists largely of wrapping parcels, running errands, and odd jobs. A few children serve as clerks behind the counter. During summer vacation some girls act as "cash girls" and "wrappers." Many children accept such positions during the summer, and when the offer of a permanent position comes they can not resist the allurements of the department store. This, coupled with the opportunity to earn money and to obtain many of the things that money will buy, is responsible for the early withdrawal of many children from school. The work, as a rule, is not heavy, but demands comparatively long hours, during which the children are on their feet most of the time. Many girls have experienced serious foot troubles as a result of such work. Boys are sometimes required to carry heavy loads for long distances, but on the whole the work is not undesirable. The surroundings are not objectionable, and children so employed have opportunities for learning much about business affairs that may be useful to them in many callings. Cash and wrapper girls commonly become saleswomen. The experience is usually worth while, even from the standpoint of vocational guidance. It should give children a chance to determine whether or not they are adapted to that kind of business or occupation—something they can not learn at school.

5. *Work in offices.*—There are few office positions open to children of the grammar grades, only a little over 1 per cent being thus employed. This sort of work is largely in the nature of "office boy" and "telephone girl." The duties sometimes include the running of errands and in keeping the office in order. As a rule, the work is light and requires short hours. Although the duties sometimes furnish opportunities for observing business methods, such employment has little to commend it from the educational standpoint.

Some exceptional employers, of course, take an unusual interest in their office boys and encourage them to improve their time during slack moments, and it is not difficult to point to some successful business men who have obtained a large share of their training in this way. Cases of this are extremely rare, however.

6. *Helpers in industrial occupations.*—On account of the nature of the work, few children of the grammar grades are attracted by industrial occupations, only a little over 2 per cent being thus employed. In general, the work is too heavy for young boys and girls. The trades that mainly attract boys are painting, carpentering, and plumbing. It is seldom that the boys do more than wait upon the older craftsmen. The garment-making trade is the one in which most girls are found. The work of schoolgirls consists largely of doing piecework at home, where they are employed directly by their parents and indirectly by the manufacturers. Those who work in the so-called "sweat shops" during summer vacation are classed under factory work. The greatest hardships under this class of employment are found in the long and irksome service at home during out-of-school hours. In many cases the surroundings are not conducive to health, and the mental development of girls so employed, even though they attend school regularly, must in many cases be seriously hampered. Under favorable conditions, industrial work should offer good opportunities for children to discover the advantages and disadvantages of such work, to learn something about some important occupations that may be a means to a livelihood, and to contribute to the support of themselves while attending school.

7. *Labor.*—Over 10 per cent of the working boys and 1 per cent of the working girls investigated are engaged in a kind of work classed as labor. The following are some of the occupations grouped under this head as taken from the reports received: Working on road; teaming; ditching; cutting wood; mowing lawns; washing automobiles; sweeping, dusting, and scrubbing offices; beating rugs; caring for furnace; working around saloons, theaters, schools, and other public buildings. It may be seen that there is very little of this kind of work suited to children. The work is too heavy for children, and in most cases the environmental conditions are not suitable. Educationally there is nothing to commend employment of these types, except that children so employed will have an opportunity for learning the value of money as expressed by labor.

8. *Personal service.*—This group includes many kinds of occupations and employs nearly 2 per cent of the working boys and 10 per cent of the working girls investigated. Among the kinds of service rendered under this head may be mentioned the following: Work in barber shop, hairdressing, shoe shining, carrying grips, bell boy in

hotel, valet, waiter or waitress in restaurant, companion, leading the blind, etc. There is nothing in these occupations to commend them to school children. The environmental conditions usually are not satisfactory, and there are no educational advantages in such employment.

9. *Street trades.*—The selling of newspapers and other articles on the street supplies nearly 8 per cent of the working boys and nearly 2 per cent of the working girls with employment during out-of-school hours. The newspaper trade holds a large proportion of the children of this group, although many, especially girls, sell flowers. The newspaper workers are of two classes—those who deliver papers to homes for newsdealers and those who buy their papers independently and sell them on the streets. Frequently, boys deliver and sell at the same time, and for this reason the boys who deliver papers are grouped under this head rather than under the delivery and messenger-service groups. On account of recent child-labor legislation, the very young children are not being engaged as much as formerly for delivering papers. Attempts have been made recently to bring about legislation to prevent children within a minimum age from engaging in the paper business on their own responsibility.

On account of the work demanding attention largely in early morning and in the evening, it is very popular with school children. In many cases boys work from two to three hours before school and even longer after school. Occasionally they spend an hour or more at noon. It is very clear that children who spend more than four or five hours a day selling or delivering papers can not make the best use of their time at school and are likely to be so fatigued as to affect permanently the full development of mind and body. The associations, usually, are not conducive to good living, and many boys become victims of vice as a result of their street experience. The boys who survive these contaminating influences are probably stronger for their experience, but these are the exceptions. Boys who are engaged in such work spend their time in the open air and no doubt have opportunities for acquiring much useful knowledge concerning the affairs of life, but these advantages are offset by the undesirable features of the work. Yet, there is still a question whether work so well adapted, from the standpoint of hours of service, should be withheld from school children until some suitable substitute is provided.

10. *Delivery and messenger service.*—Next to work about the farm, delivery and messenger service holds the largest percentage of the working school children. Nearly 25 per cent of the boys are engaged in such work as running errands, taking orders, delivering goods, messages, etc., and peddling milk, bread, and the like. The work

lacks continuity. As boys grow up, they are automatically replaced by younger boys. Occasionally the duties of the messenger and delivery boys, through association with other people, are responsible for their securing permanent employment along some other line. In some phases of the work there are opportunities for useful experience, but on the whole these occupations are devoid of educational or vocational advantages. The work generally is of a wholesome nature, calling mainly for outside activities, but, like the newspaper trade, it throws the worker among contaminating influences. It is one of those schoolboy occupations that should be supplanted by a more wholesome and elevating employment.

11. *Caddying.*—This kind of employment holds about 3 per cent of the working boys of the grammar grades. It includes work on the golf links, tennis courts, and in bowling alleys, and although different in character, might be classed under the head of personal service. Those employed outside are engaged in a wholesome exercise, but those found in bowling alleys are often confined for many hours in "stuffy" quarters. Oftentimes the duties of the latter call for employment up to midnight, and the environment in many cases is objectionable. The outside work is without the objections of the bowling-alley activities, but both types are wholly without prospect.

12. *Unclassified employment.*—Under this head over 4 per cent of the working children are employed during out-of-school hours. The group comprises some very unusual kinds of employment for school children and includes, among others, fishing, trapping, sailing, playing musical instruments, posing for artists, etc. In general these are attractive occupations for children, but each requires special consideration.

SUMMARY.

Thirty-six per cent of the children are employed during summer vacation. Their total earnings amount to $68,342.04, or an average of $13.19. Seven per cent averaged $69.01. Twenty-seven per cent of the children work during out-of-school hours throughout the year. Their average weekly earnings amount to $1.51. Seven per cent of these workers averaged $6.27 per week.

The kinds of employment are classified under 12 heads, namely: (1) Farm work; (2) housework; (3) work in factories, mills, and mines; (4) work in stores; (5) work in offices; (6) helpers in industrial occupations; (7) labor; (8) personal service; (9) street trades; (10) delivery and messenger service; (11) caddying; (12) unclassified employment.

Groups 1, 2, and 6 comprise occupations which are not undesirable and in the main are commendable for children. In these 47 per cent of the working school children find employment during out-of-

school hours. The occupations represented by groups 4 and 5 have some desirable features, but offer limited educational and vocational opportunities. The occupations of group 12 are mostly unobjectionable and with those of groups 4 and 5 may be considered second-rate occupations for school children. Combined, they furnish employment to 13 per cent of the working school children. The occupations represented by groups 1, 2, 4, 5, 6, and 12, therefore, may be regarded as the unobjectionable class, and they are selected by 60 per cent of the working school children. The remaining 40 per cent are found in occupations represented by groups 3, 7, 8, 9, 10, and 11, which are regarded as the objectionable class.

RECOMMENDATIONS.

The immediate elimination of children from these objectionable occupations is not recommended, but it should be the duty of the school, so far as possible, to instruct and guide children in the matter of employment. The school should be intrusted with the task of regulating the employment of children during out-of-school hours. It should be willing to undertake this additional responsibility in self-defense.

If the school is to be held responsible for the failure of children to keep up with normal progress, for the enormous number of withdrawals every year, and for the health and habits of the children, it should have better control over the forces that operate for and against its success.

As has been pointed out before, the incorporation into the school program of profitable home-project enterprises in gardening, home making, shopwork, and other phases of the practical arts may be the best solution to the problem of school-child employment.

WHY CHILDREN LEAVE SCHOOL.

That portion of the investigation relating to why children leave school contributes to the existing evidence on the subject to the extent that the information presented is based upon the reasons given by the children still in attendance rather than by those who have left school. The reasons given by the children who desire to leave are presented along with those of the children who undoubtedly will leave during the current year.

Table 3 (p. 27) shows that 1,117, or 8.5 per cent, of the children expressed a desire to leave. This, undoubtedly, is a smaller proportion than actually exists, for many children would hesitate to admit to their teacher that they desired to leave. The table shows also that 699, or 5.5 per cent, of the children intended to leave before the close of the current year. This figure, for salient reasons, may be

far from expressing the real proportion of those who undoubtedly will leave. The figures do not include those who leave to attend other schools. Some of the reports failed to indicate the number of children who had already left school, but, considering only the 11,333 children listed on the complete reports, 850, or 7.5 per cent, had left school during the school year up to the time the schedules were filled out, which in most cases was toward the end of the year.

Table 4 (p. 27) summarizes the children's reasons for desiring to leave. Of the number who expressed a desire, 405, or 34 per cent, gave for their reason that they did not like school. About the same number, 446, or 38 per cent, said that they wished to earn money, and 257, or 22 per cent, wished to learn a trade. There were 69, or 6 per cent, who had other reasons. Those who desire to leave so that they may earn money or learn a trade make up 60 per cent of the total. It is interesting to note that 60 per cent are anxious to go to work. Another astonishing feature of this investigation is that 32 per cent of the children who desire to leave school frankly admit to their teacher that they do not like school. Undoubtedly, there are others who, rather than make such an admission, give other reasons when at heart they are dissatisfied. The desire on the part of school children to work and to earn money and their general dissatisfaction with persent conditions should be considered in any effort toward readjustment.

In Table 5 (p. 27) are shown the reasons for leaving as expressed by those who undoubtedly will leave. These reasons, as contrasted with those given in the preceding table, are determined by the teachers from personal knowledge of the home conditions and fron consultation with the children. A direct examination of home conditions possibly would have given more accurate results, but the statements made by parents often are less dependable than those made by children. Parents, from a sense of pride, are inclined to magnify the family income. On the other hand, where parents are anxious to take their children from school, they are likely to minimize their income to justify their actions.

Forty per cent of the children are leaving because of economic necessity, 12 per cent because of the indifference of parents, 34 per cent because of the personal desire of the child, 5 per cent because of ill health, and 9 per cent because of unspecified reasons. Since the personal desire of the pupil and the indifference of parents indicate dissatisfaction, either by parent or child, it is safe to classify these reasons under one head, making 46 per cent. On account of modesty many of the children who fail to specify their reasons are in reality leaving because of dissatisfaction, and these undoubtedly would bring the dissatisfied group up to 50 per cent. About 90 per cent, then, of the children leave either from financial necessity or indifference. The

remaining 10 per cent leave on account of ill health or other unmentioned reasons.

On the same basis of grouping the reasons for leaving, Neill [1] found that 30 per cent of the children left school because of economic necessity and 64 per cent because of dissatisfaction. The findings of Lewis [2] in his investigation in Iowa cities were similar, showing 32 and 55 per cent respectively. Talbert,[3] in his investigation of the stockyards district in Chicago, found the proportion to be 52 and 33 per cent, respectively. The proportion in this case is reversed and is accounted for largely in the difference in the economic conditions of the district under investigation. Mrs. Reed,[4] in her Seattle investigation, found the proportion to be 30 and 36 per cent, respectively.

Economic necessity as a cause for leaving.—From Table 6 (p. 27) it may be seen that of the 850 pupils who left school during the current year, 341, or 40 per cent, left because of financial necessity, and 541, or 64 per cent, were known to be at work. With regard to the number who would have remained longer in school if remunerative employment had been available, comparatively few teachers attempted to answer the question. Nevertheless, 116 cases, or 14 per cent of the pupils who left, were so recorded.

From this investigation, as well as from others, it is apparent that economic necessity accounts for many withdrawals. It probably is not such a potent factor as the returns seem to indicate, for children often give this reason when they do not wish to admit their dislike for school. This belief is strengthened by the fact that 70 per cent of the children giving economic necessity as their reason for leaving previously admitted that they desired to leave school. In her investigation of homes in certain Massachusetts cities Miss Kingsbury [5] found that about 30 per cent of the families could not afford to give the children schooling beyond the compulsory age limit. Some localities undoubtedly would show a higher proportion, as indicated by the survey of the stockyards district of Chicago. It is fairly safe to assume, however, that economic necessity accounts for not more than one-third of the withdrawals.

Dissatisfaction as a cause for leaving.—Dissatisfaction is the dominating factor in school leaving and probably accounts for at least 50 per cent of the withdrawals. It takes many forms. Very often it is due to the inability on the part of both parent and child to realize the

[1] Neill, Chas. P. "Woman and Child Wage-earners in the United States." Senate Document No. 645, 1910. p. 46.

[2] Lewis, E. E. "Work, Wages, and Schooling of Eight Hundred Iowa Boys." State University of Iowa Bul. 90, new series, 1916.

[3] Talbert, E. L. "Opportunities in School and Industry for Children of the Stockyards District." University of Chicago Settlement publications, 1912.

[4] Reed, Mrs. A. Y. "Seattle Children in School and Industry." Board of School Directors, Seattle, Wash., 1915.

[5] Kingsbury, Miss Susan M. Rep. of Com. on Indus. and Tech. Ed., Mass., Senate Document No. 349, 1906, p. 111.

value or necessity of further schooling. Many parents believe that the experience gained in some of the common occupations of children is more useful in the preparation for the earning of a living than that gained in the ordinary elementary school. In many cases this is true and, as investigation has shown, age and work experience are the determining wage factors with the younger employees rather than school experience.

Dissatisfaction is sometimes due to a personal dislike to the teacher and to other trivial matters, but by far the most conspicuous source of dissatisfaction is backwardness, or inability to keep up with other children of the same age. Hoke found in his study of the schools of Richmond that 88.5 per cent of the children who dropped out to go to work had repeated grades before they left.[1]

Table 7 (p. 28) shows the proportion of children of the various ages found in each of the three grammar grades. It may be readily seen that children of all ages between 10 and 18 years are found in all three grades, except that none of the 10-year-old children have reached the eighth grade. Only 28 per cent of the 13-year-old children are in the eighth grade, 42 per cent are in the seventh grade, and 30 per cent are in the sixth grade. When all grades are considered, even greater variation than this is shown. Ayres's examination into the progress of children in 78 city school systems showed that boys who have reached the limit of the compulsory attendance period are scattered through the grades from the kindergarten to the senior year in high school.[2]

The relation of age to grade is shown more vividly in Table 8 (p. 28). There are more 12-year-old children in the sixth grade, more 13-year-old children in the seventh grade, and more 14-year-old children in the eighth grade than of any of the other ages. Assuming that these children are making normal progress, 38 per cent of the pupils in the sixth grade, 35 per cent in the seventh grade, and 30 per cent in the eighth grade are backward. Some of the pupils, of course, are backward because of starting late, but it is evident that a larger proportion of the children fail to keep up with their classes, which necessitates a repetition of the work.

The solution of the backward-pupil problem, therefore, should go a long way toward solving the school-leaving problem and at the same time stop one of the most wasteful leaks in the educational system. While retardation can not be completely eliminated, it is believed that the evil can be mitigated in a large degree. The loss involved in repeating instruction to backward children amounts to a sum large enough to warrant the expenditure of large amounts in an effort to find the cause and to make the adjustments necessary to reduce the waste to the minimum.

[1] Hoke, K. J., Bureau of Education Bul. 3, 1916, p. 24.
[2] Ayres, S. P., Russell Sage Foundation Document E135, 1914.

SUMMARY.

Eight and one-half per cent of the children desire to leave school, and of these 34 per cent frankly state that they do not like school. Sixty per cent would rather go to work.

Of those who intend to leave during the current year, approximately one-third claim economic necessity as the reason and, except for a small proportion who will leave on account of illness or some unmentioned reason, the remainder leave on account of dissatisfaction expressed or implied.

Retarded or backward children are numerous, and the inability to make normal progress through the grades is the source of much dissatisfaction in the school.

RECOMMENDATIONS.

The remedy for the school-leaving problem should provide for, first, remunerative employment for children while attending school; second, a change in the educational methods, aiming to vitalize school work and thus make school more interesting and retardation less common; and third, the establishment of continuation courses for children who must leave school.

1. Remunerative employment for school children.—A few local examples in various parts of the country have shown that part-time employment for children of secondary grade is a feasible undertaking. Such a plan may be applicable in a limited way to the two upper grades of the elementary school, but, in general, the employment for children of the upper grades must assume the nature of home-project work. The work of the agricultural and home-making clubs among the rural children is of this nature. Home gardening, as it is promoted in some cities, also serves the purpose. Shopwork, garment making, business projects, and the like, when conducted on a real industrial and commercial basis and associated with home enterprises, furnish additional examples. Unfortunately, there has been too little effort made to commercialize these activities. The educational value of such enterprises is greatly enhanced by conducting them on a real money-earning basis. If more attention were given to this feature, and every effort made to insure profitable employment for the children so engaged, there would be fewer withdrawals from school, fewer children stranded in "blind alley" occupations, and a different attitude toward the school. As observed under another head, and as may be seen from consulting Table 10 (p. 28), gardening may be made fairly profitable for children while attending school. Nine per cent of the children engaged in gardening produced an average of $15.66 worth of vegetables, fruit, and flowers during a single season. Twenty-two children averaged $61.25. Since few schools

offer instruction in gardening, it is safe to assume that these records are the result of independent effort. With a knowledge of the succes of individual children while working under the direction of a skilled teacher, these results even do not seem phenomenal. With home-project work in gardening as a regular school function, much better results may be expected.

Compared with other common occupations of children, gardening makes a good showing from a money-earning standpoint. The children who worked at general occupations during summer vacation earned an average of $13.19 and only 7 per cent earned $50 or over. The average weekly earnings of the children who work during out-of-school hours amount to $1.51, and 117, or 3 per cent, earn $5 or over per week. As startling as these results seem, the children who undertake gardening on a reasonable basis are able to make much more in proportion to the time employed. Most of the children who have made phenomenal records in general employment are those who have large paper businesses requiring much time both in the early morning and late at night. The same amount of time spent on gardening would be more profitable.

There is an opportunity, therefore, for profitable home project work in gardening, even in cities and towns. Other lines of wholesome project work may be undertaken, with equally satisfying results, especially for seasons of the year when gardening requires little or no attention. This is not child labor. It is earning while learning and learning while earning.

2. *To change educational methods.*—It has been repeatedly said that school work needs vitalizing, and to this end the belief prevails that it should center about concrete occupational pursuits. Since real education is a matter of sense training, it becomes necessary for the school to provide for its pupils a wider range of experience. As industrial specialization and population centralization progress, there will be an ever-increasing need for a more active type of training. This need for a vitalizing influence fortunately may be supplied in the same way, as suggested for the providing of remunerative employment for school children. Gardening, shopwork, home-making activities, and business enterprises performed under the joint direction of school and home should make school work easier, more interesting, more purposeful, and more effective from the standpoint of the child. Children would then have their attention focused upon preparing for a definite kind of work. They would know the meaning of education. They would readily see its connection with the affairs of life and would come to appreciate its advantages and the obligations that follow. Such a readjustment should go a long way toward solving the problem of the backward pupil and consequently that of school leaving. With its influence upon habit formation, it also

should have a far-reaching influence upon solving many of the dominant social problems of the time.

The evidence presented here and that collected by other investigators shows that many children unnecessarily leave school on reaching the legal age limit. If the reorganization of school methods and processes as suggested here should not materially mitigate this evil, there is need for extending the period of school responsibility. Much has been accomplished by compulsory school attendance, but the idea of making school work more attractive should be productive of even better results. Legislative methods usually succeed in bringing the child bodily to school, but something more is needed to bring him there in mind and in heart. Few people question the effectiveness of the school system as a whole, but certain weak spots are apparent. That so many parents allow their children to leave on reaching the legal age limit suggests the possibility that schooling is not a good investment. If every year that the child remains in school can not be made to pay from the standpoint of earning a living, it is an injustice to require him to remain there. It behooves society, therefore, to make sure that school attendance is profitable for the individual. If it is not profitable for the individual, it is very doubtful whether it is profitable for society.

3. Continuation instruction.—For those children who have left school to go to work and for those who will leave before being prepared for the duties of life and citizenship there is need for continuation instruction. The type of instruction commonly given in night schools is not sufficient. A large part of the instruction should be of an occupational nature. There will be need for much individual work to suit the needs of the various members of the class. Such instruction, of course, should aim to prepare the young people for the occupations of the community. In some way the school should keep in closer touch with the children who have left. It should render direct service not only by way of furnishing needed instruction, but by guiding the youth along suitable vocational channels.

HOME GARDENING AS A SUBSTITUTE FOR THE COMMON FORMS OF EMPLOYMENT FOR SCHOOL CHILDREN.

It is well known that many families need the wage-earning support of their children even while attending the elementary school, without which support many parents could not afford to continue to send their children to school. It is also well known that children need a wide range of active experience for the proper development of the senses. Furthermore, children need active employment to insure the formation of industrious habits and to guard against the

evils attending idleness. Lastly, children need to know the meaning of work.

A large proportion of the children are anxious to leave school at the earliest moment of exemption, to put away childish things, to become wage earners, and to take an active part in the great busy world. School does not satisfy the longing for a plunge into the the affairs of life. It has been shown that many children engage in undesirable occupations while attending school, and a large proportion of them continue in these occupations after leaving school. Since many of these occupations offer no inducements for children above a certain age, there comes a time when they must be given over to younger children. The older children, then, wholly unskilled in any special work, must look for some other means of making a living. They change from one job to another, and sooner or later join the army of the unemployed.

Since the school is the institution established and designated by society to prepare the individual for the duties of life, it should be given a wider range of influence. It should not be expected to perform its functions properly if it is denied the necessary facilities for such preparation. Neither can the school fulfill its obligations if society withholds from it the right of control over the activities of children during the whole preparatory period, whether in or out of school. Such additional responsibility the school should gladly accept in self-defense. These additional obligations are not necessarily additional burdens. Any adjustment that provides for active participation in the affairs of men, as a part of the school program, means simply a changing from artificial to natural methods of training. Teaching becomes easier, children become interested, and parents become convinced of the value of education—the expensive gift of society—which in the past they have been forced to accept.

Gardening, as an intensive phase of agriculture, constitutes only one kind of employment that should be provided for children. On account of its intimate relation to the life of all people, it should be regarded as one of the most important forms of activity at the disposal of the children of the elementary school. On account of the general interest in agriculture, from the standpoint of either production or consumption, it is well adapted to the prevocational period in education. Any knowledge concerning agriculture that may be acquired by children may be turned to good account, whether or not they follow agriculture as a vocation. Many people obtain much pleasure, and incidentally much profit, from agriculture as an avocation and all are interested in the products of the soil. Agriculture, then, should be regarded as one of the chief occuptions about which modern educational effort should center. Many phases of the subject are

amenable to school instruction in rural communities, but the gardening phase is the one commonly accepted in connection with urban schools.

School officials quite generally approve of gardening, and the work is being promoted by many schools. A recent inquiry showed that 1,220 cities and towns, or 78 per cent of those having a population of 2,500 or over, were encouraging gardening. The inquiry showed also that $106,680 has been set aside by school officials for the promotion of the work. But very little of the gardening work has been undertaken on a serious, businesslike basis. The recreational and esthetic, rather than the vocational aspects of the work, have been emphasized. The trend at the present time, however, is to encourage home gardening on an intensive commercial basis. Some schools also have engaged skilled teachers on a 12-month basis and are furnishing instruction to the children in accord with the recommendations of the Bureau of Education.[1]

The present investigation shows that 3,901, or 27 per cent, of the children conducted gardening exercises during the summer of 1915 (see Table 9, p. 28). The estimated value of the produce raised is $14,001.07, making an average value of $3.59 per child. This does not wholly express the value, for many children conducted ornamental gardening, on which no money value can be placed. Table 10 (p. 28) shows some of the high records in garden production. Twenty-two children averaged $61.25 for the season, and this, put on a weekly basis, amounts to $1.18 the year round. Considering the fact that garden work occupies the attention of the children only part of their spare time, and is practiced only during the summer months, the work is very profitable. These achievements are not remarkably high, and with a good system of garden instruction most children should approach these records. The table shows also the total area and the average area used by the pupils in the production of their crops. Some children utilized as much as an acre of land, while others cultivated only a few square feet, the average being 1,101 square feet, or a piece of land about 34 feet square. A very small proportion of the gardens, however, equal this area. By eliminating the gardens of one-half acre or over, the average area is reduced to about 350 square feet. The average production amounts to 3 cents per square foot. The best use of the land under cultivation, therefore, is not being made, for many individual records show returns as high as 15 cents per square foot.

The total area available to all the children included in the investigation amounts to a little over 314 acres, or an average of 961 square feet. These figures are low, for experience has shown that there is

[1] Bul. 40, 1916, discusses the organization of gardening in the school.

more land available than is generally believed. The vacant lots of the neighborhood are not considered in the above estimate, and from a knowledge of the conditions it is safe to assume that in most cities and towns there is abundant land for the use of the children. In the congested sections of a few of the largest cities it may be necessary to divide the land into very small plats and to use some of the vacant land in the suburbs.

If all of the children in the sixth, seventh, and eighth grades throughout the country should utilize an average of 961 square feet of land (the amount shown to be available) and produce an average return of 3 cents per square foot, the total production would amount to over $130,000,000. If the land contained in vacant lots were included, about twice this return should be expected. With a good system of garden instruction, the average return per square foot could be multiplied by three, and this increase in production easily would take care of the cost of furnishing instruction.

SUMMARY.

Twenty-seven per cent of the children conducted independent garden exercises.

The children's gardens averaged 1,101 square feet, and gave an average return of $3.59.

There were 361 children who raised produce valued at $10 or over; 81 valued at $25 or over; 30 valued at $40 or over; and 22 valued at $50 or over.

There is available for all pupils an average of 961 square feet of land for the purpose of gardening. This amount of land with intelligent handling should produce at the rate of 10 cents per square foot, returning to each of the operators $96.10.

RECOMMENDATIONS.

The recommendations of the Bureau of Education concerning the organization of gardening in city schools are presented in a previous publication (Bul. 40, 1916), and it is therefore unnecessary to repeat them here.

There are many difficulties in the way of a complete and sudden reorganization of school work to provide for gardening and other practical arts instruction. The proposed adjustment contemplates a widely different method of attack and necessitates a reorganization of school work. Unless a complete change is made from the old to the new method, there will be no opportunity to measure the effectiveness of the plan. It would seem that the most effective way of

demonstrating the value of the new method is to try it out under favorable conditions in one school at a time. If the plan possesses merit, the people will demand its extension through the whole school system of any city or town. Too often attempts to introduce new features fail from a compromised effort to inaugurate them throughout the whole system with insufficient financial support and inadequate experience.

One of the conspicuous changes needed consists in the rearrangement of the school year so that the summer vacation may come in the middle of the year instead of at the end. Under present conditions the children at the end of the year drop everything pertaining to school. The summer vacation is given over to activities entirely distinct from school work. On returning to school at the end of the long vacation the children enter new classes, meet new teachers, and commence new studies. If the school year commenced with January and ended with December the summer vacation might be made decidedly more useful than it is at the present. It is not necessary to burden the children by heavy assignments, but there should be some kind of continuity of thought and purpose to eliminate such a long waste of time as is the case under present conditions. With the vacation coming at the end of the year there can be no work assigned, and after a lapse of 10 or 12 weeks the children return and are compelled to relearn that which was unused and forgotten during the summer. The work of the summer should be so completely different that it will still serve the purpose intended and at the same time furnish an opportunity to crystalize the knowledge acquired during the year. The summer should be the time for performing much of the home project work, which should be of such a nature that children may acquire a practical experience in and enjoy the satisfaction gained from conducting a real commercial or industrial enterprise. The summer work should be of such a character also as to furnish remunerative employment, and in this way the child may learn the value of money expressed in work, and be able to contribute something to his support and the support of the family.

As previously intimated the school should have control of all the activities of children above a certain age, whether in or out of school. In this way teachers may point out the dangers and the undesirable features of certain occupations. While home project work eventually should provide all the employment children need during out-of-school hours, there will be abundant opportunity through many years to come for teachers and school officials to render a valuable service by way of directing the outside activities of children and of exercising control over their employment.

STATISTICAL TABLES.

TABLE 1.—*Amount and money value of employment of the children of the sixth, seventh, and eighth grades, 1916.*

States.	Pupils employed at work other than gardening.	Per cent of pupils employed at work other than gardening.	Income from employment during summer.	Average income from employment during summer.	Number who earned $50 or over.	Per cent who earned $50 or over last summer.	Average income of those who earned $50 or over.	Number who work during out-of-school hours.	Per cent who work during out-of-school hours.	Average weekly earnings.	Number who earn $5 or over per week.	Per cent who earn $5 or over per week.	Average weekly earnings of those who earn $5 or over per week.
Alabama	97	25	$2,052.52	$37.34	14	14	$75.20	84	22	$3.42	11	13	$7.59
Arkansas	83	34	1,131.40	20.57	7	8	70.50	74	30	1.43	.....	.....	.....
Connecticut	389	33	4,935.63	15.23	29	7	62.17	286	24	1.47	12	4	5.83
Delaware	21	36	222.50	13.09	1	5	70.00	20	34	.91	.....	.....	.....
Iowa	869	41	4,204.97	17.59	73	8	68.80	587	28	1.64	28	5	5.77
Michigan	1,436	46	19,812.60	11.75	71	5	72.35	984	32	1.07	19	2	5.95
Missouri	204	36	5,082.65	26.05	32	16	82.71	98	18	2.11	6	6	8.82
Ohio	954	45	13,453.40	16.30	63	6	73.09	714	33	1.32	12	2	6.00
Pennsylvania	1,019	23	15,734.72	17.42	63	6	63.21	931	21	1.69	29	3	5.72
Utah	87	53	1,054.95	12.12	4	5	60.00	49	30	1.11	.....	.....	.....
Washington	22	31	656.70	36.48	5	23	78.00	37	51	2.00	.....	.....	.....
Total	5,181	36	68,342.04	13.19	362	7	69.01	3,864	27	1.51	117	3	6.27

TABLE 2.—*Classes of occupations in which 4,526 children are engaged during out-of-school hours, including summer vacation.*

Nature of occupation.	Boys.	Per cent.	Girls.	Per cent.	Total.	Per cent.
1. Farm work (picking fruit or any other kind of farm or garden work)	1,080	32.7	316	25.8	1,396	30.8
2. Housework:						
At home	.....	.....	321	26.2	321	7.1
Away from home, in domestic service, caring for children, etc.	.....	.....	295	24.1	295	6.5
3. Factories, mills, and mines (canning, tobacco, shoe, and garment factories, breweries, creameries, cotton mills, etc.)	67	2.0	14	1.1	81	1.8
4. Work in stores (clerks, wrappers, cash girls, etc.)	292	8.8	41	3.4	333	7.4
5. Work in offices	47	1.1	11	.9	58	1.3
6. Helpers in industrial occupations (painting, carpentering, plastering, blacksmithing, etc.)	84	2.5	25	2.0	109	2.4
7. Labor (including road work; teaming; ditching; cutting wood; mowing lawns; washing autos; janitor service and rough work around hotels, theaters, schools, and other public buildings; cleaning rugs; washing; scrubbing; etc.)	352	10.7	16	1.3	368	8.1
8. Personal service (in restaurants, in barber shops, shoe shining, porter service, valeting, as bell boy, as companion, leading the blind)	61	1.8	120	9.8	181	3.9
9. Street trades: Selling papers or goods of any kind on the street	256	7.7	24	1.9	280	6.2
10. Delivery and messenger service (running errands, taking orders, peddling, delivering goods, etc.)	816	24.7	.....	.....	816	18.0
11. Caddying (work on golf links and tennis courts, in bowling alleys, etc.)	95	2.9	.....	.....	95	2.1
12. Unclassified (fishing, trapping, selling, playing musical instruments, posing for artists, etc.)	153	4.6	40	3.3	193	4.2
Total	3,303	100	1,223	100	4,526	100

TABLE 3.—*Number of children desiring to leave school, the number who undoubtedly will leave, and the number who have already left during the current year.*

	Number.	Per cent.[1]
Desiring to leave	1,177	8.5
Undoubtedly will leave	699	5.5
Have left	850	[2] 7.5

[1] A number of the schedules were incompletely filled out and were discarded. The percentages given here are based on the number of children listed on complete schedules only.

[2] Since the investigation deals only with the children of the three grammar grades, this figure is not comparable with those of other investigations which are based upon the total number of children entering school.

TABLE 4.—*Reasons given by children for desiring to leave school.*

Reasons for desiring to leave.	Number.	Per cent.
Do not like school	405	34
Wish to earn money	446	38
Wish to learn a trade	257	22
Desire to leave for other reasons	69	6
Total	1,177	100

TABLE 5.—*Reasons for leaving school obtained by the teacher from children who undoubtedly will leave during the current year.*

Reasons for leaving.	Number.	Per cent.
Family needs help	278	40
Indifference of parents	86	12
Personal desire of pupil	235	34
Ill health	37	5
Unmentioned reasons	63	9
Total	699	100

TABLE 6.—*Data concerning the 850 pupils of the current school year who had already left when the investigation was made. (1) Number who are known to be at work; (2) number who left because of financial necessity; (3) number who probably would have remained longer in school if remunerative employment had been available.*

Children.	Number.	Per cent.
Known to be at work	541	64
Left because of financial necessity	341	40
Probably would have remained longer in school if remunerative employment had been available	116	14

TABLE 7.—*Proportion of children of the various ages found in each of the upper three grades.*

Ages.	Sixth grade.		Seventh grade.		Eighth grade.		Total in sixth, seventh, and eighth grades.	Per cent.
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.		
10 years or under	272	94	18	6			290	2
11 years	1,366	83	251	15	30	2	1,647	11
12 years	1,774	53	1,321	40	228	7	3,323	23
13 years	1,194	30	1,638	42	1,121	28	3,953	27
14 years	660	21	1,073	35	1,361	44	3,094	22
15 years	230	15	481	31	853	54	1,564	11
16 years	59	13	122	27	276	60	457	3
17 years	3	4	17	23	54	73	74	1
18 years or over	1	7	5	36	8	57	14	.....
Total (all ages)	5,559	39	4,926	34	3,931	27	14,416	100

TABLE 8.—*Placement of children in the three upper grades according to age.*

Grades.	10 years or under.	11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years.	All ages.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Sixth grade	5	25	32	21	12	4	1	.....	.....	100
Seventh grade	.....	5	27	33	22	10	3	.....	.....	100
Eighth grade	.....	.....	6	29	35	22	7	1	.....	100

TABLE 9.—*Number of children conducting garden work, the value of the produce, the amount of land used, and the amount of land available for gardening.*

States.	Children with gardens.	Per cent of children with gardens.	Value of produce.	Average value per child.	Area in square feet used by pupils.	Average area in square feet used by pupils.	Area in square feet available.	Average area in square feet available. (all pupils).
Alabama	97	25	$570.01	$6.79	105,872	1,091	79,489	247
Arkansas	80	33	401.25	7.72	123,808	1,547	365,557	1,491
Connecticut	385	33	1,124.08	4.50	135,628	352	905,150	844
Delaware	17	29	2.00	2.00	1,761	103	4,839	179
Iowa	553	22	2,188.30	5.96	350,711	634	1,321,142	695
Michigan	911	29	2,950.56	7.11	2,135,248	2,343	6,356,306	1,829
Missouri	159	28	1,274.90	9.83	369,190	2,035	1,041,438	1,801
Ohio	517	25	2,458.13	5.73	630,113	1,223	2,473,918	1,348
Pennsylvania	1,102	25	2,780.24	4.64	399,041	353	1,053,048	244
Utah	55	33	220.50	6.12	41,055	746	131,847	976
Washington	25	35	31.10	2.07	2,659	106	172,410	2,394
Total	3,901	27	14,001.07	3.59	4,295,086	1,101	13,905,146	961

TABLE 10.—*Some high records in garden production.*

Income from children earning—	Number.	Per cent.	Amount.	Average.
$10 or over	361	9.3	$6,653.68	$15.66
$25 or over	81	2.0	3,087.88	38.12
$40 or over	30	.7	1,672.88	55.76
$50 or over	22	.5	1,347.50	61.25