## HOUSEHOLD ARTS

-By
EVA W. WHITE



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## THE GARY PUBLIC SCHOOLS

The results of the study of the Gary Public Schools, undertaken on the invitation of the Superintendent and the Board of Education of Gary, will be published in eight parts, as follows:

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## INTRODUCTION

## The Gary Plan

In the last few years both laymen and professional educators have engaged in a lively controversy as to the merits and defects, advantages and disadvantages of what has come to be called the Gary idea or the Gary plan. The rapidly increasing literature bearing on the subject is, however, deficient in details and too often partisan in tone. The present study was undertaken by the General Education Board at the request of the Gary school authorities for the purpose of presenting an accurate and comprehensive account of the Gary schools in their significant aspects.
In the several volumes in which the main features of the Gary schools are separately considered, the reader will observe that, after presenting facts, each of the authors discusses or-in technical phrase-attempts to evaluate the Gary plan from the angle of his particular interest. Facts were gathered in a patient, painstaking, and objective fashion; and those who want facts, and facts only, will, it is believed, find them in the descriptive and statistical portions of the respective studies. But the successive volumes will discuss principles, as well as
state facts. That is, the authors will not only describe the Gary schools in the frankest manner, as they found them, but they will also endeavor to interpret them in the light of the large educational movement of which they are part. An educational conception may be sound or unsound; any particular effort to embody an educational conception may be adequate or inadequate, effective or ineffective. The public is interested in knowing whether the Gary schools as now conducted are efficient or inefficient; the public is also interested in knowing whether the plan as such is sound or unsound. The present study tries to do justice to both points.

What is the Gary plan?
Perhaps, in the first instance, the essential features of the Gary plan can be made clear, if, instead of trying to tell what the Gary plan is, we tell what it is not. Except for its recent origin and the unusual situation as respects its foreign population, Gary resembles many other industrial centers that are to be found throughout the country. Now, had Gary provided itself with the type of school commonly found in other small industrial American towns, we should find there half a dozen or more square brick "soap-box" buildings, each accommodating a dozen classes pursuing the usual book studies, a playground, with little or no equipment, perhaps a basement room for manual training, a laboratory, and a cooking room for the girls. Had Gary played safe, this is the sort of school and school equipment that it would now possess. Provided with this conventional school

Representative of Best Residential Section
system, the town would have led a conventional school life-quiet, unoffending, and negatively happy-doing as many others do, doing it about as well as they do it and satisfied to do just that.

As contrasted with education of this meager type, the Gary plan is distinguished by two features, intimately connected with each other:

First-the enrichment and diversification of the curriculum;
Second-the administrative device that, for want of a better name, will be tentatively termed the duplicate school organization.
These two features must first be considered in general terms, if the reader is to understand the detailed description and discussion.

As to the curriculum and school activities. While the practice of education has in large part continued to follow traditional paths, the progressive literature of the subject has abounded in constructive suggestions of far-reaching practical significance. Social, political, and industrial changes have forced upon the school responsibilities formerly laid upon the home. Once the school had mainly to teach the elements of knowledge; now the school is charged with the physical, mental, and social training of the child. To meet these needs a changed and enriched curriculum, including community activities, facilities for recreation, shop work, and household arts, has been urged on the content side of school work; the transformation of school aims and discipline
on the basis of modern psychology, ethics, and social philosophy has been for similar reasons recommended on the side of attitude and method.

These things have been in the air. Every one of them has been tried and is being practised in some form or other, somewhere or other. In probably every large city in the country efforts have been made, especially in the more recent school plants, to develop some of the features above mentioned. There has been a distinct, unmistakable, and general trend toward making the school a place where children "live" as well as "learn." This movement did not originate at Gary; nor is Gary its only evidence. It is none the less true that perhaps nowhere else have the schools so deliberately and explicitly avowed this modern policy. The Gary schools are officially described as "work, study, and play" schoolsschools, that is, that try to respond adequately to a manysided responsibility; how far and with what success, the successive reports of the Gary survey will show.

It must not, however, be supposed that the enriched curriculum was applied in its present form at the outset or that it is equally well developed in all the Gary schools. Far from it. There has been a distinct and uneven process of development at Gary; sometimes, as subsequent chapters will show, such rapid and unstable development that our account may in certain respects be obsolete before it is printed. When the Emerson school was opened in 1909, the equipment in laboratories, shops, and museums, while doubtless superior to what
was offered by other towns of the Gary type, could have been matched by what was to be found in many of the better favored larger towns and cities at the same period. The gymnasium, for example, was not more than one third its present size; the industrial work was not unprecedented in kind or extent; the boys had woodwork, the girls cooking and sewing. But progress was rapid: painting and printing were added in IgII; the foundry, forge, and machine shop in 19I3. The opportunities for girls were enlarged by the addition of the cafeteria in 19I3. The auditorium reached its present extended use as recently as the school year 1913-14. The Froebel school, first occupied in the fall of 1912, started with facilities similar to those previously introduced piecemeal into the Emerson.

These facilities, covering in their development a period of years, represent the effort to create an elementary school more nearly adequate to the needs of modern urban life. The curriculum is enriched by various activities in the fields of industry, science, and recreation. Questions as to the efficiency with which these varied activities have been administered will be discussed by the various contributors to the present study. Meanwhile, it is perhaps only fair to point out that the modern movement calls not only for additions to, but eliminations from, the curriculum and for a critical attitude toward the products of classroom teaching. How far, on the academic side, the Gary schools reflect this aspect of the modern movement will also presently appear.

The administrative device-the "duplicate" organization, noted above as the second characteristic feature of the Gary plan-stands on a somewhat different footing, as the following considerations make plain.

Once more, Mr. Wirt was not the inventor of the intensive use of school buildings, though he was among the first-if not the very first-to perceive the purely educational advantage to which the situation could be turned. The rapidity with which American cities have grown has created a difficult problem for school administratorsthe problem of providing space and instruction for children who increase in number faster than buildings are constructed. The problem has been handled in various ways. In one place, the regular school day has been shortened and two different sets of children attending at different hours have been taught daily in one building and by one group of teachers. Elsewhere, as in certain high schools, a complete double session has been conducted. The use of one set of schoolrooms for more than one set of children each day did not therefore originate at Gary.

Another point needs to be considered before we discuss the so-called duplicate feature of the Gary plan. In American colleges, subjects have commonly been taught by specialists, not by class teachers. The work is "de-partmentalized"-to use the technical term. There is a teacher of Latin, a teacher of mathematics, a teacher of physics, who together instruct every class-not a separate teacher of each class in all subjects. Latterly,

Representative of Poorer Residential Section
departmentalization has spread from the college into the high school, until nowadays well organized high schools and the upper grades of elementary schools are quite generally "departmentalized," i.e., organized with special teachers for the several subjects, rather than with one teacher for each grade.
Out of these two elements, Gary has evolved an administrative device, the so-called duplicate school, which, from the standpoint of its present educational significance, does indeed represent a definite innovation.

For the sake of clearness, it will be well to explain the theory of the duplicate school by a simplified imaginary example:

Let us suppose that elementary school facilities have to be provided for, say, 1,600 children. If each class is to contain a maximum of 40 children, a schoolhouse of 40 rooms would formerly have been built, with perhaps a few additional rooms, little used, for special activities; except during the recess ( I 2 to $\mathrm{I}: 30$ ) each recitation room would be in practically continuous use in the oldline subjects from 9 to 3:30, when school is adjourned till next morning. A school plant of this kind may be represented by Figure I, each square representing a schoolroom.

The "duplicate" school proposes a different solution. Instead of providing 40 classrooms for 40 classes, it requires 20 classrooms, capable of holding 800 children; and further, playgrounds, laboratories, shops, gardens, gymnasium, and auditorium, also capable of holding

800 children. If, now, 800 children use the classrooms while 800 are using the other facilities, morning and afternoon, the entire plant accommodates $\mathrm{r}, 600$ pupils throughout the school day; and the curriculum is greatly enriched, since, without taking away anything from their classroom work, they are getting other branches also. A school thus equipped and organized may be represented

FIGURE I REPRESENTS OLD-FASHIONED SCHOOLHOUSE
40 rooms for 40 classes, of 40 children each, i. e., facilities for the academic instruction of 1,600 children. A school yard and an extra room or two, little used, for special activities, are also usually found.

by Figure II, in which A represents 20 classes taking care of 40 children each ( 800 children), and B represents special facilities taking care of 800 children. As A and B are in simultaneous operation, $\mathrm{x}, 600$ children are cared for.

This method of visualizing the "duplicate" school serves to correct a common misconception. The plan aims to intensify the use of schoolrooms; yet it would be
incorrect to say that 20 classrooms, instead of 40 , as under the old plan, accommodate 1,600 children. For while the number of classrooms has been reduced from 40 to 20 , special facilities of equal capacity have been added in the form of auditorium, shops, playground, etc. The 20 classrooms apparently saved

FIGURE II
REPRESENTS THE GARY EQUIPMENT

A
20 classrooms for academic instruction of 20 classes of 40 children each ( 800 children) in the morning hours and an equal number in the afternoon ( 1,600 in all daily)

Special facilities, taking care of 800 children in the morning hours and an equal number in the afternoon hours ( 1,600 in all daily)


| Auditorium |
| :--- |
| Shops |
| Laboratories |
| Playground, gardens, <br> gymnasium and library |

have been replaced by special facilities of one kind or another. The so-called duplicate organization and the longer school day make it possible to give larger facilities to twice as many children as the classrooms alone would accommodate. The duplicate school, as developed at Gary, is not therefore a device to relieve congestion or to reduce expense, but the natural result of efforts to provide a richer school life for all children.

The enriched curriculum and the duplicate organization support each other. The social situation requires a scheme of education fairly adequate to the entire scope of the child's activities and possibilities; this cannot be achieved without a longer school day and a more varied school equipment. The duplicate school endeavors to give the longer day, the richer curriculum, and the more varied activities with the lowest possible investment in, and the most intensive use of, the school plant. The so-called duplicate school is thus a single school with two different types of facilities in more or less constant and simultaneous operation, morning and afternoon.

Such is the Gary plan in conception. What about the execution? Is it realized at Gary? Does it work? What is involved as respects space, investment, etc., when ordinary classrooms are replaced by shops, playgrounds, and laboratories? Can a given equipment in the way of auditorium, shops, etc., handle precisely the same number of children accommodated in the classrooms without doing violence to their educational needs on the one hand, and without waste through temporary disuse of the special facilities, on the other? To what extent has Gary modified or reorganized on modern lines the treatment of the common classroom subjects? How efficient is instruction in the usual academic studies as well as in the newer or so-called modern subjects and activities? Is the plan economical in the sense that equal educational advantages cannot be procuied by


Cooking Room-Emerson School
any other scheme except at greater cost? These and other questions as to the execution of the Gary plan are, as far as data were obtainable, discussed in the separate volumes making up the present survey.
The concrete questions above mentioned do not, however, exhaust the educational values of a given school situation. From every school system there come imponderable products, bad as well as good. Aside from all else, many observers of the Gary schools report one such imponderable in the form of a spiritual something which can hardly be included in a study of administration and eludes the testing of classroom work. These observers have no way of knowing whether Gary school costs are high or low; whether the pupils spell and add as well as children do elsewhere; but, however these things may be, they usually describe the pupils as characterized by self-possession, resourcefulness, and happiness to an unusual degree. While different schools and indeed different parts of the same school vary in this respect, the members of the survey staff agree that, on the whole, there is a basis of fact for these observations. Gary is thus something more than a school organization characterized by the two main features above discussed.

The reason is not far to seek. Innovation is stimulating, just as conformity is deadening. Experiment is in this sense a thing wholesome in itself. Of course it must be held to strict accountability for results; and this study is the work of persons who, convinced of the necessity of educational progress, are at the same time
solicitous that the outcome be carefully observed. The fact that customary school procedure does not rest upon a scientific basis, does not willingly submit itself to thorough scrutiny, is no reason for exempting educational innovations from strict accountability. The very reverse is indeed true; for otherwise innovation may imperil or sacrifice essential educational values, without actually knowing whether or not it has achieved definite values of its own. Faith in a new program does not absolve the reformer from a watchful and critical attitude toward results. Moreover, if the innovator formulates his purposes in definite terms and measures his results in the light of his professed aims, the conservative cannot permanently escape the same process. Gary, like all other educational experiments, must be held accountable in this fashion. Subject however to such accountability, the breaking of the conventional school framework, the introduction of new subject matter or equipment, even administrative reorganization, at Gary as elsewhere, tend to favor a fresher, more vigorous interest and spirit. Defects will in the following pages be pointed out in the Gary schools-defects of organization, of administration, of instruction. But there is for the reasons just suggested something in the Gary schools over and above the Gary plan. Problems abound, as in every living and developing situation. But the problems are the problems of life, and, as such, are in the long run perhaps more hopeful than the relatively smooth functioning of a stationary school system. Thus, not-
withstanding the defects and shortcomings which this study will candidly point out, the experiment at Gary rightly observed and interpreted is both interesting and stimulating.

## I. AIM OF HOUSEHOLD ARTS WORK

In Professor Richards' report ${ }^{1}$ it is pointed out that the industrial work for boys is not vocational in aim. Shop activities are not meant to make carpenters, painters and plumbers, but to furnish growing boys with opportunities for the development of senses and muscles and concrete experiences which will enable them to participate intelligently in a social order in which industry bulks large. Fundamentally, the same principle holds of the work in the household arts for girls; that is, it is not primarily intended to train expert seamstresses or expert cooks. Still, instruction in cooking and sewing is not on precisely the same footing as instruction in foundry work or carpentering; for, in addition to general educative value, the household arts have for girls greater personal value and a more intimate social bearing than has shop work for boys.

Besides stenography and typewriting, the Gary schools provide instruction for girls in printing, gardening, cooking, and sewing. The present report deals only with cooking and sewing. ${ }^{2}$

[^0]
## A. COOKING

## II. TIME SCHEDULE AND ENROLLMENT

COOKING is taught regularly in the elementary schools in the seventh and eighth grades, with pupils from the lower grades acting as helpers. The instruction is condensed into courses from ten to thirteen weeks in length, one or two hours daily. Pupils must enroll for at least one course one hour daily, and may take more. While cooking is thus compulsory for elementary pupils, it is optional for high school girls, and may be elected by them in the ninth, tenth, eleventh, and twelfth grades, at the Emerson and Froebel schools, which alone have high school students. During the first term, 1915-1916,44I elementary school pupils, including helpers, were enrolled in cooking classes, and during the fourth, $280 .{ }^{1}$ (Tables I, III, IV.)

The reports from Jefferson, Glen Park, and Beveridge do not distinguish between helpers and those regularly enrolled, though it may be assumed that children from

[^1]the third to the sixth grades are helpers, rather than students (Table I). At Glen Park, of the 78 pupils enrolled, 42 took cooking one hour a day and 36 for two hours daily from September to December, and all took one hour per day from December to April. At Beveridge, pupils continued in cooking one hour per day throughout the year. This is a considerable amount of time for elementary grades. It occurred, however, not because it was considered wise to stress household arts, but because of a shortage of teachers in other departments of special work.

Comparatively few high school students elect cooking. Emerson, for example, enrolled during 1915-1916 a total of only 32 for thirteen weeks, and Froebel, 57 for ten weeks (Table II). They belong chiefly to the first two high school years; no junior or senior elected cooking at Froebel, and but two seniors and one junior at Emerson. It is to be noted, however, that many high schools do not provide household arts.

The classes in cooking are always small, never containing over twenty and averaging from twelve to fifteen. This would be admirable, if the group were homogeneous; unfortunately, a class in cooking is seldom made up of pupils from one grade or from closely related grades. Not infrequently a class comprises pupils from the third to the ninth grades. To be sure, the younger children are supposed to assist the older; nevertheless, their presence renders difficult the concentration of attention upon the needs of the regular pupils.

TIME SCHEDULE AND ENROLLMENT
enrollment in elementary cooking classes, 1915-1916: Jefferson

| Grade | First Ten Weeks |  |  | Second Ten Weeks |  |  | $\begin{gathered} \text { THird } \\ T_{\text {TEN }} \\ \text { WEESS }^{2} \end{gathered}$ | Fourth Ten Weeks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Pupils Enrolled | Pupils Enrolled 1 hr . | $\begin{aligned} & \text { Pupils } \\ & \text { Enrolled } \\ & 2 \text { hrs. } \end{aligned}$ | No. of Pupils Enrolled | Pupils Enrolled I hr. | Pupils Enrolled Enroled 2 hrs . |  | No. of Pupils Enrolled | Pupils Enrolled 1 hr . | $\begin{aligned} & \text { Pupils } \\ & \text { Enrolled } \\ & 2 \text { hrs. } \end{aligned}$ |
| $\begin{aligned} & 3 \\ & 4 \\ & 4 \\ & 5 \\ & 7 \\ & 7 \\ & \hline \end{aligned}$ | $\begin{aligned} & 31 \\ & \\ & 14 \\ & 20 \end{aligned}$ | $\begin{aligned} & 12 \\ & \\ & 14 \\ & 20 \end{aligned}$ | 19 | $\begin{gathered} 13 \\ 41 \\ 15 \\ 3 \end{gathered}$ | $\begin{array}{r} 13 \\ 26 \\ 15 \\ 3 \end{array}$ | 15 | $\begin{gathered} \text { No } \\ \text { infor- } \\ \text { mation } \end{gathered}$ | 12 33 20 2 | $\begin{array}{r} 12 \\ 18 \\ 20 \\ 2 \end{array}$ | 15 |
| Total | 65 | 46 | 19 | 72 | 57 | 15 |  | 67 | 52 | 15 |
| ENROLLMENT IN ELEMENTARY COOKING CLASSES 1915-I9I6: BEVERIDGE |  |  |  |  | ENROLLMENT IN ELEMENTARY COOKING CLASSES 1915-1916: GLEN PARK |  |  |  |  |  |
| Grade |  | No. of Pupils Enrolled for 1 hr . |  |  | Grade | No. of Pupils Enrolled |  | Pupils Enrolled 1 hr . | Pupils Enrolled 2 hrs. |  |
| 3 8 7 8 |  | $\begin{aligned} & 17 \\ & 49 \\ & 23 \\ & 18 \\ & 14 \end{aligned}$ |  |  | $\begin{aligned} & 3 \\ & 4 \\ & 5 \\ & 6 \\ & 7 \\ & 8 \end{aligned}$ | $\begin{gathered} 21 \\ 11 \\ 17 \\ 12 \\ 9 \\ 8 \end{gathered}$ |  | $\begin{aligned} & 21 \\ & 11 \\ & 10 \end{aligned}$ | $\begin{array}{r} 7 \\ 12 \\ 9 \\ 8 \end{array}$ |  |
| Total |  | 121 |  |  | Total | 78 |  | 42 | 36 |  |
| No changes reported during year. |  |  |  |  | From September to December all the time of these pupils was devoted to cooking; from December, 1915, to April ro, 1916, one hour of the time of those pupils enrolled for two hours was devoted to sewing. From April 10 to end of year no time was given to cooking or sewing. |  |  |  |  |  |

TABLE II

## ENROLLMENT IN HIGH SCHOOL COORING CLASSES, 1915-1916

| GRADE | First Thirteen Weeks |  |  | Second Thirteen Weeks |  |  | Third Thirteen Weeks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Pupils Enrolled | Regularly Enrolled |  | No. of Pupils Enrolled | Regularly Enrolled |  | No. of Pupils Enrolled | Regularly Enrolled |  |
|  |  | $\begin{gathered} 1 \\ \mathrm{hr} . \end{gathered}$ | $\stackrel{2}{\mathrm{hrs}}$ |  | $\begin{gathered} 1 \\ \mathrm{hr} . \end{gathered}$ | $\stackrel{2}{\mathrm{hrs}} .$ |  | $\stackrel{1}{\mathrm{hr}}$. | $\underset{\text { hrs. }}{ }$ |
| 9 10 11 12 | 3 |  | 3 | 3 |  | 3 | 20 3 1 2 |  | 20 3 1 2 |
| Total | 3 |  | 3 | 3 |  | 3 | 26 |  | 26 |

Froebel

| Grade | First Ten Weeks |  |  | Second Ten Weeks |  |  | Third Ten Weeks |  |  | Fourth Ten Weeks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Pupils Enrolled | Regularly Enrolled |  | No. of Pupils Enrolled | Regularly <br> Enrolled |  | No. of Pupils Enrolled | Regularly Enrolled |  | No. of Pupils Enrolled | Regularly Enrolled |  |
|  |  | $\begin{gathered} 1 \\ \mathrm{hr} . \end{gathered}$ | $\underset{\mathrm{hrs}}{2}$ |  | $\begin{gathered} 1 \\ \mathrm{hr} . \end{gathered}$ | $\underset{\mathrm{hrs} .}{2}$ |  | 1 hr. | $\underset{\mathrm{hrs}}{2}$ |  | 1 hr. | $\underset{\mathrm{hrs} .}{2}$ |
| $\begin{array}{r} 9 \\ 10 \\ 11 \\ 12 \end{array}$ | 3 13 | 3 5 | 8 | 9 3 | 9 3 |  | 18 | 18 1 | 2 | 7 | 7 | 1 |
| Total | 16 | 8 | 8 | 12 | 12 |  | 21 | 19 | 2 | 8 | 7 | 1 |

The time allowance for cooking is unusually liberal. On the basis of two hours per day for five days a week for I3 weeks, I3O hours are offered as compared with two hours per week for 40 weeks or 80 hours in the average school system. This number of hours added to a like number of hours in sewing shows that 260 hours may be devoted to household arts in a year. On the basis of the minimum of ten weeks' cooking for one hour per day and the same for sewing, 100 hours are scheduled for these subjects.

But the allowance does not work out in practice. The groups are in continuous flux. Pupils are withdrawn in the course of a term; new pupils are admitted irregularly. There is no record of the make-up of the group or of the specific tasks accomplished. The method of grading, that is, dividing the grade into $\mathrm{A}, \mathrm{B}, \mathrm{C}$ sections, and the change of classes at the end of each ten or thirteen week period also add to the confusion.
While records show the number of girls enrolled in cooking classes, it is impossible to say precisely how much instruction and experience they have had, inasmuch as term lengths are not uniform in the different schools and as the periods are sometimes one hour and sometimes two. Thus, for example, eighth grade pupils at Emerson had one hour of cooking daily in the first term of 1915-1916, while those who took cooking in the second term had twice as much (Table III). At Froebel, on the other hand, the eighth grade pupils were enrolled for two hours during the first and second terms,

Froebel School Building

TABLE III
ENROLLMENT IN ELEMENTARY COOKING CLASSES, 1915-1916: EMERSON

| Grade | First Thirteen Weers |  |  |  |  | Second Thirteen Weers |  |  |  |  | Third Thirteen Weeks |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Pupils Enrolled | Regularly Enrolled |  | Enrolled as Helpers |  | No. of Pupils Enrolled | Regularly <br> Enrolled |  | Enrolled as Helpers |  | No. of Pupils Enrolled | Regularly Enrolled |  | Enrolled as Helpers |  |
|  |  | $\begin{gathered} 1 \\ \mathrm{hr} . \end{gathered}$ | $\underset{\mathrm{hrs} .}{2}$ | $\underset{\mathrm{hr} .}{\mathbf{1}}$ | $\underset{\mathrm{hrs}}{2}$ |  | $\stackrel{1}{\mathrm{hr} .}$ | $\underset{\mathrm{hrs}}{2}$ | $\stackrel{1}{\mathrm{hr} .}$ | $\underset{\text { hrs. }}{2}$ |  | $\underset{\mathrm{hr} .}{1}$ | $\underset{\mathrm{hrs}}{2}$ | 1 | $\underset{\mathrm{hrs} .}{2}$ |
| 3 4 5 6 7 8 | 20 19 19 8 16 16 | 8 16 16 |  | 20 13 19 | 6 | $\begin{array}{r} 6 \\ 11 \\ 6 \\ 4 \\ 4 \end{array}$ |  | 18 | 6 11 6 4 |  | 11 4 5 7 |  |  | 11 4 5 7 |  |
| Total | 98 | 40 |  | 52 | 6 | 45 |  | 18 | 27 |  | 27 |  |  | 27 |  |

TABLE IV
ENROLLMENT IN ELEMENTARY COOKING CLASSES, 1915-1916: FROEBEL

First Ten Weexs

| Grade | No. of Pupils Enrolled | Regularly Enrolled |  | Enrolled as Helpers |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 hr . | 2 hrs . | 1 hr . | 2 hrs . |
| 3 |  |  |  |  |  |
| 4 | 10 |  | = | 6 | 4 |
| 5 | 39 7 | 33 | $\div$ | 6 7 |  |
| 7 | 11 | 11 | - |  |  |
| 8 | 12 |  | 12 |  |  |
| Total | 79 | 44 | 12 | 19 | 4 |

Second Ten Weers

| 3 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 12 | 12 |  | 26 |  |
| 5 | 26 |  |  |  |  |
| 6 |  |  |  |  |  |
| 7 |  |  |  |  |  |
| 8 | 11 |  | 11 |  |  |
| Total | 49 | 12 | 11 | 26 |  |

Third Ten Weeks

| 3 |  |  |  | 8 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 8 |  |  |  |  |
| 5 | 26 |  | 15 | 13 |  |
| 6 | 28 |  |  |  |  |
| 7 | 7 | 7 |  |  |  |
| 8 | 7 |  |  |  |  |
| Total | 69 | 7 | 15 | 47 |  |

Fourth Ten Weeks

| 3 |  |  |  | 17 |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 4 | 23 | 6 |  | 19 |  |
| 5 | 19 |  |  | 4 |  |
| 6 | 4 |  | 4 |  |  |
| 7 | 17 | 13 | 4 |  |  |
| 8 | 2 | 2 |  |  |  |
| Total | 65 | 21 | 4 | 40 |  |

but in the other terms for a single period (Table IV). Again, the helper system extends at Emerson as low as the third grade, but at Froebel not below the fourth. The variation in hours for regular cooking pupils is due to the fact that additional time beyond one hour is optional. Helpers, however, generally speaking, have no choice. They are allotted either to cooking or sewing as the program is worked out, in the making of which teachers, pupils, and resources are considered.

## III. THE CAFETERIA

THE work in cooking centers about the school luncheon. Many of the children go home at the noon recess; many get their entire luncheon at school, while others bring a luncheon from home, supplementing it with hot soup, cocoa, or dessert. The lunch rooms are open from $11: 15$ to $1: 15$. During 19151916 Emerson served 44,582 persons, including teachers and guests; Froebel, 17,842; and Jefferson, 7,889.

The cafeterias in the newer school buildings are well equipped; those in the older buildings have been arranged as conveniently as possible. At Emerson there is a large kitchen and separate dining room, tastefully decorated by the art students. The kitchen is equipped with a hotel size range, steam table, continuous cooking tables with individual gas plates, and storage place for utensils in drawers and small cupboards; a refrigerator, wall closets and a supply room, and serving counters. The dining room is furnished with substantial oak chairs and tables; cutlery and china are provided in restaurant quantities.

The quality of the food supplied is good, and the prices are reasonable, as shown by the schedule at Emerson for September:
Vegetable soup . . . 04 Fruit salad . . . . . 05

Noodle soup . . . . 04
Bean soup . . . . . 04
Corn chowder . . . . 04

Cold meat
Baked beef hash, Spanish sauce . . . . . 05
Leg of veal . . . . . 07
Braised potatoes . . . 03
Mashed potatoes . . . 03
Glazed sweet potatoes . 03
Cabbage . . . . . 03
Stuffed tomatoes . . . 05
Sweet corn . . . . . 03
Stuffed sweet peppers . . 03
Ham sandwich . . . . 03
Peanut butter sandwich .03
Cabbage and cucumber salad
Orange and grape salad .07 Cocoa
Chocolate pudding . . 03
Apple sauce . . . . 03
Scalloped apple, cinna-
mon sauce . . . . 03
Orange float . . . . 03
Punch . . . . . . 03
Grape punch . . . . 03
Baked apple . . . . 02
Ice cream . . . . . 05
Apple . . . . . . 03
Banana . . . . . . 03
Cake . . . . . . 03
Hot bread . . . . . 02
Hot rolls . . . . . 02
Lemonade . . . . . 03
Coffee . . . . . . 05
Cocoa . . . . . . 03

Apple dumpling, sauce .O3
Fruit salad . . . . . 05
Peach tapioca . . . . 03
.05 Apple sauce

$$
.03
$$03Grape punch03Ice cream05Banana03Hot breadHot rolls . . . . . 0203. 05 Cocoa03

Grape and nut salad . . 07

The average lunch charge per person was, at Emerson, I3.9c.; at Froebel, 14.2c.; and at Jefferson, I5c.

At Froebel the lunches are cooked and served in one room, although there is a small alcove for the teachers and guests. The equipment is of the same general character as that of the Emerson, though neither so extensive nor so complete. Its present inventory value is $\$ 750$.

Jefferson shows what can be done on an extremely modest scale. A basement room, not originally con-
structed as a cooking laboratory, has been partitioned off and painted white, one side serving as the kitchen, the other as the lunch room. A similar use is made of ordinary basement rooms at Beveridge and Glen Park.

The entire operating expenses of the cooking departments, with the exception of fuel and the salaries of the instructors at Emerson and Froebel and half the salary of the teacher at Jefferson, are met from the proceeds of

## TABLE V

-Financial Statement of Emerson Cafeteria, 1915-1916

|  | NUMBER SERVED | RECEIPTS | DISBURSEMENTS | PROFITS |
| :---: | :---: | :---: | :---: | :---: |
| September. | 3,958 | \$ 465.32 | \$ 410.62 | \$ 54.70 |
| October. | 4,127 | 547.08 | 499.62 | 47.46 |
| November | 3,869 | 540.64 | 508.64 | 32.00 |
| December | 4,255 | 623.81 | 573.45 | 50.36 |
| January | 4,998 | 705.24 | 674.49 | 30.75 |
| February | 5,080 | 739.40 | 693.68 | 45.72 |
| March. | 4,738 | 730.28 | 721.70 | 8.58 |
| April. | 3,711 | 604.04 | 576.25 | 27.79 |
| May | 4,851 | 653.13 | 632.00 | 21.13 |
| June | 4,995 | 602.81 | 519.24 | 83.57 |
| Total | 44,582 | \$6,211.75 | \$5,809.69 | \$402.06 |

the cafeteria. An examination of the receipts and disbursements, as submitted by the Gary authorities, at Emerson, Froebel, and Jefferson is interesting as bearing on the question of financing such departments.

The total receipts at Emerson for 1915-1916 were $\$ 6,2$ II and the disbursements $\$ 5,809$, leaving a net profit of $\$ 402$ (Table V). These disbursements include, however, not only the cost of food, but also the
salaries of two adult helpers at a monthly wage of $\$ 65$ and $\$ 40$ respectively, who assist in preparing the lunches and do most of the rough work. It also includes pay for a pupil cashier, and for pupils who assist in serving and in washing dishes.

While the Froebel cafeteria shows a net profit of only $\$ 22.63$ (Table VI), the actual profit was in excess of this, for the disbursements include not only the pay of the

TABLE VI
Financial Statement of Froebel Cafeteria, 1915-1916

|  | NUMBER SERVED | RECEIPTS | DISBURSE- MENTS | PROFITS |
| :---: | :---: | :---: | :---: | :---: |
| September. | 1,787 | \$ 215.50 | \$ 148.94 | \$ 66.56 |
| October | 1,943 | 268.81 | 232.76 | 36.05 |
| November | 1,677 | 238.82 | 247.80 | -8.98 |
| December | 1,184 | 171.29 | 172.69 | -1.40 |
| January. | 2,018 | 250.48 | 232.57 | 17.91 |
| February | 2,035 | 284.90 | 207.22 | 77.68 |
| March. | 1,938 | 271.25 | 311.57 | -40.32 |
| April. | 1,353 | 189.39 | 243.36 | -53.97 |
| May. | 2,162 | 302.72 | 333.33 | -30.61 |
| June. | 1,745 | 354.01 | 394.30 | -40.29 |
| Total. | 17,842 | \$2,547.17 | \$2,524.54 | \$22.63 |

adult helper at $\$ 60$ per month, but also expenditures for equipment amounting to $\$$ I 50 .

Jefferson makes the best showing of all, for even after paying half the salary of the instructor and an assistant for two hours a day at \$1o per month, there remained a net profit for the year of $\$ 453.30$ (Table VII). In all instances it is the policy of the school authorities to use the surplus for the benefit of the pupils either in adding
to the teaching staff or in improving the equipment. An accumulation of profits is not permitted.

The financial experience of Emerson, Froebel, and Jefferson demonstrates that cooking departments offering limited opportunities may be operated, after the original capital outlay, without cost to the system other than the salaries of professionally trained teachers, and may even be made to pay a part of this expense.

TABLE VII
Financial Statement of Jefferson Cafeteria, 1915-1916

|  | NUMBER SERVED | RECEIPTS | $\begin{aligned} & \text { DISBURSE- } \\ & \text { MENTS } \end{aligned}$ | PROFITS |
| :---: | :---: | :---: | :---: | :---: |
| September | 417 | \$ 57.15 | \$ 59.12 | \$-1.97 |
| October. | 886 | 143.95 | 89.97 | 53.98 |
| November. | 649 | 71.23 | 40.58 | 30.65 |
| December | 877 | 115.65 | 62.68 | 52.97 |
| January. | 970 | 112.45 | 50.13 | 62.32 |
| February | 520 | 126.47 | 88.00 | 38.47 |
| March. | 1,099 | 191.13 | 146.27 | 44.86 |
| April. | 595 | 86.69 | 64.63 | 22.06 |
| May. | 959 | 153.31 | 76.31 | 77.00 |
| June. | 917 | 125.69 | 52.73 | 72.96 |
| Total. | 7,889 | \$1,183.72 | \$730.42 | \$453.30 |

## IV. STAFF AND INSTRUCTION

THE teachers fall into three groups. Emerson, Froebel, and Jeffersonhave professionally trained instructors from the University of Chicago, from Cornell University, and from Valparaiso University. Their salaries are $\$ \mathrm{r}, 000$, $\$ 750$ and $\$ 600$ respectively. At Glen Park a regular teacher with slight special preparation conducts the work, and at Beveridge a practical housekeeper, with no professional training, is in charge. Practical housekeepers receive from $\$ 40$ to $\$ 65$ a month.
It is difficult to determine definitely the content of the cooking instruction in either the elementary schools or the high schools, since there is no systematic course of study for either all schools or any one school. Moreover, the year of the survey chanced to be one of unusual disorganization. The teacher at the Froebel school had been in the system only since September and was preparing to leave, as was also the instructor at Emerson. Teachers changed at Jefferson during the spring, and at Glen Park all cooking gave way in April to gardening, while at Beveridge nothing more than the preparation of the school luncheon has ever been attempted. However, effort was being made, at least
at the Emerson, Froebel, Jefferson, and Glen Park schools, to meet the minimum elementary, and at Emerson and Froebel the minimum high school, requirements of the State Department of Public Instruction. ${ }^{1}$ Beyond these minimum requirements, each teacher was free to plan and to execute such daily tasks as in her judgment were calculated to meet local and individual needs.

As has already been stated, the preparation of food for the cafeteria forms the basis of the Gary work whether of elementary or high school grade. There are no cooking laboratories or facilities other than the kitchens and utensils employed in the preparation of the noon luncheon. The same equipment is used by both elementary and high school students and the same instructor directs both groups. The children help to prepare the food, set the tables, and do the serving, the older pupils being held for the more responsible tasks.

Under these conditions, the content of the cooking instruction can be best inferred from typical menus:

MONDAY
Cream of tomato soup
Boiled ham
Baked potatoes
Tuna fish salad
Tomato salad
Cup cake
Peach dumplings

TUESDAY
Roast pork
Sweet potatoes
Stewed tomatoes
Cabbage salad
Brown betty
Chocolate cream

[^2]
Cooking Room-Froebel School
**

WEDNESDAY
Lima bean soup
Roast beef
Boiled potatoes
Banana salad
Washington pie
Stewed prunies

THURSDAY
Hot roast beef sandwiches
Scalloped meat
Steamed cabbage
Ham sandwich
Orange salad
Marble cake
Steamed pudding
Lemon cookies

It is possible to cover the field by means of such varied menus quite as thoroughly as by means of definitely organized courses, provided the teacher keeps track of what the pupils have done and what remains for them to do. Unfortunately, however, except in one school there were no such records, so that between the absence of records and the frequent change of teachers, there was danger of repetition without progress.

Unquestionably, in the Emerson school, where individual records were found, the pupils were getting broader and more adequate instruction than elsewhere, as is apparent from the schedule given on the following page.

This schedule shows that the instructor responsible for the schedule had a plan underlying her work. Note, for example, the soup column. The making of cream soup of various kinds was driven into a girl's understanding by repetition and yet the monotony was relieved by varying the kind of cream soup. By tabulating what the pupils had done, the teacher had a record of accomplishment to guide herself and her successor.
SCHEDULE OF PUPILS' WORK

| Name | Soup | Meat | Vegetable | Salad | Bread | Cake | Frosting | Beverage | Sandwich | Dessert |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underset{\mathrm{A}}{\text { Pupil }}$ | Cream of Pea Cream of Celery | Halibut Spare Ribs and Kraut Swedish Steak | String Beans <br> Lady Cabbage Spinach Potatoes au Gratin | $\underset{\text { Potato }}{\text { Dressing }}$ <br> Frui <br> Potato | Yeast Sponge |  | Plain | Cocoa Coffee Cocoa | Pimento and Cheese Pickle Peanut Egg Olive Cheese and Egg | Clove Sauce <br> Baked <br> Custard <br> Bread Pudding <br> Rice <br> Custard |
| $\underset{\text { B }}{\text { Pupil }}$ | Cream of Celery Corn Chowder Cream of Potato | Baked Hash Scalloped Salmon Pork Chops Macaroni and Cheese | Potatoes au Gratin and Celery |  |  |  |  |  |  |  |
| Pupil | Cream of Pea Cream of Tomato Cream of Celery |  |  |  |  | . |  | - |  |  |
| $\underset{\text { Pupil }}{ }$ | Cream of Pea Corn Chowder Cream of Potatoes |  |  |  |  |  |  |  |  |  |

It will be observed, however, that only one girl made bread. Obviously an instructor following the one in charge, or the present instructor herself, should immediately endeavor to give drill in breadmaking and increased drill in that subject to those who have had little or no training in it.

Children who attend cooking classes at the Froebel and Emerson schools are urged to repeat at home the work performed at school. Only one teacher, however, attempted, by means of a report made by the child herself, to hold children accountable for effort in this direction. The following are samples of reports made by the pupils themselves, telling what they have done at home and their opinion of it:

Student Report of Work at Home

| Student | DISH MADE | SUCCESS AS JUDGED BY PUPIL |
| :---: | :---: | :---: |
| "A" | Chocolate pudding Boiled rice | Excellent |
|  | Creamed carrots | Good |
|  | Cocoa | " |
|  | Caramel frosting | " |
|  | Jelly | Fair |
|  | Baked tapioca | " |
| "B" | Boiled frosting | Excellent |
|  | Cocoa | Fair |
|  | Boiled frosting | Excellent |
|  | Cocoa | Good |


| STUDENT | DISH MADE | SUCCESS AS JUDGED BY PUPIL |
| :---: | :---: | :---: |
| "C" | Doughnuts | Excellent |
|  | Jelly | " |
|  | Rice pudding | " |
|  | Potatoes in half-shell | Good |
|  | Jelly | " ${ }^{\text {a }}$ |
|  | Creamed carrots | Fine |
|  | Jelly | Good |
|  | Rice pudding | Excellent |

## V. TESTS

FOR the purpose of obtaining objective evidence as to what the Gary method accomplished, practical cooking tests were given. To make sure that the children had at some time had the particular dishes to be cooked and were familiar with the recipes, the teachers in each case selected the test dishes. A sufficient number were chosen so that each pupil in each test group might have an individual task, and in each case the pupils drew lots for these. The numbers in each test group, it will be noted, are small, but they include all the cooking pupils in both Emerson and Froebel in grades 8 to 12 inclusive.

The tests and the results were as follows:

## Group A

This group of ten ninth grade pupils were set the following dishes to cook by recipe:

Hash (made from cold chops and cold potatoes)
Mashed potatoes
Tomato and cucumber salad, French dressing
Creamed asparagus
Cocoa cake, with plain frosting
Banana float

The results, when expressed in common, nontechnical terms were:

Hash: Satisfactory, though nearly an hour was spent in cutting up the meat and potatoes.

Mashed potatoes: Satisfactory.
Tomato and cucumber salad, with French dressing: Satisfactory.
Creamed asparagus: Too much cream. Pupil did not consider the quantity of asparagus she had. She knew the principles of making the white sauce, but did not reason.

Cocoa cake: Satisfactory.
Plain frosting: Satisfactory.
Banana float: A failure. By some error the recipe did not specify when the yolks of the eggs were to be added.

## Group B

Group B, four ninth and tenth grade pupils, had had practically individual attention for some weeks. They used recipes, and all their dishes came out well; these were:

Creamed cabbage
Mashed potatoes
Two-egg plain white,
Tapioca cream
This same group also wrote on the following questions:
r. State the most helpful things you have learned in your cooking lessons.
2. In what ways do you help at home?
3. How many ways of cooking potatoes do you know?
4. Why do we need food?

In answer to No. I, nearly all the children implied they had learned to be tidy; some to measure correctly; some to bake. There was no attempt to enlarge upon their experience; each child merely stated one or two points.

In answer to No. 2, all the children reported that they assisted at home in washing dishes and cooking.

In answer to No. 3, it appears that boiling, frying, and baking are the three favorite ways of cooking potatoes.
In answer to No. 4, it was generally stated that food builds up the tissues, gives strength and warmth.

## Group C

Group C, composed of seven ninth grade pupils, cooked without recipes. The dishes and the results were as follows:
Kidney bean salad: Satisfactory.
Strawberry jelly: Used twice as much gelatine as should have been used. No sugar added.

Oatmeal cookies: Not enough oatmeal used. By an unaccountable mistake bay leaf was added, giving a very strange. flavor. Yet oatmeal cookies have a frequent place on the cafeteria menu.

Plain cake: Satisfactory.

## Grour D

This group of ten ninth grade pupils took a written test on these questions:
r. For what needs should the income of a family provide?
2. What are the essentials of a good meal?
3. What factors should determine the patronage of a market?
4. What do you do in the way of applying your domestic science instruction at home?
5. What are the main classifications of food?
6. Why is dust dangerous?
7. What interest has a home maker in a city board of health?
8. What steps would you take to lessen the waste of food-stuffs?
9. What are the characteristics of good bread?
ro. State briefly your idea of a well run home.
The answers to these questions showed a narrow range of knowledge and interest, and a lack of understanding of the application of what is learned. For example, to these children the family budget (Question I ) is a remote matter; the interest of a home maker in a city board of health, nominal; the ideal of a well run home, weakly formulated.

## Group E

This group, numbering two twelfth grade students, one eleventh grade student, and one tenth grade student, wrote on these questions:
I. What considerations should enter into the selection of a home?
2. What constitutes good buying?
3. What elements enter into the cost of food?
4. What kinds of food should an anemic person eat? Why?
5. What factors affect the kinds of foods needed?
6. What influence has woman as a consumer?
7. How should a refrigerator be cared for?
8. Give a recipe for bread.
9. Write a list of the most important kitchen utensils.
io. Describe the way you would lay the table for breakfast.

Answers to questions 2, 4, 7, 8, 9 and io evidence emphasis on technique only. Answers to $\mathrm{I}, 3,5$, and 6 show a grave lack of general understanding of anything but definite facts. The pupils do not draw on their personal experience, and evidently are not able to make deductions properly from their general studies.

## VI. MERITS AND DEFECTS

IT IS not easy to pass a single or simple verdict on the instruction in cooking at Gary, for there are two sides to almost every one of its characteristic features. For example, the introduction of household arts into the lower grades through the helper system revives in a measure the wholesome participation of the child in the activities of the home-an order now all too rapidly passing away. But the helper system is not free from dangers and drawbacks. The child's interest may be deadened. She may conceive positive dislike for the household arts, if she is kept at the same routine tasks for prolonged periods. To avoid this, helpers should be rotated from task to task-an arrangement which does not always obtain in the Gary cafeteria.
Again, young children cannot gain unless they are helping older persons who really understand what they are engaged in doing. Too often the older girls do not measure up to this standard. The instructors labor therefore at a threefold task-they guide the older girls (their main educational task), keep the helpers out of mischief, and must have the school luncheon ready at the stroke of eleven. Under this burden the capable instructor becomes discouraged; the weak instructor
evades her full responsibilities, leaving the practical cook to prepare the important dishes.

So also the cafeteria. Much is to be said in its favor. Pupils learn to work with proper regard for time, to handle quantities, to consider money values, to contrive dietetic combinations. Thus the cafeteria not only supplies the school lunch, but enlarges the scope of school work in cooking and gives practical point to the child's effort and interest. But danger lurks in the division of responsibility. One and the same individual at one and the same time teaches cooking and conducts a commercial enterprise: few persons are equally interested and equally effective in both fields. When, for example, the instructor's attention inclines to the commercial side, the scope and opportunity of the pupils inevitably suffer. Little or no risk can be taken with the food, for the quantities are large and the hour approaches. The practical cook therefore scarcely realizes how often she prompts the pupils or does things for them; nor does the teacher realize how small a part of the responsibility for the menu is borne by the children. The theory is sound that children must learn to cook by cooking. But in practice, the importance of the immediate practical interests at stake seriously compromises the educational view point. Occasionally, of course, a girl goes about her tasks with assurance. At Beveridge, for example, a child serves as assistant manager; she does her own work and is capable of assisting her classmates. But it happens that this particular
child has considerable responsibility at home and likes to cook. A few children here and there display similar characteristics. But, in the main, the exigencies of the situation tie the pupils to recipes-paid helpers and instructor constantly aiding even when recipes are followed. So wedded are the pupils to recipes that they are well nigh helpless without them.

Cafeteria activities center about the preparation of the luncheon; in consequence the afternoon instruction in cooking lacks motivation. As a meal is not imminent, there is really no program that must be followed. Hence the instruction lacks vigor and content; the children soon recognize the situation and cease to attend regularly. Moreover, the teachers are exhausted by the morning's ordeal, and are hardly in condition to attempt a systematic effort. A few dishes are prepared-cake, gelatine desserts, or bread-by a late afternoon class, but baked by another group next morning. On Friday afternoon, the children simply mark time, bringing notebooks up to date or copying recipes, while the instructor checks up luncheon receipts, makes out market or grocery orders, or looks after clerical details.

It must be frankly admitted that the results of the cooking instruction at Gary are disappointing. It must also be frankly admitted that home making in its well rounded aspects has not been developed and cannot be developed so long as cooking is confined almost entirely to the cafeteria. The cafeteria, as we shall point out later, has its part to play in well thought out scheme.


But from the point of view of home making, a cafeteria, organized on a large scale, is as far removed from application to the home as were the individual quantities used almost universally a few years ago. The cafeteria problems of purchasing, preparing, and serving food are quite different from the problems the housewife faces.

To achieve the desired results, cooking needs to be taught under conditions as nearly like those of the home as can be devised and as are practicable, the endeavor being to train a girl so thoroughly that she will be able to think in home terms. This requires a laboratory kitchen so that the instruction will not be sacrificed to the demands of serving the noon lunch. Wherever possible the laboratory kitchen should be supplemented by an apartment or practice house, where the multiple tasks of the household can be carried on simultaneously.

This brings us to the part that the cafeteria should play. It cannot take the place of a laboratory kitchen, nor can the two be combined. The aim of the laboratory kitchen is educational-to train for the home; the cafeteria is a business proposition and it must be so conducted. But the two may well supplement one another. The family meals planned in the laboratory kitchen can be arranged according to the cafeteria menu, and the food, if up to standard, can be utilized for the luncheon. The advanced students in the cooking classes may at the proper time take their place in the
cafeteria, and help with the work during definite periods of apprenticeship; the household arts instructor, acting as "coördinator," should see to it that the tasks assigned are properly graded and that pupils are properly rotated. The cafeteria, if of any size, should be in charge of an assistant chosen because of trade experience in large scale catering or lunch room management. Such a person may or may not have had household training. Business experience is the essential requirement. The second asset is the power to guide pupils and the willingness to take advantage of their aid. The type of organization here suggested frees the household arts teacher for teaching and makes her responsible for education only; at the same time, it obtains from the cafeteria certain educational advantages, since through it the children get opportunity to acquire skill and independence.

## B. SEWING

## VII. TIME SCHEDULE AND ENROLLMENT

SEWING at Gary is optional for high school girls; girls in the elementary school are required to take a minimum of fifty hours in either the seventh or eighth grade. As in cooking, most of the elementary pupils choose to take more. It was found that greater numbers were enrolled in the sewing classes than in cooking and at a much younger age (Table VIII). Although a majority of the pupils in the sewing classes come from the fifth and upper grades, pupils as young as those of the third grade are found engaged in class work. They are not helpers, but students. In fact, the helper system is not so conspicuous in the sewing as in the cooking department; only in rare instances is it employed. These young children are seated in groups at the side or the corner of the room. The instructors give them a certain amount of attention, teaching them crocheting stitches, how to knit, how to put an article of underwear together, and the like. They apparently enjoy the sewing room, and seemingly do not annoy or hinder the work of the older pupils, who have no responsibility for them.

TABLE VIII
ENROLLMENT IN ELEMENTARY SEWING CLASSES, 1915-1916
Emerson

| Grade | No. of Pupils Enrolled | Regularly Enrolled |  | Enrolled | as Helpers |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 1 \\ \mathrm{hr} . \end{gathered}$ | $\begin{gathered} 2 \\ \mathrm{hrs} . \end{gathered}$ | $\begin{gathered} 1 \\ \mathrm{hr} . \end{gathered}$ | $\underset{\text { hrs. }}{2}$ |
| $\begin{aligned} & \hline 3 \\ & 4 \\ & 4 \\ & 6 \\ & 7 \\ & 8 \end{aligned}$ | 23 |  |  | 23 |  |
| Total | 23 |  |  | 23 |  |

SECOND thirteen weeks

| 3 | 6 |  |  | 6 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 6 |  |  |  |  |
| 5 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 7 | 31 |  | 14 |  |  |
| 8 |  |  |  |  |  |
| Total | 43 |  | 17 | 26 |  |

THIRD THIRTEEN WEEKS

| 3 |  |  |  | 8 |
| :--- | ---: | ---: | ---: | ---: |
| 4 | 8 |  |  | 33 |
| 5 | 33 |  |  |  |
| 6 | 18 |  |  |  |
| 7 | 12 |  | 12 |  |
| 8 |  |  |  |  |
|  |  |  |  |  |

Froebel
First Ten Weeks

| Grade | No. of Pupils Enrolled | Regularly Enrolled |  | Enrolled as Helpers |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 hr . | 2 hrs . | 1 hr . | 2 hrs . |
| 3 | 5 |  |  | 5 |  |
| 4 | 39 | 11 |  | 28 |  |
| 5 | 18 |  |  |  |  |
| 6 | 15 | 15 |  |  |  |
| 8 | 16 | 1 | 15 |  |  |
| Total | 93 | 27 | 15 | 51 |  |
| Second Ten Weers |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 | 24 |  |  | 5 | 19 |
| 5 | 36 |  |  | 20 | 16 |
| 7 | 40 7 | 25 7 | 15 |  |  |
| 8 | 5 | 5 |  |  |  |
| Total | 112 | 37 | 15 | 25 | 35 |
| Third Ten Weeks |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 | 55 |  |  | 39 | 16 |
| 5 | 33 |  |  | 23 | 10 |
| 6 | 15 | 15 |  |  |  |
| 8 | 27 | 8 | 19 |  |  |
| Total | 130 | 23 | 19 | 62 | 26 |

Fourth Ten Weeks

| 3 |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 4 | 22 |  |  | 12 | 10 |
| 5 | 22 |  |  |  |  |
| 6 | 13 | 13 |  |  |  |
| 7 | 15 | 11 | 4 |  |  |
| 8 | 5 | 5 |  |  |  |
| Total | 77 | 29 | 4 | 34 | 10 |

TABLE IX
ENROLLMENT IN HIGH SCHOOL SEWING CLASSES, 1915-1916

| Grade | First Thirteen Weers |  |  | Second Thirteen Weeks |  |  | Third Thirteen Weers |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Pupils Enrolled | Regularly Enrolled |  | No. of Pupils Enrolled | Regularly |  | No. ofPupilsEnrolled | RegularlyEnrolled |  |
|  |  | 1 hr . | 2 hrs . |  | 1 hr . | 2 hrs . |  | 1 hr . | 2 hrs . |
| 9 10 11 12 | $\begin{array}{r} 37 \\ 32 \\ 16 \\ 8 \end{array}$ | $\begin{array}{r} 37 \\ 32 \\ 16 \\ 8 \end{array}$ |  | 22 11 16 9 | 7 4 16 9 | 15 7 | 39 32 18 5 | 39 32 18 5 |  |
| Total | 93 | 93 |  | 58 | 36 | 22 | 94 | 94 |  |

Froebel

| Grade | First Ten Weeks |  |  | Second Ten Weeks |  |  | Third Ten Weeks |  |  | Fourth Ten Weeks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of Pupils Enrolled | Regularly Enrolled |  | No. of Pupils Enrolled | Regularly Enrolled |  | No. of Pupils Enrolled | Regularly Enrolled |  | No. of Pupils Enrolled | Regularly Enrolled |  |
|  |  | $\begin{gathered} 1 \\ \mathrm{hr} . \end{gathered}$ | $\underset{\text { hrs. }}{2}$ |  | 1 hr | $\stackrel{2}{\text { hrs. }}$ |  | hr. | $\stackrel{2}{\text { hrs. }}$ |  | 1 hr | $\underset{\text { hrs. }}{2}$ |
| 9 | 15 | 5 | 10 | 12 | 4 | 8 | 19 | 4 | 15 | 17 | 17 |  |
| 10 | 8 | 8 |  | 8 | 8 |  | 13 | 13 |  | 6 | 6 |  |
| 11 | 7 | 5 | 2 | 7 | 5 | 2 | 4 | 2 | 2 | 6 | 4 | 2 |
| 12 | 5 | 5 |  | 8 | 6 | 2 | 5 | 3 | 2 | 9 | 9 |  |
| Total | 35 | 23 | 12 | 35 | 23 | 12 | 41 | 22 | 19 | 38 | 36 | 2 |

A group of sixth grade boys also received instruction in sewing at Emerson. They learned to sew on buttons and were engaged in making caps for workers in the steel mills and cloth pencil holders for use in the schools.

In contrast with cooking, sewing is rather popular with high school girls (Table IX). Whether they choose sewing in order to gain individual skill or because, with the assistance of the instructor, they make clothes for themselves and members of their family is a question. At all events, they elect it, and, as might be expected, follow their choice with varying degrees of enthusiasm and ability.

## VIII. EQUIPMENT, STAFF AND INSTRUCTION

ALTHOUGH there is a little sewing at Glen Park school in the form of busy work, and somewhat more at Jefferson, there is really no systematic work in sewing except at the Emerson and Froebel schools. The equipment at these two schools is ample for what is attempted, the same equipment serving both elementary and high school pupils. It consists of foot-power and electric machines, model busts, sewing tables, pressing boards, and electric flatirons.

At Emerson, sewing is in charge of an academically trained teacher, who also teaches geography and history. At Froebel, the household arts instructor directs the work. In each school there is a practical woman assistant, and these assistants do most of the teaching. This arrangement should bring about an admirable balance. The practical woman learns tried methods of instruction and comes to appreciate the step-by-step explanation necessary in guiding pupils, while the professionally trained teacher learns the "short cuts" of trade work.

It would be difficult to find a harder working corps of trade assistants than those in the sewing departments
of Emerson and Froebel. They teach seven hours a day and are constantly on the alert. The teaching is highly individualized, and, although the pupils are assembled in classes, no two members are likely to be at work on the same kind of article, or to be at the same point even if making the same thing. Each step is taught as it comes up.
Instruction in sewing at Gary centers around the practical needs of the children. Accordingly, no course of study is marked out. Pupils work on what they want or need to make, or on garments provided at the request of parents. The teachers buy cotton cloth, flannel and dress findings at wholesale, selling them to the pupils at cost, unless the parents prefer to furnish material themselves. Thus, a younger sister needs a dress, which at once becomes a project, even though the elder sister, who is expected to make it, does not know how. In such a case the instructor cuts the dress, while the pupil looks on. In the making, all the elementary stitches are explained and tried before the child proceeds. Over-refinement of execution is, of course, not emphasized, as the child would become bored and the mother impatient at the delay in finishing the article. Thus, no time is lost on preparatory stitches or on samplers; the children work from the beginning on real things. The courses run from ten to thirteen weeks in length, varying with the school.

## IX. TESTS

IN ORDER to ascertain whether the Gary children receive the explanatory and supplementary instruction necessary to make their practical work intelligible, two written tests were given. The questions addressed to 33 ninth, tenth, and eleventh grade girls were as follows:
I. Name the common sewing stitches. Tell how each should be used.
2. Explain a French seam. Give an example of its use.
3. To do good sewing, what supplies should be on hand?
4. How do you test a new paper pattern?
5. What types of persons should avoid plaids? Stripes? Bright colors?
6. What do you consider essential to good gowning?
7. What points should be remembered in sewing a sleeve into a garment?
8. How can a woman, when buying, influence factory conditions under which clothing is made? Explain.
9. What decides you to choose between ready-made and home-made garments?
io. How much instruction have you had in sewing? Name the articles you have made.

Questions I, 2, 3, and 5 were answered correctly. Questions 4 and 7 brought out surprisingly loose,
general answers, considering that question io elicited a long list of articles.

Questions 6 and 9 were answered incompletely, oinly one factor, as a rule, being mentioned.

Question 8 was not attempted by most of the pupils.
The second test was given to 35 tenth, eleventh, and twelfth grade students. The questions were as follows:
I. What considerations enter into the choice of different kinds of fabrics?
2. When is a woman "well dressed"?
3. How should a paper pattern be altered if the waist is too long? If the waist is too short?
4. Name, in succession, the steps to be taken in cutting out a skirt when a paper pattern is used.
5. Which is easier to make, a shirt-waist of plain material or a shirt-waist of plaid material? Explain.
6. Explain what a placket is.
7. Tell how to press a seam.
8. With what sewing machine are you familiar? What are its special characteristics?
9. How do you figure the cost of an article of underwear?
10. Write a list of articles you have made at home.

Questions 3, 5, 6, and 7 were answered, in the main, correctly.

Questions I and 2 were answered in very general terms.
Question 8 was not answered correctly by a single member of the group, yet all stated the make of a machine.

Questions 4 and 9 elicited indefinite and inaccurate answers.


Question io brought out a long list.
The pupils do reasonably well, it will be observed, with questions dealing with facts and with questions related closely to their experiences, but they are weak when called on for general information and for reasoned answers. In justice to the pupils, it should be said that there is practically no class discussion. And in justice to the teachers, it should be remembered that the numbers tested are small, that the courses in sewing are narrow, and there is no leeway for related work. Though the teachers recognize the value of supplementary comment and instruction, the opportunities for it are very limited.

## X. MERITS AND DEFECTS

THHERE is no doubt that sewing instruction in the past has erred by too close application of the $\mathrm{A}, \mathrm{B}, \mathrm{C}$ of technique, and by devoting too much time to drill on valueless objects. Gary is to be commended for breaking away from this lock-step procedure. But in attempting to construct a course in sewing around personal and family needs, it is quite possible that she has gone to the other extreme.

The theory of the Gary work in sewing assumes that the reality of the task assures the child's interest and that, as compared with this, logical sequence in the tasks set is of inferior importance. The proposition cannot, however, be accepted in this simple form. While the older model exercises have been rightly banished, some form of regular progress is unquestionably indispensable. It is the teacher's business to advance the child more or less regularly through the main steps of plain sewing, dressmaking and millinery, with constant regard at each step for the realities possible. Thus, merely formal training is avoided; but, on the other hand, some consideration beyond the practical needs of the moment controls procedure.

Gary wisely avoids mass teaching in sewing. On the
other hand, with its classes of 25 or 30 , helpers being included, individualization is apt to distract the teacher and to dissipate her energies. As each pupil goes her own way, it is necessary to make the same explanation over and over again, and the teacher is constantly on the jump. Far more, we believe, could be done for the children if they were handled in groups. Certain principles in all household art processes can be demonstrated and explained to a number of pupils at one time. The majority will be able, as a result of the demonstration, to carry out the process, and thus the instructor is left free to help those in need of special assistance.

It may be, too, that this excessive effort to individualize instruction accounts for the strain noticeable among the practical assistants, especially when this is coupled with a seven hour day. A trade day is a day of eight hours, it is true, but there are difficulties involved in instructing mixed groups of children which make a seven hour day in the classroom more exhausting than eight hours in the work shop of a dressmaking establishment.

Again, the emphasis at Gary on actual production is commendable, but sewing instruction is something more than learning to sew on buttons and hooks and eyes, and learning to mend and make simple garments. Ability to do these things and to do them well is desirable, but it is quite as important that children give attention to the kind and character of the garments required for different purposes, to the worth and quality
of different fabrics, to dyes, and to a multitude of other matters essential to the proper background for clothing a modern family.

Owing to the lack of appropriate records, it was impossible to determine the amount of sewing the children had had and to judge their accomplishments in the light of the amount of time given to their training. Observations of the classroom work and inspection of garments yielded a few vivid impressions.

In the first place, the standard of accomplishment is by no means high. In the lower grades this may be due to the fact that pupils with little or no prior experience often begin at once to make garments. Under these conditions a finished product of high quality could not be expected. Much of the work of the advanced pupils is also below standard. While it is true that trade work and school instruction differ, still, in so far as the processes are common, the home making standard should equal the trade standard. Gary certainly judges its products more leniently than does the trade.

Again, the instruction is hardly calculated to result in capacity to do independent work. Obviously, not much can be expected at the outset of children who begin their school work in sewing with garment making. The difficulty is that throughout the course the teachers are apt to do so much of the thinking that it is doubtful whether many pupils can, on completing their course, put a dress together by themselves. There are, to be sure, exceptions and for these the system is en-
titled to full credit. That is, there are students who sew skillfully and who cut and fit with sureness. On the whole, however, it remains true that sufficient drill is not given in the principles of garment making, nor is the power to think, as applied to sewing and garment construction, satisfactorily developed.

Finally, too little pressure is put on the students; as a result, they do not take their work seriously. A degree of inattention in the elementary grades is excusable, but in the high school grades, there should be evidence of concentration aiming at a definite object. This was by no means commonly in evidence. A class supposed to start at 2:15 did not get down to work until 2:35. Of a group numbering 14 , only nine were occupied. These were busy-three on underwear, one on an apron, another on a duck skirt, a sixth in making bloomers, a seventh embroidering a sofa cushion, an eighth, a centerpiece, and the ninth was cutting out a dress. A monthly school paper had just been published and the remaining five members of the class were absorbed in looking through the issue and in discussing the same. The thread at a sewing machine broke. The pupil did not re-thread that machine but moved to another. At another time a group of girls came into the sewing room and part of them went to work. The rest were absorbed in reading "The Tempest," which was to be performed that afternoon by the senior class.

In sewing as in cooking, the experience of Gary shows
that mere practical ends-the cooking of the daily school luncheon or the making of needed garments-are not alone broadly or sufficiently educative. Training should aim to give the pupil an intelligent grasp of both subjects. The child must of course be able to cut, fit and sew; but she must also have an interest in fabrics, designs, uses, etc. The instruction must have a conscious, central aim; it must touch, now here, now there, the child's other studies and activities.

A course can be conceived and executed in this spirit only if there is team play between instructors under proper supervision. At Gary, unfortunately, the single supervisor of manual work devotes himself almost entirely to the industrial work for boys. The household arts themselves require the full time of a supervisor. Not only is there need of a supervisor to stimulate and assist the teachers, but to exercise leadership in solving the perplexing problems surrounding the practical training of girls, in experimenting with courses of study, organization and methods, and in working out connections with other studies and especially with the home.

The foregoing pages endeavor to depict with complete impartiality the actual instruction given in the Gary schools in household arts and the theory on which the instruction is based. No effort has been made to extenuate defects; every effort has been made to do full justice. It remains, however, to be said that there is danger that such an account as has been given may mislead because
it fails to give the reader a proper realization of the attitude and spirit of the Gary pupils. These pupils are happy and this is a point that cannot be ignored when an inventory is taken. In the writer's judgment, the happiness and spontaneity of the children are due to a variety of causes-to the flexibility of the schedule, to the development of special activities, to the absence of repressive rules, to the general feeling that the school exists for the child, not the child for the school.

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[^0]:    ${ }^{1}$ See report on Industrial Work.
    ${ }^{2}$ For printing, see report on Industrial Work, and for gardening, see report on Science Teaching.

[^1]:    ${ }^{1}$ The greatest care has been exercised in preparing the enrollment data for cooking and sewing, but owing to the frequent change of classes and changes in the make-up of the same class, and to differences in reports which we were unable to reconcile, we are not satisfied that the tables are more than approximately correct either as to numbers or grade distribution.

[^2]:    ${ }^{1 " D}$ Domestic Science must be taught to the girls of the 7 th and 8th grades . . . two regular recitation periods per week."
    "High Schools must provide at least one full year's work." (Bulletin No. 17, State Department of Public Instruction, p. 214.) iv

