

Domestic Science in the Public Schools

by  
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## Authority

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## Domestic Science in the Public Schools

"Today educators, law-makers, philanthropists, and all interested in the highest good of the largest number of people, or in the best development of our growing and varied industries, are looking for the remedy, through education, not of the head alone, but of the head and hand combined in the same system, in order that the education may lead each pupil to some definite end, that the students' skill of head and hand combined shall have some small commercial value when he has completed his prescribed course of study. The introduction of cooking into the public schools is a means to reach this end. The purpose of such a course is not educational alone, nor yet is it strictly utilitarian, but it is, or should be, a

careful combination of both. This gives the pupil a practical as well as a scientific education, and principles are inculcated which will be helpful to her or him in later life.

The subject of Domestic Science includes Household Economics, Chemistry of Foods, and the theory and practice of cooking. This is, as yet, a new science, and was until recently all but unknown to the majority of people. Years ago Count Rumford wrote some on this subject, and while he gave some very valuable ideas on the principles of cookery, they were necessarily limited. About the year 1886, Matthew Williams gave to the world the first work on the chemistry of Cooking. In this book he complains of the neglect of this subject by chemists, and furthermore states that almost absolutely nothing can be found on the subject.

This crude volume of Williams's was followed by a little book entitled the "Chemistry of Cooking and Clearing," by Ellen H. Richards and S. Maria Elliott, while today Mrs. Erving stands pre-eminent as authority on Domestic Science through the text-book she has published. These, with magazine articles, comprise the entire works on this subject. This is a serious mistake as the giving of proper food and nourishment to our bodies is one of the most important duties of life. The responsibility of preparing this food falls to the housewives and how shall they know what to give their families if there be neither text books to consult nor anyone to tell them? Some one has said that man's food has more than a physical influence. This is quite true. It has a mental and moral influence as well.

Within the last twelve years

Domestic Science has been introduced into the public schools of the United States to a greater or less degree of efficiency; Davenport, Iowa, being a good illustration of what a city can do for the youths of her state. Furthermore there are several schools in Boston where this subject is successfully taught. These are an evolution from a single little school established by Mrs. Mary Hemerway in the year 1886. These departments of the schools are well attended, great interest being shown by the school board of the various schools as well as by the parents of the girls who take this work. As for the pupils themselves, they are very enthusiastic over the work as the methods of teaching are such that it makes cooking an interesting and novel work.

The necessary equipments need not be expensive. In

one such school a single room is fitted up for the cooking classes. The part which serves as dining room is fitted up with a table, china-closet, cabinet, and chairs; while another portion with its range, sink, refrigerator, etc. is the kitchen. In this school a U-shaped table in the centre of the room is the pupils' work table, while in some other schools individual desks or the hollow square form the students' work table. That the industrial department in these schools is growing in favor is shown by the increase in the attendance. For instance, more pupils apply for admittance to this department of the schools than can be accommodated, showing that the work is enjoyed by the children.

In the days of early civ-

ilization each family had to provide for its own wants by manufacturing its own cloth, shoes, farming implements, and various other articles as they were needed. As there were no factories at that time, this home manufacture was an excellent promoter of originality and invention. The underlying principles of that day were necessarily invention and conquest. Now contrast that period with its generality of work with the present conditions and we will find that people now are specialists hence learn one trade, or a single phase of a trade and unless employed at that particular work they are almost helpless; they do not know how to do any other kind of work hence have lost the independence their fore-fathers

possessed. Today hand-made articles are more valuable and higher priced than those that are factory made because in the former the hand has been guided by the human brain in their manufacture. Now, then, shall this deficiency be provided for except by the introduction of manual training into the schools? The word manual means hand, hence manual training has been defined as "systematic instruction and practice in the use of such tools and on such materials as will impart skill to the eye and hand." What boys and girls need is a training that will enable them to use their brain and hand at the same time—manumental training as it were—. It is something to know the theory of how a

thing is done, it is more to know how to do it. Take, for example, two boys in school both taking work in carpentering. A takes lectures and studies a text but has no practice. He studies the descriptions and manipulations of various tools and, being a diligent student, masters all the book contains for him. While B, on the other hand, has not only done the mental work but has applied his knowledge in the carpenter shops. Later in life each secures a position and begins to put his knowledge into practice. Which, think you, will be the more successful? A has the correct ideas but his tools will not work as they should; he is sure he does his work correctly but nothing turns out as he would have it. B, having had practice before, is master

of his tools and his plans, and all works harmoniously. If anything goes wrong he knows immediately how to remedy it. He united brain and hand in his work while A exercised only brain power. A true education cannot be secured by information alone, but must be accompanied by practice, by personal experience.

The training of the hand should begin in the home long before the child is sent to school. The child fashions things with its hands long before its brain has developed enough power to form definite conceptions of things. This goes on for several years, sometimes aided by kindergarten work, until the child enters the public school where the hand and eye are

trained by the use of pencils, pens, and crayon. Their conceptions become clearer by producing their mental pictures on paper. In many schools this has been followed by wood-work and sewing. The pupils are given the hammer and saw and boards with which to fashion simple models, or the needles, thread, and cloth to make their samplers in sewing. They are willing or rather anxious to do this kind of work because it is a rest from the other duties and, what is of still more importance, a child works better when he can see the result of his own labor. Think of the pride with which the little carpenters display their own constructions in woodwork. It stimulates their minds to see the complet-

ed work of their own hands. If so much can be done by a few experimental lessons, why not give the girls the same opportunity to learn cooking by experiment? We never think of teaching chemistry without giving the pupils laboratory work in connection with the lessons in the text.

As the food determines, to a great extent, the character of a nation or an individual, it is surely of as much importance that the girls should know how to cook as that the boys should know carpentry or drawing. If the girls are to be the home makers of the future, it is but just that they should have, in early life, some preparation for their future work; then when they go into homes of

their own, cooking—instead of being a drudgery to them—will be a pleasure. To know the scientific principles of cooking is to raise it above the weary routine or drudgery and thereby elevate it to a higher plane. Care-taking is woman's work in the world and for this reason should be begun in childhood. Responsibility inspires children to do their best work hence they enjoy work when they have something to show for their labor. They need something to stimulate an effort of the mental powers. A course of Domestic Science in our schools would supply this need.

Learning the effects produced by foods properly, as well as improperly, cooked, would give an opportunity for applying at least part of

their knowledge of physiology. A lesson on "Eggs" would bring out the physical and chemical value of albumen, the food principles contained in the egg, and why it is valuable as a food. These lessons would be an excellent intellectual, as well as manual, training for the girls. The subjects treated should be something of the nature of the following. - The history, production, and preparation of cereals, tea, coffee, cocoa, and chocolate; the cultivation, preparation, and food value of vegetables and fruits; and a lesson on breads, treating of the composition of baking powder, and the objective points in making yeast breads. Following this with lessons on the five food principles and the principle of cookery of each

would give the pupils a good practical knowledge of the chemistry of foods, give them a general idea of different food products, and help them to see why certain foods should be cooked in a certain way to make them the most healthful, while other foods require entirely different treatment. By having the pupils wash the dishes, clean the tables, and polish the silver, the habits of order and cleanliness will be formed. Milton says, "the childhood shows the man as the morning shows the day." If this be true, the women of the future would be better fitted for life's work if, in their childhood, they learned the habit of cleanliness, and hygienic and economic living.

The cost of such a course in the schools would be but a trifle compared with the

good that would result there-  
from. In the school at Davenport,  
Iowa, the cost including all  
expenses connected with it was  
less than \$130. per year, while  
in Boston the cost was only  
about \$80. per year. Both the  
directors of the schools and  
the parents of the children who  
have had the benefit of this  
training feel amply repaid  
for the little extra cost, and  
why not? Won't these girls be  
the mothers in the homes  
of the future? Since the  
family is a small type of the  
great world and the problems  
that they have to solve are  
identical, we can safely say  
that the women make the  
Nation. In a home where the  
work is done in an unsyste-  
matic and a careless manner,  
without respect to the laws of  
health, the children will grow

up with loose habits and perhaps be shiftless men and women, while in the well ordered home they learn system, cleanliness, and habits of industry, thus making them the better prepared to go out in the world and meet its requirements.

If the mother fills well her position of governess, physician, and housekeeper, her influence must be felt outside her own little circle as well as in it. Her influence will make the world better. Give the girls the early training and they will be better prepared to fill this responsible place.

Dr. Samuel Johnson says, "Where the dinner is ill got there is poverty, or there is indolence, or there is ignorance." If the girls have a knowledge of the art of cookery, it will remove the ignorance, do away, in part,

with the indolence, and by their learning the economic principles of right living poverty will be easier for them to bear. This subject is doubly important because God symbolized his Son by food and drink. Looked at in this light, cookery becomes more than a mere provision for bodily wants. This is expressed by Rev. Keyser when he says that "Speeding the gospel of good cooking will hasten the triumph of the gospel of redeeming love."