

Transcript of *School Gardens with Constance Carter*

Transcript of video presentation by Constance Carter

School gardens are once again a hot topic in the news and on the bookshelf. Growing concern for the health and well-being of our nation's youth and increased emphasis on the environment have spawned a renewed interest in the value of providing students with the opportunity to plan and care for a garden as part of their school curriculum. Healthcare professionals see school gardens as a way to counteract obesity, diabetes, and the harmful effects of fast food; environmentalists feel they provide a method for encouraging sustainability, diversity, and conservation; and educators value them as a means of fostering hands-on learning, teamwork, motivation, responsibility, personal growth, and creativity.

School gardens are actually a 19th century concept. The hard labor involved appealed to the Puritan work ethic of the 1800s. Some advocates promoted school gardens in this country by citing Europe's success in using them to advance its agricultural methods. But it was primarily the 19th century views on the benefits of fresh air, physical exertion, and character building, as well as the basic educational aspects of nature study that ignited the school garden movement here in America. Honesty, accountability, thrift, appreciation for public property, cooperation, a sense of pride, and self-respect were hallmarks of the garden experience.

In 1902, Dick Crosby of the U.S. Department of Agriculture observed, "Teachers who have had experience with school gardens are almost unanimous in testifying to the good influence of the well-kept garden. Children develop a feeling for the beautiful; they become neater in their habits, less troublesome, kindlier; they take pride in keeping the schoolyard neat. And the influence extends beyond the school grounds to the homes. Children start home gardens, begin to adorn backyards, porches, and windows; the parents become interested, and the influence goes on and on."

In 1904, Mrs. Fannie G. Parsons, a pioneer of school gardens in the United States, noted in a Report of the First Children's School Farm in New York City, "City children are enclosed amid bricks, stone, concrete, trolleys, trucks, and automobiles; and are therefore 'alienated' from their human birthright of trees, fields, and flowers. " Through her gardening program at New York's De Witt Clinton School Farm, Mrs. Parsons sought to save these city children.

By 1910, the School Garden Association of America, civic and women's clubs, horticultural groups, and educational organizations joined the ranks of those promoting and supporting the school garden movement. In 1914, the Federal government realized the educational potential of school gardens and created the Office of School and Home Gardening within the U.S. Bureau of Education. School gardens became a nationwide movement and by 1918 every state in America had at least one school garden.

To help schools develop their gardening curriculum, the U.S. Department of Agriculture provided the Office of School and Home Gardening with seeds, expertise, course guides, articles, and planting schemes. It also issued "how-to" pamphlets that enumerated what and when to plant, as well as the best ways to plow, fertilize, seed, mulch, and weed. These materials are well represented in the collections of the Library of Congress along with a plethora of journal articles, personal accounts, progress reports, illustrations, photographs, and posters. They give us insight into the hearts and minds of educators and students of the time.

As they worked in the garden, students learned that they could benefit or hurt the growth of living plants and organisms. In the New England Magazine of June 1902, Henry Clapp, Master of the George Putnam School in Boston, Massachusetts recalled, "The children not knowing how carefully young plants must be treated to live and thrive...were told plants resembled babies and could no more...be pulled out of their warm beds, deprived of their supply of food, or exposed to the hot sun, without harm...When the children saw their plants wilt, grow pale and sickly and actually disappear from the beds, they had an object lesson worth hours of lecture."

Educators expounded on the ways in which mathematics, language arts, geography, entomology, botany, landscaping, drawing, music, manual training, physical education, home economics, and nutrition could be incorporated into the school garden curriculum by linking them to garden tasks. For instance, in mathematics,

students figured the size of garden plots; calculated the distance between rows for optimal plant growth; determined the number of seeds required; measured the depth of the soil for each seed type; computed the cost of seed, fertilizer, and garden implements; and calculated margins of profit and loss.

By reading garden poems, stories, seed journals, field guides, and cookbooks, students satisfied the verbal and reading requirements of language arts. They honed writing skills by keeping planting journals, diaries, and lab notebooks; spelling insect and plant names; printing plant labels; and corresponding with seed and tool companies. In her article, "School Gardens in Their Relations to the Three R's" published in May 1905, Miss Persis K. Miller noted, "The necessary business correspondence, brief though it may seem, is more in quantity than the average language book provides for, and it has what a mere textbook cannot furnish; namely, the necessity of expressing oneself with clearness, because a real thing is coming in answer to this letter. But the greatest difference is noticed in the attitude of the children themselves in the interest and earnest effort that they put into these letters which are going to a real somewhere to secure a real something."

Students also composed articles for school newspapers and wrote compositions about various aspects of the school garden. Miss Miller recounted, "More subjects for compositions were here than could be used. Were descriptive articles desired, the children were ready to describe any plant in their gardens, or insect and bird visitor, and couldn't possibly say half they wanted to in the time given them."

In some school districts, children submitted their compositions in competitions. A winning essay entitled, "The Life of a Japanese Radish", was written by a 6th grader named Paul Roberts and was reprinted in a 1912 Bulletin of the U.S. Department of Agriculture's Experiment Station. Written from the viewpoint of a radish, the composition showed imagination and considerable research effort on the part of its author. Here is an excerpt from the composition: "After I had been buried about three days, I peeped out of the ground. I was given water every day, and within two weeks my leaves were 3 inches in length...my body is between a white and a pale yellow...I ought to weigh about 15 pounds. Some of my family reach the remarkable weight of 40 pounds... Paul is very much interested in me, and has taken good care of me and will take me out of the ground when Jack Frost comes again."

Geographic principles were learned in the garden as students researched the origin of fruits and vegetables, observed the effect of climate and soil on the growth and development of plants, noticed methods of seed dispersal, and studied American cultural history and variations in planting customs. For example, a Native American custom called "three sisters" involved planting corn, beans and squash together. Beans fixed nitrogen in the soil to help the corn grow, the cornstalks provided support for the bean plants, and the squash covered the ground like mulch while its prickly vines kept animals away.

Students received valuable lessons in botany and entomology by learning the names, anatomy, and life cycles of garden plants and insects; detecting the role of earthworms in soil aeration; watching seed germination; observing pollination by bees and other insects; determining which insects ate which plants; and learning to recognize garden weeds. In his 1902 article in the New England Magazine, Henry Clapp recalled, "The development of the young plants, each species in its own peculiar manner, excited the curiosity of the children...many singular phenomena of plant growth like, for instance, the bean's habit of coming out of the ground with the skin of the bean perched on the leaf; or the marked difference between the seed leaves and the first pair of ordinary leaves interested them and sharpened their powers of observation."

Students were introduced to landscaping fundamentals as they planned the school garden and made aesthetic and functional paths leading up to and around the school grounds and plants. Colorful vegetables and flowers beautifully transformed the schoolyards. In her article entitled "School Gardens in Great Cities" in the April 1904 American Monthly Review of Reviews, Helen Christine Bennett described the making of the first children's school garden in New York City, "Facing the Hudson, on the west side of New York City, is a piece of condemned land awaiting improvement. The most vivid imagination could not have conceived a more desolate spot than this was in the summer of 1902...Rows of tumble-down houses...piles of rubbish, stones, rags, and litter. In the center of this plot of ground, it was evident that something of more than ordinary importance was occurring...the children's ready minds, assisted by those of older brothers and sisters, and by workmen from the Park Department of Manhattan, accomplished wonders. Stones and rubbish vanished. The hard earth yielded to the plow and harrow. Load after load

of rich loam was brought...Walks were laid out and plots marked...Children...planted the seeds given to them...soon in that desert waste rose an oasis of living green, orderly, neat, and picturesque."

In 1905, Mrs. Keach, a supervisor of drawing at the Critic School in Baltimore, Maryland remarked, "Children paint and draw so much better the things they have had some care of." In the school garden, students learned to draw and paint by sketching seeds and plants, designing garden signs and markers, mapping garden plots to scale, and creating watercolors of vegetables, flowers, birds, and insects. Students received training in music by writing and singing garden songs.

Lessons in manual training included cutting plant stakes, and constructing raised beds, cold frames, row markers, and benches. Physical education departments recognized the value of tilling, hauling, digging, planting, and weeding for building and maintaining physical stamina. Henry Clapp noted, "No system of indoor gymnastics could have done so much for the health and strength and enthusiastic pleasure of the children in so short a time as did the work. The boys had ample opportunity to show their skill, strength, and helpfulness, and even the girls, after a two hours' tussle with refractory sods, seemed in no way weary or discouraged."

Students gained practical experience in home economics by cooking, canning, and preserving the fruits and vegetables they harvested. As they prepared the food they grew, students had an opportunity to add healthier foods to their diets and to learn the principles of better nutrition.

The First World War gave a boost to the School Garden Movement. School gardens flourished as an integral part of the war effort and provided an important source of local food. Adopting the motto, "A garden for every child, every child in a garden," the United States School Garden Army was organized and consisted of boys and girls, ages 9 through 15. Each participant pledged to "consecrate my head, heart, hands and health through food production and food conservation to help in the World War and world peace." The logo consisted of Uncle Sam as the Pied Piper being followed by children carrying a hoe, rake, shovel, and trowel, and by a smaller child sowing seed. The logo graced the covers of the School Garden Army's many instruction manuals and guides on preparing the soil, sowing seed, caring for plants, and harvesting crops.

In 1879, Erasmus Schwab noted, "School gardens are a fountain for the knowledge of nature and its consequent pleasure, and an excellent means of training." Today, the school garden is once again becoming a vehicle for teaching students about the wonder of nature and the diversity of living things. It also is used to foster self-esteem, responsibility, appreciation for the environment, and better nutrition and health. In the past decade, there has been an eightfold increase in teacher requests for school garden materials and it is estimated that about one-fourth of public and private schools in the United States now have gardens."

The Library of Congress has a wealth of materials on school gardens. We encourage you to explore the ways in which these gardens have enriched the lives of students, transformed entire communities, and contributed to the well-being of our nation.

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