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## The Origin and Development of the Open Air School

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UNIVERSITY  
OF MAINE

THE ORIGIN AND DEVELOPMENT  
OF THE  
OPEN AIR SCHOOL

By

MARION FRANCES QUINN

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A PAPER

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Requirements for the Degree of  
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## THE ORIGIN AND DEVELOPMENT OF OPEN AIR SCHOOLS

### Introduction

Open Air Schools came into existence because people had found a need for them. Some children were for one reason or another not profiting by a regular school routine. There were several causes for this. One cause was that some children had come in contact with tuberculosis and scientific studies showed that the tuberculosis germs could be best treated by out-of-door rest and good nourishing food. Other children were malnourished so didn't have the resistance to fight off colds and tiredness. Still others had had operations and were not strong enough to attend a regular school.

"Open Air Schools are based on the conception that the first essential to a worthy education is sound bodily health."<sup>1</sup> Since the regular routine of the ordinary public school does not take care of children who because of their physical condition cannot compete with their normal classmates, the Open Air School became necessary.

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1. Kingsley, Sherman C., & Dressler, F. B. Open Air Schools.

## Methods of Procedure

The following methods of procedure were used in this study of Open Air Schools:

1. A study of available articles on the history of the Open Air Schools in other countries.
2. A study of available articles on the history of the Open Air Schools in the United States.
3. A study of available material showing the development of the Open Air Rooms at Portland, Maine.
4. Personal interviews with the two teachers of the Open Air Rooms at Portland, Maine.
5. A study of available material showing the development of the Open Air School at Bangor, Maine.
6. Actual contact with the pupils of the Bangor Open Air School as the Director during the past 10 years.
7. Personal interviews with Miss Howard, the former Director at the Bangor Open Air School.
8. Personal interviews with Miss Hopkins of the Public Health Association at Bangor, Maine who was one of the first to see the need for an Open Air School at Bangor.

### The Origin and Development of Open Air Schools in Europe

The first school of this type was opened in Charlottenburg, a suburb of Berlin, Germany, in 1904. The success of

this experiment was so great that very soon 10 of the leading cities of Germany adopted the plan.

The first Open Air School in England was conducted by the school authorities of London in 1907 at Bostall Wood, near London. It was followed in 1908 by three Open Air Schools at Birley House, Montpelier House, and Shrewsbury House, three private estates near London. These schools were in session from June 1, to October 31. By 1911 the council found it was desirable to keep the schools open during the whole year. The evidence of the medical officer testified that the children who had been suffering from debility and general ill health and who had been unable hitherto to benefit from instruction in the ordinary schools were able at the conclusion of the Open Air School Courses to take their places in the ordinary classes.

The first Open Air School at Padua, Italy was begun in 1902. In 1905 a larger colony was opened on the outskirts of Padua, opened from spring to fall. In 1909 the city built a large and beautiful structure for these special classes. Milan, Rome, Genoa, and Florence have a traveling Open Air School. The Open Air School at Florence has continued without interruption even through the vacation months.

In France Vacation Colonies were started in 1911. About 81,358 French children spent from three to six months in these vacation colonies. At Havre, two colonies have been developed, one at Grosfys and one at Montgeon. As early as

1904 France had an Open Air School at Montsgny-Sur-Loing, at the entrance of the forest on Fontainebleau. Lyon was the first city in France to have a municipal Open Air School. The Open Air School at Lyon was started in 1907.

Switzerland has Open Air Schools in Leysin, and St. Moritz, Lausanne, Geneve, Neuchatel, Bischofzell, and Zurich.

At Lille Bellguard, Denmark a farm was owned by the city and was opened for a colony of undernourished children from May 15 to September 16 as early as 1905.

In the sand dunes near The Hague, Holland there is an Open Air School run by a private organization. The work was begun in a very small way in 1905 in a private home, where the children went for six weeks. In 1906 another private house was given with rent and here the work was carried on for three or four months. In 1913 the city authorities became interested and gave the ground for a new and larger school.

In Hungary the first Open Air School was established at Szombathely, by the Anti-Tuberculosis Association of Vas County in 1908.

#### The Origin and Development of Open Air Schools in Canada, Australia, and Hawaii

An Open Air School was established at Toronto, Canada in 1912 under the supervision of the Board of Education. The school was in session from June to September in 1912 and from



May to November in 1913. There are also Open Air Schools at Montreal and other Canadian cities.

The climate of Australia is particularly favorable for Open Air School work. Sandringham, and Victoria have erected Open Air Schools at a cost of \$650 each. These schools take care of 50 children each.

Puuanahula, Hawaii seemed a doomed city with people dying of tuberculosis. In 1929 the records showed one death from tuberculosis. In 1932 there were three deaths. In September 1933 a girl died, her brother having died the previous December. In October 1933 tuberculosis again struck in the same family, taking another girl who had been in school during the preceding month. In November of the same year another boy from that family died. In 1934 there was one more death against the record of tuberculosis. In 1935 there were left only 55 people in this isolated little community.

In all but two families there had been deaths from tuberculosis in past years. Something had to be done and it was done.

With a combination of a government physician, possessed of a public health attitude, a teacher who envisioned the value of prevention, and a public health nurse whose energy smiled at the task this little community has tackled its tuberculosis problem.

In September of 1933 and again the following March, every school child was given a physical examination by the physician. In April tuberculin tests were given to the 21 children remaining in the school. Twenty of these children proved to be infected with tubercle bacilli.

At this time the one-room school was changed to what might be called a preventorium. To the many tasks assumed by the teacher was added that of taking temperatures twice a day

for two weeks during May and June, while arrangements were made for X-Ray examinations. Many of the children showed a temperature above normal nearly every day. None were normal at all times. The average for the whole group was 99 degrees.

The children were driven 90 miles for X-Rays. The cost of these was met by Christmas Seals. Most of the pictures showed evidences of healed childhood type of tuberculosis. There were nine negative and 12 positive cases. As a result of this work several of the children are receiving far more careful supervision than ever before. This is the background for the preventorium program developed in the school. For over a year the emphasis in this school, as in all schools in Hawaii, has been gain in weight rather than upon variation from so-called normal.<sup>2</sup>

Cod liver oil was furnished by the Bureau of Public Health Nursing of the Territorial Board of Health, and later this was taken over by the local tuberculosis committee.

Play periods were most carefully supervised by the teacher. Rest became one of the major activities of the day. The normal school day was lengthened so that each child could receive the maximum of rest.

Supervision of the children's diet was another most important feature of this school. A nourishing hot lunch was

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2. Health for the Children in Hawaii. (See next page)

served to all the children daily. The food and milk were furnished regularly without cost by the Puuwaawaa Ranch, employer of the majority of the children's parents. It is interesting to note that at the end of the first year all but two of these children were considered normal. During the one year the average gain in weight for the boys was 10.9 pounds and for the girls was 9.5 pounds.

In the space of one year this little community of Puuanajulu, where the tuberculosis mortality has been enormous, has shown that much good can be done by spreading education into the homes.

The outlook for Puuanajulu is not as drab as it has been. No longer is this community resigned to the grief that has been theirs. Puuanajulu is just one example of what the whole of Hawaii is doing to control tuberculosis. In 1934 Ewa Plantation provided the tuberculin test and X-Ray examinations for 1100 children in the local schools of Hawaii. The plantation provided the personnel and paid the bills.<sup>3</sup>

#### The Origin and Development of Open Air Schools in the United States

An Open Air School was established at Providence, Rhode Island, in 1908. This school was set up in an old

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<sup>3</sup>. Health for the Children in Hawaii by Walter Seymour, M.D. and James G. Stone. Taken from Journal of Outdoor Life 1935. Pages 179-181 and 196-197.

school building. The windows were placed on one side of a very large room and a kitchen and dining outfit were installed in another part of the room.

An Open Air School at Buffalo, New York was one that received much publicity. It was situated on a large plot of land, centrally located and shaded by large old trees with a number of small open sided shed-like smaller buildings clustered around the large old-fashioned house.

The children carried on projects that interested them. Some children had a garden and made the fence that surrounded it. Others had chickens in a hen coop and these children stained the coop green. Other children who were interested in cooking made such desserts as bread and butter pudding and helped serve the lunch for the 150 children attending the school.

The Open Air School at Jacksonville, Illinois consisted of two buildings which were joined by a passage way. The floor dimensions are about 30 by 50 feet, accommodating 50 or 60 children. The windows on all four sides were adjustable so that a controlled low temperature could be maintained at all times. Two teachers, a housekeeper and a nurse were in charge of the work.

Children who were found by the city public school nurse to be deficient in health, with tubercular family history or tendencies, or anemia, were assigned to this school

Tuberculosis Clinic. This school was primarily a health school in the large sense.

The children attend the school for a full day. A hot lunch is furnished at 9:15, dinner at 12:15 and a lunch before they return to their homes in the late afternoon.

Only the children who needed it most could be taken care of in this school. In 1915 there were 40 pupils. In 1915-1916 there were 47 cases; in 1916-1917 there were 48 cases.

It was significant that the attendance of the children assigned to this school was greatly improved. In many cases where the record of previous attendance showed absence of from 50 to 70 days per year, the record in the Open Air School was almost perfect.

Cambridge was one of only three cities in Massachusetts that saw the value of entering the national school health contest arranged by the American Child Health Association in the spring of 1924. Twenty-eight Cambridge teachers took part in this competition and a prize, a \$500 scholarship, was won by a teacher of the Morse School. Of the 23,000 school children of the city, there were annually selected by school nurses and examined by physicians 1,000 underweight and undernourished children. These children fell into three groups. Those positively tuberculous, the distinctly pre-tuberculous, a group of undernourished children, all needing summer care.

The children of the first group are taken care of by ample provision in the state and city sanitariums. The second group of pretuberculous group are cared for in the children's pavilion of the Sharon Sanatorium. The average length of stay here is about six months. When these children have a sufficient reserve of health and resistance safely to take up normal life at home again they are discharged from Sharon. The after care of these children shows how child welfare work can be effective. When a child leaves Sharon a report goes with him to the head school nurse. The child usually enters an Open Air School, where the teacher and nurse are asked to give him special care. The parents are shown the importance of continuing the Sharon routine. Summer day camps are also in operation to aid in restoring these children to good health. In the summer of 1926 there were two camps, each numbering 400 children. Much of the time at these health schools is happily spent outdoors under a program that includes a luncheon of milk and cookies on arrival, then games, singing, posture work, with special corrective exercises for those needing it, training in health and food habits, napping after lunch, sewing, basketry or other handiwork, and sandwiches and milk before dismissal.

During the summer of 1926 another group was formed to include children who were undernourished with family history, environment that threatened tuberculosis, etc. They were given heliotherapy a portion of each week day, during a period

of eight weeks. The Cambridge school committee lent the association one of its school buildings, which had a spacious roof for sun treatment.

Through heliotherapy it was hoped that there would be:

1. A gain in the excretory function of the skin.
2. An improvement in the general muscular tone.
3. An improvement in the hemoglobin content of the blood.
4. A gain in weight and in physical tone.

The treatment was under the guidance of a physician and was preceded by a thorough physical examination. Treatment was begun with a gradual acclimatizing to fresh air and the graded exposure to the sun.

Besides the physician in charge there was a nurse, a dietitian and a director of play. The longer school day was an added advantage for the children had both dinner and supper at camp.

The Open Air Room at Chelsea, Massachusetts is ideally located on the south corner of the building with windows on two sides of the room. These windows open like doors. The room is equipped with moveable furniture that can be pushed back against the wall to make room for the cots during rest periods.

Children are selected at the beginning of the school year by the school nurses. These children are weighed and measured and the 24 children who need the care are chosen for

this room. The children are examined by a physician and the nurse records the findings and makes home visits so that any defects can be corrected.

The children and teachers prepare the meals and do the serving. The teacher studies the effects of various diets on the gain of the class and changes them accordingly. The children are given practical training in the selection of foods and in the preparation and serving of the meals.

At Chelsea part of the rest period is before dinner and all except the dinner helpers rest for 15 minutes. The dinner is served at 12 o'clock and is followed by a tooth-brush drill. Then the class returns to their cots for a half-hour nap, while dinner helpers wash the dishes. By having three sets of helpers, the girls lost their rest period only once in three days.

Each child has a weight card on the wall so he could see his progress. When a child reached normal weight and held it for a few weeks he was transferred to the regular room and someone from the reserve list took his place. Usually about half of the class returned to regular rooms before the end of the year.

The Open Window Room in the Campbell School, LaSalle, Illinois was established in 1928. It was intended for the benefit of delicate and undernourished children. The children enrolled in the room were taken from among the pupils of the first six grades by Doctor Ailes and the nurses of the Hygienic



Institute, and all of them were free from any communicable disease. Seventeen children were accommodated in this room. The classroom was conducted similar to a rural school with the first six grades.

At the Campbell School the noon lunch was eaten at school and a rest period followed. Health was emphasized with the nurse visiting the room daily to advise, instruct, and check on the health habits of the pupils. The nurse made the home calls to keep the parents posted on the pupils' progress and to keep the nurse informed on home conditions.

A marked improvement was noted in the physical condition of the children. Each child gained an average of about five pounds in weight which was approximately two pounds more than the average for similar groups in other schools. All the children gained in a feeling of well being and showed an improvement in scholarship. Their physical condition was greatly improved, and they gained a knowledge of good health habits and their effect on growing children.

The Sunshine School of Berkeley, California was organized to care for children in the following groups:

1. Convalescents from acute illness.
2. Children with or without known tuberculous infection in danger of developing tuberculosis.
3. Cardiacs needing increased rest, limited activity, and careful supervision of exercise.
4. Children with other organic defects who needed a rest program.

5. Children discharged from the preventorium or sanitarium who still needed increased rest and close medical supervision.

The Sunshine School has two dormitories, school cafeteria, three classrooms, shower and dressing rooms, and a sun platform.

The Sunshine School was financed by the Berkeley Board of Education, the Berkeley Health Center, the Alameda County Tuberculosis Association, California Tuberculosis Association, Berkeley Exchange Club, and the Berkeley School Lunch Committee.

The maintenance cost per pupil was 17 cents more per day than the cost per pupil in regular elementary school.

The staff health workers in addition to the usual school staff are the school physician, the advisor in tuberculosis, the school nurse, and the school dietitian.

Requirements for admission specify that applicants must be Berkeley residents for the first six grades. Their financial status does not determine eligibility, this being determined by physical need. The amount of school work is limited to three hours daily and lunches are eaten in the school cafeteria under supervision.

The children are weighed once a week, and a complete record of weights, temperatures, sun exposure, and other medical data is kept by the nurse and is gone over each week by the school physician.

The following conclusions seemed to result from this project:

1. A school of this kind carefully operated along sound health lines is a necessary adjunct to the tuberculosis program of any community.
2. Such a school is one solution for the economic difficulty of providing adequate preventorium space in an average city.
3. Such a school would be centralized in one building.

#### History of the Development of the Bangor Open Air School

The Open Air School at Bangor was an outgrowth of the Clinic on York Street. This Clinic had been established by the Anti-Tuberculosis Association several years previous to 1915. Miss Louise Hopkins, the Public Health Nurse in charge of the York Street Clinic, was probably the first individual to feel the need for an Open Air School at Bangor.

Mrs. W. F. Atwood in her report to Superintendent of Schools in 1936 said "The Anti-Tuberculosis Association Committee of the York Street Clinic while working with the children who attended the clinics was impressed with the need for an Open Air School to care for the undernourished and undeveloped children."<sup>4</sup>

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4. Atwood, Mrs. W. F. Report of the Anti-Tuberculosis Association to School Superintendent Irving I. Small. June 1936.

Miss Hopkins went to Portland where the first Open Air Program in Maine was established. She studied the situation and returned to Bangor very much enthused over the situation. Later Miss Strout came to Bangor, on Miss Hopkins' invitation, and spoke to various civic clubs of the city to show the value of such a school. Miss Soule came also to speak before the City Government on the feasibility of an Open Air School at Bangor.

The Anti-Tuberculosis Association through their Secretary Mr. Samuel R. Prentiss sent a communication to the Superintending School Committee asking for the use of the then vacant Newberry Street School for an Open Air School. It was planned to have the school out of doors on a covered platform which would be erected for the purpose. The indoor rooms would be used when the weather was too severe for the pupils to remain out of doors.

The School Committee was ready and willing to aid in the project and authorized Superintendent Wormwood to assist the Association in its arrangements and to furnish a teacher for the school. The School Committee felt that if the project was successful the school department would without doubt take the project over at a later time.

In 1921 the Open Air School Committee of the Anti-Tuberculosis consisting of: Dr. Barbara Hunt, chairman, Mrs. N. C. Ayer, Mrs. W. F. Atwood, Miss Winifred Taylor, Dr. Harrison Robinson, Richard Palmer, Henry Wheelwright, and

Harold Hodge opened a room over the heating plant of the Hannibal Hamlin School. This room was refitted by Contractor Morse in accordance with plans drawn by Parker Crowell. This building marked the site of the first Open Air School at Bangor.

"The City Government had appropriated \$2000, which covered the remodeling of the building. The City provided the teacher and the Maine Public Health Association donated \$1000."<sup>5</sup>

The school room is a large, sunny and well heated room. Wide overhanging eaves form a protection against wind and rain so that the casement windows may be kept open at all times. There are 16 windows allowing a flood of light and air to enter on two sides of the room. The large skylight fitted with ground glass and covered with wire netting has been set in the roof, throwing open a large part of the ceiling to the health giving rays of the sun. On the opposite slope of the roof is a large ventilator placed so as to insure perfect circulation. One end of the room will be covered with blackboard, all the light for the room will come from the correct quarters. Opening from the main room are coat rooms for the boys and girls, two toilets with connecting shower and an office.

In one corner of the main room is a raised platform on which will be the school kitchenette. Here the lunches will be prepared and served by the little folks themselves. The dish cabinet is a much valued present from the high school students in the manual training department.

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5. Bangor Daily Commercial, October 14, 1921.  
Article on Bangor Open Air School.

On the whole it would be hard to imagine a more attractive and practical building in which to inaugurate the new school. Dr. Hunt has appointed an executive committee to act with the committee to conduct the opening of the school and undertake the provision of the necessary equipment.<sup>6</sup>

After some delay occasioned by the fire which broke out in the coal in the basement of the building the school finally was opened on November 7, 1921. Twenty children were enrolled. All of them were 10 per cent or more underweight.

Miss Nettie M. Howard, a grade teacher in the Abraham Lincoln School, was chosen to teach at the Open Air School because of her interest in health work.

Miss Lilla McLeod, a trained dietitian, prepared the meals for the children. At 10 o'clock the children were served a lunch consisting of graham crackers and milk. At noon, the luncheon consisted of a nutritious soup, scrambled eggs or macaroni, with an easily digested dessert. The children were allowed all the bread and butter they could eat.

After lunch the children were allowed to play out of doors on pleasant days until one o'clock. At one o'clock the cots were placed in the room for the rest period and the children prepared for resting. Most of the children went to sleep and at two thirty had to be awakened. When the children awoke they were served another graham cracker and milk lunch before they started for home on the street cars.

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6. Article taken from the Bangor Daily Commercial, October 14, 1921.

The children were chosen for Open Air School by the school nurses and the doctors of the city. As soon as the children had reached normal weight and held it for a few weeks they were transferred back to regular school and others took their places.

The positive side of health is always emphasized and the beauty of health which includes rosy cheeks, pearly teeth, good posture and the sunny smile is ever stressed.

The children are weighed each Friday and the average gain has been about one pound a week. The school nurse weighs the children and gives health talks each Friday. Dr. O'Brian examines the children every two weeks and everything is done to help the children to gain weight.

Home records are encouraged and heartily endorsed by the parents. Seven pieces of candy a week is the maximum. Early bed hours take their place on the school charts and the children are delighted to report on their breakfasts, all of them beginning with a glass of water and all of them including eggs, milk, bread, cereals, and fruits.

All school work is correlated with health if possible thus carrying over the idea of the health school in so far as possible. The children have learned that they get iron from carrots, starch from potatoes, and proteins from meat and nuts. They know that lime is one of the necessary substances for making good teeth and bones. The children develop an interest in building up their body machines when they learn

the causes and effects of eating the right kinds of food.

It is interesting to note that not a child who follows the rules laid down has failed to respond to the Open Air School treatment. The rules are so simple. They are:

1. Drink one quart of milk a day.
2. Rest an hour after dinner, and go to bed early.
3. Eat only one piece of candy a day and that after a meal.
4. Keep body and clothes clean.

The Anti-Tuberculosis Association opened their first Summer Day Camp July 1st, 1931 on the spacious grounds of the Coe Estate. They had received permission from the school department to use the two classrooms for stormy days. This day camp was conducted during the months of July and August. Supervisors directed the play and handwork periods and the school was a continuation of the Open Air School for many years.

Early in November of 1933 the Junior League offered to aid in the expense of moving the Open Air School from Hannibal Hamlin extension to the Coe Estate on Court Street. The matter was referred to the Finance Board of the City Government, but it met with some opposition due to lack of funds. The Junior League wrote a letter to the City Manager in which they offered to give \$500 if the city would do likewise. The money was to be used to renovate and install heating equipment in the building so that it might be occupied by the Summer Day Camp and the Open Air School.



In the early part of May 1934 the Coe Building was ready for occupancy and the 24 children were moved to the new quarters.

The Coe building had been newly painted, with partitions shifted or removed, and the whole wing remodeled for proper accommodation of the pupils in five big rooms.

Most important was the big classroom on the Court Street side, which had been painted white and which contained all the desks and school equipment. Plenty of windows, two fireplaces and a big door which could be left open to admit plenty of fresh air made it an attractive place to study.

The bedroom opened off an entry-way behind this large dormitory on the side originally two rooms, where the cots are all made up ready for afternoon naps. This room is done in darker brown with shuttered windows, so that the general effect is an aid for sleeping.

In the hall were hooks along the walls. Here the pupils would hang their outside wraps. Opening off this entry the sun porch or garden room as it was called was used for five more cots. This was the honor room and children who could take care of themselves were allowed to sleep here. This room was also used by the doctor and nurses when they came to examine the children.

Behind the cloakroom was the kitchen. The kitchen was painted cream color with natural wood trim. Here Mrs. Merrill cooked the nutritious dinners for the children. Two grammar school girls came in at noon to help serve and to clear up afterwards.

Miss Nettie Howard retired from her position at the close of the school year in June 1935. Through her untiring service and devotion, the school was raised to a very high standard.

On June 21, 1935 the Anti-Tuberculosis Association, having completed its work in the establishment of this project, gave the School to the School Department for entire support. There had been a fine spirit of cooperation between the School Department and the Anti-Tuberculosis Association and the Association surely deserves much credit for the work accomplished.

In September 1935 I was elected to the Open Air School as its Director. I had followed the workings of the school and was interested in the health of these boys and girls.

The first matter to be considered at the beginning of the school year is the selection of the class. There are always 12 or 14 children held over from the previous year and so 10 or 12 new children are selected by the school nurses. These children are taken from grades three, four, and five.

In September Doctor Gumprecht who has always been most interested and cooperative examines the children and the nurses record his findings. Several times during the year he comes back for check-ups and to give skin tests, etc. A health record is kept for each child and notices of defects

are sent out to the parents. If the parents cannot afford to have the corrections made the various health agencies help through their clinics.

Health has always been the first consideration at Open Air School, but the children, in spite of short school work periods, seldom fail in their work. Many of the smarter ones are able to skip a grade in these ideal surroundings.

Mrs. Wentworth, the west side school nurse, came each week to weigh the children and their weights were kept on individual charts which were placed on the wall where the children could see how they were progressing along the road to normal weight. Champion weekly gainers received a star on their charts and there was lively competition to see who received the largest number of stars during the year. Prizes were given at the end of the year to the children who had received the most stars.

Health posters made by the children decorated the walls and these served as incentives to the children in learning to eat healthful foods, in outlining good meals, and in learning the rules of the game of health.

## The Program for Open Air School follows:

- 9:00 - 9:10. Opening Exercises which include salute to the flag, Singing of America, Recitation of the Lord's Prayer, Reading of Psalms, etc.
- 9:10 - 9:25 Music.
- 9:25 - 9:45 Spelling Activities which include oral spelling, talking about words not understood, and the giving of sentences containing the words, and written spelling.
- 9:45 -10:10 Reading Activities including Oral Reading, Silent Reading and Language Work.
- 10:10 -10:25 Lunch Period and Games.
- 10:25 -10:45 Writing or Drawing Lesson.
- 10:45 -11:00 Arithmetic Period. On Friday we weigh children.
- 11:00 -11:30 Dinner

because of the war and to save expense, the Open Air School was moved to the Mary Snow School.

At the Mary Snow School we had two rooms. One room was used for a classroom and the other for a rest room. The program was, of course, more formal and the children didn't have the freedom that they had enjoyed at the Coe Estate. The noon lunch was served in the gymnasium with the children of the Mary S. Snow School and the quantity and quality of the food didn't aid much in the children's striving to gain weight. Emergency menus were used and, of course, no account was taken as to whether or not the foods were well balanced.

In 1943 the rest room was moved upstairs and the children were able to get better rest as it was much quieter upstairs. The children also had their noon meal in the classroom downstairs. This was made possible when the Home Economics Director loaned us trays from the High School. Each child took his tray to the gymnasium and got his dinner and then brought the tray back to his desk. A quieter atmosphere was had during the dinner period and the children began to gain more weight.

In the fall of 1945 we had to give up the downstairs room to make room for an extra first grade at Mary S. Snow School. The desks had to be moved into the rest room upstairs and there was six inches between beds and 12 inches between desks. We felt cramped for space, couldn't carry on any group activity.

The children had their morning and afternoon lunches of sandwiches and milk in the gymnasium. They carried their dinner upstairs on trays and ate at their own desks. In January the dining room was moved into new quarters in the basement so the children were not able to carry their dinners up two flights. They, therefore, had to wait for the first grade children to finish their dinner in the small dining room and then the Open Air School Children sat in kindergarten chairs at kindergarten tables to eat their dinner. In the spring it was decided that the children would have their dinner in the big dining room before the others came down to eat. Here they were able to sit at regular size tables and although they had to hurry to finish before the others came down for dinner the children were much more comfortable under this arrangement.

The School Board voted to close the Open Air School in June of 1946 and to try to give all children who needed extra rest a period of rest after dinner.

#### SUMMARY

In summarizing the work of Open Air Schools and Open Window Schools it seems that they have proved their worth to the many children who have benefited by them.

When Open Air Schools were first introduced it was felt that the outside temperatures should be maintained. Later, the tendency was to have a rest room with a cold temperature and to have a classroom which was 68 degrees to 70 degrees.

## CONCLUSIONS

In conclusion it seems that Open Air Schools are beneficial to the following types:

1. Those who have a tendency toward tuberculosis.
2. Those having asthma.
3. Those having cardiac trouble.
4. Those who are malnourished.
5. Those recovering from a severe illness.
6. Those recovering from an operation.
7. Those who are nervous.

The tendency today is to benefit all the children by furnishing better ventilation, rest periods, and added food needs to the regular routine of all schools.

## BIBLIOGRAPHY

## BOOKS

1. Ayres, Leonard P., Open Air Schools, Doubleday Page & Co., 1910.
2. Fisher, Dorothy C., An Outdoor School, "Self Reliance," Henry Holt & Co., 1916.

## PAMPHLETS, BULLETINS, AND MAGAZINE ARTICLES

1. Adler, H. H., Open Air School for Normal Children, Century Magazine, 1915.
2. Ayres, Leonard P., Open Air Schools. Pamphlet of Russell Sage Foundation, New York, 1914.
3. Bryce, P. H., Open Air Schools and Preventoria. Medical Review of Reviews, 1909.
4. Clark, Ida Hood, Management and Curriculum of Open Air Schools, National Education Association Proceedings, and Addresses, 1909.
5. Crowley, Ralph H., The Open Air School Movement, British Journal of Tuberculosis, 1909.
6. Curtis, Elnora W., Outdoor Schools, Pedagogical Seminary, 1909.
7. Seymour, Walter J., and Stone, James G., Health of Children of Hawaii, Journal of Outdoor Life, 1935.
8. Kingsley, S. C. & Dressler, F. B., Open Air Schools, Gov't. Printing Office, U. S. Bulletin No. 23, 1916.



9. Rogers, James Frederick, Schools and Classes for Delicate Children, U. S. Gov't. Printing Office, Bulletin No. 22, 1930.
10. Taylor, Mary W., Do Open Air Schools Justify Their Extra Cost? Nations Schools, Vol. 10, 1932.
11. Warren, B. S., Open Air Schools for the Prevention and Cure of Tuberculosis, U.S. Public Health Series, Bulletin No. 58, 1912.

#### MISCELLANEOUS ARTICLES

1. Outdoor Schools, Outlook Magazine 111: 299-300.
2. Going to School Outdoors, Ladies Home Journal, Feb. 1916.
3. Open Air Schools, Journal of Outdoor Life, Jan. 1910.
4. Paris Has New Type of Open Air School, American Journal of Public Health, July 1928.
5. The Preventorium School, American Journal of Public Health, July 1928.
6. Sunshine Camp in Cambridge, Hygeia Magazine, May 1927.
7. The Open Window Room in the Campbell School, La Salle, Illinois, American School Board Journal, December 1929.
8. Open Air Schooling at Jacksonville Illinois, American City, 1918.
9. Open Air School at Bangor, The Bangor Daily News Files, Sept. 1915.
10. Open Air School at Bangor, The Bangor Daily Commercial Files, Sept. 1915.

Marion Frances Quinn, daughter of Michael and Mary (Gaffney) Quinn, was born at Bangor, Maine. She received her early education at the Abraham Lincoln School from which she was graduated in 1915. She completed her secondary education at Bangor High School in June 1919. After attending the University of Maine for one year she entered the Gorham Normal School from which institution she was graduated in 1923.

She taught school in the towns of Green Lake, Rumford, and Caribou before being appointed to a teaching position at the Odlin School in Bangor in the fall of 1925. In 1926 she was transferred to the Park Street School to teach the first grade. In January 1927 the Park Street School was closed and she was transferred to the Longfellow School to teach the first grade. She taught at the Longfellow School until the spring of 1935 when she was appointed Director of the Open Air School on Court Street. She occupied the position as Director of the Open Air School until it was closed in 1946. She was then transferred to Abraham Lincoln School as teacher of third grade.

She took several extension and campus courses at the University of Maine and received her B.S. degree from the University in June 1933 as of the class of 1923. In 1935 she began work for the M.S. in Education degree at the University

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Miss Quinn is a member of the Eastern Association of University of Maine Women, the American Association of University Women, the Mental Hygiene Association, the Maine Teachers' Association, the National Education Association, and a life member of the Gorham Teachers' College Alumni Association.

She is active in many civic and fraternal organizations, of the City of Bangor, being a member of the Queen City Grange, the Hospital Association of the Eastern Maine General Hospital, the Association of Social Agencies, and the Daughters of Isabella. She has been a member of the School Children's Fund Committee for several years and is now serving as its chairman. She is also President of the American Legion Auxiliary of the James Williams Post No. 12 of Bangor, Maine.

She is an active member of the Canteen Corps and the Motor Corps of the American Red Cross and has taught First Aid for the American Red Cross for several years. During the war she served as a member of the Filter Center and gave over 2000 hours of service at the Bangor U.S.O. in the Snack Bar and as an instructor in shell craft.