DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

BULLETIN, 1920, No. 23

A SCHOOL BUILDING PROGRAM

FOR

GLOUCESTER, MASS.

WASHINGTON
GOVERNMENT PRINTING OFFICE
1920

A SCHOOL BUILDING PROGRAM FOR GLOUCESTER, MASSACHUSETTS.

Years ago the city of Gloucester gave its children the kind of education which made them strong, healthy, self-reliant, resourceful, and industrious. Some of the schools built in those days are still standing. But the children of 50 years ago did not receive their education only in these school buildings; in fact, they received only a very small part of it there. They received their health and strength from the work that they did about the home and in helping in their father's business of fishing or farming. In doing this work they had the chance to test their ingenuity and resourcefulness in overcoming obstacles; they learned to handle tools, to invent new ways of doing things. Therefore, it mattered little that the school was nothing but a collection of seats where the children could study the three R's. Two-thirds of their education—in work and play—they received outside the school. There is such a common tendency to identify "schools" with "education" that it is necessary to emphasize the fact that education has always consisted of work and study and play, and that children must not be deprived of any of these three elements in their education if they are to grow in health and strength, and develop initiative, intelligence, and the ability to think for themselves.

Fifty years ago the environment of the average boy and girl in Gloucester furnished an education in wholesome activities that developed intelligence, initiative, and industrious habits. Moreover, their education was real and vital, because it was necessary in the life of the community. In those days each man owned his own boat or his own farm or homestead. He worked for himself and had the interest and initiative that came from that independence. The effect on the children of growing up in a community where every man was his own master, where everyone had an equal chance, can hardly be overestimated.

CHANGED SOCIAL AND INDUSTRIAL CONDITIONS DEMAND CHANGES IN EDUCATION.

But in the past 50 years conditions have changed greatly. For example, fishing is still the main industry of Gloucester, but it is no longer carried on by a group of skippers each of whom owns his own

boat. On the contrary, the industry is largely in the hands of one or two corporations, which control not only the fishing industry but allied industries, such as repairing of boats, painting, sails, ropes, etc. Boys do not grow up now with the thought of some day owning their own boats, of belonging to that fleet of daring Gloucester fishermen whose exploits have been made famous in song and story. Fishing is an "industry" now, not an occupation. Moreover, where formerly the countryside from Eastern Point to Annisquam and Lanesville was dotted with small holdings owned by those who worked them, now "summer visitors" have swarmed over the whole beautiful coast, buying up land, putting up cottages, and developing summer places which lie idle three-fourths of the year. These summer visitors bring money to Gloucester to such an extent that it is doubtless possible now for the permanent inhabitants to earn more during the three months of summer than they did formerly during the whole year. That means that independent farming has not grown; on the contrary, looking after the summer people's estates, i. e., tenant farming, has grown.

Whatever may be said of the desirability of this from the point of view of the adults, there can be no question but that educationally it is undesirable in its effects on the children. Not only do they not get the wholesome effects of the simpler life of the earlier days, but also they can not help being influenced in their ideals, standards of living, and general attitude toward life by the great mass of summer visitors who are in their midst three or four months yearly, bent solely on pleasure, living in but not working in Gloucester.

FORTY-SIX PER CENT OF FATHERS OF PUBLIC-SCHOOL CHILDREN ARE FOREIGN-BORN.

Furthermore, another change that has taken place is that whereas formerly a very large majority of the people in Gloucester were native-born, now 46.6 per cent of the fathers of public-school children are foreign-born; 19 countries are represented—Canada, Denmark, England, Finland, France, Germany, Greece, Holland, Iceland, Ireland, Italy, Newfoundland, Norway, Nova Scotia, Portugal, Russia, Scotland, Spain, Sweden. From the standpoint of the school, this means that the educational problem is far more difficult than formerly. It means that the school must now not only teach the three R's, but, to use a much overworked term, it must really be the "melting pot" of all these diverse elements. It must be a social agency in the community where all elements may meet on a common footing. It must be a school where the children may have the opportunity to develop the particular gifts which all these different nationalities bring to America.

To sum up, although Gloucester is a small town of only a few thousand inhabitants, yet from an educational standpoint it is confronted with the same problems which are found in school systems in the average city, i. e., the gradual elimination of opportunities for healthful work and play outside the school and the substitution of city habits and ideals of life for the simpler and more wholesome ideals of a hardy, self-supporting and self-sustaining community. In the second place, like the larger city, it has the problems which arise from the increase of the number of children of foreign-born parents.

THE MODERN SCHOOL MUST PROVIDE OPPORTUNITIES FOR WORK AND PLAY.

Because of these conditions, there has come to be a realization of the fact that the city school must not only supply the opportunity for studying in good classrooms, under wholesome conditions, but it must also return to the children the opportunities for work and play which the home can no longer supply, and which are necessary for education and to counteract the undesirable aspects of city life.

It must provide playgrounds where children may have a chance to play; and shops, laboratories, drawing and music rooms where they may be kept wholesomely occupied when not engaged in other school work or at play. Moreover, it should be remembered that if the modern city makes it necessary for the school to provide playgrounds and shops and science laboratories for American children, it is even more important that these facilities be given to the children of the foreign-born. The crowded conditions under which they live as a general rule are such that public playgrounds and playground supervision are an absolute essential, if they are to get the wholesome recreation necessary for every growing child. Again, because of the precarious economic condition of the average wage earner, their children have practically no chance outside of school to develop their talents in handwork or music, or drawing or science—talents which every child should have a chance to develop. It is said that America is the land of equal opportunity in education, but this does not mean opportunity for uniform education, but opportunity for the development of the varied gifts of many individuals. Democratic education means variety of opportunity in accordance with the needs of the individual. If Gloucester does not give this variety of opportunity in work and study and play to the children of all its people, then it is failing to tap the reservoirs of power for its coming citizenship. Moreover, it is laying up trouble for itself in the future, for nothing is more serious to any community than

to have the great mass of people feel balked in their power of self-expression and attainment.

THE SCHOOL BUILDINGS OF GLOUCESTER.

How is Gloucester fulfilling the needs of such a modern school system?

In the first place, with the exception of the Eastern Avenue School, not a single new elementary school building has been erected for 21 years. More than half the schools were built half a century ago. One-third of the schools were built nearly 70 years ago and one nearly 100 years ago. In other words, for a quarter to half a century Gloucester has done little in the way of giving her children richer school facilities. The buildings erected so long ago are absolutely lacking in all modern facilities. There are 22 elementary-school buildings, but not one has a regular auditorium, none has a well-equipped gymnasium, and there are only two shops and one sewing room in the 22 schools. Furthermore, no school has adequate playground space. In fact the lack of playground space in the city of Gloucester is shocking. There is no playground except Stage Fort Park, and that is too far out of town for all the children to use. The people of Gloucester need to realize that it is absolutely essential that every school have playgrounds sufficiently large for every child to have at least 40 square feet of play space, and it is necessary that the playground should be where the children can use it—not at the extreme edge of town.

A COMPREHENSIVE BUILDING PROGRAM NECESSARY FOR GLOUCESTER.

It is obvious, then, from the foregoing facts that Gloucester must enter upon a building program which will make up for time lost during the past 25 to 50 years, in which practically nothing has been done to keep the school buildings abreast of the times; and it must also provide for the future. No temporary patchwork will meet the situation.

In order to work out such a program it is necessary that Gloucester obtain answers to the following questions:

What has been the rate of increase in the school population over a period of years?
Is this increase likely to remain constant or to become less or greater?
Where is the congestion greatest?
In what direction is the tide of population moving?
What is the present condition of the school buildings? Which ones should be abandoned? For what ones should additions be erected?
How much playground space is needed?

In order to eliminate present congestion and also provide for future growth, how many and what kind of new buildings should be erected, and in what parts of the city; and to what extent can present congestion be relieved by reorganization of existing schools?

What appropriation is necessary to carry out a comprehensive building program?

RATE OF INCREASE IN THE SCHOOL POPULATION.

In 1913–14 there were 4,655 children enrolled in the public schools of Gloucester; in 1917–18 there were 4,680, an increase of only 25 pupils, and this increase is found in the high school only. In the elementary schools (excluding the outlying schools—Bray, Haskell, Blynman, and Parsons) there has been an actual decrease of 97 pupils in the last four years. Therefore, evidently school congestion is not the problem to be solved in a building program for Gloucester. The important point is that the existing buildings, although not crowded, are old, inadequate, and utterly devoid of all modern school facilities, such as auditoriums, shops, and laboratories.

Moreover, in developing a building program, Gloucester should realize that it has too many small buildings. This means greater cost of upkeep as well as of initial cost. It also means fewer modern facilities for the children. The larger school with more children means that the community can afford to give the children a greater variety of facilities. For example, a school of 1,200 pupils can afford such facilities as an auditorium, shops, gymnasium, swimming pool, library, etc., whereas if the children were housed in two school buildings with separate sites, equipment, teaching force, janitorial service, and cost of upkeep, the total expense would obviously be far greater. In other words, the city has something to learn from the country in the matter of both the social and financial advantages of the consolidated school.

Obviously, a building program should be planned on the assumption that it is the duty of the public schools to provide accommodations for all children of school age. The fact that a considerable number of children of school age are not enrolled in the public schools is due at least to a certain extent to the fact that the schools of Gloucester have not up to the present time provided either adequate seating accommodations or modern school facilities for the children.

Public-school enrollment, 1914–1918; capacity of school buildings, number of regular classrooms, number of classrooms required.

Name of school.	Grades.	Capacity.	Enrollment: 1913–14	Enrollment: 1917–18	Increase or decrease.	Regular classrooms: Number required.	Regular classrooms: Number available.	Regular classrooms: Number required over those available.
Collins	6–9	400	481	493	9	13	10	3
Sawyer	4–9	480	530	468	¹ 62	12	12	0
Maplewood	1–9	320	424	299	¹ 25	8	8	0
Lane	1–9	240	282	260	¹ 22	7	6	1
Eastern Avenue	1–9	320	247	252	5	5	8	¹ 3
Point Grammar	5–9	240	220	210	¹ 10	6	6	0
Riggs	1–9	240	93	187	¹ 91	5	6	¹ 1
Hubson	1–6	280	326	291	32	8	7	1
Hovey	1–5	320	362	323	¹ 39	8	8	0
Bradstreet	1–4	160	156	128	¹ 28	4	4	0
Hildreth	1–8	240	238	247	9	6	6	0
Mount Vernon	1–3	240	170	185	¹ 15	5	6	¹ 1
Forest	1–3	160	138	134	¹ 4	4	4	0
Point Primary	1–3	160	107	130	23	4	4	0
Leonard	1–6	80	75	44	¹ 31	2	2	0
Stone Court	1–3	80	64	79	15	2	2	0
Rogers	1–2	40	39	35	¹ 4	1	1	0
Total		4,000	3,855	3,758	¹ 97	100	100	0
Bray	1–6		61	49	¹ 12			
Haskell	1–6		51	¹ 36	¹ 15			
Blynman	1–6		30	39	13			
Special				5	¹ 34			
Parsons								
Total			197	149	18			
Total elementary			4,052	3,907	¹ 115			
High school			603	773	170			
Grand total			4,655	4,680	25			

¹ Decrease.

The first step, then, in the development of an up-to-date building program for Gloucester is to eliminate the present old buildings and erect a few buildings with modern school equipment and facilities. To do this, however, especially as Gloucester has done nothing for practically a quarter of a century in the matter of school building, is evidently going to involve considerable expense and thoughtful planning. There are two methods by which an adequate school building program may be undertaken.

The *first method* would attempt to solve the situation by the usual procedure of adding classrooms or new buildings without changing the traditional school organization. All children would be expected to be in school seats at the same time, and if provision were made for special activities, such as shops or cooking rooms, the classrooms would remain vacant when such facilities were in use. If such special facilities were provided, therefore, they would have to be in addition to a classroom for every class.

THE WORK-STUDY-PLAY PLAN OF ORGANIZATION.

A *second possible method* of solving the building problem of Gloucester is what is commonly known as the work-study-play plan, now in operation in some 30 or 40 cities in the country. This plan developed in an attempt to solve the peculiar school problems created by the modern city. It grew out of a recognition of the fact that, as is the case in Gloucester, the growth of city conditions makes the educational problem far more difficult than formerly; in fact, has created a new school problem. The plan represents an attempt to make it practicable, both administratively and financially, for school administrators to provide not only classroom accommodations but also such modern educational facilities as gymnasiums, auditoriums, shops, and laboratories where children may be kept wholesomely occupied in study and work and play.

HOW THE PLAN WORKS.[1]

Briefly, the plan is this: A school is divided into two parts, each having the same number of classes and each containing all the eight or nine grades. The first part, which we will call the "A School," comes to school in the morning at 8.30, and goes to classrooms for academic work. While this school is in the classroom, it obviously can not use any of the special facilities; therefore the other school—"B School"—goes to the special activities, one-third to the auditorium, one-third to the playground, and one-third divided among such activities as the shops, laboratories, drawing and music studios. At the end of one or two periods—that is, when the first group of children has remained, according to the judgment of the school authorities, in school seats as long as is good for them at one time—the A School goes to the playground, auditorium, and other special facilities, while the B School goes to the classroom.

Under this reorganization on the work-study-play plan, all the children would have not only the same amount of time for reading, writing, arithmetic, geography, and history as formerly, 210 minutes, but also 50 minutes a day of shopwork every day in the week for a third of the year; science every day for a third of the year; and drawing or music every day for a third of the year.

The following table gives a possible program for the A School. There are 12 classes in this A School, which are divided into 3 divisions of 4 classes each: Division 1, upper grades; division 2, intermediate grades; division 3, primary grades.

[1] This description of the work-study-play plan is taken from the author's discussion of it in U. S. Bu. of Educ. Bul., 1919, No. 68, p. 34 et seq.

The "A" School.

School hours.	Regular activities.	Special activities.		
	Academic instruction.	Auditorium.	Play and physical training.	Cooking, shop, science, etc.
8.30– 9.20	Arithmetic—Divisions 1, 2, 3			
9.20–10.10	Language—Divisions 1, 2, 3			
10.10–11.00		Division 1	Division 3	Division 2.
11.00–12.00	Entire "A" school at luncheon.			
12.00– 1.00	Reading—Divisions 1, 2, 3			
1.00– 1.50	History and geography—Divisions 1, 2, 3			
1.50– 2.40		Division 3	Division 2	Division 1.
2.40– 3.30		Division 2	Division 3	Division 1

The "B" School.

School hours.	Regular activities.	Special activities.		
	Academic instruction.	Auditorium.	Play and physical training.	Cooking, shop, science, etc.
8.30– 9.20		Division 2	Division 3	Division 1
9.20–10.10		Division 3	Division 2	Division 1.
10.10–11.00	Arithmetic—Divisions 1, 2, 3			
11.00–12.00	Language—Divisions 1, 2, 3			
12.00– 1.00	Entire "B" school at luncheon.			
1.00– 1.50		Division 1	Division 3	Division 2.
1.50– 2.40	Reading—Divisions 1, 2, 3			
2.40– 3.30	History and geography—Divisions 1, 2, 3			

This program represents a change in the traditional method in several important points. In the first place, it breaks up the custom of having all children in classrooms at the same time and letting the classrooms lie idle when the children go to the auditorium, shops, and playground. In other words, it applies to the public school the principle on which all other public service institutions are run—that is, the multiple use of all facilities all the time. For example, it is evident that our transportation system is made possible because of the fact that all people do not wish to ride at exactly the same time; concerts and theaters are made available to many people because one person can use another's seat when he does not want to use it; hotels can accommodate thousands of people because they are not run on the principle of reserving each room for the exclusive use of a single individual during the whole year. On the other hand, the public school system has been run on the principle of reserving a seat for each child during the whole year. All children have to be in school seats from 9 to 12 a. m. and from 1 to 3 p. m.; all have to go home to lunch at the same time; and at 3 o'clock all are dismissed and turned out to play.

There would, after all, seem to be no good reason why the principle of other public service institutions, i. e., multiple use of facili-

ties all the time, should not apply to the school, nor any reason why all children should be in classrooms at the same time, nor why the special facilities should be used only a fraction of the day, provided, of course, that the children receive during the day the required amount of academic work. In fact, it is difficult to see how the problem of providing enough classrooms, or playgrounds, or auditoriums for the mass of children is ever to be met if all children have to be in classrooms at the same time, and if all children have to play at once. Moreover, there seems to be no good reason from an educational standpoint why children should all have to do the same thing at the same time.

PRINCIPLE OF MULTIPLE USE MAKES MODERN EDUCATIONAL FACILITIES FINANCIALLY PRACTICABLE.

Fortunately, however, if the principle of multiple use is applied to public school facilities, it is possible to provide not only adequate classroom accommodations but also auditoriums, gymnasiums, and shops for the mass of children. In fact, accommodations may be provided in all facilities, if they are in use constantly by alternating groups, at less cost than regular classrooms alone may be provided on the basis of a reserved seat for every child. For example, in a 24-class school, under the traditional plan 24 classrooms are needed in addition to all the other special facilities. Under the work-study-play plan only 12 classrooms are needed. The classroom, however, is the most expensive unit in the school, therefore since only half the usual number of classrooms is needed, i. e., 12 classrooms in a 24-class school, the cost of the remainder is released for all the other special facilities.

FLEXIBILITY OF THE PROGRAM.

A program based upon the multiple use of facilities not only makes possible modern educational advantages for the children, but it also makes it possible to have a flexible program. A study of the different types of these schools in different parts of the country shows that it is possible for a community to adapt the program to its particular needs. For example, it is possible to arrange to have the school begin at 8.30, 8.45, or 9 a. m., or any other hour desired. Or, if the school begins at 8.30 and certain parents object to having their children leave for school so early, it is possible to put these children in the "B School," which begins the day with special activities; in this case the children can omit the play period from 8.30 to 9.20 and arrive at school at 9.20. Or again, many parents prefer to have their children take special music lessons after school. It often happens that

home work or staying after school interferes with these lessons. Under the work-study-play plan it is possible to put such children in the "A School" and let them omit the play period or the auditorium in the afternoon from 2.40 to 3.30 p. m. There is, of course, no reason why children should not be given credit for these out-of-school activities if so desired. Again, a child who is backward in a special subject, such as arithmetic, and is being held back in a grade because he can not master that subject, can double up in arithmetic for a number of weeks by omitting the auditorium period until he has made up the work and is ready to go on with his grade. As for the special activities, each community and each section of the city can have the special facilities which the school authorities and parents desire.

THE SCHOOL TAKES OVER THE STREET TIME OF THE CHILD.

As has been pointed out, one of the most undesirable elements in the life of city children is the street life in which they have hitherto spent so large a part of their time. The average city school is in session about 180 days in the year. This means that even though all the children attend the entire time, they would still be out of school 185 days in the year. Obviously, because of the conditions of modern city life it is necessary that the school take over some of the time now spent by the child on the city streets, especially the school year. At present if 10 hours of the 24 are allowed for sleep and 6 for meals and home duties, there still remain 8 hours to be accounted for. Even if the children were in school 5 hours every day there would still be 3 hours left, and as is well known these hours are spent on the city streets and not always to the child's advantage. At least one or two of these should be taken over by the school, and wholesome activity in work and play provided.

The work-study-play plan does this by lengthening the school day an hour or more as each community may desire, and by offering to the children the wholesome activity in shops and laboratories on the playgrounds, which is so essential for them. It should be borne in mind, however, that this lengthening of the school day does not necessarily lengthen the number of teaching hours of any teacher. It is necessary that she be at the school six hours, but she need not teach more than five hours.

How a building program can be worked out on the basis of the work-study-play plan of school organization will now be considered.

A BUILDING PROGRAM ON THE BASIS OF THE WORK-STUDY-PLAY PLAN.

In the following building program the elementary schools will be taken up first, and in treating these it should be remembered that

Haskell, Bray, Blynman, and Parsons are omitted. The total number of pupils in these four schools is 144 (1917–18). There are two ways of dealing with these schools. Either they should remain as they are, or else the pupils should be transported to the consolidated school recommended under (1) below.

The first recommendation is that the remaining 18 elementary schools should be combined into 6 elementary school buildings of the modern type.

1. *Consolidate Babson, Collins, Forbes, Rogers, and Hovey.*—None of these buildings have any modern facilities, such as shops, or laboratories or auditoriums or gymnasiums, and none have adequate playground space. It is impossible to add the necessary rooms to these buildings because of limitation of space. Moreover, it would be a waste of money to do so, as the buildings are old and in poor condition. Collins was built 56 years ago, in 1864; Babson, 40 years ago, in 1880; Forbes, 52 years ago, in 1868; Rogers, 70 years ago, in 1850; Hovey, 24 years ago, in 1896.

All the pupils in grades one to six in these five schools should be consolidated in one modern school. According to the enrollment for the month of October, 1919, the number of pupils would then be 860 in the five schools: Babson, 279; Collins, 91; Hovey, 348; Forbes, 107; Rogers, 35; total, 860, or 22 classes.

Make this a 24-class school. On the work-study-play plan, it would then be necessary to have a building of 12 classrooms, 1 auditorium, 1 gymnasium, 1 shop for girls, 1 shop for boys, 1 drawing room, 1 nature study room—16 units; $256,000.

2. *Consolidate Mount Vernon, Sawyer, and Hildreth.*—The first six grades of these three schools should be housed in one building, and the seventh, eighth, and ninth grades, now going to Sawyer, should be sent to the combination junior-senior high school hereinafter recommended. According to the enrollment of October, 1919, the number in the school would be as follows: Mount Vernon, 187; Hildreth, 211; Sawyer, 239; total, 637, or 16 classes.

Make this an 18-class school, and on the work-study-play plan nine classrooms would be needed, an auditorium, gymnasium, one shop for girls, one shop for boys, one drawing room, one nature study room. A new building of 13 units should be put up. This would cost $208,000.

3. *Consolidate Point Primary and Point Grammar.*—These buildings are very old and inadequate for school purposes. Point Grammar was erected in 1852 and Point Primary in 1867. Even when combined, they would make a very small school; they should be combined in a new building with modern facilities; at present the enrollment is 204 pupils in Point Grammar and 122 in Point Primary;

making a total of 326 pupils, or 9 classes. A 10-class school should be put up. Under the plan this would require five classrooms, a nature-study room and drawing room, a shop, an auditorium, and gymnasium—8 units. If a permanent building of 8 units were erected, it would cost $128,000.

4. *Consolidate Lane School, Bradstreet, Leonard, and Riggs.*—These are all very old buildings, erected in the time of the district schoolhouse, and are utterly inadequate for modern educational purposes. Lane was erected in 1860, Bradstreet in 1850, Riggs in 1850, and Leonard in 1834; in other words, from 60 to 96 years ago. A good modern school is very much needed in this neighborhood. There is a growing Finnish settlement there, but it is situated a considerable distance from the center of Gloucester. For the sake of both the social as well as the educational life of that district, there should be a modern school building, a combination elementary and junior high school, with auditorium, two gymnasiums, shops, laboratories, etc. At present Lane School is overcrowded, so that one of the classes has to be taught in the Finnish Hall. The school authorities have the opportunity to make the school the social center of the district. And they would find quick response on the part of the Finns, who have strong social instincts and organizing ability. The enrollment for October, 1919, is as follows: Lane School, 265; Bradstreet, 81; Leonard, 26; Riggs, 181; total, 553, or 16 classes.

A building should be erected to house an 18-class school, allowing for an increase of 4 classes over the present enrollment. The building would need under the work-study-play plan 9 classrooms, an auditorium, and a gymnasium, 1 nature-study room, 1 drawing room, shop for girls, shop for boys, and an additional science or music room, making 14 units in all. This would cost $224,000.

5. *Consolidate Maplewood and Stone Court.*—Of course the pupils in Maplewood and Stone Court should not be housed separately. It would be perfectly possible to have all the pupils in the two schools housed in Maplewood School, but if the people desire to keep these two schools separate, of course there is no reason why it should not be done. It should be clearly understood, however, that it would cost more to keep them separate, and that it is not possible to give modern facilities to the children under such circumstances. Maplewood now has 204 children, or about 8 classes, in the first six grades, and Stone Court has 67, making a total of 271, or 7 classes. By making this an 8-class school, it could easily be housed in Maplewood. Four of the present 8 classrooms could be used as classrooms and 4 for special activities. A portable gymnasium and auditorium could be erected at a cost of $5,000.

Summary of cost under work-study-play plan.

	Cost.	Number of classes provided for.
1. Consolidation of Babson, Collins, Hovey, Forbes, Rogers, new building of 16 units	$256,000	24
2. Consolidation of Mount Vernon, Sawyer, Hildreth, new building of 13 units	208,000	18
3. Consolidation of Point Primary, Point Grammar, new building of 8 units	128,000	10
4. Consolidation of Lane, Broadstreet, Leonard, Riggs, new building of 14 units	224,000	18
5. Consolidation of Maplewood and Stone Court, one portable auditorium and one gymnasium, at $2,500 each	5,000	8
Total	$821,000	78

Under the traditional plan of school organization the cost would be as follows:

Summary of cost under the traditional plan.

	Cost.	Number of classes provided for.
1. Consolidation of Babson, Collins, Hovey, Forbes, Rogers, new building of 28 units	$448,000	24
2. Consolidation of Mount Vernon, Sawyer, Hildreth, new building of 22 units	352,000	18
3. Consolidation of Point Grammar and Point Primary, new building of 13 units	208,000	10
4. Consolidation of Lane, Bradstreet, Leonard, Riggs, new building of 22 units	352,000	18
5. Consolidation of Maplewood and Stone Court, one portable auditorium and one gymnasium and four special rooms, at $2,500, $2,500, and $4,000, respectively	9,000	8
Total	1,369,000	78

PLANS FOR A COMBINATION JUNIOR AND SENIOR HIGH SCHOOL.

At the present time there are 773 pupils in the high school, and 1,055 pupils in the seventh, eighth, and ninth grades.

The present high school is utterly inadequate for school purposes. It is badly congested and has no modern school facilities. Because of overcrowding it has two sessions—one from 8.05 to 12.50 and the other from 1.05 to 5.20.

The building is old and dark and badly arranged. It was built 32 years ago. It has practically no modern equipment. It has rooms called gymnasiums, chemical laboratories, and sewing room, but they are nothing but attic rooms. The sewing room, if found in a factory, would be condemned by law.

One of Gloucester's greatest needs is a modern high school and also a junior high school for the seventh, eighth, and ninth grades.

It is recommended that a combination junior and senior high school be erected on Beckford Street, just off Mount Vernon Street, on the brow of the hill, with the 773 high-school and 1,055 junior-high-school pupils. This would make a school of 1,788 pupils, or 45 classes. A building should be erected for a 48-class school, thus allowing for a growth of three classes, or over 120 children.

Under the work-study-play plan this would necessitate a building of 24 classrooms and 2 gymnasiums, 2 laboratories, chemical and physics, 2 shops for girls, 2 shops for boys, a mechanical drawing room and another drawing room and a music room, a library, i. e., 10 special rooms and 24 classrooms or 34 rooms. This would cost $544,000. If more special facilities were desired, or smaller classes, it would cost correspondingly more.

Under the traditional plan of school organization, 58 units would be needed, and the cost would be $928,000.

SUMMARY.

Therefore, under the work-study-play plan the cost of giving modern schools to the city of Gloucester would be, minus the cost of sites, $1,365,000. Under the traditional plan, it would be $2,297,000.

It is estimated that by eliminating 15 of these old buildings as recommended there would be a yearly saving to the city of about $50,000.

CONCLUSION.

As was pointed out at the beginning of this report, Gloucester is about 25 to 75 years behind in its school building program. In the meantime social, industrial, and educational conditions have changed greatly, and it is now a serious menace to the welfare of the children of Gloucester and its coming citizenship that modern school facilities are not provided. Moreover, the people of Gloucester probably do not realize that by failing to provide modern buildings and equipment they are asking the school authorities to accomplish an almost impossible task. There is no question but that Gloucester will want to give the best possible education to its children once it realizes the deplorable conditions which now obtain in the schools—conditions which all the zeal and intelligence and progressive spirit of the teaching force can not overcome; conditions which are a menace to the health and strength of the coming citizenship of Gloucester.