

# Education Unlimited

***A Community High School in Action***

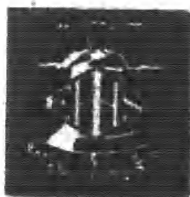
by

***Grace S. Wright***

and

***Walter H. Gaumnitz***

*Division of Elementary  
and Secondary Schools*



***Everett A. McDonald, Jr.***

*East Hampton High School  
East Hampton, Conn.*

Bulletin 1951, No. 5

**FEDERAL SECURITY AGENCY • Oscar R. Ewing, Administrator**

**Office of Education • Earl James McGrath, Commissioner**

# Contents

	Page
<b>Foreword</b> .....	iv
<b>I. The People and Their School</b> .....	1
<b>II. Planning for a School Program To Serve All Youth</b> .....	4
The Staff Expresses Dissatisfaction and Decides on a Plan of Action .....	4
Parents and Pupils Help in the Building of a Philosophy and a Set of Workable Objectives .....	7
Each Staff Member Prepares New Course Outlines in Keeping with the New Objectives .....	9
The Schedule Is Reworked .....	11
<b>III. Organization and Unique Features</b> .....	16
Hour Periods and Five-Subject Pupil Programs Replace 45- Minute Periods and 4-Subject Programs .....	16
A Diagonally Placed X-Period Provides Flexibility .....	17
Correspondence Courses Broaden Opportunities .....	19
The Community Also Teaches School .....	20
Additional Credits Ease College Entrance and Related Problems .....	21
The Z-Period Provides Time for Many Activities .....	21
A Square-Shaped Schedule Makes Possible Day- and Week- Long Periods .....	22
<b>IV. Improved Instructional Techniques</b> .....	27
Work Experience Adds Opportunities for Practical Learning .....	27
Cooperative Teacher-Pupil Planning Is Increasing .....	28
<b>V. Pupil Counseling and Guidance</b> .....	30
Administrator, Guidance Teachers, and Other Teachers Co- operate To Evaluate and Guide Pupil Progress .....	30
Improved Student-Faculty Relations Is One of the Outstand- ing Accomplishments of the School .....	32
<b>VI. Appendix</b> .....	33
Objectives .....	33
Personnel and Tenure .....	35

# Foreword

*THE MOST COMMON PROBLEM and characteristic associated with secondary education in the small and rural communities is its limitations—low financial resources, inadequate plant and equipment, small enrollments, restricted curriculum offerings, small and overworked staffs. The purpose of this report is to show that these limitations need not dominate the services of the small and middle-sized high schools. Indeed, the developments here briefly described demonstrate that such schools can provide "education unlimited."*

*What are the conditions necessary to such developments? Answers to this question will vary with different communities. So far as East Hampton High School is concerned they can be clearly discerned only by a careful reading of the highlights herein set forth. A thumbnail sketch of the basic ingredients involved would contain at least the following: A clear understanding of the possibilities inherent in the peculiar setting in which the school serves; a determined effort to do much with little; an honest desire to elicit and use the best ideas engendered by staffs, pupils, and parents; a willingness to improve the old and try the new; and much unselfish cooperation by all concerned.*

*These ingredients seem simple enough and readily obtainable when considered in the abstract, but in a practical setting they are too often missing. It is hoped that this report will point the way to other programs of "education unlimited" in the myriads of rural and village high schools which spell secondary education to so many in the United States.*

**GALEN JONES**  
*Director, Division of  
Elementary and Secondary Schools*

# I. The people and their school

NESTLED IN THE QUIET SHADOWS of seven hills in the southeastern part of Connecticut midway between New York and Boston, lies the little industrial town of East Hampton, long known as the "Bell Town of America." Following its early beginnings as a shipbuilding center, the town developed the art of bell making into an industry important out of all proportion to its size. This industry produces bells large and small, bells for churches and for schools, bells for work and for play. There is hardly a toy shop or "5 and 10" in the country which does not carry a line of East Hampton toys, all of which have bells attached.

The majority of the citizens of this town of 4,000 population find employment in its bell and bell-toy factories and in its other plants where fish lines and wire products are manufactured. Some seek employment in the airplane factories of East Hartford and the machine and silver shops of Meriden and Middletown. A number of professional and business people whose offices are in the nearby cities have their homes in this small country town away from the hubbub and confusion of the city. During the summer, many hundreds of people find relaxation and vacationing pleasure at the summer resorts dotting the shores of Lake Pocotopaug which lies within the limits of the town. There is some farming done within the school district. Most of the farmers produce milk for local and State distributors; a few raise vegetables for market.

The town, which covers 27 square miles, in addition to an extensive State park acreage, has an assessed valuation of 12 million dollars. The people are frugal, own very few pretentious houses, drive average automobiles, and live average lives. But one thing they insist upon, individually and collectively, is an educational program for their children which is sound, and which returns one hundred cents' value for every dollar spent. Accordingly, within this community an educational program has been developed which is designed to meet the needs of not a few children, or not just many of the children, but *each and every one*. The school buildings are not pretentious either; they are not special in any way, but they are more adequate than many small high schools. Within their walls ring the happy voices of children who like school, who find enjoyment in learning and work and in the social life and athletic activity the school provides, and who seek out the school staff for counsel and advice. As with other towns, the increased number of children has become a problem. Indeed

they are now taxing the physical facilities of the school buildings, but this problem is being met. New space is being provided. The ingenuity of the community is producing the necessary tax funds to continue to provide all the educational services for its children deemed essential by the leadership of this progressive school district.

Two adjoining towns send their children to East Hampton to improve their educational opportunities. Through mutual agreement they pay one hundred cents for each dollar expended on their children's education—as determined by a carefully devised formula.<sup>1</sup> In all, about half the pupils of the combined ele-



Student Court.

During the school year 1947-48 the Student Council organized a Student Court to try pupils committing infractions of the school's rules. There is a Minor Court with one judge to try all cases brought to its attention; a Major Court with three judges to act on all cases appealed after the verdict of the Minor Court; and a Supreme Court to act on all cases appealed to it from the Major Court. The Supreme Court consists of five members, including the principal and vice-principal. The court system also has a clerk of the court, a State's attorney, a sheriff, and jurors. The court has been one more step toward the goal of a better school through student self-government.

mentary and secondary school are transported in the school's own five busses and in the three that belong to towns joined to the East Hampton High School District by agreement.

The community has accepted the point of view that the most important factor in the success of an educational program is the staff. It is one of the first small towns in Connecticut to adopt a salary schedule as high as that of many of its larger neighbors. This expenditure has proved to be a wise one since the school personnel has become stable and this in turn has stabilized the educational program and made for greater efficiency as well as for a greater return on the funds expended. Qualifications of teachers have been set very high. The Board

<sup>1</sup> McDonald, Everett A., Jr. Tuition Formula. *Nation's Schools*, 45:33, June 1950.

of Education has authorized the Superintendent to go wherever he wishes and to whatever lengths are necessary to secure those persons best qualified to guide the growth and development of boys and girls. There are 16 teachers for the 350 pupils in grades 7-12, plus a principal who is also the superintendent, and a vice principal who teaches half-time.

At well-attended town meetings the people make recommendations for the continued operation of their schools. All important issues of school policy, changes in program, differences in the methods of doing things are taken to the people themselves for discussion, suggestions, and approval. To make it possible for all, especially the younger parents, to attend the town meeting called to decide about procuring adequate facilities for East Hampton's young people, the local minister, for example, invited their young children to the parish house. There he entertained them with movies while their parents were voting into being a school building advisory committee to prepare plans for a new building.

This school is more than an aggregation of classrooms. It has made it a policy to keep in mind that school is but a part of the community and that it should operate not as a separate organization within the town, but should exert its influence as a significant part of it. In that sense, the school is one of three influencing agencies of the community—the other two being the home and the church. The school has attempted to carry its share of the load and to assist or reinforce wherever and whenever the church or the home need such assistance. It has also attempted through its program of studies to strengthen the influences of the church and the home, and it is agreed that the home and the church will in turn strengthen the influence of the school.

The school is a meeting center for many local organizations, for all town meetings and town business; the doors are open at all times for its continued use by the townspeople. In like manner, the facilities of the factories, the bank, the foundry, and local government are open to the use of school children. These agencies have helped immeasurably to develop in the children an understanding of their own community and an increasing participation in community life.

## II. Planning for a school program to serve all youth

### *The staff expresses dissatisfaction and decides on a plan of action*

THE PRESENT CLOSE RELATIONSHIP between "the people and their school" has not always existed nor did it happen automatically. In January 1946, discussions were begun of what was right and what was wrong with secondary education in East Hampton. There seemed to be more that was "wrong" than was "right." The school had a high drop-out rate; discipline was an ever-present problem; the daily schedule was inflexible and crowded. There was a group among the faculty that felt that the program was at fault. It had not been designed to fit the needs of *all* youth, but was highly overweighted with college-preparatory elements. Industrial and commercial offerings were few and unrealistic.

The staff decided that despite the tasks entailed in evaluating and replanning the school's objectives and services, it would be easier and more satisfying to work in an efficient school which provided for the needs, interests, abilities, and aptitudes of *all* students than it was to confront daily the dead weight of inadequately prepared students, the many program misfits, and the hosts of related problems. They decided, therefore, that they would devote whatever time and effort was needed to devise a new pupil- and community-centered program based on sound educational procedures. In order that the word "experiment" should not dominate their discussions or obscure the long-range view, they agreed that each step should be taken with deliberate care and that, if possible, spots apparently weak should be carefully studied before important changes were instituted.

Problems that usually beset the small high school when it seeks to improve its program were soon identified by the staff. Pupil-teacher ratios in small schools are commonly much lower than in large ones. To decrease these ratios still further by adding staff or services quickly becomes prohibitively expensive. Therefore the addition of enough teachers to offer in the usual way all the subjects and activities commonly provided by the large school was recognized as impossible. Employing teachers to teach in more than one area is common practice, but even this cannot be stretched to provide adequate coverage. The small school, like its larger counterpart, feels that it must prepare for college those students who wish to go, even though their number is disproportionately small. This requires first and foremost that teachers be employed who are certificated in the

usual academic subjects—English, social studies, foreign languages, mathematics, the sciences. The bulk of the pupils, who go directly from the high school into homemaking, into the shops, into industry, or into farming, are seldom provided with experiences which will help them "to do better the desirable things they will do anyway." Their interests and needs are commonly placed second to those of college-bound pupils. True, at East Hampton a larger than



Latin, Too, Can Be Interesting and Meaningful.

When the second-year Latin class planned a dinner it turned into a "Latin" banquet. The boys wore togas and the girls came in loose-flowing dresses. At the banquet the men lay on rugs in the old Roman custom. First-year Latin pupils acting as slaves served the banquet and provided entertainment. Third-year Latin pupils, the principal, and vice-principal were guests; no others were invited. All conversation had to be in Latin. Following the banquet there was a dramatization of a scene from *Midsummer Night's Dream*, which had previously been translated into Latin. While not required, about 50 percent of all pupils take Latin.

average proportion of boys and girls are college bound. Even so, it was found that about 60 per cent of the school population was not receiving the type of education it needed.

Another hurdle, and a difficult one, especially in the smaller secondary schools, is the inflexibility of the schedule. Usually the day is made up of six or seven 40- or 45-minute periods, which are rigidly scheduled with regard to required courses, study-hall periods, and staff qualifications and load, each teacher teaching a traditional subject in the traditional manner. The fact that many pupils depend upon bus transportation means that schedules may not be extended beyond the regular school-closing hour. This introduces additional problems in



providing extraclass activities, increasingly recognized as important to the sound development of youth.

It seemed difficult to know how to begin the replanning process. In the early faculty meetings routine matters came in for much attention. It was easier to talk about specific, isolated points that were bothering—homeroom duties, scheduling particular classes, extraclass responsibilities—than it was to bite into the problem of reorganizing the school and replanning its services. On the basis of these early discussions a committee drew up a general outline on how the school should operate. After this had been approved by all staff members it was issued as a teachers' manual with the understanding that it was subject to yearly revision. The preparation of this manual helped solve some of the problems the teachers faced, but it did not get at the root of the matter. Changes more fundamental and baffling in nature were yet to be considered; a deeper and more widespread understanding needed to be developed of the realistic objectives to be achieved by this school and the difficulties that would ensue. In the face of this situation the faculty resolutely set for itself the following far-reaching and fundamental goals to be achieved through further study and discussion:

1. Determine a philosophy of education for *all* with emphasis upon life adjustment.
2. Determine a set of objectives which appear to be workable, practical, and comprehensive.
3. Rewrite course outlines to effect necessary correlation of activities in the various subject offerings.
4. Forge all of the above theory—philosophy, objectives, courses, activities—into a workable daily program.

This was no minor undertaking. The accomplishment of the desired objectives within the framework of the community's resources and willingness to accept change would involve the complete reorganization of the school and its program. Some of the concrete and puzzling problems with which they would have to wrestle were set down as follows:

1. The subject and activities load of pupils should be increased *without* increasing the length of the school day.
2. A wider selection of program offerings should be provided *without* increasing the staff.
3. The school's program should utilize *all* the community's resources—the homes, the stores, the factories, community organizations, the fields, the woodlands, the lake, and the hills.
4. The secondary school should be an *active* rather than a passive center of community life.
5. Pupils should be led to a desire to understand and to *share* responsibilities within the community.

6. The program should as far as possible implement *all* the Seven Cardinal Principles of Secondary Education<sup>2</sup> and *all* the 10 imperative needs of youth of secondary school age.<sup>3</sup>

**Parents and pupils help in the building of a philosophy and a set of workable objectives<sup>4</sup>**

The staff came to an agreement early (and this was unusual since most agreements came after lengthy discussion and a great deal of give and take by all concerned) on two major premises epitomizing the school's philosophy: (1) The school is one of three agencies in the community which must cooperate for the good of boys and girls. It must cooperate with the home and the church; it cannot function effectively by itself. (2) If education is to be financed from the public treasury, it must be available to all and on an equitable basis.

This meant of course that the college-preparatory program could no longer maintain its claim to superiority; it must function on a basis of equality with the other programs which would now be expanded within the total school program. It meant also that each pupil, no matter what his needs or his abilities, or how far they deviated from the traditional standards, must receive attention equal to that accorded to any other pupil. A pupil's placement in every class, course, or program must be based primarily on an understanding of his needs. This, of course, posed serious problems of guidance calling for further consideration as work on the plan got under way.

It was necessary during the formulation of the basic understanding—philosophy, objectives, curriculum guides—for each member of the faculty to think through his own theories of educational philosophy and to come to an agreement with others on what each expected the school to accomplish and what each planned to do about it. Staff members had graduated from a wide variety of types of higher institutions of learning; they represented extremely divergent philosophies. Pragmatists and scholastics found it necessary to iron out their differences in order that the highest educational good of *each pupil* might become the major effort of the school.

The staff realized that parents, members of the Board of Education, pupils, and anyone else who felt he was connected or concerned with any part of the educational program had to be in sympathy with the school's basic philosophy if it was to function effectively. Over a period of 2 years, therefore, philosophy, objectives, and program were discussed with community leaders in order to help unite divergent opinions, and to lay community foundations for changes to come. Alternate PTA meetings were devoted to discussing these concerns. But most of the work with parents and other adults was done in individual face-to-face contacts between faculty members and individuals. It was found that people

<sup>2</sup> Cardinal Principles of Secondary Education. Washington, U. S. Government Printing Office, 1948. (Bureau of Education, Bulletin 1918, No. 35.)

<sup>3</sup> The Imperative Needs of Youth of Secondary School Age. *Bulletin of the National Association of Secondary School Principals*, 31:7-144, March 1947.

<sup>4</sup> See Appendix for the list of objectives developed.

feel freer to open up in a one-to-one discussion, or in small groups, than in public meetings. Some opportunities for discussing school problems came through visits by parents to the school; chance meetings on the street provided others. The superintendent-principal had joined all of the town's clubs; he now made it a point to listen and to encourage discussion of school affairs whenever opportunity offered. One of the great advantages of the small community is the possibility for the principal and staff to know personally all the residents of that community.

It became obvious as work progressed and discussion followed discussion that the teen-age boys and girls also had good ideas, and that these ideas should be included in the discussions. Procedures were devised to give them the opportunity to express their views and desires and to formulate their own philosophies of education. Their ideas were given weight in establishing the final philosophy accepted for the entire school.

The objectives upon which the planning groups finally agreed proved in many respects to be similar to those of many progressive educational programs. They were basically in accord with the Seven Cardinal Principles of Secondary Edu-



*Courtesy of the Hartford Courant*

#### Girls Receive Instruction in Industrial Arts.

In the junior high school all boys take industrial arts and all girls have homemaking. But all girls must spend one semester of that time in the industrial arts shop learning simple repairs needed in the home—furniture, electrical wiring, household gadgets.

ation, and with the 10 Imperative Needs of Youth of Secondary School Age. But many modifications were required over the long period in which they were discussed prior to their adoption.

The method used to get participation by and the reaction of the student body and at the same time to make the objectives a part of pupil thinking was as unusual as it was direct. The principal spent one period each day with one of the English classes, beginning with seniors in the college-preparatory group. He encouraged the class to go over the objectives, detail by detail, discussing them in any way it wished. Discussions in any one class group sometimes lasted for as many as 10 or 15 class periods. In the beginning, a schedule for these discussions was worked out with teachers in order to make the interruption of the regular class work come at the most convenient time. However, since the time needed by any one class did not always coincide with the amount scheduled, and as other unforeseen problems sometimes arose, it was difficult to keep to the schedule. But the teachers were as interested as were the superintendent and pupils in arriving at objectives acceptable to all. They cooperated both in providing the necessary time and in furthering this project. In each class there was at the beginning much disagreement, but discussions continued until a consensus was reached.

Following the meetings with all the various English classes in grades 9 through 12, a series of forums on objectives was planned for the student assemblies. Three or four objectives were presented for discussion at a time with three or four pupils giving their ideas on what those objectives meant to them. A panel of several other pupils supplemented the presentation. A prominent citizen, formerly an elementary principal of East Hampton and therefore acquainted with the purposes of this project, served as chairman. Participating pupils prepared their own statements for these forums. The forums were so well received that they were later duplicated at PTA meetings. Discussions from the floor in both instances resulted in further alterations in the original statements of the objectives.

During the present year (1950-51) classes of pupils who were not in high school 2 years ago when the objectives were first formulated were given an opportunity in their classes to discuss and understand the objectives. The staff placed much weight upon the learning values inherent in such a project. Moreover it was felt that the new pupils should not be put in the position of being required to live up to objectives when they had had no part in making them and probably did not understand them.

***Each staff member prepares new course outlines in keeping with the new objectives***

To translate the philosophy and objectives into educational experiences was the next necessary and fateful step. It was found to be comparatively easy to write objectives and a philosophy. The difficult part was to make them work, to make them a part of the everyday educational program.

The staff therefore proceeded next to develop the new course outlines needed as guides to teachers in implementing the school's philosophy and objectives. A committee of the faculty was appointed to set up plans for rewriting such outlines. It was decided that these should keep in mind the following basic ideas:

1. Certain common objectives must pervade all teaching.
2. Additional specific objectives must become the special burden of each subject.
3. There must be cooperation, not competition, among the subjects.
4. Children, not subjects, are developed and taught.

After the committee had done its preliminary work and the faculty had adopted specific headings under which plans for each subject would be written, each teacher undertook to prepare course outlines for his or her own fields of study. Each tried to provide (1) for the common objectives outlined for all teaching, and (2) for those essential skills and appreciations to be derived from the specific subjects under consideration. New teachers were left free either to use the course outlines already prepared or to prepare new ones.

These course outlines came to be regarded as a nucleus of content around which all other educational experiences of a given field could be planned. While it is considered desirable for study activities to conform generally to these course outlines, the teacher is not disturbed if the class decides it wants very much to undertake one or more projects not scheduled, and so does not cover all of the listed topics. For example, if as part of their work in English the pupils in an industrial arts curriculum should wish to read the English literature usually planned for those in the college-preparatory group, rather than the books suggested for their own curriculum, they may do so. In other words, the school prefers youth to choose the books *they* want to read rather than to require them to read those "prescribed."

An important concomitant to formulating these course outlines resulted from teachers having to bear in mind that no one person teaches children to read, and that not only the English courses teach spelling and composition; thus they learned that the courses in mathematics, in science, in the social studies, and in the practical arts also play important roles in teaching English and spelling proficiency. Likewise it was salutary for them to grapple with the fact that certain objectives, especially those relating to home life, could best be achieved through instruction in several different subjects and at various grade levels. For example, it was decided that an initial understanding of human reproduction, and the changes that occur at puberty, could best be taught in the health or physical education classes of the seventh or eighth grades, and separately to the boys and to the girls. It was also found that an understanding of reproduction and proper sex conduct could be more easily taught to sophomores in a unit of biology, which put the study of the reproductive system on a par with the various other systems of the human body—digestion, circulation of the blood, wear and

rebuilding of bodily tissues. Furthermore, it was decided that the class in problems of democracy was the most logical place for studying the problems of marital compatibility and the role of each member of the family.

The logic behind these decisions is clear. For example, what greater problem does democracy have than that of divorce, broken homes, and uncared-for children? And where better could consumer problems—purchasing, installment buying, and insurance—be learned than in arithmetic classes? Likewise, where could youth better learn sewing, home mechanics, and other skills of value about the home than in the homemaking classes and in the school shop?

#### *The schedule is reworked*

Fairly early it became common thinking among all groups—faculty, parents, townspeople, pupils, members of the Board of Education—that far-reaching changes had to be made in the over-all program or plan of the school. This in turn called for changes in the daily and weekly schedules of both pupils and teachers. It was decided that more of the pupil's time should be filled with instructional periods and extraclass activities and less with the usual study-hall periods. Already nearly 25 percent of the pupils were carrying a five-subject load and more were requesting permission to do so. Many pupils felt that they were missing much that they ought to be learning. They also felt that their time could be used to better advantage than was possible in the study-hall situation, and that there were too many such "study periods." A pupil's four-subject program spread over a seven-period day could and often did result in double study-hall periods when schedules were made. Teachers, too, were of the opinion that study-hall periods were generally ineffective. The greatest number of discipline problems came from study-hall periods; teachers too often served as monitors instead of helpers.

Many other problems of better division and utilization of the school day also arose. It was thought that greater educational use should be made of the community's natural resources, its industries, and its organizations. The teachers felt that occasional field trips were not enough. They wanted the school to become a real part of the community life. This would mean for one thing using time for this purpose during regular school hours, since the problems of bus transportation made it inadvisable to lengthen the school day for high-school pupils. It also meant flexibility of scheduling and interclass cooperation to facilitate projects which could be carried on effectively only if longer periods of time were available—an hour, a half day, a whole day, or a week.

By popular demand faculty meetings concerned with these problems came to be held every week. The staff had become so intrigued with the possibilities of what changes the school might make that daily conversation centered on little else. The old schedule just didn't work. How could one be developed that would? It was agreed that each teacher should decide how much and what knowledge, or skills, or subject matter in his field or activity each pupil should have. When the results of this thinking were presented everyone saw that there was far too

much and that reductions had to be made. This became the starting point for constructive planning. The staff worked on what was proposed as minimum offerings until everything fitted into a day of 7 periods of 45 minutes each. This was what they were accustomed to. Then, because they saw no advantage in



*Courtesy of the Hartford Courant*

#### Boys Receive Instruction in Homemaking.

All boys must spend one semester with the homemaking teacher, learning to prepare simple dishes and to do the kinds of things usually done by the women of the family, but which men may be called upon to do when emergencies arise.

continuing to include so many study-hall periods in the school day, they devised a plan for a 6-period day.

This new over-all program or plan was placed on a blackboard in the office of the superintendent-principal where it remained for 3 months, available for study by any and all. Teachers, board members, pupils, and others dropped in at any free time they had to study the chart, to argue over it, and to propose changes.

The major purpose dominating all their planning was to increase substantially the number and variety of educational experiences extended to the pupils. One idea that received support early was that each pupil should be required to take five regular subjects, all to be scheduled during the first five periods of the day. This would clear the sixth period for free electives. Thus the number and variety of subjects made available to and taken by all pupils would be increased.

The next suggestion was to place the sixth period (later called X-period) (see figs. I-III) successively at different hours throughout the week; that is, arrange for it to fall at the last hour on Monday and the first hour on Friday. But this would not work exactly unless the schedule were square, that is, a five-period day in a 5-day week. The idea of a five-period day fitted in well with some other thinking the staff had been doing—that of increasing the length of periods to a full hour and having each class meet but four times a week. Reducing the number of periods would not reduce the total amount of time any one class would meet during the week but would increase it slightly. That is, a class meeting five times a week for 45 minutes had at its disposal 225 minutes; a class meeting for four 60-minute periods had a total of 240 minutes. Moreover, there would be less lost motion if there were fewer but longer periods.

A review of the various changes proposed for the pupils' schedules revealed no insurmountable obstacles or undesirable outcomes in the teachers' loads or schedules. The elimination of study-halls and the longer class periods would provide more time for guided classroom work; the plan for scheduling regular subjects four times per week would leave free a fifth hour (or X-period) for each of 4 days, and would clear 1 hour (later called Z-period) for extraclass activities on the fifth day.

The square schedule resulting would also open up another possibility of which the staff was quick to see the advantages. During the months devoted to the problem of reworking the schedule, there had been some discussion about schools which are experimenting with the practice of pursuing one subject all day for several weeks until they have completed the time requirement for that subject, then beginning another subject which they follow in similar fashion. The staff saw immediately that there was merit in this plan, but it was felt that it was too drastic a change. It became apparent, however, that if a schedule could be devised which could be turned vertically, instead of its usual horizontal position, a teacher could devote a whole day or more to one or two subjects or projects.

When the staff was satisfied with its efforts at program scheduling, the principal took the proposed new schedule for study and discussion to all groups in grades 9 to 12, as he had done with the objectives. This time the social studies classes were used for this purpose.

The Board of Education naturally also had to be convinced that the radical changes proposed in the schedule were sound. One board member suggested a general meeting of parents and students, with representatives from other agencies. Members of the staff of the University of Connecticut and from the staff of the State Department of Education also were invited. These sent two representatives each. Also attending were reporters from the local papers and from papers in Hartford and surrounding towns. The principal presented the proposed program and schedule and then opened the meeting for discussion. Many questions were raised and thrashed over. When the board met later it voted unanimously for the changes.



Figure 1—Typical pupil's weekly schedule—  
(Mary Smith, college-prep sophomore)  
(Horizontal Schedule)

Per- iod	Mon.	Tues.	Wed.	Thurs.	Fri.
1	Eng. II	Eng. II	Eng. II	Eng. II	X-Pd. Typ'g.
2	Lat. II	Lat. II	Lat. II	X-Pd. Typ'g.	Lat. II
3	Plane Geom.	Plane Geom.	Z-Pd. <sup>1</sup>	Plane Geom.	Plane Geom.
4	Biol.	X-Pd. Typ'g.	Biol.	Biol.	Biol.
5	X-Pd. Typ'g.	World Hist.	World Hist.	World Hist.	World Hist.

By the shift here depicted the horizontal schedule (see above) becomes a vertical schedule (see below). Such a shift permits each class to extend the usual 60-minute period either to 240 minutes per day, thus leaving the X- and Z-periods undisturbed to provide variety; or the entire 300 minutes of a day may be devoted to one subject with time for the X-period provided for if occasion may demand.

(Vertical Schedule)

Per- iod	Mon.	Tues.	Wed.	Thurs.	Fri.
1	Eng. II	Lat. II	Plane Geom.	Biol.	X-Pd. <sup>2</sup> Typ'g.
2	Eng. II	Lat. II	Plane Geom.	X-Pd. <sup>2</sup> Typ'g.	World Hist.
3	Eng. II <sup>3</sup>	Lat. II	Z-Pd. <sup>1</sup>	Biol.	World Hist.
4	Eng. II &	X-Pd. <sup>2</sup> Typ'g.	Plane Geom.	Biol.	World Hist.
5	X-Pd. <sup>2</sup> Typ'g.	Lat. II	Plane Geom.	Biol.	World Hist.

<sup>1</sup> Z-period: First and third Wednesdays, Mural Club; second Wednesday, Assembly; and fourth Wednesday, Class Meeting or Guidance.  
<sup>2</sup> X-periods could be scheduled for the first or fifth period each day, if desired, to avoid interrupting extended periods.

Figure II—Typical pupil's weekly schedule—  
(Jane Meredith, commercial senior)  
(Horizontal Schedule)

Per-iod	Mon.	Tues.	Wed.	Thurs.	Fri.
1	Work Expr.	Work Expr.	Work Expr.	Work Expr.	X-Pd. <sup>1</sup> Spanish
2	Work Expr.	Work Expr.	Work Expr.	X-Pd. <sup>1</sup> Spanish	Work Expr.
3	Prob. of Democ.	Prob. of Democ.	Z-Pd. <sup>2</sup>	Prob. of Democ.	Prob. of Democ.
4	Short-hand	X-Pd. <sup>1</sup> Chorus	Short-hand	Short-hand	Short-hand
5	X-Pd. <sup>1</sup> Phys. Ed.	Eng. IV	Eng. IV	Eng. IV	Eng. IV

The square pattern of the schedule facilitates shift from horizontal position (above) to vertical position (below). Pupils scheduled for work experience may be scheduled to work all day without interruption in the vertical plan. In such a schedule the X-periods involved are either eliminated or rescheduled.

(Vertical Schedule)

Per-iod	Mon.	Tues.	Wed.	Thurs.	Fri.
1	Work Expr.	Work Expr.	Prob. of Democ.	Short-hand	X-Pd. <sup>1</sup> Phys. Ed.
2	Work Expr.	Work Expr.	Prob. of Democ.	X-Pd. <sup>1</sup> Chorus	Eng. IV
3	Work Expr.	Work Expr.	Z-Pd. <sup>2</sup>	Short-hand	Eng. IV
4	Work Expr.	X-Pd. <sup>1</sup> Spanish	Prob. of Democ.	Short-hand	Eng. IV
5	X-Pd. <sup>1</sup> Spanish	Work Expr.	Prob. of Democ.	Short-hand	Eng. IV

<sup>1</sup> X-periods: This pupil has chosen Spanish for 2 periods (120 minutes) per week, chorus for 1 period, and physical education for 1 period.

<sup>2</sup> Z-period: First and third Wednesdays, Dancing Club; second Wednesday, Assembly; and fourth Wednesday, Class Meeting.

### III. Organization and unique features

#### *Hour periods and five-subject pupil programs replace 45-minute periods and four-subject programs*

A COMPLETELY NEW SCHEDULE was put into operation in the fall of 1949. Two significant provisions, (1) a 5-period day and (2) a five-subject pupil program, were its major features. This was in line with the decision that a pupil's subject-load, i. e., the breadth of his education, should be increased without increasing the size of staff or lengthening the school day.

Each of the five 60-minute periods in the school day is now devoted to class work or activities. Pupils are required to carry five major subjects, each meeting four times a week. The remaining five periods are for free electives and extraclass activities. There are now no study-hall periods. The 60-minute period presumes that individual work and study is an essential part of the class time. No definite amount of time is specified for either group activity or individual activity. The division of the period is left to the discretion of the teacher and the pupils. A class may use the entire hour for group discussion and work, or it may devote the complete hour to individual work and study if that should prove to be the wisest use of the time.

The specific five subjects which make up the pupil's class load are those suggested by the school for the curriculum the pupil has chosen—college-preparatory, commercial, or industrial arts or homemaking. However, if a pupil wishes to substitute a subject generally associated with one curriculum for that of another, such as typing for Latin or industrial arts for algebra, he may do so if he shows good reason for his choice and if those responsible for his guidance find the shift wise.

Under the present schedule teachers have no free periods or study-hall although their separate preparations are fewer. Formerly they met six classes a day, five days a week with the seventh period scheduled for supervising activity or study periods. Now all teachers have five classes per day for which to prepare; the fifth period, however, as will be explained later and as is indicated by the teacher's schedules (fig. III) is often devoted to duties different from the usual classroom teaching. Moreover, the greater interest and more intensive work of the pupils, resulting from increased participation in planning and carrying forward all activities of the school, have lightened the load of the teachers.

During the 3 years in which the philosophy, the objectives, the course outlines, and the schedules were being discussed and developed, the program was also being changed to provide wider offerings. The widely used device of alternation of courses, e. g., chemistry and physics, algebra II and solid geometry-trigonometry, was adopted. In order to better adjust fields of instruction required of all, such as English, the junior and senior classes were combined and divided into three sections: college-preparatory, industrial arts and homemaking, and commercial. These changes made it possible to add other courses of a more practical nature for non-college-preparatory pupils—general mathematics, work experience, science courses emphasizing everyday problems.

**A diagonally placed X-period provides flexibility**

The five-subject plan adopted provided a 25 percent increase in the traditional number of courses taken by each pupil. Another 25 percent increase in the variety of pupil experiences was provided through free electives made possible by a period which was designated the "X" period. This extra period remained after the five subjects of four periods each had been provided for in the daily schedule (figs. I and II). This X-period provides time for electives to be chosen from the current offerings of the school or new courses to be provided as needed. Indeed,

Figure III—Typical teacher's weekly schedule

A. Mr. Callahan,<sup>1</sup> Mathematics and Science

Per-iod	Mon.	Tues.	Wed.	Thurs.	Fri.
1	Chem.	Chem.	Chem.	Chem.	X-Pd. <sup>3</sup> Corres. Study
2	Arith. Gr. 7	Anth. Gr. 7	Arith. Gr. 7	X-Pd. <sup>3</sup> Corres. Study	Arith. Gr. 7
3	Plane Geom.	Plane Geom.	Z-Pd. <sup>2</sup>	Plane Geom.	Plane Geom.
4	Math. Gr. 11-12	X-Pd. <sup>3</sup> Corres. Study	Math. Gr. 11-12	Math. Gr. 11-12	Math. Gr. 11-12
5	X-Pd. <sup>3</sup> Corres. Study	Alg. I	Alg. I	Alg. I	Alg. I

<sup>1</sup> Also responsible for junior high-school athletics.

<sup>2</sup> Z-period: First and third Wednesdays, Hobby Clubs; second Wednesday, Assembly; and fourth Wednesday, Homeroom and Eighth-grade Guidance.

<sup>3</sup> X-period: Mr. Callahan is scheduled during the four X-periods to supervise study through correspondence courses in a variety of fields.

## EDUCATION UNLIMITED

B. Mr. Battje,<sup>1</sup> Graphic and Fine Arts

Per- iod	Mon.	Tues.	Wed.	Thurs.	Fri.
1	Work Expr. <sup>2</sup>	Work Expr. <sup>2</sup>	Work Expr. <sup>2</sup>	Work Expr. <sup>2</sup>	X-Pd. Art
2	Work Expr. <sup>2</sup>	Work Expr. <sup>2</sup>	Work Expr. <sup>2</sup>	X-Pd. Art	Work Expr. <sup>2</sup>
3	Gr. Arts II	Gr. Arts II	Z-Pd. <sup>3</sup>	Gr. Arts II	Gr. Arts II
4	Art Gr. 7-8	X-Pd. Art	Art Gr. 7-8	Art Gr. 7-8	Art Gr. 7-8
5	X-Pd. Art	Gr. Arts I	Gr. Arts I	Gr. Arts I	Gr. Arts I

<sup>1</sup> Also in charge of visual aids equipment.

<sup>2</sup> Supervises work experience and guidance for industrial arts groups.

<sup>3</sup> Z-period: First and third Wednesdays, Mural Club; second Wednesday, Assembly; and fourth Wednesday, Homeroom and Guidance.

a most important and outstanding tenet of the school's philosophy is that every effort should be made to furnish whatever a pupil may need or desire for self-development. If the school does not have the course or activity needed by the pupils, it usually can be supplied through correspondence study or through similar unorthodox means.

During the current year the school has more than 40 different courses scheduled during the X-periods. These are the result of needs determined the previous April when pupils were asked to list on prepared cards their first, second, and third choices for work to be carried on during the X-periods.

Pupils in grades 9-12 have three X-periods for free electives and one X-period for physical education. However, physical education may be waived by a pupil if he so desires and if the physical education instructor approves. Since health and physical education are combined as a regular required full-credit subject for grades 7 and 8, and since in grades 9 through 12 there is an extensive physical education and athletic program outside the regular school hours, many pupils substitute some other elective for physical education in the X-period.

During the X-periods teachers are scheduled for instruction or other important services related to their respective fields. One teacher may simultaneously be directing the work of several different individuals or groups. For example, the teacher of graphic arts may have one or two pupils doing oil painting, some doing silk screening, others doing mechanical drawing. The commercial teacher may at the same time have a bookkeeping group, one pupil studying commercial law, and one or two others working on simplified shorthand.

During the X-period a pupil may elect one subject to meet for four periods during the week, or two subjects to be taken two periods each. Partial credits are allowed for a two-period course and a full credit for a four-period course; that is, a pupil may pursue two different courses in his X-period and earn one-half credit for each for the year, or a 4-period course and earn one credit for the year. If a number of pupils request one subject for four periods, that subject for that term takes on the characteristics of a regular curricular subject. This year, for example, two such classes were formed by popular request, one in Book-keeping II and one in Radio.

One of the most productive developments in connection with the X-period, brought about largely through the initiative and exceptional ability of one teacher, is a reading program for high-school boys and girls who need to improve their skill. Pupils meet in a regular class for development of reading skills and for individual attention when needed. Definite increases in reading ability have been noted. The benefits derived from improved reading skills have been reflected in all subsequent courses taken by the pupils involved. Indeed, the reading program has developed such a reputation within the school that students now elect reading as a regular subject in preference to some of the others, feeling that there is much to be gained from the class.

#### ***Correspondence courses broaden opportunities***

Supplementation of curriculum offerings of this high school is not dependent alone upon the changes in schedule already described. A plan to use correspondence courses has been adopted. Such courses need not be confined to the X-periods, of course, but in this school it is thus far a recognized feature of this special period. Although most of the teachers are certified in more than one area, thus making possible a diversity of offerings, a small staff cannot provide instruction in all of the subjects needed by all of the pupils. For those who ask for courses the staff cannot teach adequately, or for which there are too few pupils interested to form a class, supervised correspondence courses were found to be the answer. Since this type of instruction was begun, the pupils have elected and furthered through correspondence study such subjects as radio, advanced auto mechanics, driver training, animal husbandry, advanced chemistry, advanced biology, commercial law, etiquette, agriculture, third- and fourth-year Latin, Greek, Italian, Spanish, German, anatomy, meteorology, differential calculus, meat cutting, and music. This year (1950-51) there are 25 pupils taking 15 different courses by correspondence. Although supervised correspondence work can be carried on without help by a teacher, it is believed that pupils do better if there is someone to consult with them when they feel a need. For that reason correspondence work, within the X-period of course, is scheduled with those teachers who because of interest and experience are likely to be most able to help. Supervising study by correspondence study also means many other things—the selection and purchase of courses, the regular sending in and return of



#### Dances and Entertainment.

Most of the dances are sponsored by one of the classes. The sponsoring class often provides some type of special entertainment which has been previously planned either by the pupils themselves as an extra-class activity or with the help of the teachers as part of the classroom work.



lessons, the giving of tests and recording of results, the supplementation of theory with laboratory experiences in school, home, and community.

Versatility of teachers is important to the success of this type of instruction. To illustrate: This year two pupils have elected Italian, three Spanish, five German, and two third-year Latin. Foreign language is popular, probably due to the fact that 40 percent of the graduates go to college. (The school's regular program includes only Latin I and II and 2 years of French.) The Board of Education has provided instruction for these 12 pupils through correspondence courses, obtained through the facilities of the University of Nebraska and other correspondence schools. They meet during the same period under the guiding hand of one teacher, but carry on their work on an individual basis.

### ***The community also teaches school***

An excellent example of the opportunity for wide choice of subjects occurred in 1949-50 when a student requested an opportunity to study meat cutting. This posed a puzzling problem until it was discovered that the American Institute of Meat Cutting offered a correspondence course, which the Board of Education approved and purchased. During the X-period this student was soon studying about the chief cuts of lamb, veal, pork, and beef, how to prepare hamburger, a loin of beef, or a leg-of-lamb. In order to combine theory and practice, arrangements were made for him to work behind the counter and in the meat cooler of a local meat market for two periods each school day. Thus, through correspondence study and the guidance of the local butcher, with the work coordinated by his teacher, a boy graduating from East Hampton High School in 1950 was ready to take a job in a meat market with considerable training and experience in cutting meat. What is more he was employed as an assistant chef in a local summer resort and spent the summer successfully preparing meats for the cooking range.

Assistance by the local butcher is only one example of many types of help given by local people to pupils supplementing their work through correspondence courses. Auto mechanics are aided by practical demonstrations at a local garage. Commercial law students often have an opportunity for work and other experience with a local lawyer in their senior year or in the law library in Hartford. Sometimes local people are brought into the school to give demonstrations to groups of pupils; again they give instruction to a teacher who then can teach pupils.

### ***Additional credits ease college-entrance and related problems***

Since there has been a 50 percent increase in the number of courses taken by each pupil there is likewise a 50 percent increase in the number of credits to be earned. The pupil finishes his 4 years with a minimum of 18 credits or a maximum of 24-20 in the field of his specific choice, plus 4 other credits earned through free electives taken during the X-periods.

The increases in the number of offerings and subject credits, and the flexibility



of programing have also practically eliminated pupil failures and drop-outs. Although failures still occur, nearly all pupils now complete their high-school education in the usual 4 years. Under the present program pupils have accumulated more credits by the end of their junior year than their predecessors had at graduation time. Despite this fact there have been no requests to leave high school at the close of the 11th grade on the assumption that they have met the usual demands.

### ***The Z-period provides for many activities***

The one remaining period in each week still unaccounted for is designated the "Z" period. The Z-period is scheduled for the third period every Wednesday. This period facilitates a wide variety of pupil activities of the extraclass or co-curricular type. These activities are regarded as equal in importance with the classroom work in achieving the objectives of the school.

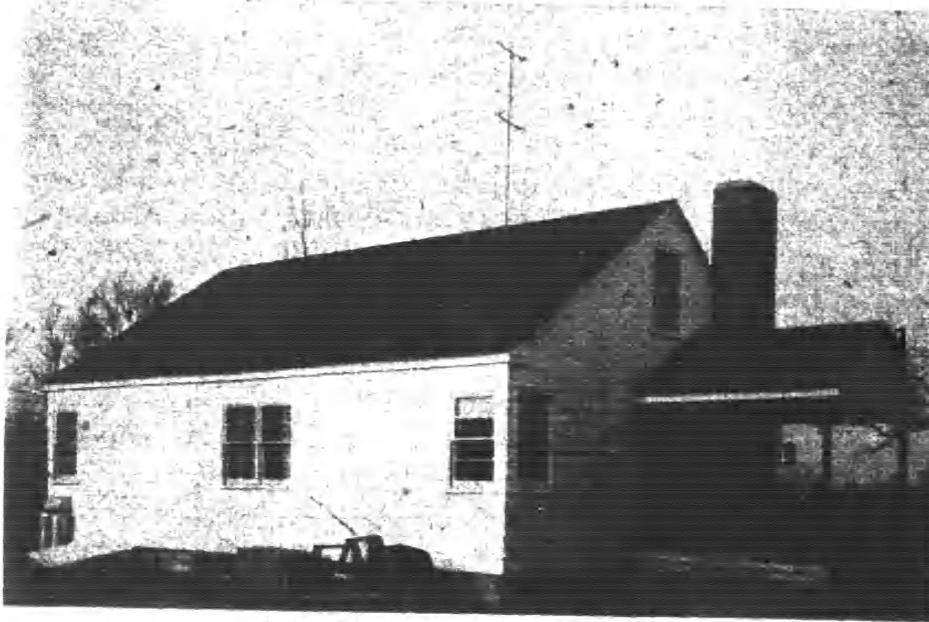
The Z-period of the second Wednesday of each month is set aside for assemblies and that of the fourth Wednesday is devoted to class meetings, to student council meetings, to planning for the annual senior-class excursion to Washington, and to homeroom guidance activities. The Z-periods of the first and third Wednesdays of each month are devoted to organized clubs and activities, such as plays, rifle competition, photography, nature study, and dancing. In many cases activities extend beyond the school day and beyond the walls of the school.

Sixteen clubs are now in active operation. Among these are: a Boys' Cooking Club whose members learn to plan, prepare, and serve common foods used in simple meals; a Music Club whose members attend concerts and musical shows as a group, prepare the program for a spring concert, and plan musical programs for their enjoyment, a Nature Club whose members take field trips to observe erosion, land-conservation practices, plant and animal life, and the habits of migratory birds, and study helpful and harmful plants, animals, and insects; a Junior Activity Club and a Senior Activity Club whose members promote interest in recreational activities—skiing, camping, hiking, swimming, chess, checkers—not included in the school's physical education program; a Mural Club whose members have as their objective the planning and executing in oil paint on prepared canvas of scenes depicting life in East Hampton which will be used on one large wall in the school gymnasium.

### ***A square-shaped schedule makes possible day- and week-long periods***

One of a teacher's chief handicaps in providing real life situations for active learning is the inflexibility of the schedule. This commonly gives her a group of pupils for 40 to 60 minutes each day, which is not long enough for excursions or other uses of community resources or for projects which need continuity of effort. Besides, if a class plans to pursue its work outside of the classroom and away from the school grounds this will necessitate absences from other regularly

scheduled classes. At East Hampton the new "square schedule" makes it possible for the school to provide at any time it wishes longer periods for certain classes. It can set aside for concentrated work a whole day or a week at a time, or even multiples of a day or week. This is achieved by simply shifting or rotating the regular schedule—the horizontal one—90° and using it vertically. (See Pupils' Schedules I and II.) When the shift extends the length of all class periods to a full day, each class meets on consecutive days rather than at consecutive hours.



Industrial Arts Projects Are Practical.

One pupil developed proficiency to plan and to build a house for his parents.

In other words, the first period class meets all day Monday, the second all day Tuesday, the third all day Wednesday, etc. Also, each class may meet for a full week or more if such a concentration of work should be deemed desirable.<sup>5</sup>

The advantages of this plan have now been demonstrated in many ways. The biology teacher is able to make an all-day field trip into the woods or to a nearby museum **WITHOUT INTERRUPTING THE PROGRAM** of any other teacher or any of the pupils. The English teacher can plan with his class to read an entire play, discuss it, plan for and carry out its production without the usual fits and starts. In that single day a class in drama can go to see a play in a nearby city without waiting for the weekend or without disrupting other class projects or the progress of classes involved in two or more activities. The mathematics teacher can take his class out on the playground, up to the lake, or into the woods actually to perform a surveying or other life-related operation. In this way the

<sup>5</sup> For a discussion of the advantages and disadvantages of the continuous use of the one-subject plan, see "Flexibility in Secondary Schools Through the One-Subject Plan" by Samuel M. Holton, *The High School Journal*, 32:113-122, May 1949.

loss of time in getting out the equipment, setting it up, arriving at the destination at which the work is to be done, returning and putting away the equipment is proportionately less, since it relates to a whole day's activities instead of to but 1 hour-period. This plan not only facilitates more practical instruction, but clearly adds greatly to its efficiency.

In the industrial arts shop or the graphic arts room, students may now learn to work as they would under regular factory methods; they may work all day at a machine or in developing a project for printing. Business groups now have the opportunity more nearly to reproduce business practices, and thus better understand and realize what a full working day is like under regular operating conditions. The physical education teacher may expand his program from the usual basketball, baseball, football, and similar games limited to short periods on the school's grounds to include golf, archery, camping, hiking, boating, skiing, and a list of other desirable recreational activities too numerous to mention. Indeed, through this plan teaching efficiency is increased, learning processes are vitalized, and the pupils begin to work and operate more nearly as they will when they become adult members of the community after their formal education is completed.

While the possibilities of this schedule were recognized from the beginning, it was not until the fall of 1950 that plans for the full utilization of time by all classes was worked out sufficiently well to put into operation the plan of concentrating on one subject for an extended time span. It was then tried for the period of 1 week.

Before actually undertaking a week-long shift of the schedule from the horizontal to the vertical plan, the school experimented first with double periods; that is, the first period was doubled on Monday (1, 1, 3, 4, 5), the second on Tuesday (2, 2, 3, 4, 5), the third on Wednesday (1, 2, 3, 3, 5), etc., for a week. When the shift to one subject for a full day was put into effect a variety of plans had been prepared. The following significantly different plans were tried out during the time the schedules were shifted:

1. French classes gave their extended time span to regular translations, the acting out of a play, singing French songs, and writing an original French composition.
2. One English class read a piece of prose literature, rewrote it in dramatic form, and dramatized it.
3. In graphic arts, the students observed a 2-hour demonstration on the silk-screen process and then continued with their activities as they would have done if they were engaged in regular graphic arts work in industry.
4. Boys' physical education classes worked out a time schedule, appointed safety leaders, went on a camping trip, cooked a meal, and worked out plans for tying in their mathematics and science work with the outdoor-life projects, e. g., costs involved, mensuration problems entailed, and nature study possibilities.

5. In the homemaking department one whole day was devoted to a career day. Another was devoted to purchasing supplies and preparing and serving of a complete meal; another was given to seeing a good-grooming demonstration by local beauty parlor operators; and still another to visiting stores and checking prices, weights, and packaging of various items, and to reporting back to the classes.

6. One arithmetic class spent its time making measurements of the school building, estimating cost of tiling, amount of paint needed, etc.

7. Commercial classes combined to set up a model insurance office for 1 day; "sold" fire, burglary, theft, life, and other types of insurance; and figured premiums. Another day they spent in constructing letters of application, answering want ads, holding interviews, and drafting follow-up letters. Regular personnel managers in the community participated in a discussion of the interviews bringing out good points and points to be improved upon. Another 2 days were spent in combining the commercial classes to form a model company in which there were mailing, filing, pay-rolls, shipping, billing, and order departments set up with routine work organized in accordance with procedures in local business houses. The fifth day was set aside for a field trip to a Hartford insurance company office.

8. A Latin class spent its day planning for a Christmas assembly, preparing songs and carols to be sung in Latin. Other classes devoted time to study and discussions of the use of Latin in astronomy and biology.

9. The girls' physical education program carried on a rotating schedule of games which would ordinarily be played by groups during out-of-school time, such as ping pong, badminton, volley ball, and swimming.

10. Biology classes went on a regularly planned field trip and dissected their specimens on their return.

11. One English class spent its time in creative writing and in discussion of various types of writing, including newspaper write-ups and headlines.

12. In industrial arts, one group made a field trip to local factories. Another group went through the complete procedures of factory mass production of kitchen stepladders in which individuals were assigned as foremen, cutters, sanders, etc. Each performed his task and produced his part without anyone making a complete stepladder.

The experiments in operating the new square schedule in a vertical position also were extended to the extra-class pupil activities with interesting results. For example, 15 students, selected for this purpose by the Student Association, made a cost-of-living survey with a view to understanding the construction of the commercial price index by the Bureau of Labor Statistics. These 15 students divided themselves into 3 teams, which together with 3 local adults, visited 9 different communities. Each team spent the first 3 days of the week pricing 196 items of food, clothing, and services produced by the community visited. The

communities were carefully selected on the basis of previous arithmetical computations to be representative of certain types and size.

The shift of the schedule to permit each class to experiment with carrying on continuously for a whole week instead of a 60-minute period or a single day, was voted a success. Even the academic teachers, who earlier were inclined to be dubious about the all-day single-class scheduling now feel that it gives them opportunities to do things they had been hoping to do for many years. Out of these experiments grew the faculty suggestion that the vertical program be scheduled for 1 day each week, rotating it so it would fall on Monday of the first week, Tuesday of the second week, Wednesday of the third week, etc.

Some members of the faculty are in favor of retaining the X-period on the days the schedule is shifted; i. e., to devote four periods to one subject and the fifth to the work regularly scheduled during that period; others are in favor of excluding it. Finally it was decided the best use of the X-period for any given week should be determined by the faculty as occasion might demand. When the vertical schedule is followed continuously throughout a week, the X- and Z-periods may be included as shown in Figures I and II or they may be omitted altogether that week and the time made up the following week by devoting a whole day to X- and Z-period activities. The extra hour of instruction for each class during the week the shifted schedule is in effect would make this arrangement feasible.

The faculty is impressed by the degree of flexibility possible in its present unorthodox schedule. They feel that it permits them to organize in whatever way they and the pupils find necessary to achieve the desired results. For the spring semester of 1951 it is planned to alternate each month between (1) using the shifted schedule 1 day a week, and (2) using it continuously for a week. In this way those activities which require for their accomplishment a longer, continuous time span can be postponed to the especially scheduled days and weeks ahead.

## IV. Improved instructional techniques

### *Work experience adds opportunities for practical learning*

REGULARLY PLANNED WORK EXPERIENCE has now been made an important aspect of the educational program of East Hampton High School. The plan provides that for 4 days each week all seniors of the industrial arts and commercial curriculums will spend the first two periods in local offices, factories, stores, and garages. They do the same jobs as the regular employees, but less is expected of them especially as to quantity production. One industrial arts teacher and one commercial teacher are scheduled to supervise this work during those two periods, to go through the community and into the industries to arrange for work opportunities, and to help iron out any difficulties which may arise in connection with pupil employment. The pupils are marked on their work experience jointly by these school faculty members and by their employers.

During the past 2 years the industrial arts pupils have elected the following types of work experience: Radio repair, machine shop, carpentry, printing, silk-screen work, auto mechanics, and power shovel operation. These have all been in local industries and with local contractors.

This work experience program has given pupils an opportunity to acquire a great deal of knowledge about the type of work in which they think they would like to engage as adults. Sometimes they discover that the work they have selected is not to their liking and that they would be better off in some other line of work. Many of last year's pupils who benefited from this program are now employed in the industries in which they had their guided work experience. Employers state that because of this arrangement these students are far better trained and have a greater understanding of their jobs than other high-school graduates. In some cases the work experience has also inspired graduates to further their education in trade or technical schools.

Commercial pupils find work experience in typing, shorthand, bookkeeping, and general office work in the various offices in the community. In addition, a group of such pupils has formed a school-centered corporation, known as "Office Services, Inc." for the purpose of supplying commercial services to the community. This corporation does typing, duplicating, simple bookkeeping, and filing for local business firms. Members are on call from 3 to 5 p.m. on school days and all day Saturday. Facilities of the school's commerce department are

available for their use. The project is organized as an informal corporation with 100 shares of stock authorized. Eighty percent of the remuneration for work done goes to pay the pupil, and 20 percent goes to the corporation. Funds accumulated by it are used for the purchase of supplies, equipment, and other operating expenses. If there is a surplus, dividends are declared. The payroll clerk keeps a record of hours worked by all members of the organization. Salaries are paid once a month on the basis of these records. Wages are calculated on an hourly basis, but if it takes a pupil longer than an hour to do an hour's work, he gets paid for only 1 hour.<sup>6</sup>



Work Experience Is Provided.

A group of pupils may learn the fundamentals of painting, and render a public service, by redecorating a classroom or a hallway.

### **Cooperative pupil-teacher planning is increasing**

Pupil participation in instructional practices varies from class to class. At one extreme there is a class for college-preparatory seniors which is still conducted largely by the lecture method typical of so many college courses; at the other extreme is a class in English for industrial arts-homemaking pupils in which the project is not only pupil-initiated, planned, and conducted, but which illustrates a deep concern for the operation of the entire school.

This class, for example, attempted to determine whether the school is accomplishing its 10 objectives. It had been reading Bacon's essay on *Studies*. Out of that grew a comparison of Bacon's estimates of the expected values of various studies or subjects with the outcomes which East Hampton High School had set

<sup>6</sup> For further information about this plan see "Office Services, Inc." by Laurent Fortin, *Business Education World*, 31:277-280, February 1951.

for its pupils. Discussion led to the following questions concerned with whether or not the objectives were being accomplished: Do they work? How well do they work? Which ones are in active operation? The pupils had some opinions, of course, but they wanted to know how they could go about collecting the convincing facts. They decided on two methods. (1) A questionnaire distributed to all homerooms of pupils in grades 7 through 12, and (2) panel discussions to which they invited guests from other classes.

The questionnaire was developed by committees—one committee for each objective. In tabulating the data supplied by the questionnaires the pupils decided that most of this work was to be done at home over the weekend, "so as not to delay too long in making the results available." The class decided also that the results should be presented in both the school paper and the school news page of the local paper, so that the townspeople would also see how their school was doing. They thought their results should be especially helpful to the guidance staff and to the faculty generally. It was agreed to ask the principal's confirmation of their plan.

Panel led discussions centered around each of the objectives in turn. If the pupils felt they needed special help, e. g., to evaluate progress in the understanding and appreciation of esthetic values, they decided to invite in the teachers of music, art, and dramatics to discuss these values with them.

This entire project had as its main goal to help the pupils gain a more thorough understanding of what the entire school is trying to do for its pupils. However, since this was an English class, there was constant emphasis—in the planning, in making the questionnaire, in panel discussions, and in writing the reports—on certain communicative skills. In preparing the questionnaire these pupils received valuable practice in developing a more precise vocabulary, in formulating the particular ideas they had in mind, and in the spelling of the various terms used. The tabulations of the results of the questionnaire, while largely an exercise in statistics, furnished opportunity for practice in the reading and use of tables, in presenting numerical facts, and in summarizing conclusions.

More and more the pupils at East Hampton are learning how to use their school experiences to help solve practical life problems of their own. While there is the usual course outline for the pupils to follow when they have no such problems of their own, they are encouraged to depart from these outlines. Last year, for example, during the graphic arts period one of the senior industrial arts boys drew plans and made the blueprints for a house he hoped to build. This year he built the house and presented it to his parents as a Christmas gift. This boy, who was both valedictorian and president of his class, has demonstrated so much practical skill that he has since been employed by one of the local carpenters.



## V. Pupil counseling and guidance

*Administrator, guidance teachers, and other teachers cooperate to evaluate and guide pupil progress*

LIKE MOST SMALL HIGH SCHOOLS, East Hampton has no full-time guidance personnel. It believes, however, that educational and vocational guidance is an essential high-school service in the modern complex social economy. It has, therefore, developed an effective program around its regular teaching staff. Two teachers, one man and one woman, each of whom has a master's degree in guidance, were given the major responsibility for developing guidance services on a part-time basis, but all classroom teachers are involved.

There is a budgetary provision for the purchase of standardized tests and a permanent record system. The administrator and the two guidance teachers have set up a program of testing, the purpose of which is to obtain as clear a picture of the interests, abilities, and needs of each pupil as possible. Tests are administered and scored by classroom teachers; tabulating, setting up class records, and finding medians and other pertinent data are the responsibility of the guidance teachers. These data are kept on file in the principal's office for the use of all of the classroom teachers. The teachers in charge of guidance and the administrator discuss with the other teachers any pertinent pupil deficiencies, outstanding talent, or special interests or need which are discovered through the testing program.

Promotion from grade to grade is determined largely on the basis of the pupil's achievements as measured against his ability. However, because of the cold, impersonal nature of standardized tests and the subjective nature of teachers' marks, the staff has developed other understandings and agreements which must be considered in evaluating a child's progress. All pupils whose general achievement quotient is below 0.75 become the subject of faculty conferences. Teachers of seventh- and eighth-grade pupils meet annually to discuss the advisability of promoting each pupil in those grades. Most pupils, of course, are passed over quickly as meriting promotion; borderline cases are discussed at length. Each such pupil is an individual case, i. e., of two who have failed in two subjects, one might pass and one might not, depending upon the age of the pupil, his physical size, his social maturity, and similar factors. The needs and problems of each child are fairly weighed; the opinions of the teachers, especially in the

lower grades carry more weight than the test scores. Following the staff evaluations conferences are arranged with the parents of those whose regular promotion is in doubt. Human values are regarded as more important than rigid rules, regulations, or scholastic standards.

The Z-period once each month is set aside for homeroom guidance. This time is usually confined to educational and social problems related to the living of boys and girls here and now. Its purpose is to help them get the most from their present school work and to provide opportunities for discussion of social situations and activities when the need arises. Also scheduled once each month are the conferences between the tenth- and eleventh-grade pupils and the two guidance teachers. These are devoted to a discussion of educational and vocational problems as they arise.

In the twelfth grade, teacher specialists in the three curriculum fields—college-preparatory, commercial, and industrial arts—are responsible for specialized guidance services in their respective areas. The college-preparatory teacher specialist keeps in touch with former students now in college to obtain data to aid present pupils hoping to go to college. For the past several years he has been able to arrange college entrance for all college-preparatory pupils—90 percent of them entering the college of their first choice.

The commercial teacher keeps himself informed on the employment needs of the local business firms and helps pupils select and obtain positions in keeping with their skills and interests. He also follows former pupils into their work situations with a view to gaining data to help present pupils. Both the commercial teacher and the industrial arts teacher keep in touch with the local factory owners and with other persons likely to employ high-school graduates.

In April of each year conferences are arranged—one for each grade—for the pupils and their parents. The requirements and electives of the next grade are presented and discussion invited. Efforts are made to explain the program of the school, to impress upon pupil and parent the wide possibilities for choosing X-period subjects, and to inform them of the many other means provided for meeting the pupils' educational needs.

Following a general conference with the entire group, the pupils leave and there is further discussion with the parents on any school problem of interest to them; parents who wish to do so are then invited to remain for individual conferences. Through this method of informing both parents and pupils on what the school has to offer, the parents have a better basis for discussing with their children their next year's program.

During the school year 1950-51 a new addition to the plan of counseling the seventh- and eighth-grade pupils is being tried out. The plan provides for the assignment of each such pupil to a selected student from grades 11 or 12. The older student is charged with the responsibility of orienting the younger boys and girls in the life and activities of the high school, and of helping them with any problems which may arise—discipline, scholarship, social adjustment.

The plan promises benefits to both the younger and the older pupils. A 2-year relationship between them is envisaged.

***Improved student-faculty relations is one of the outstanding accomplishments of the school***

The morale of both pupils and teachers of East Hampton High School is high. Boys and girls feel that their rights and interests are respected. Discipline problems have dropped to a minimum. There was only one referral to the principal's office in the first 4 weeks of the school year 1950-51. Teachers and pupils know that no arbitrary decisions affecting them will be made by the administration.

The principal and vice principal and many of the staff know by name each and every pupil in the school. Knowing the pupils is part of the planned procedure. The principal makes it a point never to ask a pupil his name after the first week or two; if his memory needs help the teacher is the one approached. When he first came to East Hampton, the principal set up individual interviews with the children, beginning with seniors and moving through the successive grades. In that way he established acquaintanceship and rapport with each pupil.

At the 10-minute recess between the second and third periods, pupils gather in the gymnasium to dance, make purchases from the senior class' concession stand, or just talk; the teachers meet in the faculty room on the second floor where coffee is served. This is time reserved for general relaxation. It provides the principal, and other faculty members, if they choose, an opportunity to chat with individuals or groups, to comment on yesterday's soccer game with a player, to ask a pupil about the accident his father had, or to inquire of another concerning some community activity in which he is participating.

## VI. Appendix

### Objectives

THE SPECIFIC OBJECTIVES agreed upon as best fitting East Hampton High School are quoted below:

#### A. STUDENT

1. Health—physical and mental—and Happiness
  - a. Understanding of good health habits, leading to general good health.
  - b. Feeling of mental and economic security—freedom from fear and want.
  - c. Sense of courage to carry on despite handicaps or lack of support.
  - d. The right to the pursuit to happiness in his choice of religion, vocation, and political affiliations.
2. Communicative Skills
  - a. Ability to read and evaluate many types of literature—books, magazines, newspapers, advertising, etc.
  - b. Ability to read and understand scientific materials, current events, novels, biographies, etc.
  - c. Ability to listen and evaluate—the radio, speeches, propaganda, etc.
  - d. Ability to compute well for everyday needs—budget, taxes, insurance, etc.
  - e. Ability to express himself, well through speeches, writing, creative art and music, dancing.
  - f. Ability to write well in letters, memorandums, newspaper reports, etc.—both grammatically and legibly.
3. Home and Family Life
  - a. Understanding of reproduction, marital relations, and proper sex conduct.
  - b. Understanding of home management and the rearing of children—their needs, abilities, and actions.
  - c. Desire for marital compatibility and an understanding of the desires of each member of the family.
  - d. Understanding of consumer problems, intelligent purchasing, installment buying, insurance, banking, taxes, and other monetary problems of the family.
  - e. Knowledge of cooking, sewing, home mechanics, and other skills of value about the home.
  - f. Desire to establish a strong family group exerting the proper influence on society of the home and cooperating with the church and the school.
  - g. Understanding of the basic differences of children and their abilities, interests, and aptitudes.

## 4. Religion

- a. Understanding of the Golden Rule and a respect for others.
- b. Instilling of a reverence for God.
- c. Desire to be an active member of a church group and cause the church to exert its due influence on society.
- d. Desire to practice tolerance.
- e. Desire for equality and equity for all and a respect for others.
- f. Understanding of Biblical literature.
- g. Desire to eradicate racial prejudices.
- h. Understanding of basic religious doctrine.

## 5. Financial Independence and Vocational Specialty

- a. Desire for being needed by society.
- b. Desire to be of service to society.
- c. Desire to practice thrift.
- d. Skill in chosen field—specialization above and beyond communicative skill.
- e. Desire for financial independence.

## 6. Citizenship

- a. Understanding of his obligations to himself, his school, his community, his State, his Nation, and the world.
- b. Understanding of his right and duty to elect and be elected.
- c. Desire to participate actively in school, local, or even higher government.
- d. Understanding of his privilege and duty to criticize constructively his leaders and his government.
- e. Understanding of his duty to demand reform.
- f. Desire to be socially adjusted to his school and his community.

## 7. Ethics

- a. Desire to live a good life.
- b. Understanding of the proper values of the influences of life about him.
- c. Desire to respect the values of others.

## 8. Esthetics

- a. Understanding and appreciation of the finer values and things of life.
- b. Understanding and appreciation of art, music, and nature.
- c. Ability to draw, sing, paint, play an instrument, and appreciate the efforts of others.
- d. Desire to express oneself through art, music, and dramatic mediums.
- e. Understanding and appreciation of the heritage of the past.

## 9. Worthy Use of Leisure Time

- a. Desire for healthy recreation.
- b. Desire for a worthy hobby.
- c. Desire to volunteer for civic duties for the betterment of his community or school group.
- d. Skill to participate in some form of athletic recreation.

## 10. Education

- a. Desire to select a field of endeavor and strive to become expert in that field.
- b. Desire to fill individual needs through study and advancement.

- c. Desire to reach the highest level of achievement possible.
- d. Ability to reason and think and study individually without help from others.
- e. Desire to search continually for knowledge and methods for improving himself and his fellow men.
- f. Understanding of the importance of education to the well-being of civilization.

#### B. SOCIETY

- 1. Coordination between school and society.
- 2. Building a better world and community through the guidance of youth.
- 3. Careful school administration and proper handling of budgetary monies.
- 4. Extension of facilities and services to the entire community.

#### C. EDUCATION

- 1. Complete homogeneity of purpose and continuity of experiences from kindergarten to graduation from secondary school.
- 2. Core of common learnings for all and a reconstruction of the educational ladder in order that all might have the opportunity to climb to the limit of the desires of each.
- 3. Opportunity for specialization for all for the development of each for the benefit of all.

#### **Personnel and tenure**

Following is a list of the faculty members at East Hampton High School who contributed to the planning and successful operation of the new program during the years the changes reported herein were being made:

Battit, Nicholas	1946-51	Hastings, Warren	1950-51
Bear, Edward	1947-51	Higgins, V. Louise	1944-47
Bell, Evelyn	1944-51	House, Marjorie	1946-51
Callahan, John	1946-51	Jacobson, Marjorie	1945-50
Cole, Harry	1945-48	Jones, Phyllis	1944-51
DeFrancisco, James	1947-51	Krotky, Helen	1946-51
Doody, Marion	1948-50	McDonald, Everett (superintendent-principal)	1945-51
Dwyer, Mary	1946-51	MacLean, C. Blair	1948-50
Ferrigno, Andrew D. V. (vice principal)	1939-51	Markiewicz, Julius	1946-47
Fortin, Laurent	1947-51	Martens, Romeo	1950-51
Friedrichs, Anna May	1950-51	Peters, Barbara	1947-49
Gradone, Michael	1947-51	Pilicy, George	1946-51
Grimes, Ellen	1945-47	Werner, Richard	1950-51