The report begins by describing the northeast New Jersey District, its student population growth, and the need for expanded educational opportunities. It examines major extended school year programs in theory and in practice, as well as the probable educational, social, and fiscal impact in the District should an extended school year program be implemented. Programs considered include the 45-15 plan, the mandatory staggered attendance quarter concept, and the voluntary quarter and quinmester programs. The author considers the educational, social, and fiscal ramifications of an extended school year program as well as the possible procedures for implementation of term-length courses, instructional objectives, expanded day and summer programs, and self-selected vacation periods. (Author/DN)
A REPORT ON EXTENDED SCHOOL YEAR PROGRAMS
INCLUDING FEATURES OF YEAR-ROUND SCHOOLS FOR THE
NORTHERN VALLEY REGIONAL HIGH SCHOOL DISTRICT

Submitted by

Mathew R. Glowski
Director, Extended School Year Study

The Study Director is responsible for the contents of this report, but acknowledges the contributions and guidance of the members of the district-wide ESY Advisory Council.

January 1974

NOTE: The work presented or reported herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Office of Education, and no official endorsement by the U.S. Office of Education should be inferred.

Northern Valley Regional High School District
Administrative Offices at the Closter Plaza
Closter, New Jersey 07624
Members of the Board of Education of the
Northern Valley Regional High School District
Serving the Communities of
Closter, Demarest, Harrington Park, Haworth,
Northvale, Norwood and Old Tappan
in Northeastern New Jersey

Mrs. Elias Eliasof - President
Stanley Rosenthal - Vice-President
Nicholas Dashcund
Victor De Martini
William Durocher
Fred A. Princiotta
Herbert F. Savoye
Joseph W. Scott
Mrs. Marcia Smith
Fred H. Wilken

Superintendent of the NVRHS District
Donald A. Watts

Principal of NVRHS at Demarest
John J. Howarth

Principal of NVRHS at Old Tappan
Donald T. Duff
ABSTRACT OF ESY STUDY

The forecast increases in the student population, and the existing educational pro-
gram do not appear to warrant the educational, social and fiscal upheaval that would be
associated with the conversion to a mandatory or even a voluntary extended school year
program.

Educational Impact - Summary

The adoption of mandatory programs, that is, those requiring summer attendance for
a portion of the students, and the adoption of voluntary programs, provide the opportunity
to revise and strengthen courses of study. Increased educational opportunities can arise
through flexibility in scheduling with the greater use of shorter time units of instruction
(45, 60, and 90-day classes). However, considerable change in the instructional and admin-
istrative procedures of the District would be required at a time when the educational program
of the District is known to be of a high quality. Abandonment of modular scheduling
would be necessary.

Social Impact - Summary

Mandatory programs would require as many as 75 percent of the students to attend
during some part of the summer. Many students would lose summer job opportunities.
Disruption of family-life patterns would occur with families having children in both an
elementary and high school simultaneously. However, districts with mandatory programs
in operation for a year or more have found parent, student and faculty attitudes favorable
toward these programs.

Voluntary programs would have negligible impact on family-life patterns.

Fiscal Impact - Summary

Mandatory programs such as a 45-15 program or a quarter program would increase
costs approximately 9.7 percent above the 1973-74 budget during the first year, and 2.3 per-
cent in subsequent years. Over a twenty-year period, however, these programs could defray
nearly $4,000,000 in new capital outlay which would be necessary if the student population
reached 4,000.

A voluntary quinmester program would cost approximately 12.9 percent above the
1973-74 budget in the first year, and 3.0 percent in subsequent years. No savings can be
guaranteed over a twenty-year period. However, more education and opportunities would
be available to the students.

Recommendations

While a full-fledged extended school year program has not been identified which would
meet the needs and characteristics of the NVRHS District at the present time, the investiga-
tion has identified four features of year-round schools that may be desirable for the District.
A limited pilot project is suggested to test the usefulness and desirability of: 1) term-length
courses (45 and 90-day courses) which will increase educational opportunities through pro-
gram flexibility; 2) expanded use of instructional objectives which will further enhance the
quality of education; 3) expanded summer and evening opportunities; and 4) self-selected
vacation periods.

The cost of implementing all four features in a pilot program would be approximately
1.3 percent of the 1973-74 budget or $84,067 (without air-conditioning).

The report also suggests investigation of student acceleration, expansion of work-
experience and service programs, expansion of independent study, an alternative school,
renting elementary facilities and relocatable classrooms as possible alternatives for
alleviating the expected population increases of the next few years.
ACKNOWLEDGEMENTS

Students, staff and community members gave of their time and expertise in contributing to this study as members of the ESY Advisory Council. Since the study began, the following individuals have served on the ESY Advisory Council:

Jack N. Arbolino (Harrington Park)  
Davis Berg (Haworth)  
Charles Binaghi (Northvale)  
Paul Brown (Closter)  
Dr. Alfred Campanella (Curriculum Center)  
Dr. Edward A. Ciccoricco (Curriculum Center)  
Miss Holly Ciarke (Student-NV RHS - Demarest)  
Sister Monica Mary Drogon (Closter)  
Dr. Harold Eby (Haworth)  
Mrs. Elias Eliasof (NVRHS Board of Education)  
Mrs. Ivor Eliker (P.T.A.-Old Tappan)  
Miss Christina Fantoni (Student-NV RHS - Demarest)  
Vincent Fondacaro (Faculty-NV RHS - Demarest)  
Dr. Louis Goldberg (Harrington Park)  
Brian Hennessey (Harrington Park)  
Dr. Arthur Jacoby (Old Tappan)  
Ronald Johnson (Faculty-NV RHS-Old Tappan)  
Barry Kaplan (Student-NV RHS - Old Tappan)  
Mrs. Bernice Kershaw (Rockleigh)  
Arthur Lauber (Northvale)  
Richard Levi (Closter)  
Wayne Levin (Norwood)  
Charles Luethke (Haworth)  
Mrs. Lorraine Ling (Faculty-NV RHS-Demarest)  
William Maier (Northern Valley Administrators Association)  
Miss Gail Mazurek (Student-NV RHS-Old Tappan)  
Mrs. Sidney Milstein (Closter)  
Rexford Moon, Jr. (Closter)  
Frank Murphy (Northvale)  
Mrs. Ricardo Orellana (P.T.A.-Demarest)  
Davis Ross (Closter)  
Mrs. Clarence Shapiro (P.T.A.-Demarest)  
Mrs. Barbara Shotliff (Haworth)  
Mrs. Eugene Smith (Norwood)  
Harold Starr (Harrington Park)  
Mrs. John Stockwell (Demarest)  
James Strohmeyer (NVRHS-Administration)  
Stephen Sussman (Student-NV RHS-Demarest)  
Fred Wilken (NVRHS-Board of Education)  
Sister Mary Janice Wolak (Demarest)  
Stuart Wolff (Faculty-NV RHS-Old Tappan)

The following individuals served on the ESY Evaluation Committee:

Jack Arbolino  
Dr. Leslie Ault  
Dr. Louis Goldberg  
James C. Hartwig  
Dr. Arthur Jacoby, Chairman  
John Kazanjian  
Dr. Marcella Lawler  
John Mullins  
Stephen Sussman  
Dr. Eugene Westlake

The following individuals served on the ESY Information Committee:

Mrs. Sue Dudzinsky  
Mrs. Miriam Eliasof  
Peter Fedorchak  
Mrs. Dot Kane  
Jay Kaplan  
Fred Pagniuc  
John Scullion  
Dominic Sgro

Special thanks is also given to the many members of the faculty, administration, clerical staff, and student body who assisted in providing information, gathering data and preparing reports in expediting research for this study.

Mrs. Elsie Venator and Mrs. Miriam Kahn must be recognized for their secretarial competence in helping the Study Director prepare the seemingly endless reports generated in the study.

Finally, a thank you to Bruce Campbell, Director of Extended School Year Programs for the New Jersey State Department of Education, for his insights, encouragement, cooperation and assistance.
A REPORT ON EXTENDED SCHOOL YEAR PROGRAMS
INCLUDING FEATURES OF YEAR-ROUND SCHOOLS FOR THE
NORTHERN VALLEY REGIONAL HIGH SCHOOL DISTRICT

INTRODUCTION

Federal funds obtained from the New Jersey State Department of Education in 1972 financed a study of year-round school use in the Northern Valley Regional High School District. A desire to maintain an educational program of high quality in light of projected enrollment increases of nearly 20% by 1976 prompted the Extended School Year Study.

Considerable change in the curriculum and operations of the District would be necessary in extended school year programs whether mandatory or voluntary in summer attendance. Family-life patterns under a mandatory summer attendance program would also require change for as many as 75 percent of the families of high school students.

Since the study began, the student population has not increased as much as anticipated.

No existing extended school year program has been identified which would meet existent needs and characteristics of the District. However, investigations have revealed features in year-round programs that may be desirable in the high schools regardless of the status of the student population.

Student population growth and the need for expanded educational opportunities along with characteristics of the District pertinent to year-round school use are discussed in chapter one of this report.

The second chapter describes major extended school year programs in theory and in practice as well as probable educational, social and fiscal impact in the District.

The educational, social and fiscal ramifications as well as possible procedures for implementation of term-length courses, instructional objectives, expanded day and summer programs, and self-selected vacation periods are described in the third chapter.
## CONTENTS

### CHAPTER  

<table>
<thead>
<tr>
<th>I. NEEDS AND CHARACTERISTICS OF THE NVRHS DISTRICT</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs of District Addressed in the ESY Study</td>
<td>1</td>
</tr>
<tr>
<td>Characteristics of the District Reviewed in the ESY Study</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. EXTENDED SCHOOL YEAR PROGRAMS</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>The 45-15 Concept For An Extended School Year</td>
<td>4</td>
</tr>
<tr>
<td>Mandatory Staggered Attendance Quarter Concept For An Extended School Year</td>
<td>8</td>
</tr>
<tr>
<td>Voluntary Quarter And Quinmester Programs For An Extended School Year</td>
<td>10</td>
</tr>
<tr>
<td>Other Programs For An Extended School Year</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. FEATURES OF YEAR-ROUND PROGRAMS THAT MAY BE DESIRABLE FOR THE NVRHS DISTRICT</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term-Length Courses</td>
<td>16</td>
</tr>
<tr>
<td>Expanded Use Of Instructional Objectives</td>
<td>19</td>
</tr>
<tr>
<td>Expanded Summer and Evening Options</td>
<td>22</td>
</tr>
<tr>
<td>Self-Selected Vacation Periods</td>
<td>24</td>
</tr>
</tbody>
</table>

APPENDIX: TABLES 26
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. RATE OF GROWTH NVRHS DISTRICT</td>
<td>27</td>
</tr>
<tr>
<td>II. SUMMER SCHOOL ENROLLMENTS OF NVRHS STUDENTS</td>
<td>27</td>
</tr>
<tr>
<td>III. NVRHS DISTRICT SUMMER SCHOOL COURSE ENROLLMENTS</td>
<td>28</td>
</tr>
<tr>
<td>IV. CAPACITY OF NVRHS DISTRICT FACILITIES</td>
<td>29</td>
</tr>
<tr>
<td>V. DISTRIBUTION OF NVRHS GRADUATES (1972 and 1973) CONTINUING EDUCATION, GAINING EMPLOYMENT AND UNABLE TO GAIN EMPLOYMENT</td>
<td>30</td>
</tr>
<tr>
<td>VI. 1972-1973 NVRHS DISTRICT SUBJECT FAILURE RATE</td>
<td>31</td>
</tr>
<tr>
<td>VII. COMPARISON OF NVRHS DISTRICT DROP-OUT RATES WITH NATIONAL AND STATE RATES</td>
<td></td>
</tr>
<tr>
<td>VIII. NVRHS DISTRICT FACULTY EDUCATIONAL ATTAINMENT</td>
<td>32</td>
</tr>
<tr>
<td>IX. NVRHS DISTRICT FACULTY TEACHING EXPERIENCE</td>
<td>32</td>
</tr>
<tr>
<td>X. PROJECTED NVRHS DISTRICT ENROLLMENT</td>
<td>33</td>
</tr>
</tbody>
</table>
CHAPTER I

NEEDS AND CHARACTERISTICS OF THE NVRHS DISTRICT

School districts strive to provide the finest educational programs for their students. These programs depend upon comprehensive curriculum responsive to the needs of students and the society in which they live; qualified, competent and dedicated staff; adequate equipment and supplies; and well-planned operational facilities. But, even the best designed program will fail if it ignores vital characteristics of the district. In the case of the Northern Valley Regional High Schools, the ESY Study paid particular attention to the District’s educational characteristics, its family-life patterns, and its students’ use of summer recess.

NEEDS OF THE DISTRICT ADDRESSED IN THE ESY STUDY

Today’s students require access to a greater diversity of information in an ever-expanding, culturally pluralistic and cybertechnical society. Providing for the educational needs of students is accomplished through a credit and non-credit granting course of study, co-curricular activities and guidance and counseling services. Students are required to enroll in at least six courses each year, and successfully complete 22 courses for graduation. Of the 22 courses, four years of English are required as well as three years of History, one year of Mathematics, and Physical Education during each year of attendance. To complete these requirements, students choose from approximately 130 courses. Twenty of these courses are 90 days long. The remaining 110 courses are 180 days long.

The number of courses a student can choose from each year is determined by his interest, his grade level and his proficiency in a subject area. In addition, students may enroll in summer school to make up a failure, improve a grade or accelerate.

Credit for work experience is attached to courses in the Business and Industrial Arts Departments. Other vocationally oriented courses are offered by these departments, and can also be taken on a full-time basis at the Bergen County Vocational and Technical School in Hackensack, or on a part-time basis at its satellite school in Norwood. A non-credit program for seniors (work-service) is available for one month at the end of the school year for a limited number of students at Demarest.

The Charles F. Kettering Foundation completed a national study of high schools in late 1973, and published 32 recommendations for improving secondary education. The recommendations described, in part, the high drop-out rate of college students. Less than half of all students who enter college complete two years, and about one-third complete a full four years. These students have been prepared for college for 12 years, are ignorant of the world of work, lack job skills, and do not even know how to look for a job. The report stated, "High school curricula should be expanded so that all adolescents can participate in cooperative work-study programs while pursuing other educational interests. The traditional barriers between vocational and academic ‘tracks’ must be eliminated to permit students to cross lines in pursuit of their individual educational goals. All options must remain open as long as possible to all students.”
The Board of Education received a report entitled, "A Look Ahead - The Future Needs of the Northern Valley Regional High School District" in 1971. An approximate 20 percent increase in the student population by 1976 was projected in the report. By September 1973, the enrollment was projected to increase by 14 percent. Actual figures for September 1973 reflected an increase of one percent. The student population increased from 1966 through 1969 by an average rate of 5.5 percent. From 1970 through 1973, it dropped to 2.2 percent. The immediate need for considerable classroom space identified in the 1971 projections has not materialized. However, it must be noted that existing facilities are operating beyond functional capacity (see Appendix).

If existing economic conditions continue and local zoning regulations remain intact, the rate of increase in student population should continue to decrease. As learned from the 1971 study, and from studies across the nation in the 1960's, projecting student enrollment far in advance is a precarious task. However, the report of the Kettering Foundation stated that the total American high school population will decrease over the next ten years. If the District wishes to continue to provide a responsive and comprehensive curriculum, it must be capable of responding to increases as well as decreases in the student population.

Regardless of the changes that occur in the population in the next five or ten years, the average life expectancy of a school facility is 40 years. This means that in 1995, a large portion of the Demarest facilities will be due for renovation or replacement. In 2002, the same will hold true for the facilities at Old Tappan.

CHARACTERISTICS OF THE DISTRICT REVIEWED IN THE ESY STUDY

The two high schools utilize modular scheduling in their instructional program. The school day is divided into 17 twenty minute periods. Many courses with several sections meet in specially designed auditoriums in large-groups ranging from 30 to over 200 students. On the average, this arrangement releases five classrooms throughout the day for additional student use. Small-groups that compliment the instruction of large-groups use some of this classroom space.

Students enroll in an average of seven credit-granting courses. The scheduling process begins in February and is completed in mid-August.

There are nearly 50 co-curricular activities which meet primarily after school. These are non-credit programs which include athletic, service and cultural activities.

During the summer of 1973, thirty percent of the families of high school students responded to a survey of vacation patterns. This survey showed (1) the respondents were interested in fall, winter and spring vacations, but only in addition to the existing summer recess; (2) a significant minority (36%) of the respondents were inclined toward staggered vacations throughout the year; (3) the majority of respondents (55%) expressed a desire to maintain the existing summer recess; (4) an almost equal number of families vacation away from home in July as in August (summer school operates only in July); only seven percent of the respondents indicated they vacationed away from home during the one week winter recess in February and only five percent vacationed away from home during the Christmas recess period. The survey also indicated that students from 51 percent of the responding families were employed during the summer. Finally, 13 percent of the respondents indicated that their children participated in organized recreational activities during the summer months.
A survey of students in the 7th, 8th, 9th and 10th grades revealed that 50 percent of the families in the District would have students enrolled simultaneously in the high schools and elementary schools during the 1975-1976 school year.

From 1966 through 1973, twenty-seven percent (27) of the District's students attended the summer session for enrichment, advanced or remedial courses. No trend of increasing or decreasing enrollments appeared during this period. The lowest percentage attendance was 22 percent in 1968, and the highest percentage attendance was 31 percent in 1969 (see Appendix). Further analysis of all summer school course enrollments (elementary, out-of-district, and district students) from 1967 through 1973 revealed that an average of 50 percent of all summer course enrollments were for remedial work, an average of 34 percent enrolled in enrichment courses, and the remaining average of 16 percent enrolled in advanced work (see Appendix).
CHAPTER II

EXTENDED SCHOOL YEAR PROGRAMS

The term "extended school year" refers to several concepts of school operation. Although extended school year implies more school each year for students and teachers, in nearly all operating programs this does not occur.

Extended school year refers, in this report, to any school calendar and curriculum designed to expand educational opportunities and/or accommodate a larger number of students in existing facilities. Students and staff attend or work the traditional 180 days, however, some students and staff may choose or be required to complete a segment of the traditional 180 days during summer months.

Five-hundred thousand students from Tacoma, Washington to Miami, Florida were enrolled in extended school year programs in 1972-73. Two-thirds of these programs (17 districts) employed mandatory summer programs.

The 45-15 Concept for an Extended School Year

IN THEORY:

Providing more usable space in existing facilities is the primary purpose of a 45-15 Plan of year-round school use. School facilities accommodate up to 33 percent more students through a 45-15 Plan.

Students are divided into four geographic groups of equal numbers (A,B,C,D). Group A may begin a 45-day session in September. Fifteen school days later Group B begins classes. Thirty days after Group A begins, and 15 days after Group B, Group C begins its 45-day session. Group D begins just as Group A starts it 15 day vacation. This cycle continues four times through the year. Therefore, only 75 percent of the students are in school at any one time.
All students are scheduled for a three week vacation in each of the four seasons as well as for a common two week summer recess. Courses of study are structured into 45-day units instead of the traditional 180 days. Students must take a minimum of English, History and other required courses. Most courses are non-sequential.

IN PRACTICE:

A 45-15 Plan has been used with resounding success in providing space in Valley View (Romeoville), Illinois.


Prince William County, Virginia has found the 45-15 concept successful in providing more space as well as providing an almost 10 percent cut in operating expenditures.

Hinesburg, Vermont, a regional high school district, was unsuccessful in implementing a 45-15 Plan. Community residents and teachers were willing to experiment with other internal school programs for saving space rather than convert to a 45-15 Plan.

Virginia Beach will operate its schools under a 45-15 Plan this year.

In almost all cases where 45-15 Plans have been adopted, the school district had faced considerable stress with its ability to provide sufficient classroom space. These were all rapidly growing districts that had exhausted their tax-levying capacity and had had few, if any, alternatives for providing the needed classroom space. 45-15 has been successful in helping rapidly growing communities meet their needs for additional classroom space.

Northville, Michigan set aside one elementary school for a voluntary 45-15 Plan during the 1973-1974 school year. Those families interested in the 45-15 program could enroll their children regardless of where they lived in the city.

Surveys of residents in districts operating 45-15 Plans repeatedly reveal that the experience is not unpleasant nor restrictive. The greatest clamor in opposition to 45-15 comes from areas surrounding districts that have ESY programs, and from those districts conducting feasibility studies.

IN THE NORTHERN VALLEY REGIONAL HIGH SCHOOLS

In considering the educational, social and fiscal ramifications of a 45-15 Plan as it could affect the two high schools, only the most significant advantages and disadvantages are presented below:

Educational Advantages:

1. The restructuring of courses into 45-day lengths provides an opportunity to develop precise instructional objectives in all courses, thereby strengthening courses of study.

2. Courses for study abroad, special projects and exchange programs can be facilitated several times a year through a 45-15 Plan.

3. Research with the 45-15 Program in Valley View, Illinois has shown that students have scored statistically significant increases in their grades.

4. The comparatively short three week recesses leave considerably less time for loss of learning to occur.
Educational Disadvantages:

6. With four different groups of students (A,B,C,D) starting school at four different times (15 days apart), the administration must adapt to operating, in essence, four schools.

7. Academic offerings for four groups of students, while maintaining existing staff, would decrease the availability of a wide selection of courses for all students.

8. Large-group instruction, a technique developed in modular scheduling, would not have the opportunity to function as effectively in releasing classroom space since the average size of large-groups would be smaller. Smaller large-groups would occur because fewer students would be available each quarter.

9. With all courses 45 days long, students and teachers do not have sufficient time to "get to know" each other in the classroom. Teachers would have less time to foster a student’s interest in his subject matter.

Social Advantages:

1. Extracurricular activities in other schools implementing 45-15 programs have not been seriously altered. Some changes would have to occur concerning athletic eligibility and attendance regulations.

2. School-spirit could very well improve because of identification with a unique school program.

3. Parents with children in elementary school and the high school (less than 50% of the high school students) would have high school children home for three-week periods throughout the year to help with the younger children and household chores.

4. Families would have the advantage of being able to take a vacation during any of the four seasons since students would be free for three weeks in each season.

Social Disadvantages:

5. Employment for students who would normally work during the traditional summer vacation would become difficult since they would be available for periods of three weeks at any one time.

6. Unless local districts implemented 45-15 programs, parents with children in elementary school and the high school would have their high school age children available only five weeks during the summer months to babysit and do household chores.

7. Families interested in prolonged vacations would be limited to three week vacations in a 45-15 program.

8. Established life-patterns of parents, students, and teachers would have to change to adapt to the 45-15 schedule.
**Fiscal Ramifications**  
**Constant Student Population**

If the student population remains constant, the following additional expenditures would be necessary with a 45-15 Program:

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>$28,000</td>
<td>Salary, medical insurance, pension contribution, and social security expenses for two additional full-time persons for Data Processing for scheduling, grading and other related increases in reporting.</td>
</tr>
<tr>
<td>$30,000</td>
<td>Salary, medical insurance, pension, social security for four additional full-time clerks to process added paper work.</td>
</tr>
<tr>
<td>$30,000</td>
<td>Increases in paper and office supplies and data processing equipment (computer for scheduling).</td>
</tr>
<tr>
<td>$58,500</td>
<td>Maintenance of air-conditioning for 45 classrooms and cafeteria in each building.</td>
</tr>
</tbody>
</table>

Teachers would be contracted for a 180-day period. Students would be equally distributed throughout the year and total instructional time would remain the same. Therefore, no additional instructional staff expense would occur.

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>$146,500</td>
<td>Total increase in operational expenses representing a 2.3% increase over the 1973-74 budget.</td>
</tr>
</tbody>
</table>

Certain one-time implementation expenditures would also occur. These include:

- $30,000 to $120,000 for curriculum revision - restructuring all courses into 45-day units.
- $80,000 to $700,000 (if desired by public) - range of air-conditioning installation.

Taking the mean expenditure of the range on curriculum revision ($75,000), and the median expenditure for the range on air-conditioning equipment ($390,000), the total cost of implementing and maintaining a 45-15 Program for the first year would be $611,500.

**Increasing Student Population**

If the student population increases, a 45-15 Program would make it possible to accommodate one-third as many students.

Additional classroom facilities for 1,000 more students would cost the district approximately $4,000,000 and an additional $4,000,000 in interest payments over a 20-year period.

Regardless of the type of program, teacher-student instruction time remains the same. Some savings can occur in fringe benefits if teachers agreed to work 225 days.
If additional operating expenses would increase, $146,500 for 3,000 students, the total operational increase for 4,000 students in a 45-15 Program would be $195,333 per year.

Over a twenty-year period, this would amount to $3,906,660. Adding the cost of 45-15 implementation, $465,000, the total cost of a 45-15 Program accommodating 4,000 students in existing facilities would be $4,371,660.

Cost of new facilities to accommodate 1,000 additional students (with interest) $8,000,000. Cost of accommodating 1,000 more students in existing facilities with a 45-15 Program of year-round school operation, $4,371,660.

Mandatory Staggered Attendance Quarter Concept
For An Extended School Year

IN THEORY:

The primary purpose of a mandatory staggered attendance quarter concept for an extended school year is that of housing, in existing facilities, a larger number of students than could normally be accommodated during a traditional school year.

Students are divided into four geographic groups of equal numbers (E,F,G,H). The school calendar is divided into four equivalent 60-day terms.

Only three groups are scheduled during any one term. Only 75 percent of the student population is enrolled at any one time. Each group receives one long vacation period of 10 to 12 weeks. One group would vacation in summer, another in fall, another in winter and the other in spring.

<table>
<thead>
<tr>
<th>September</th>
<th>December</th>
<th>March</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group E</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group F</th>
<th>vacation</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>vacation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group G</th>
</tr>
</thead>
<tbody>
<tr>
<td>vacation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group H</th>
</tr>
</thead>
<tbody>
<tr>
<td>vacation</td>
</tr>
</tbody>
</table>

All courses are 60 days long. Many 60-day long courses are non-sequential.

IN PRACTICE:

The investigation secured data on one of two districts operating a mandatory staggered attendance quarter plan.

In Molalla, Oregon new building costs and related operating expenses were avoided, while the operating budget increased by $68,000. Student population was 1,000.

During the summer months, classes begin at 7:30 a.m. and end at 1:30 p.m.

From 1928 to 1939 Aliquippa, Pennsylvania conducted a mandatory staggered attendance quarter plan. Additional facilities relieved the need in 1939, and the district returned to a traditional school year.
Ambridge, Pennsylvania conducted a mandatory quarter plan to relieve overcrowding from 1920-1936. Ambridge experienced difficulty in administering the program as well as parental opposition.

IN NORTHERN VALLEY REGIONAL HIGH SCHOOLS

Educational Advantages:

The educational advantages itemized under the 45-15 Analysis would hold true under a Mandatory Quarter Program (see pp. 5 and 6).

Educational Disadvantages:

1. As with 45-15, the existence of four different groups of students that must be staggered in their attendance patterns calls for the simultaneous operation of four different schools. It would not be possible to provide expanded opportunities without increasing staff and having smaller class sizes.

2. All courses would have to be reorganized into 60-day units. While shortened time-units of instruction have numerous attractive features, a total program change involving all courses is not sound organizational practice at a time when the quality of the existing program is considered very high.

3. Large-group instruction developed under modular scheduling would necessarily be restricted as far as maximum group size is concerned. Team teaching, therefore, would also be restricted.

Social Advantages:

1. Families would be able to vacation outside the traditional summer months.

2. Student employment opportunities would increase since the majority of the students would be entering the job-market at times other than the traditional summer "flood period" of high school and college students.

Social Disadvantages:

1. Parents with children in elementary school and the high school (less than 50% of the high school students) may be inconvenienced with their children on different schedules not having the older children available to help with household chores.

2. A two-month vacation outside the summer months would leave children too young to work with very little to do since there are fewer recreational activities available in other than summer months.

Fiscal Ramifications:

Constant Student Population

The fiscal ramifications are the same as under a 45-15 Program. That is, implementation costs - approximately $465,000 and increased annual operational expenditure of $146,500.
Voluntary Quarter and Quinmester Programs For An Extended School Year

IN THEORY:

The primary purpose of voluntary year-round education programs is that of increasing educational opportunities.

Quarter and Quinmester Programs are the most frequently appearing voluntary year-round programs.

In a Quarter Program, the traditional September to June program is divided into three 60-day long terms. A fourth term, with 60-day equivalent courses, is offered during July and August.

Students choose to attend any three of the four terms to fulfill their 180 days required attendance.

In a Quinmester Program, the September to June school year is divided into four 45-day terms. A fifth 45-day term is added during July and August. Students select any four of the five terms to complete the 180 day attendance.

In all voluntary year-round education programs, whether Trimester, Quarter or Quinmester, no student is required to attend during the optional summer term.

All courses are restructured into 90, 60 or 45 day lengths. Wherever possible, term-courses are structured to stand as separate entities. In languages and mathematics, however, many shortened courses must be taken in sequence.

Student and teacher schedules can be constructed once a year for all terms or they may be constructed new for each term.

Students may attend during all terms for enrichment or acceleration. It is also possible for students to attend all terms with a reduced course load permitting them to work a half-day or more.

With term-length courses in Quarter and Quinmester Programs, students are no longer locked into predominantly year-long courses. This permits students to study a greater number as well as a greater variety of subjects.

Students can explore new subject areas without having to make a year-long commitment to the course.

Term-courses provide more of an opportunity for girls as well as boys to learn basic household mechanics, electricity or even automechanics.

The vocationally oriented student has more of an opportunity to study academic subjects.

Term-length courses provide new and fresh educational and social environments for students and teachers with the beginning of each term.

Term-length courses decrease the opportunity for procrastination.

Students mismatched with a course or a teacher can opt for a new course at the end of a term.
Students failing a course may repeat the term, or redirect their efforts without losing an entire year.

The conversion to term-length courses enables the staff to recast instructional objectives for their courses.

IN PRACTICE:

Seventeen (33%) of the 51 school districts with year-round programs in 1972-73 had voluntary programs.

Atlanta was the first school district in recent years to implement a voluntary year-round program. Since implementation in 1968, Atlanta has consistently had from 34 to 42 percent of its high school students attending the summer quarter. In addition, the majority of the students attending the summer quarter were attending all year, and not choosing to accelerate their programs.

Miami had twenty-two high schools operating voluntary Quinmester Programs this year, with 24 percent of its 100,000 high school students attending the summer quin. Miami implemented Quinmester Programs in three schools in 1969.

Rochester, Pennsylvania has had a voluntary quarter plan since 1971. In the 1973 summer quarter, 29 percent of their 2,400 K-12 students participated.

Jefferson County, Kentucky (Louisville) has had a voluntary quarter plan operational for two years. Approximately 2,250 students have accelerated in the program providing a $600,000 savings in school operations.

Rock Hill, South Carolina began a voluntary Quinmester Program in September 1973 in its three junior high and two high schools.

Reports from these districts and others with voluntary year-round programs consistently exclaim student enthusiasm for the changes.

The major cost of these programs has been in transition from a traditional curriculum to the term-courses. These school districts spent from $150,000 to $1,500,000 in revising their courses of study.

The major problem confronted by these schools was a delay in identifying and acquiring new classroom materials. In most cases, more use has been made of paperback books as opposed to texts.

IN THE NORTHERN VALLEY REGIONAL HIGH SCHOOLS

In considering educational, social and fiscal ramifications of voluntary year-round programs as they could affect the two high schools, only the most significant advantages and disadvantages are presented below:

Educational Ramifications:

In addition to the various ways in which educational opportunities can be increased (see IN THEORY), other advantages of a voluntary year-round program with term-courses include:

- Term-courses make it easier to revise and update course content.
- It is generally agreed that it is easier and more efficient to work toward short-term goals as opposed to long-term goals.
- The make-up of failures with shorter-length courses is less costly.
- Transfer students and students who have been ill can be more easily reintroduced into the curriculum.
- Faculty have more of an opportunity to utilize and expand their expertise and talents without making a year-long commitment to a new course.

Educational Disadvantages:

- Trimester, Quarter and Quinmester Programs of year-round education require the restructuring of all courses in the program of studies to fit a specific time unit of 90, 60, or 45 days. The revision of all courses of study into 90, 60, or 45 day units would call for the development of courses of an unknown and untested quality in the two high schools.

Since the existing educational program is held to be of high quality, and since the professional staff is beginning to feel comfortable with the reorganization brought about under modular scheduling, it appears unlikely at this time that a call for the total revision of all courses of study would be in the best interest of the educational program.

- Large-group instruction developed under modular scheduling would be restricted with respect to maximum group size and the number of subjects that could be so structured. As a result, additional classroom space would be needed.

- Students now failing one marking period or even two, have the chance to do well in the last two marking periods and pass the course. This would no longer be possible in a Voluntary ESY Plan.

- Student scheduling and teacher allocation with modular scheduling would become an even more detailed and cumbersome task then it presently is. However, scheduling could be done at one point during the year for all terms.

- Unless students are properly informed, counseled and advised, the increased number of courses available to them may cause confusion and serve to inhibit their educational opportunities rather than expand them.

Social Ramifications:

The social ramifications of voluntary year-round programs are nominal if not non-existent. Since students and their parents would decide the terms that the students would attend schools, their choices would reflect their anticipated employment and vacation needs.

Traditional holidays remain in effect with voluntary programs.

Employment opportunities for students would be greater with a voluntary year-round program. Students would be available if they desired for work in fall, winter or spring and not necessarily be restricted to seeking and perhaps not finding summer employment.

Vacation opportunities for some families would also be expanded. At the present time, all families are restricted to taking prolonged vacations in the summer months. A voluntary year-round program would provide those families who are interested in prolonged vacations during fall, winter or spring the opportunity to do so.

Fiscal Ramifications:

With Constant Student Population

If the student population remains constant, the following additional operational expenditures would occur with a voluntary quarter or quinmester program.

A voluntary quarter or quinmester program would incur all the additional expenditures
of a 45-15 Program ($146,500) as well as an additional $20,000 in salaries and supplies for additional summer school offerings.

Air-conditioning maintenance would be approximately $26,000 because of fewer rooms being utilized.

The total increase in operational expenditures for a voluntary quarter or quinmester program would be $189,875.

Implementation costs would be the same as those under a 45-15 Program. This amounted to $465,000.

Additional facilities would be necessary to house the smaller class sizes. Two relocatables at each building would total approximately $160,000.

The total additional cost of implementing and operating a voluntary quarter or quinmester program would be $810,875.

Increased Student Population

If the student population increases, a voluntary quarter or quinmester might make it possible to accommodate 33% or 25%, respectively, more students in existing facilities. This assumes that as many as 75% of the students would voluntarily choose to vacation during the fall, winter or spring terms.

If this kind of cooperation could be achieved, the expense to the District over a twenty-year period would be $4,531,600.

Other Programs for an Extended School Year

Other programs for an extended school year which have not yet received wide implementation include the Flexible All-Year Plan, the Multiple Trails Plan, Concept-6, the Multiple Access Curriculum and Calendar, and the Extended School Usage Plan in neighboring Tenafly. Before briefly describing these programs, mention should be made of the “four-day week” found in a few New England school districts.

Four-Day Week

The four-day week, in Unity, Maine, was implemented as a means of absorbing a budget cut voted by the taxpayers. Students attend school for four days a week, and Friday is set aside for teacher training programs. The school day was lengthened moderately to gain equivalent time to a traditional school year. The four-day student week arose in response to budget limitations. The district was looking for a means to work within budget limitations.

Flexible All-Year Plan

Students have as many as 240 days throughout the year to complete the traditional 180-day requirements. This scheme relies heavily on individualized instruction, and is being tested in a pilot program with approximately 100 students in Clarion, Pennsylvania. Students progress at their own rate and may select vacation periods at any time during the year as long as they meet their 180-day requirement.

Because it relies largely on individualized instruction, it appears unlikely that this approach will prove successful in large school districts.
Multiple Trails Plan

The purpose of this program is to accommodate larger numbers of students in existing facilities.

The school year is expanded to 225 days with students enrolled in a reduced load all year. This permits the school buildings to house more students each day than that held in a traditional program.

There are no programs of this nature in existence.

The year-round attendance places a severe limitation of family travel and recreation.

Concept-6

This is a program being developed in Jefferson County, Colorado. It may permit more students to be accommodated in existing facilities.

The school year is divided into six equal sessions. Students must attend four of the six. Their selection of the first two terms determines the remaining two terms they will attend.

If a student selects to attend from December 1 through January 30, he automatically must enroll from June 1 to July 30. If he chooses to attend from October 1 to November 30, he automatically must attend from April 1 to May 30.

Multiple Access Curriculum and Calendar

Hinesburg, Vermont developed a voluntary modified 45-15 Plan with a "continuous progress" approach (individualized instruction) in several departments.

The majority of students selected the shortest possible period in which to complete their program. Very few students selected major vacation periods during the traditional school year.

Extended School Usage Plan

Tenafly has received $15,000 in State Funds for pre-implementation. Four proposals are being considered. These include: I. Extended Day - adding a 17th mod to the schedule to alleviate conflicts; II. Convert all courses to 90-day or semester lengths; III. Evening Options - offering English and Social Studies courses in evening to allow for acceleration or a reduced course load during day; and IV. Expanded Summer Program - with only 10 percent of students now attending summer program an effort to expand offerings for advancement and enrichment is proposed.
CHAPTER III

FEATURES OF YEAR-ROUND PROGRAMS
THAT MAY BE DESIRABLE FOR THE
NVRHS DISTRICT

Exploding populations in districts with exhausted tax-levying ability or a strong need to improve the educational program are the two major conditions prompting districts to implement full-fledged extended school year programs. These conditions do not exist in the NVRHS District at the present time, nor are they anticipated in the near future.

The District facilities are operating at 81.7 percent of their rated capacity this year (Table IV). This is 1.7 percent beyond their functional capacity. Demarest is at 78 percent of its rated capacity - two percent below functional capacity. Old Tappan is at 85.4 percent of rated capacity, or already 5.4 percent beyond its functional capacity.

Both schools are forecasted to continue increasing in students (Table IV and X). The most recent projections predict that Demarest will peak in 1976 with 1,588 students - 84.3 percent of rated capacity and 4.3 percent beyond functional capacity, and then begin a steady decline. Old Tappan will not peak until 1979 with 1,763 students. This represents 97 percent of its rated capacity, and 17 percent beyond its functional capacity. While the projections forecast a decrease beginning in 1980 for Old Tappan, it should be pointed out that this is a seven-year prediction, and highly susceptible to change. It will take approximately another year or two before the impact of the new sewage system can be predicted with any reliability.

The debt limitation and remaining borrowing capacity of the District was last computed in 1970 at $4,619,234. Taxpayers can choose to meet possible future increases in student numbers by voting capital, outlay for relocatable or permanent classrooms.

It may also be possible to accommodate the projected increases in the student population through mechanisms which may not require additional capital outlay. These alternatives include: (1) Acceleration of graduation - through summer study, evening school, and an extra course during the regular school year students can complete high school requirements in less than four years. It is expected that fourteen students will complete their high school requirements in less than four years in 1974. These students ordinarily accelerate by taking an advanced history course in the summer before their freshman year, and then proceed to enroll in seven courses for the next three years, thus completing the 22 courses required for the high school diploma. (2) Community based learning work-study and work-service programs can be expanded to all students, and credit given for work experience. Students may attend classes a half-day or be involved in an intensive full-time session for one marking period. (3) Continuous progress individualized independent study. The non-credit independent study program can be developed into a credit-granting program for the varied projects. (4) Alternative school. An unconventional program away from the school building in which students are guided in developing and
refining on a concentrated basis, a specific skill, talent or interest. (5) Renting available facilities from one or more of the local elementary districts. (6) Renting relocatable classrooms.

The following facts are presented in support of the contention that the educational program of the District is comparatively high:

- 70 percent of the graduates continue their education after high school (Table V);
- 21 percent of the graduates gain employment after high school (Table V);
- Subject failure rate for the District is only 5.3 percent;
- Drop-out rate is only 1.7 percent;
- Almost 50 percent of the faculty have more than ten years teaching experience;
- 65 percent of the teaching faculty have at least a Masters Degree.

While improving the educational program is not an apparent need in the District, the desire to maintain a responsive and comprehensive curriculum is always present. It is with this desire in mind that the initial recommendations described in this chapter are made to the NVRHS District Board of Education.

In this chapter the educational, social and fiscal ramifications of A) term-length courses, B) instructional objectives, C) expanded summer and day programs, and D) self-selected vacation periods are discussed.

A. Term-Length Courses

In the existing Program of Studies, there are approximately 130 courses. About 110 courses are 180 days in length (year-long courses) with the remaining courses 90 days in length (semester courses).

Term-length courses are any courses that are less than 180 days in length. Term-length courses may be 45 days, 90 days, or even 135 days in length.

The restructuring of 180-day long courses into term-length courses is a means of increasing educational opportunities without adding additional courses to the Program of Studies.

Data developed by department chairmen in the two high schools has shown that many of the courses in the existing Program of Studies can be restructured into shortened time units that can stand as independent courses. This information shows that the 130 courses in the 1973-74 Program of Studies could be restructured into as many as 333 term-length courses.

Thirty courses in the Program of Studies were organized into large-group classroom organization during the 1973-74 school year. Because this form of classroom organization provides a more efficient form of instruction, enhances professional growth of the staff by necessitating team-planning and team-teaching, and releases usable classroom space for more students, it is advantageous for the District to maintain large-group instruction.
In order to allow for the most effective use of large-group classroom organization, it is suggested that the 30 courses with large-groups be maintained in their present length of either 180 or 90 days.

In some school districts that introduced quarter and quimister courses, teachers have stated a need to meet with students for longer than a nine-week period in order to develop a strong educational relationship.

It is suggested, therefore, that courses involving skill development be maintained in 180-day, 135-day, or 90-day periods.

The remaining courses in the Program of Studies should be restructured into independent 45, 90, and 135-day term lengths that would enhance the achievement of the course goals. Such an arrangement would increase the number of course options available to students by at least 50 percent.

Educational Advantages of Term-Length Courses:

- Students have a greater variety of subject matter to choose from for their program.
- Work-service programs and other career oriented experiences can be offered for short periods throughout the year. Work-service arrangements for students now exist at the end of the senior year. Expansion of this service throughout the year can continue to take advantage of local, state, and federal government agencies, local schools, child day-care centers, hospitals and mental health units, voter registration groups, ecology groups, and senior citizens organizations. Arrangements might also include assisting in law and medical offices.
- Students may study more subject areas than now possible.
- Students can explore new subject areas without having to make a year-long commitment to a course.
- Term courses provide more of an opportunity for girls as well as boys to learn basic household mechanics, electricity or even autocanics.
- The vocationally oriented student has more of an opportunity to study academic subjects.
- Student and staff enthusiasm is rekindled with the start of each shorter course with new and fresh educational and social environments.
- Students and staff members work more conscientiously and effectively toward more immediate goals of term-length courses.
- Students are more able to progress in school at an optimum rate as term-length courses provide the opportunity for the exceptional student to accelerate to more advanced courses. Students requiring more intensive work on their subject matter can take additional courses in that area.
- Students failing a term-length course would have to make up credit for only that term and not an entire year.
- Students mismatched with a teacher or a term-course could redirect their efforts, energies and interests at the end of the term.
- Updating and revision of course content is more easily expedited with term courses.
- Faculty have more of an opportunity to utilize and expand their expertise and talents without a need for a year-long commitment to a new course.
- New courses developed in response to the advancing technology and changing social environment can be more quickly introduced into the Program of Studies.

Educational Disadvantages of Term-Length Courses:

- Complications will arise in implementing a large array of 45 and 90-day independent courses in the modular organization. Considerably more time and personnel will be needed to process and overcome the scheduling conflicts that will arise because of the smaller courses and single course offerings.
- Some faculty and students might find they would have less time to “get to know” one another in the classroom. Some faculty may feel they have less time to identify and foster student interest in their subject matter.
- Another disadvantage found with term-length courses has to do with the availability, selection and use of adequate instructional materials. Schools have found that traditional text books are used less frequently in term courses. Consequently, selection of new materials is required. This often includes the purchase of paperbacks as well as the development of individual teacher materials. It has been found that this often takes more time and money than originally projected.
- Too much of a proliferation of term courses may result in a situation known as over-choice. A student offered too many choices may encounter difficulty in choosing courses. Every effort must be taken with term-length courses to assure the student of developing a coherent program of studies and prevent a meaningless hodge-podge of courses from making up his program.
- A disadvantage associated with term courses is one of space utilization. While overall room utilization may be increased, the number of students per room per period might decrease.

Social Ramifications of Term-Length Courses:

There are no significant social ramifications of term-length courses. Term-length courses, however, are a means to providing the families of high school students an opportunity to choose a vacation period during some part of the traditional school year. This is explained more fully in section D of this chapter.

Fiscal Ramifications of Term-Length Courses:

The following expenditures are estimated for the development and implementation of term-length courses:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Pilot</th>
<th>Total Program Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and development of four term-length courses in each department as a pilot project as soon as possible</td>
<td>$2,500*</td>
<td>$7,500*</td>
</tr>
</tbody>
</table>
Activity | Pilot | Total Program Development |
--- | --- | --- |
Additional scheduling needs | $2,000 | $4,000 |
Printing, public information and evaluation costs | 1,800 | 5,400 |
**TOTAL** | $6,300 | $16,900 |

*Assuming that direction and coordination of these efforts be undertaken by either Curriculum Center or Superintendent's Office and, therefore, no additional expense for salaries.

Suggested Implementation:

Since non-credit mini-courses have been developed in some departments, an attempt should be made to allow for the evolution of these courses into the Program of Studies as credit-granting term-length courses.

In addition, a limited pilot project incorporating term-length courses should be undertaken.

A screening committee would be established to monitor the progress of the development of these courses. As soon as possible, the Superintendent and building principals should select a committee of no more than five individuals to oversee the pilot project. The main concern of the pilot should be to expand opportunities as widely as possible within the existing structure.

If the pilot project proves successful, the number of term-length courses would be expanded.

Term-length courses should also be offered in the summer program in the summer of 1975.

Wherever possible, an effort would be made in the scheduling process to provide a high degree of teacher-student continuity in term-course enrollments.

B. Expanded Use of Instructional Objectives

Implementing extended school year programs has provided school districts the opportunity to rewrite their courses of study in terms of instructional objectives.

As one writer stated, "An instructional objective is a statement that describes an intended outcome of instruction." As a statement, an instructional objective communicates an instructional intent to its reader and describes the tasks that will be accepted as evidence that the learner has achieved the objective.

The use of instructional objectives includes not only the identification of the achievement sought in a course, but also includes the procedures for fostering that achievement as well as procedures for evaluating progress.
Separate statements must be written for each objective and students should be given a copy of the instructional objectives in each course.

It is proposed, therefore, that instructional objectives be identified in all courses in the Program of Studies, that they be communicated to the students in advance, that they be used in evaluating student progress as well as teacher effectiveness and course value.

Clearly stated instructional objectives make possible the more precise, efficient and effective assessment and evaluation of student achievement.

Instructional objectives allow for a more effective means of selecting course content, course materials and instructional objectives.

Clearly stated instructional objectives allow students the opportunity to know in advance what is in store for them in a course.

Instructional objectives permit students to assess and correct where possible their own progress in a course. Instructional objectives let students know what they are working to achieve. Students are not “left-in-the-dark” with instructional objectives.

The use of instructional objectives may play a role in developing goal-oriented behavior in the students.

Clearly stated instructional objectives make it possible to evaluate a course efficiently.

Clearly stated instructional objectives make it possible to evaluate instructional staff more effectively.

The process of identifying instructional objectives allows the staff to evaluate existing course and department goals, content and procedures.

It seems possible that the use of instructional objectives will improve the channels of communications between teachers and parents with regard to their students.

Educational Disadvantages of Instructional Objectives:

In using instructional objectives for evaluation of students and staff, care must be taken that such use does not result in “too confining” a teaching atmosphere for students and staff. Some deviation from the stated instructional objectives may be necessary for clarification, amplification or just mere interest. However, any wide deviations should be noted and explained.

The identification of instructional objectives is a time-consuming, tedious and often frustrating task. Time and professional guidance are needed to help the staff develop the ability to draft statements of instructional objectives.

The use of instructional objectives may limit the use of a teacher’s expertise in a given subject area if he is confined to those courses in which he has total expertise.

The identification and use of instructional objectives requires a follow-up in staff supervision to assist in identifying and overcoming any problems that may arise, thereby increasing costs for additional personnel.
Social Ramifications of Instructional Objectives:

No social ramifications have been identified with this suggestion for the identification and use of instructional objectives in all courses.

Fiscal Ramifications of Instructional Objectives:

There are several options available for identifying instructional objectives. These include: released-time workshops in all department areas; summer workshops in all department areas; on-going identification as part of the teacher preparation periods; requesting that lesson-plans be submitted with instructional objectives.

It is suggested that the Director of Curriculum and Instruction, the building Principals and the Superintendent decide on the processes to be used for identification and utilization of instructional objectives.

Basic costs would include:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handbooks for staff and other related curriculum material</td>
<td>$1,000</td>
</tr>
<tr>
<td>Curriculum Consultants</td>
<td>4,400</td>
</tr>
<tr>
<td>Staff supplemental salaries</td>
<td>5,000 to $100,000*</td>
</tr>
<tr>
<td>Printing</td>
<td>1,500</td>
</tr>
</tbody>
</table>

$9,700** to $104,700**

*This figure would come into consideration with summer workshops and individual performance-contracting;

**It is assumed that the direction and coordination of this undertaking would be the responsibility of either the Curriculum Center or the Superintendent's Office.

Suggested Implementation of Instructional Objectives:

The Director of Curriculum and Instruction, the building Principals and the Superintendent should decide on the approach to be used for the identification and utilization of instructional objectives.

Whatever mechanisms are decided upon, the goal should be that instructional objectives will be identified in all courses by September 1975.

The following approach is suggested:

A workshop on developing instructional objectives should be conducted prior to school opening in September 1974.

Throughout the school year, instructional objectives would continue to be developed
under the supervision of a committee from each department area.

These materials would be further screened by a committee established by the Curriculum Center in concert with the Superintendent and the building Principals.

C. Expanded Summer and Evening Options

Most year-round programs of school operation provide an additional term for their students that allows for acceleration, or a reduced course load throughout the year, or remedial work.

Since 1967, an average of 50 percent of the summer school course enrollments have been in review courses. These are courses that meet for two hours a day for 30 days. While most of the students who enroll in review courses are trying to improve a grade of failure, there are a number of students who enroll in review courses as a primer for the corollary year-long course. These students who are previewing a course are not awarded credit for the successful completion of it.

Sixteen percent of the students, as an average, have enrolled in advanced courses. These courses are four hours in length for 30 days. For successful completion of these courses, students receive credit toward fulfillment of their high school requirements.

The remaining average of 34 percent enrolled in enrichment courses in physical education, music, art and industrial arts. No credit was granted for the successful completion of these courses.

It was also found that an average of 27 percent of the Northern Valley Regional High School District students attended the summer school programs since 1966.

The survey of family vacations found that as many people vacation in July as in August. The summer program operates essentially during July, limiting available vacation time to the last few weeks in August.

It is suggested, therefore, that two summer terms of 22-days be offered during July and August. Classes would be two hours and 45 minutes in length with two classes each day.

In addition, credit should be granted to all courses successfully completed during the summer terms regardless of their being enrichment, remedial or advanced.

A second mechanism for providing more options is that of providing courses from the Program of Studies in the Evening School.

This area of Evening School options needs further investigation before any definite proposals can be made. However, there are several different ways in which arrangements can be made with the Board of Trustees of the Northern Valley Evening School.

Educational Advantages of Expanded Summer and Evening Options:

The availability of courses in the Evening School and increased summer school options will allow students more opportunities for enrichment, acceleration or review. At
the present time, these opportunities are limited to one summer session in July, and to traveling to Hackensack for an accredited evening program.

Another advantage to availability of courses in the Evening School and an expanded Summer School Program is that students will be able to take a reduced course load during the regular school day. This would be desirable for students needing to work at a more deliberate pace as well as for students who desire to seek gainful employment during the traditional school day and school year.

Students opting for summer or evening study help to alleviate the pressure on classroom space during the regular school day.

A second summer term in August will make courses available for enrichment, acceleration and review for those students returning from their vacation at that time.

Acceleration does occur now and is showing signs of growth. Fourteen students are expected to complete their high school requirements before their senior year in 1974.

As the report of the Kettering Foundation suggests, "Differing time sequences - hourly, daily, weekly, yearly - must be made available so that educational programs can be adapted to the needs of individual students."

Educational Disadvantages of Expanded Summer and Evening Options:

While purely voluntary in nature, these increased course option for enrichment, acceleration and review may attract students who are not mature enough to deal with the increased responsibilities, pressures and work.

Social Ramifications of Expanded Summer and Evening Options:

Since the enrollment in evening courses and summer courses would be purely voluntary in nature, no social ramifications of this proposal have been identified.

Fiscal Ramifications of Expanded Summer and Evening Options:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Program Salaries</td>
<td>$110,435 representing an increase of $53,841 over 1973 summer program expense</td>
</tr>
<tr>
<td>Air-conditioning installation* (40 classrooms, 2 cafeterias)</td>
<td>$390,000*</td>
</tr>
<tr>
<td>Air-conditioning maintenance</td>
<td>$26,999</td>
</tr>
<tr>
<td>Evening School expense</td>
<td>$10,000**</td>
</tr>
<tr>
<td>Printing and evaluation</td>
<td>$2,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$438,435</strong></td>
</tr>
</tbody>
</table>
Air-conditioning is a capital outlay item, therefore, its installation would be determined by the public.

This figure will be proportioned to the number of students and staff enrolled...$10,000 is suggested budget for pilot.

Suggested Implementation for Expanded Summer and Evening Options:

In order to make available courses in the Evening School for enrichment, acceleration and review, it is suggested that a task force be established to explore and develop arrangements between the NVRHS District Board of Education and the Trustees of the Northern Valley Evening School.

The proposal for the two-term Summer School should be further developed and market research performed with students, teachers and parents as soon as possible. As with the Evening School proposal, a task force should be created to explore and develop this proposal.

D. Self-Selected Vacation Periods for the Northern Valley Regional High School District

Mandatory extended school year programs make possible the housing of as many as 33 percent more students in their facilities by mandating vacations throughout the traditional school year for students in different geographic segments of their respective districts.

Voluntary extended school year programs do not mandate vacations during the regular school year, but make it possible for those who so desire to be able to do so.

At the present time, the parents of students in the Northern Valley Regional High Schools are not able to vacation for an extended period during the traditional school year. Students who may be able to be gainfully employed during the regular school year are severely limited unless enrolled in a work-study program in one of the vocationally oriented departments.

It is suggested, therefore, that through course and program scheduling techniques, mechanisms be established to allow students and parents the opportunity to select a major vacation period during the traditional school year.

Educational Advantages of Self-Selected Vacation Periods:

There are no significant educational advantages in permitting self-selected vacation periods.

It may be advantageous to some degree in the area of motivation for a student to be able to select the period during the year when he will attend school.

Educational Disadvantages of Self-Selected Vacation Periods:

A disadvantage associated with self-selected vacation periods would be the probability of program fragmentation occurring unless properly supervised.
Social Advantages of Self-Selected Vacation Periods:

Self-selected vacation periods will allow families that must to take their students out of school during the fall, winter or spring months.

Students will have more opportunities to seek temporary employment during the fall, winter or spring months. They will not have to compete with all other students flooding the labor market in June.

Social Disadvantages of Self-Selected Vacation Periods:

Students may opt themselves out of certain co-curricular sports and activities. However, since this would be a purely optional arrangement, no significant social disadvantages are perceived.

Fiscal Ramifications of Self-Selected Vacation Periods:

No additonal costs are perceived in providing this opportunity. In fact, if sufficient numbers of students choose to accelerate, take a reduced course load, or vacation at different times during the year, the pressure on building capacity should be eased.

Suggested Implementation of Self-Selected Vacation Periods:

A request should be made of the State Department of Education that would permit students to complete the equivalent of the 180 day instructional period in less than 180 days.

In addition, the implementation of self-selected vacation periods would be enhanced by the utilization of term-length courses. A credit-granting program for independent study would also enhance self-selected vacation periods.

A task force should be created to explore and develop the procedures by which self-selected vacation periods would become a reality.

If a decision is made to implement the foregoing recommendations for term-length courses, instructional objectives, expanded summer and day opportunities, and self-selected vacation periods, it is further suggested that every effort be made to establish these programs as much as possible within the existing administrative framework of the District.

Material from this report will be presented to the students, staff, parents and other taxpayers during the next few months. In April or May, their attitudes will be assessed. Final recommendations, based on the attitudes of these groups will be presented to the Board of Education in May or June 1974.
APPENDIX
### TABLE I

RATE OF GROWTH NVRHS DISTRICT 1966-1973

<table>
<thead>
<tr>
<th>Year</th>
<th>September Enrollment</th>
<th>Increase Over Previous Year</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>3019</td>
<td>49</td>
<td>1.7</td>
</tr>
<tr>
<td>1972</td>
<td>2970</td>
<td>81</td>
<td>2.8</td>
</tr>
<tr>
<td>1971</td>
<td>2889</td>
<td>63</td>
<td>2.2</td>
</tr>
<tr>
<td>1970</td>
<td>2826</td>
<td>66</td>
<td>2.4</td>
</tr>
<tr>
<td>1969</td>
<td>2760</td>
<td>160</td>
<td>6.2</td>
</tr>
<tr>
<td>1968</td>
<td>2600</td>
<td>167</td>
<td>6.9</td>
</tr>
<tr>
<td>1967</td>
<td>2433</td>
<td>88</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Annual Rate of Growth 1966 - 1973 equals 4%

### TABLE II

SUMMER SCHOOL ENROLLMENTS OF NVRHS STUDENTS (1966-1973)

<table>
<thead>
<tr>
<th>Year</th>
<th>DEMAREST</th>
<th>OLD TAPPAN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number Enrolled</td>
<td>% of Students in Regular School Year</td>
<td>Number Enrolled</td>
</tr>
<tr>
<td>1973</td>
<td>369</td>
<td>25</td>
<td>398</td>
</tr>
<tr>
<td>1972</td>
<td>387</td>
<td>27</td>
<td>303</td>
</tr>
<tr>
<td>1971</td>
<td>488</td>
<td>35</td>
<td>383</td>
</tr>
<tr>
<td>1970</td>
<td>502</td>
<td>37</td>
<td>289</td>
</tr>
<tr>
<td>1969</td>
<td>409</td>
<td>30</td>
<td>430</td>
</tr>
<tr>
<td>1968</td>
<td>332</td>
<td>25</td>
<td>247</td>
</tr>
<tr>
<td>1967</td>
<td>387</td>
<td>30</td>
<td>272</td>
</tr>
<tr>
<td>1966</td>
<td>397</td>
<td>31</td>
<td>311</td>
</tr>
<tr>
<td></td>
<td>Cumulative 3271</td>
<td>30</td>
<td>2633</td>
</tr>
<tr>
<td>Year</td>
<td>Enrichment* N</td>
<td>Enrichment* %</td>
<td>Remedial N</td>
</tr>
<tr>
<td>------</td>
<td>---------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>1973</td>
<td>355</td>
<td>45</td>
<td>283</td>
</tr>
<tr>
<td>1972</td>
<td>367</td>
<td>48</td>
<td>211</td>
</tr>
<tr>
<td>1971</td>
<td>248</td>
<td>38</td>
<td>98</td>
</tr>
<tr>
<td>1970</td>
<td>260</td>
<td>35</td>
<td>110</td>
</tr>
<tr>
<td>1969</td>
<td>218</td>
<td>30</td>
<td>98</td>
</tr>
<tr>
<td>1968</td>
<td>199</td>
<td>26</td>
<td>79</td>
</tr>
<tr>
<td>1967</td>
<td>306</td>
<td>38</td>
<td>236</td>
</tr>
<tr>
<td>Average</td>
<td>279</td>
<td>37</td>
<td>137</td>
</tr>
</tbody>
</table>

*Enrichment - All Art, Industrial Arts, Music and Physical Education

**Advanced - Includes Driver Education
### TABLE IV

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NVRHS at Demarest</td>
<td>1883</td>
<td>1507</td>
<td>1469</td>
<td>97.5</td>
<td>78.0</td>
<td>1529</td>
<td>101.5</td>
<td>81.2</td>
<td>1588</td>
<td>105.4</td>
<td>84.3</td>
</tr>
<tr>
<td>NVRHS at Old Tappan</td>
<td>1819</td>
<td>1455</td>
<td>1554</td>
<td>106.8</td>
<td>85.4</td>
<td>1644</td>
<td>113.0</td>
<td>90.4</td>
<td>1741</td>
<td>120.0</td>
<td>95.7</td>
</tr>
<tr>
<td>Total</td>
<td>3702</td>
<td>2962</td>
<td>3023</td>
<td>102.1</td>
<td>81.7</td>
<td>3173</td>
<td>107.1</td>
<td>85.7</td>
<td>3329</td>
<td>112.4</td>
<td>89.9</td>
</tr>
</tbody>
</table>

* - Rated Capacity is based on a formula of the school building code.

** - Experience of state authorities has shown that approximately 80 percent of the rated capacity can be used for normal operation and long-range planning.
<table>
<thead>
<tr>
<th>School Year</th>
<th>Total Graduates</th>
<th>Continuing Education</th>
<th>Gaining Employment</th>
<th>Employable, but not Employed</th>
<th>Unaccounted for</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Demarest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>338</td>
<td>257</td>
<td>76.0</td>
<td>49</td>
<td>14.5</td>
</tr>
<tr>
<td>1973</td>
<td>306</td>
<td>229</td>
<td>74.8</td>
<td>35</td>
<td>11.5</td>
</tr>
<tr>
<td>Average</td>
<td>322</td>
<td>243</td>
<td>75.5</td>
<td>42</td>
<td>13.0</td>
</tr>
<tr>
<td>Old Tappan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>352</td>
<td>225</td>
<td>63.9</td>
<td>92</td>
<td>26.1</td>
</tr>
<tr>
<td>1973</td>
<td>351</td>
<td>233</td>
<td>66.4</td>
<td>101</td>
<td>28.8</td>
</tr>
<tr>
<td>Average</td>
<td>352</td>
<td>229</td>
<td>65.1</td>
<td>97</td>
<td>27.6</td>
</tr>
<tr>
<td>Total District</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>690</td>
<td>482</td>
<td>69.9</td>
<td>141</td>
<td>20.4</td>
</tr>
<tr>
<td>1973</td>
<td>657</td>
<td>462</td>
<td>70.3</td>
<td>136</td>
<td>20.7</td>
</tr>
<tr>
<td>Average</td>
<td>674</td>
<td>472</td>
<td>70.1</td>
<td>139</td>
<td>20.6</td>
</tr>
</tbody>
</table>

* Based on Fall Reports to New Jersey State Department of Education
### TABLE VI

1972 - 1973 NVRHS DISTRICT SUBJECT FAILURE RATE

<table>
<thead>
<tr>
<th>School</th>
<th>Number of Subject Grades</th>
<th>Number of Failures</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demarest</td>
<td>11,034</td>
<td>410</td>
<td>3.7</td>
</tr>
<tr>
<td>Old Tappan</td>
<td>11,274</td>
<td>775</td>
<td>6.9</td>
</tr>
<tr>
<td>Total District</td>
<td>22,308</td>
<td>1185</td>
<td>5.3</td>
</tr>
</tbody>
</table>

### TABLE VII

COMPARISON OF NVRHS DISTRICT DROP-OUT RATES* WITH NATIONAL AND STATE RATES

<table>
<thead>
<tr>
<th>Year</th>
<th>NVRHS Demarest</th>
<th>NVRHS Old Tappan</th>
<th>Total District</th>
<th>National</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972 - 73</td>
<td>1.0%</td>
<td>2.3%</td>
<td>1.7%</td>
<td>not available</td>
<td>not available</td>
</tr>
<tr>
<td>1971 - 72</td>
<td>0.8%</td>
<td>2.5%</td>
<td>1.7%</td>
<td>22.8%</td>
<td>15%</td>
</tr>
</tbody>
</table>

* Compiled from Fall Report to State Department of Education
### TABLE VIII

**NVRHS District Faculty Educational Attainment**  
**As of September 1973**

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral Degree</td>
<td>3</td>
<td>1.6</td>
</tr>
<tr>
<td>Masters + 48 credits</td>
<td>24</td>
<td>12.9</td>
</tr>
<tr>
<td>Masters + 32 credits</td>
<td>30</td>
<td>16.1</td>
</tr>
<tr>
<td>Masters + 16 credits</td>
<td>29</td>
<td>15.6</td>
</tr>
<tr>
<td>Masters Degree</td>
<td>35</td>
<td>18.8</td>
</tr>
<tr>
<td>Bachelors + 32 credits</td>
<td>12</td>
<td>6.5</td>
</tr>
<tr>
<td>Bachelors + 16 credits</td>
<td>15</td>
<td>8.1</td>
</tr>
<tr>
<td>Bachelors Degree</td>
<td>38</td>
<td>20.4</td>
</tr>
</tbody>
</table>

### TABLE IX

**NVRHS District Faculty Teaching Experience**  
**As of September 1973**

<table>
<thead>
<tr>
<th>Years Experience</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 15 years</td>
<td>54</td>
<td>29.0</td>
</tr>
<tr>
<td>10 to 14 years</td>
<td>32</td>
<td>17.2</td>
</tr>
<tr>
<td>5 to 9 years</td>
<td>47</td>
<td>25.3</td>
</tr>
<tr>
<td>1 to 4 years</td>
<td>53</td>
<td>28.5</td>
</tr>
</tbody>
</table>
### TABLE X

**PROJECTED NVRHS DISTRICT ENROLLMENT***

(JANUARY 1974)

<table>
<thead>
<tr>
<th>Class Graduating Year</th>
<th>ENROLLMENT BY BOROUGH</th>
<th>Total Projected Four Year Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>District</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Demarest</td>
</tr>
<tr>
<td></td>
<td>Sending to DEMAREST Closter Demarest Haworth Other** Harrington Park Sending to OLD TAPPAN Northvale Norwood Old Tappan Other**</td>
<td>As of Total</td>
</tr>
<tr>
<td>1974</td>
<td>168 109 83 7 85 86 72 96 1</td>
<td>1974 3032 1478 1554</td>
</tr>
<tr>
<td>1975</td>
<td>159 107 69 2 93 86 76 98 1</td>
<td>1975 3173 1529 1644</td>
</tr>
<tr>
<td>1976</td>
<td>183 106 92 106 118 90 115 6</td>
<td>1976 3329 1588 1741,</td>
</tr>
<tr>
<td>1977</td>
<td>182 115 94 1 91 108 96 98 20</td>
<td>1977 3281 1543 1738</td>
</tr>
<tr>
<td>1978</td>
<td>198 130 92 112 112 92 115</td>
<td>1978 3270 1516 1754</td>
</tr>
<tr>
<td>1979</td>
<td>178 119 98 115 128 96 111</td>
<td>1979 3221 1458 1763</td>
</tr>
<tr>
<td>1980</td>
<td>160 95 81 110 127 88 121</td>
<td>1980 3048 1355 1693</td>
</tr>
<tr>
<td>1982</td>
<td>162 103 97 95 131 111 103</td>
<td>1982 2746 1212 1534</td>
</tr>
<tr>
<td>1983</td>
<td>127 77 88 97 100 87 96</td>
<td>1983 2746 1212 1534</td>
</tr>
<tr>
<td>1984</td>
<td>139 67 61 87 81 79 109</td>
<td>1984 2746 1212 1534</td>
</tr>
<tr>
<td>1985</td>
<td>135 91 65 80 96 81 94</td>
<td>1985 2746 1212 1534</td>
</tr>
</tbody>
</table>

* Projections are based on:

1. High school enrollments as of December 21, 1973
2. Public school enrollments reported at the beginning of the 1973-74 term (September 1973)
3. Parochial school enrollments September, 1973
4. Dropping 12th grade and adding 8th
5. 60% of Parochial 8th grade for Demarest; 70% for Old Tappan

** Other - this category refers to “trainable and educable students” as well as out-of-district students (usually children of NVRHS teachers)