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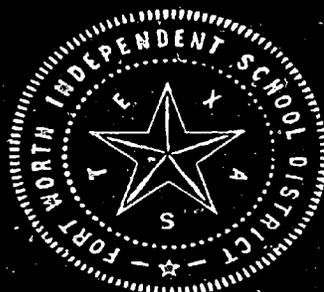
ABSTRACT

Under the Intensified Learning Plan (ILP), the school year was organized into trimesters. Students focused on fewer subjects for longer daily periods than usual. Results of tests, questionnaires, and conferences were used to measure the accomplishment of criterion objectives. The majority of parents, students, and teachers preferred the ILP, with the exception of high school teachers, who recommended returning to the semester plan. Teacher, parent, and student opinionnaire results are appended.
(MS)

FORT WORTH INDEPENDENT SCHOOL DISTRICT
FORT WORTH, TEXAS



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INITIAL ASSESSMENT
OF THE
INTENSIFIED LEARNING PLAN

Prepared for
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July, 1971

TM 000 926

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INTRODUCTION

Description of the Intensified Learning Plan

In the spring of 1970 the Fort Worth Board of Education approved a trimester schedule for one high school and three middle schools. In essence, three terms of approximately sixty days each replaced the ninety day semester. Students would be expected to complete a semester course in a trimester. In order to fulfill accreditation requirements of the Texas Education Agency, class periods were extended. Because students generally would be focusing on fewer subjects simultaneously, but for longer daily periods, the plan became known as the Intensified Learning Plan (ILP).

The high school added the extended-day concept to the plan, scheduling six 80-minute class periods between 7:55 A.M. and 4:30 P.M. This schedule allowed students to choose to register for five maximum periods with one 80-minute period reserved for lunch and independent study. The minimum class load allowed was three.

In the middle school and high school teachers taught four courses daily: high school teachers taught three courses during one trimester.

The respective ending dates for each trimester were November 25 (52-day trimester), March 5 (59-day trimester), and June 4 (59-day trimester).

Objectives of the ILP

Advantages were seen for students and teachers and in the utilization of facilities. Advantages for students included the following:

1. Provide students with expanded opportunities to study more subject and content areas during a school year.
2. Allow flexibility in the manner in which students may earn, over a four year period, sufficient credits for graduation.
3. Nurture student achievement by allowing more time per class.
4. Increase the proportion of students who earn credit in electives.
5. Improve student general attitudes toward school.

Expectations for teachers included a decrease in teacher daily and term loads and an opportunity to encourage students to explore subject matter and develop in-depth learning. It was anticipated that the realization of these objectives would improve teacher-attitude toward their vocation.

The maximizing of the use of the plant was foreseen as classrooms should serve greater number of children than under the traditional program. A classroom that served thirty children each semester (60 children yearly) would serve thirty children each trimester (90 children yearly) under the ILP.

Wisely, the proposal sent to the Board enumerated several possible disadvantages which needed monitoring. Examples are:

1. Effects on absenteeism.
2. Effects on student attentiveness and teacher fatigue in the extended period.
3. Effects on out-of-school assignments.
4. Effects of a lapse trimester on achievement.
5. Sufficiency of pre-project preparation.
6. Sufficiency of at-school class preparation time for teachers.
7. Adequacy of teaching materials and equipment.
8. Utilization of independent time by students.

Evaluation Plan

Hypotheses

The objectives of the program, as well as other areas in need of assessment, were translated into measurable statements (hypotheses) as listed below.

<u>Objectives or Areas in Need of Assessment</u>	<u>Hypotheses</u>
1. Provide students with expanded opportunities to study more subject and content areas during a school year.	1. The average number of courses completed during 1970-71 by students will exceed that completed during 1969-70.
2. Allow flexibility in the manner in which students may earn, over a four year period, sufficient credits for graduation.	2. A substantial proportion of students will plan to vary from standard scheduling relative to (1) the number of courses taken during a trimester, (2) the number of courses taken during a school year, and (3) the number of years necessary for graduation.
3. Nurture student-achievement by allowing more time per class and an opportunity to focus on fewer courses per term.	3A. A majority of experienced teachers will express belief that they covered as much subject content and that students learned as much under the ILP as previously under the semester plan at the same high school.

Objectives (cont'd.)

Hypotheses (cont'd.)

- | | | | |
|----|---|--|---|
| | 3B. | A random sample of students drawn from selected subject areas at the end of a trimester will score equally as well or better on textbook achievement test as a similar sample drawn from matched schools after a regular semester. | |
| | 3C. | The distribution of letter grades earned by students under the ILP will not significantly differ from that earned by students at the same high school under the traditional semester plan. | |
| | 3D. | Performance scores obtained by typing students under the ILP will not significantly differ from those obtained by previous students at the pilot school under the semester plan. | |
| 4. | Increase the proportion of students who earn credit in electives. | 4. | The proportion of students under ILP enrolling in selected, non-required courses will increase significantly over that under the traditional semester plan. |
| 5. | Improve student general attitudes toward school. | 5. | A substantial proportion of students will indicate that they are enjoying school more in 1970-71 than in 1969-70 due to the ILP. |
| 6. | Decrease the total number of different students for whose instructions teachers are simultaneously responsible. | 6. | The average daily and total loads of teachers will substantially decrease in 1970-71 from that of 1969-70 due to the ILP. |
| 7. | Improve teacher attitudes toward their profession. | 7. | A significantly greater proportion of teachers will express greater enjoyment of teaching during 1970-71 due to the ILP than will express less enjoyment. |

Objectives (cont'd.)

8. Maximize use of classroom and equipment.

Miscellaneous Areas in
need of assessment

Hypothesis (cont'd.)

8. The number of classrooms necessary to accommodate students will be less under the ILP than that required under the semester plan.
9. Absenteeism will be reduced under the ILP as shown by a significant increase in the ADA rate for the first trimester over that of the first semester in 1969-70.
10. Neither teachers nor students will report that the lengthened class period fosters an increase in student inattentiveness or teacher-fatigue.
11. Neither teachers nor students will report increased out-of-school assignments under the ILP.
12. The report card grades of students continuing in subject areas after a lapse of one trimester will equal those continuing in the subject area without a lapse.
13. Teachers and administrators will express satisfaction with sufficiency of pre-project orientation.
14. The majority of teachers will report that sufficient school time has been allotted for daily classroom preparation.
15. A majority of teachers will report that sufficient teaching materials and equipment are available.

Hypotheses (cont'd.)

16. Free time will be appropriately utilized by students as indicated by reports of teachers, administrators, parents, students and observation.

Summary Assessment

17. The majority of parents, students and teachers will express general satisfaction with the Intensified Learning Plan.

Data Gathering Procedures

Sources of data included students, parents, teachers, administrators, and records in both the pilot school and central administrative office.

Instruments and procedures involved.....

- (1) a student questionnaire administered to a random sample of sophomores and juniors at the pilot school
- (2) a parent questionnaire administered to a random sample of parents of students at the pilot school
- (3) a teacher questionnaire administered to all experienced teachers at the pilot school in December and in May
- (4) textbook tests in two subject areas administered to random samples of pilot and comparison students

In addition, many group and individual discussions were held with teachers, students, parents, counselors, and administrators. Two basic sources of information were student-records in the counselors' offices and the principals' classroom schedules.

All data were treated with appropriate statistical tests, primarily tests for significance of mean differences, tests for significance of proportion differences, and the Chi Square test of Goodness-of-Fit. As samples were not extremely large, all data were analyzed with the use of an Olivetti-Underwood Desk Computer 101.

Early in the assessment of the Intensified Learning Plan it was concluded by the writer that two separate assessments were needed; one for the high school implementation and one for that at the middle school level. This decision was based on rationale that held the two implementations of ILP to be substantially different because of

1. The limited extention of the class period in the middle school (to 65 minutes) in contrast to that at the high school (80 minutes).
2. The reduction in teaching-time for middle school teachers (a decrease to 260 minutes from 275 minutes with extra preparation time) as compared with an increase in teaching-time (to 320 minutes for most of the year from 275 minutes) without additional planning time at the high school level.
3. The greater emphasis at the middle school level on objectives in the affective domain and on learning skills in contrast to one at the high school level on academic objectives.
4. The addition to the plan at the high school level of the concepts of the extended school day and considerable independent time for students.
5. The need of high school students to earn credits for graduation.

Early evidence gathered relative to the two implementations indicated that problems were most likely to develop at the high school level.

Discussions with teachers, parents, and administrators concerning the middle school revealed general confidence that the plan was an improved one and that problems were minor. For this reason the present evaluation has focused on the ILP concept as installed at the high school level.

Review of the Literature

Trimester Plans

Fort Worth's trimester plan differs from those planned or actually implemented elsewhere in (1) its restriction of the school year to the standard 180 day period and in (2) its substantial extension of the class period necessitated by collapsing yearly courses into two trimester courses.

New York State's Plan (1,5)

The New York State Department of Education developed a plan that would utilize 210 day (70 day trimesters) and necessitate the lengthening of the class period to about sixty minutes.

Florida Plan (1,5)

A trimester plan was developed for Polk County Schools by the Florida Research Development Council that allowed 75 days per trimester with no basic lengthening of class periods. This plan was rejected because of initial heavy expenditures.

Florida's innovative Nova High School has experimented with three different school year lengths. The first was a trimester plan, employing the 73-day terms (a 220 school day year) and class periods of seventy minutes. The plan was discontinued after two years because of the psychological let down suffered by students and teachers during the added summer month.

The Laboratory School at the University of Florida has operated a 75-day trimester (a 225-day school year) with physical education classes on Saturday and a lengthened school day.

Florida State University operated a 70-day term trimester primary school (K-3) for three years beginning in 1964. Results, as reported in an evaluation (8, Micro) after the termination of the project, indicated that children who only attended the regular school year significantly outperformed children of similar mental ability who attended the greatly-extended school year.

In summary, it is seen that generally, trimester plans have extended the school year without greatly extending class periods.

Four Quarter Plans (3,5)

Generally, four quarter plans utilized the entire calendar year to schedule four terms, three of which must be attended by students. Two semester courses are usually trichotomized, requiring no change in the length of the school day or class period.

A surprisingly long list of schools experimented with a four quarter school year prior to 1950. All abandoned the plan by 1950 with the exception of Chattanooga who continued until 1956. The basic motivating force behind these attempts seemed to have been the common problems inherent in a shortage of funds and a surplus of students.

In recent years four quarter plans have been developed, considered, and rejected by another long list of schools led by California and Florida districts, among them Los Angeles. Typical was the plan developed and discarded by the Del Campo High School in California due to (1) lack of student interest, (2) poor parental support, and (3) insufficient funds.

The most serious attempt to implement the four quarter concept is

presently being made by eight cooperating school districts in Fulton County, Georgia (Atlanta) (2, Micro.). Several years of planning preceeded the implementation in 1968-69. Atlanta maintains that their objective is only to improve the quality of the educational program and that no financial advantage for the plan is expected. Stated objectives include:

1. An extended curriculum and an improved course selection for students.
2. Early graduation possibilities for students.
3. A chance to revamp the curriculum.

Atlanta has trichotomized two semester courses and retained the traditional length of class period. A college-type schedule is employed. The school day employs ten class periods, Saturday included, and an open campus. Students come and leave at different times and may not have classes on some days. Students must attend three of the terms and may attend four to accelerate graduation. Each quarter consists of twelve weeks.

An exploratory evaluation after the first year utilized questionnaires to ascertain the attitudes toward and opinions about the plan of samples drawn from both the business and educational domains. It was concluded that, although each segment of the population perceived different advantages, the groups surveyed understood the objectives of the plan. Administrators were enthusiastic about a chance to revise the curriculum; students and parents perceived widened course selection and early graduation; teachers noted the new flexibility as serving individual student needs and interests.

Some disadvantages were also cited after one year of operation: increased registration problems and record keeping; increase in number of daily teacher class preparation required; and a possible decrease in

opportunities for teachers to provide individual attention for students. Eleven per cent of the teachers agreed that the plan was presently satisfactory. Seventy per cent expressed belief that it would be satisfactory with modifications. If needed changes were identified by teachers, they were not reported in the evaluation.

Specific Trimester Evaluations (5)

Research into the effects of trimester or four-quarter plans is negligible. Two studies dealing with either trimester or the extended school year concept were located and are reported below.

California's Chabot Junior College rescheduled the school year into three trimesters. Although courses were not collapsed most students continued to carry the fifteen hours (5 courses) each trimester. Questionnaires were administered, after one year, to students and teachers to gather evaluative data.

The evaluation indicated that students favored the new schedule two-to-one, reasoning that the plan, (1) decreased the amount of wasted time inherent in a longer term, (2) provided less chance for a "course slump", and (3) offered improved exposure to courses and total staff. Disadvantages cited included (1) an improved chance of making poorer grades, (2) a loss of time to explore subjects in depth, (3) loss of opportunity to recover from a slow start, (4) lack of opportunity to know individual faculty members well, and (5) too much objective testing. Although grades improved in the trimester plan some concern was expressed that students were under too much pressure and brought about by taking too many courses.

A HEW grant provided the means to evaluate an extended year schedule at Florida State University's laboratory elementary school (8). Children

in primary grades (K-3) who attended school year round for a three-year period attained a lower level of performance in reading than a group matched on the basis of aptitude who attended only the regular school year.

Summary Statement About the Literature

The research on either the trimester or extended school year concept is too meager to support any position.

The fact that four-quarter plans adopted prior to 1950 were discontinued combined with the reluctance of many districts who have studied the concept in recent years to adopt it recommends a cautious approach. The Atlanta enterprise should provide fresh and up-dated information.

EFFECTS OF THE INTENSIFIED LEARNING PLAN AT THE HIGH SCHOOL

The ILP objective to provide students with an increased opportunity to study more subjects in a school year was tested by data relative to Hypothesis 1.

Hypothesis 1. The average number of courses planned to be completed during 1970-71 by students will exceed that completed during 1969-70.

Data concerning the total number of courses planned for the school year of 1970-71 and the total number taken during the fall trimester were obtained from records maintained in the counselor's office. The plans of one-half of the students at each grade level were tabulated to obtain an estimate of the number of courses completed during 1969-70.

Data reported in the final column of Table A show that approximately one-third of the students took only three courses during the fall trimester.

TABLE A. NUMBER OF COURSES TAKEN DURING FALL TRIMESTER BY STUDENT CLASSIFICATION

Number of Courses Taken	Freshmen	Sophomore	Juniors	Seniors	Aggregate
3	36%	30%	34%	39%	35%
4	54%	63%	57%	49%	56%
5	10%	7%	8%	12%	9%

Data in Table B report the number of courses planned for the entire 1970-71 school year. Thirty per cent of the students planned to take a minimum of ten courses with seventy per cent planning more than the minimum.

TABLE B. NUMBER OF COURSES PLANNED FOR 1970-71

Student Classifi- cation	Proportion of Students Taking ---						Average Number of Courses Planned
	10 Courses	11 Courses	12 Courses	13 Courses	14 Courses	15 Courses	
Freshmen	28%	32%	20%	12%	4%	4%	11.4
Sophomores	26%	32%	29%	8%	2%	2%	11.3
Juniors	33%	26%	26%	9%	4%	2%	11.3
Seniors	32%	18%	35%	7%	4%	3%	11.4
Aggregate	29%	28%	27%	9%	5%	3%	11.4

It may be noted that nearly sixty per cent of the students (taking 10 or 11 courses) had only three classes during at least one trimester. The average number of courses planned for 1970-71 was 11.4.

Prior to the end of the school year students registered for 1971-72 classes. Data in Table C show an increase in the number of courses over that taken during 1970-71, particularly by freshmen and sophomores. These two groups will average twelve courses in 1971-72, contrasted to 11.4 and 11.3 courses in 1970-71 (Table B). It is noted that 85 per cent of sophomores, after one year of experience in the trimester plan, elected to take more than the minimum load of 10 courses in contrast to 72 per cent taking more than the minimum load in 1970-71.

TABLE C. PROPORTION OF STUDENTS PLANNING VARIOUS NUMBERS OF COURSES FOR 1971-72

	1971-72 Proportion of Students Planning to take.....							Avg. Number of Courses
	9 Courses or Fewer	10 Courses	11 Courses	12 Courses	13 Courses	14 Courses	15 Courses	
Freshmen	---	27%	11%	23%	24%	6%	9%	12.0
Sophomores	---	16%	23%	26%	23%	6%	6%	12.0
Juniors	---	32%	26%	31%	5%	1%	4%	11.3
Seniors	15%*	39%	15%	24%	3%	2%	2%	10.5*
Aggregate	3%	28%	19%	26%	15%	2%	6%	11.5

*Explained by early graduation (10%) and vocational education students (5%).

On a questionnaire, two-thirds of a random sample of students revealed plans to complete more courses than necessary for graduation.

TABLE D. NUMBER OF CREDITS TO BE EARNED BY GRADUATES

Number of Credits Planned	Proportion of Students
20 or $20\frac{1}{2}$	34%
21 or $21\frac{1}{2}$	15%
22 or $22\frac{1}{2}$	21%
23 or more	30%

Findings About Hypothesis 1

The hypothesis is accepted. Records show that students took an average of 11.4 courses during 1970-71 and that freshmen and sophomores will average 12 courses in 1971-72. Seventy per cent of the students took more than the minimum of ten courses during 1970-71, and sixty-six per cent of the students indicated plans to have earned more than the minimum of twenty credit hours upon graduation.

Hypothesis 2. A substantial proportion of students will plan to vary from standard scheduling in at least one of the following ways:

- (a) number of courses taken during a trimester
- (b) number of courses taken during the school year
- (c) the portion utilized of the four years available for high school attendance

The ILP objective to improve students' options concerning the manner in which they may vary course loads was tested by data relative to Hypothesis 2.

Data in Table A, B, and C previously presented show the variation in courses taken by students for a single trimester and for a total school year.

Parents on one-half of the sample approved of their children utilizing less than the standard four years available for high school attendance. On a related matter, only six per cent indicated interest in a summer term for their children.

Approximately two-thirds of sampled students reported plans to earn more than the minimum number of credits necessary for graduation.

During the school year 1970-71, fifty-one seniors completed graduation requirements during the fall trimester (14 students) or the winter trimester (37 students). A similar number plan to complete requirements for graduation during the first two trimesters in 1971-72.

Nine 1971-72 juniors indicated that they would be able to complete all course requirement by the end of the year.

Findings About Hypothesis 2

The hypothesis is accepted. Students are taking advantage of the opportunity to vary the number of courses taken in a trimester and for the total year, thus changing the portion of time committed to the completion of high school.

Hypothesis 3A. A majority of experienced teachers will express belief that they covered as much subject content and that students learned as much under the ILP as previously under the semester plan at the same high school.

Scholastic achievement is a crucial issue in any innovative practice. A major objective of the ILP was its potential for enhancing, or at least maintaining, scholastic achievement. This advantage was expected to result from increased opportunities for students to unhurriedly digest material in the 80-minute class period while simultaneously focusing on fewer school subjects.

Because of the immense importance of this objective to students, several hypotheses were generated and several types of data were gathered. Hypotheses 3A, 3B, 3C, and 3D all deal with the question.

Teachers who had previously taught at the pilot high school were twice anonymously asked three questions about student academic achievement under the ILP. Their dual responses to these questions are shown in Table E.

TABLE 5. TEACHER OPINION ABOUT ACADEMIC ACHIEVEMENT

Question	December Response			May Response		
	No	Uncertain	Yes	No	Uncertain	Yes
Did you cover as much of the course content during the winter trimester as you normally do in a regular semester?	55%	---	45%	62%	---	38%
Do you feel that your students learned as much and developed as much in depth understanding during the winter trimester as they normally do during a regular semester?	55%	10%	35%	58%	16%	26%
Do you have any evidence to support answers to #1 and/or #2? (Test results, units covered, etc.)	5%	---	95%	2%	---	98%

Immediately following the fall trimester teachers were in disagreement about the academic success of students. Approximately one-half of the experienced teachers in December (55%) responding to the questionnaire reported in December that they had not covered as much content area and that students had not learned as much as previously under the semester plan. The proportion of experienced teachers expressing this view increased by May to approximately sixty per cent.

On the May questionnaire most teachers identified their teaching area, allowing an assessment of responses by this variable. This analysis showed that responses were consistent from department to department except that teachers of social studies and history expressed greater confidence

in the ILF than did teachers of science, mathematics, English, and miscellaneous subjects.

Findings About Hypothesis 3A

The hypothesis is rejected. The majority of teachers expressed doubt that academic achievement had been maintained, and the proportion expressing that doubt increased as the year progressed.

Hypothesis 3B. A random sample of students drawn from selected subject areas at the end of a trimester will score equally as well or better on textbook tests as a random sample drawn from a matched school after a regular semester.

A test covering the material presented during the study of American History I was administered to a random sample of students who were enrolled in that subject during the fall trimester and to a random sample of students enrolled in that subject for a semester at two schools serving similar socio-economic areas. A test covering material studied by students enrolled in Algebra III was similarly administered. Consultants in the two areas aided in the selection of the instruments and in the matching of pilot teachers with control teachers to reduce the impact of this variable on the results.

The extent to which the various samples represented their respective populations was determined through the application of a Chi Square test of Goodness-of-Fit to the several distributions of letter grades earned by samples and total populations. In all cases differences were not significant. It was therefore, concluded that samples were acceptable.

Results of the tests are shown in Table F.

TABLE F. TESTS RESULTS AT PILOT AND CONTROL SCHOOLS

Group	History I Test			Algebra III Test		
	Sample Size	Average Score	SD	Sample Size	Average Score	SD
Students completing course under the ILP	54	26.5*	6.2	75	14.0*	4.9
Students completing course under the semester plan	90	22.4*	7.3	101	13.5*	6.1

*Differences in mean raw score were not significant.

Differences in average scores earned by students under the ILP did not significantly differ from those earned by students under the semester. It was, therefore, concluded that the differences, although favoring ILP students, were chance differences due to the sampling rather than to the treatment. As a by-product an item analysis was provided for the consultants in the two areas tested. It is recognized that paper-pencil tests do not measure well all, or even the most important, objectives of history classes.

The Finding About Hypothesis 3B

The hypothesis is accepted. ILP students scored as well as semester students on textbook tests of history and mathematics.

Hypothesis 3C. The distribution of letter grades earned by students under the ILP will not significantly differ from that earned by students at the same high school in 1970-71 under the traditional semester plan.

Distribution of letter grades earned were obtained from the data processing center. Data in Table G compare the proportions of grades earned during the last nine weeks of 1969-70 by students in the pilot school with those earned by students during each trimester in 1970-71.

TABLE G. REPORT CARD GRADES EARNED BY ALL STUDENTS AT PILOT SCHOOL IN 1969-70 UNDER THE SEMESTER PLAN AND IN 1970-71 UNDER THE INTENSIFIED LEARNING PLAN

Letter Grade	Proportion of Total Grades			
	1969-70 1st Nine Weeks	1970-71 Fall Trimester	1971-72 Winter Trimester	1971-72 Spring Trimester
A	23%	27%	27%	28%
B	29%	25%	24%	25%
C	25%	24%	24%	23%
D	15%	16%	17%	17%
F	7%	8%	8%	8%

Although the total distributions of grades in the spring of 1969-70 and 1970-71 did not vary significantly, other trends were noted.

The proportion of A's significantly ($P=.001$) increased. A significant ($P=.001$) decrease in C's earned was also noted with a corresponding significant ($P=.001$) increase in combined D's and F's. A possible trend toward polarization of grades earned was thus revealed.

Samples of students and parents were asked via questionnaires to report whether student report card grades had been affected by the ILP. The reports in general were favorable, although somewhat inconsistent, in that very few students and parents reported that letter grades were adversely affected by the ILP. On the other hand, nearly one-half of the students reported making better grades. The report of parents whose children made above average grades was similar to that of parents whose

children earned average or below average grades.

It must be recognized that report card grades are relative measures, and, thus, general student achievement could rise or fall without being necessarily reflected by a corresponding change in the distribution of letter grades.

Finding About Hypotheses 3C

The hypothesis is partially accepted. Although the total distribution did not significantly vary under the ILP, a slight tendency toward polarization of grades earned was noted.

Typing involves a motor-association skill that differs somewhat from cognitive skills that are the foci of other school subjects. A successful intensified effort to develop competency in an academic area might not prove equally as successful in acquiring motor skills as in typing and shorthand. Some authorities warn against prolonged typing practice (Russon) in the early developmental stages.

"Practice should be distributed. Practice in the form of drill should not exceed 30 minutes. Nothing is gained from two hour sessions of repetitious practice." (7, p.37).

For reasons stated above the effects of the ILP on typing skills were specifically examined by data being gathered relative to Hypothesis 3D.

Hypothesis 3D. Performance scores obtained by typing students under the ILP will not significantly differ from those obtained by previous students at the pilot school under the semester plan.

Typing speeds, as well as report card grades, were obtained for students completing Typing 1 and 3 during 1969-70 (under the semester plan) and 1970-71 (under the trimester plan) from teachers' grade books.

Typing 1 During the Fall Trimester

Typing speeds of students completing Typing 1 during 1969-70 and during the fall trimester of 1970-71 are reported in Table H.

TABLE H. TYPING 1 SPEEDS* UNDER THE TRIMESTER AND SEMESTER PLAN**

Plan	Proportion of Students Achieving Various Performance Levels				
	40 WPM*	35-39 WPM*	27-34 WPM*	22-26 WPM*	Under 22 WPM*
Fall Semester** 1969-70	15%	16%	36%	23%	11%
Fall Trimester**	7%	11%	35%	24%	24%

* Typing for five minutes with not more than five errors.

** Distributions of speeds differ significantly (Chi Square = 53.6).

The two distributions of typing speeds were analyzed through the application of the Chi Square Goodness-of-Fit Test. The resulting statistic (53.6) indicates that the two distributions differ significantly ($P=.001$), favoring speeds developed under the semester plan.

Mean speeds were also compared through application of the "difference of the means" statistical test. The mean speed of 411 students taking Typing 1 under the semester plan, 31 WPM, was significantly greater ($P=.001$) than the 28 WPM obtained by 258 students in the fall trimester.

Report card grades earned by students completing Typing 1 under the semester and trimester plan are presented in Table I. These data were obtained from data center printouts of grade distributions by subject areas.

TABLE I. TYPING 1 GRADES* UNDER THE TRIMESTER AND SEMESTER PLANS

Plan	Proportion of Students Earning Designated Grade				
	A	B	C	D	F
Fall Semester 1969-70	11%	26%	41%	19%	4%
Fall Trimester 1970-71	9%	26%	39%	17%	8%

*Distributions were not significant (P=.20)

A Chi Square Goodness-of-Fit test was applied to the distributions. The resulting statistic of 6.58 (df=4) was not significant. It is, thus, concluded that the two distributions of grades earned under the two systems reveal only chance differences that could be reasonably expected from one year to another (P=.20).

Typing 1 During the Winter Trimester

As Typing 1 was offered again in the winter trimester an examination of typing speed was again made to determine if it continued to be depressed under the ILP. The data are presented in Table J.

TABLE J. TYPING 1 SPEEDS DEVELOPED IN THE WINTER TRIMESTER

Number of Students	Proportion of Students Obtaining Stated Speed				
	40 WPM	35-39 WPM	26-34 WPM	22-26 WPM	Under 20 WPM
191	8%	9%	40%	21%	23%

A comparison with Table H, row 2, indicates that Typing 1 results in the fall and the winter trimester were similar.

Typing 2

Typing 2 was offered during the winter and spring trimester to students completing Typing 1 in the fall or winter trimester. Typing speeds obtained by students are shown in Table K.

TABLE K. TYPING 2 SPEEDS

Trimester	N	Proportion of Students Achieving Stated Levels				
		51 WPM	47-50 WPM	37-46 WPM	30-36 WPM	Under 30 WPM
Winter	142	12%	19%	39%	26%	4%
Spring	111	15%	15%	43%	17%	10%

Typing 2 performances by students under the semester plan were not obtained. In the subjective judgment of two experienced teachers, the levels reported for Typing 2 above failed to meet expectations.

Typing 3

Typing performances and grades earned were also collected and compared for students finishing Typing 3 under the semester plan and under the trimester plan.

Comparisons of performance levels are shown in Table L.

TABLE L. TYPING 3 SPEEDS* UNDER THE SEMESTER AND TRIMESTER PLAN

	N	Proportion of Students Attaining Designated Performance Level				
		58 WPM Plus	52-57 WPM	43-51 WPM	39-42 WPM	Under 39 WPM
Fall Semester 1969-70	92	12%	12%	26%	26%	24%
Fall Trimester 1970-71	49	18%	24%	39%	8%	10%

*The distribution of speeds differed significantly (Chi Square=20.68, df=4).

As the Chi Square Goodness-of-Fit statistic was significant ($p=.001$), it may be concluded that Typing 3 speeds attained under the trimester plan significantly exceeded those obtained under the semester plan.

For further comparison, mean typing speeds were determined. Data in Table M depict this comparison. The mean typing speed attained under the trimester plan significantly ($P=.001$) exceeded that attained under the semester plan.

TABLE M. AVERAGE TYPING 3 SPEED ATTAINED UNDER THE SEMESTER AND TRIMESTER PLANS

Plan	N	Typing Speed	
		Mean*	SD
Fall Semester 1969-70	92	45.9	7.57
Fall Trimester 1970-71	49	50.3	6.93

*Differed significantly ($P=.001$)

Report card grades earned in Typing 3 under the semester and trimester plans were also compared. The data is shown in Table N.

TABLE N. REPORT CARD GRADES EARNED IN TYPING 3 UNDER THE SEMESTER AND TRIMESTER PLANS*

Plan	N	Proportion of Students Earning Designated Grades				
		A	B	C	D	F
Fall Semester 1969-70	95	7%	20%	28%	31%	13%
Fall Trimester 1970-71	49	14%	47%	31%	18%	---

*Distributions differ significantly (Chi Square = 19.71, $df=4$).

It is recognized that students completing Typing 3 in the fall trimester had completed Typing 1 and 2 under the semester plan. It can not be assumed that improvement in Typing 3 would be realized by students completing all typing courses under the trimester plan.

Findings Regarding Typing Under the Intensified Learning Plan

Performance levels were significantly ($P=.01$) lower for students completing Typing 1 under the Intensified Learning Plan. However, students under the ILP completing Typing 3, after having had Typing 1 and 2 in semesters, obtained a significantly ($P=.05$) higher level of performance than did students who completed all three typing courses under the semester plan.

It is concluded that, while students may make slower progress under the ILP in the early stages of developing typing skills, the possibility exists that progress may be accelerated during the latter stages and produce better terminal results. Data relative to performance after students have completed all typing courses under the ILP will be needed to resolve the issue.

Hypothesis 4. The proportion of students enrolling in non-required courses will increase under the ILP over that under the semester plan.

The expectation that students taking extra courses would focus on electives was tested through data relative to Hypothesis 4.

An administrative policy was initiated to discourage students from enrolling in a specific subject area each trimester (i.e. take English 3, 4, and 5 during the school year). An expectation to the policy was made for foreign language. The policy's purpose was to, at least initially in the

It, protect children from overloading in a given school year, on a specific subject.

In order to ascertain the extent to which students enrolled in non-required courses, enrollments in eight specific courses were examined. The data in Table O report the number of students enrolling in the selected courses in 1961-70 and in 1970-71.

TABLE O: ENROLLMENTS IN SELECTED COURSES *

Course	Number of Students 1969-70			Number of Students 1970-71			
	Fall	Spring	Total	Fall	Winter	Spring	Total
Typing I	494	57	551	249	189	35	473
French I	109	--	109	110	---	--	110
Spanish I	201	--	201	183	30	--	213
German I	80	--	80	72	---	--	72
Latin I	74	--	74	49	---	--	49
Homemaking I	88	--	88	71	19	51	141
Speech I	161	53	214	71	60	34	165
Drama I	29	--	29	43	---	--	43

* Obtained from print-outs of grades.

The data do not reveal substantial increases in enrollments in these courses from 1969-70 to 1970-71, other than Homemaking I and Drama I. Most enrollments declined slightly in these specific courses.

Data in Table P reports the number of classes scheduled for selected departments in 1969-70 and 1970-71.

TABLE P: NUMBER OF CLASSES SCHEDULED* IN 1969-70 and 1970-71 FOR SELECTED DEPARTMENTS

Department	1969-70			1970-71			
	Fall	Spring	Total	Fall	Winter	Spring	Total
Foreign Language	33	32	65	25	27	24	76
Business Education	24	27	51	22	22	23	67
Home Economics	12	12	24	9	9	9	27
Industrial Arts	18	18	36	16	17	17	50
Music	9	9	18	6	6	5	17
Art	5	5	10	4	3	4	11
Distributive Education	2	2	4	2	2	2	6
ROTC	5	5	10	4	4	4	12

* Obtained from principal's schedule of classes.

The increase in the number of classes held under the trimester represents larger numbers of students served by each department but not necessarily larger numbers of different students. In some cases students enrolled for the year; in other instances each term enrollment represented some combination of new and continuing students.

In any case, the data in Table P does report more service rendered by the departments. When the reports of Table O and P are integrated, a picture seems to materialize that depicts "students taking more courses within a department" rather than "more students taking a specific course".

Findings About Hypothesis 4

The data are inconclusive. While it was not established that more different students chose to enroll in the non-required courses examined, it did appear that those students who did were able to obtain a larger dose. The effects of the Intensified Learning Plan on individual departments that offer non-required studies is not yet clear.

Hypothesis 5. The proportion of students indicating that they are enjoying school more under the ILP than the Semester Plan will be significantly greater than that reporting less enjoyment.

The objective that students attitudes toward school would improve was tested through data relative to Hypothesis 5.

Data were obtained through the use of a student questionnaire administered to a random sample of sophomores and juniors. Student responses to the question pertinent to the hypothesis are summarized in Table Q.

TABLE Q. ENJOYMENT OF SCHOOL BY STUDENTS

Response of Students	Proportion of Students
"Enjoying school more"	51% *
"No change"	28%
"Enjoying school less"	20% *

*Differ significantly (P=.001)

It is seen that a significantly larger proportion (51%) of students reported an increase in enjoyment of school due to the Intensified Learning Plan than reported a decrease (20%).

Findings About Hypothesis 5

The hypothesis is accepted.

Hypothesis 6. The average daily and total team load of teachers will substantially decrease in 1970-71 from that in 1969-70 due to the ILP.

The objective to decrease teacher loads was tested with data relative to Hypothesis 6.

As teachers would teach four classes during two trimesters and three classes for one trimester, a reduction in daily and term class load was anticipated.

Data relative to the hypothesis was obtained from the schedule of classes prepared by administrators at the pilot school. The average number of classes taught, the average class size, and the average term loads are presented in Table R. Average number of classes taught do not average "5" in 1969-70 because of occasional assignments of teachers to study-hall duty, physical education classes, etc. Average number of classes taught in 1970-71 do not average "4" because one-third of the teachers taught only "3" classes each trimester.

TABLE R. TEACHER LOAD UNDER THE SEMESTER AND TRIMESTER PLANS

Department	Average Number of Classes Taught		Average Class Size		Average Term Load	
	Semester	Trimester	Semester	Trimester	Semester	Trimester
English Teachers	4.8	3.6	29	29	135	104
Social Studies Teachers (excluding 1 P.E. Class)	4.4	3.6	30	30	132	105
Mathematics Teachers (excluding 1 P.E. class)	4.9	3.5	28	30	136	105
Science Teachers (excluding 5 P.E. classes)	4.3	3.3	28	30	123	100
Aggregate	4.6	3.5	29	30	132	105

It may be seen by data reported in the final column of Table R that the average number of students for which a teacher was at one time responsible decreased substantially from 132 students per semester in 1969-70 to 105 students under the ILP. Although class size remained relatively unchanged, the number of classes taught per day decreased as planned from an average of about four and one-half in 1969-70 to three and one-half under the ILP.

In view of the responses and comments by teachers to the questionnaire in which the majority described considerable fatigue, the decrease in daily and team load must be viewed in conjunction with possible offsetting increases in demands on teachers. Teacher loads were enlarged by the following:

1. An increase in number of courses taught per school year. (11 courses from 10 previously).
2. An increase in number of students taught per school year. (Theoretically 2 x 120 from 2 x 150 previously).
3. An increase in amount of time spent teaching daily. (120 minutes* from 97 1/2 minutes previously).

Findings About Hypothesis 6

The hypothesis relative to the daily and trimester teacher load in teams, number of classes, and students taught is accepted. Teachers were responsible for fewer students daily and fewer students per term.

However, it cannot, from this specific data alone, be concluded that over-all demands on teachers were diminished. According to 73 per cent of the experienced teachers at the end of the year the opposite conclusion should be held. This report can be accounted for by an increase in the number of students and classes taught during the school year and the increase in daily teaching time.

Hypothesis 7. The proportion of teachers reporting greater enjoyment of teaching under the Intensified Learning Plan will be significantly greater than that reporting less enjoyment.

The objective to improve teachers' attitudes toward their profession was tested with respect to hypothesis 7.

All experienced teachers were asked to report the effect that ILP had on their enjoyment of teaching. Responses are summarized in Table S.

*For two-thirds of the school year.

TABLE 8. ENJOYMENT OF TEACHING UNDER THE TRIMESTER.

Response	Proportion of Teachers
"Enjoying Teaching More"	83%*
"Balanced Effect"	90%
"Enjoying Teaching Less"	26%*

*Differ significantly (P=.05).

A significantly greater proportion of teachers reported enjoying teaching less under the Intensified Learning Program than reported a greater enjoyment of teaching.

Findings of Hypothesis 7

The hypothesis is rejected.

Hypothesis 8. The number of classrooms necessary under the ILP to house students will substantially decreased from that required under the semester plan for a student body of similar size.

The objective to maximize classroom utilization was tested with data relative to Hypothesis 8.

The pilot school plant, containing 77 classrooms, housed 2,481 students under the semester plan in 1969-70. In 1970-71 under the trimester plan 2,450 students were accommodated. Data in table F show that while only an average of six classrooms per period were surplus (vacant) during 1969-70, an average of thirty classrooms per period were surplus in 1970-71 under the ILP.

TABLE T. SURPLUS CLASSROOMS IN 1969-70 AND 1970-71

	Enrollment	Number of Surplus Classrooms by Periods (Daily)						Average per period
		1	2	3	4	5	6	
Fall 1969-70 (Semester Plan)	2481	7	4	0	7	5	11	6
Fall 1970-71 (Trimester Plan)	2450	36	15	22	31	26	49	30

The presence of a considerable number of vacant rooms in 1970-71 was due not only to the ILP which provided that no more than two-thirds of the students would be studying a particular required subject during a given trimester but, also, to the extended-day which allowed students to arrive after period one and prior to the last class period. Other large number of students were out-of-class during their independent study-lunch period. The disposition of students is the subject of Table U.

TABLE U. DISPOSITION OF STUDENTS IN 1969-70 AND 1970-71

Disposition of Students	Enrollment	Periods*						Average
		1	2	3	4	5	6	
Fall 1969-70	2481							
In Class		2184	2168	2137	2205	2156	1962	2135
Study Hall		297	313	344	240	289	358	307
Other		---	---	---	36	36	161	39
Fall 1970-71	2450							
In Class		1446	2110	1608	1442	1814	722	1523
Independent Time		998	334	836	928	556	1648	884
Other		6	6	6	80	80	80	43

*Differ in times for 1969-70 and 1970-71.

The average number of students that were out-of-class per period (900) is substantially consistent with the average number of surplus rooms per period (30) reported in Table T.

Although, students in 1970-71 took more courses (11.3 per student) than in 1969-70 (10 per student), only 1500+ students used classrooms per period compared to 2100+ students per period in 1969-70.

Thus, the plant accommodated approximately two-thirds of the student body per period under the ILP and, at the same time, provided for the study of more subjects by students during a school year.

Finding About Hypothesis 8

The hypothesis is accepted. The pilot school plant accommodated an increase in the number of courses taken during the school year by students with substantially fewer classrooms than previously.

Hypothesis 9. Absenteeism will be reduced under the ILP as shown by an increase in the average daily attendance rate for the first nine weeks in 1970-71 over that for the first nine weeks of 1969-70.

Data relative to Hypotheses 9-16 were used to test various issues related to the Intensified Learning Plan.

Data relative to the hypothesis was obtained from central administrative records. Memberships and absences are reported in Table V.

TABLE V. ABSENCES UNDER THE SEMESTER AND TRIMESTER PLANS

Statistic	Semester Plan 1969-70		Trimester Plan 1970-71	
	1st 9 Weeks	2nd 9 Weeks	1st 9 Weeks	2nd 9 Weeks
Avg. Daily Membership	2495	2502	2410	2380
Avg. Daily Absence	175	217	164	216
Avg. Daily Rate of Absence*	7.0%	8.7%	7.0%	9.1%

*Not significantly different

Finding About Hypothesis 9

The hypothesis is rejected. The attendance under the ILP did not significantly differ from that under the semester plan.

Hypothesis 10. A significant proportion of teachers will report that the increased class period has not increased teacher fatigue or student inattentiveness.

Teachers were twice asked to report the effects of the lengthened class period on their total-day fatigue and on student attentiveness. A random sample of students were, also, queried regarding the extent of their attentiveness in classes. Responses to the questions are reported in Tables W, X, and Y.

TABLE W. EFFECTS OF THE LENGTHENED PERIOD ON TEACHER-FATIGUE

Effects of Lengthened Period on Teachers	Responses of Teachers	
	December	May
"Decreased Total-day Fatigue"	8%	3%
"No Effect"	27%	25%
"Increased Total-day Fatigue"	64%	72%

*Differ significantly (P=.001)

The data shows that nearly two-thirds of the teachers (64%) felt that the extended period has increased their total-day fatigue in December. This proportion grew to 72 per cent in May.

The data in Table X show that the majority (59 per cent) of teachers reported in December that student attentiveness had not decreased due to the lengthened period and that forty-one per cent reported a decrease in attentiveness. These proportions are not significantly different. In May the majority of teachers (56 per cent) continued to report that classroom attentiveness had not decreased; 45 per cent contended that it had.

TABLE X. STUDENT ATTENTIVENESS AS REPORTED BY TEACHERS

Teachers' Report About Student Attentiveness Due to ILP	Responses of Teachers	
	December	May
"Decreased"	41%	44%
"No Change"	49%	43%
"Increased"	10%	13%

The data in Table Y report the randomized students' estimates of their attentiveness to classroom instruction.

TABLE Y. STUDENT SELF-REPORT OF ATTENTIVENESS

Portion of Class Period Attentive	Proportion of Classes
Attentive 25% of Class Period	6% of Classes
Attentive 50% of Class Period	19% of Classes
Attentive 75% of Class Period	32% of Classes
Attentive 99% of Class Period	42% of Classes

Students report that they are attentive at least seventy-five per cent of the class period or more in most (32 per cent plus 42 per cent) of their classes. In one-fourth (6 per cent plus 19 per cent) of their classes they report being attentive one-half or less of the time.

Findings of Hypothesis 10

The hypothesis is rejected. A significant ($P=.001$) proportion of teachers reported greater fatigue under the ILP. With regard to the latter part of the hypothesis about one-half of the teachers reported decreased student attentiveness: the rest reported increased or no change in student attentiveness.

Students report that they are attentive three-fourth of the time in three-fourth of the classes.

Hypothesis 11. The majority of teachers and students will report that the ILP has not affected an increase in home assignments.

Teachers and a random sample of students were asked to report the effect of the Intensified Learning Program on homework. Results are reported in Tables Z and AA.

Data in Table Z show that a majority of teachers (79%) reported that the quantity of home assignment had not increased. The proportion of teachers reporting a decrease in the quantity of home assignments (35%) exceeded that reporting an increase (20%).

TABLE Z. EFFECTS OF ILP ON HOME ASSIGNMENTS AS REPORTED BY TEACHERS

Effects of ILP on Assignments	Proportion of Teachers
"Decreased Quantity"	35%
"No Effect"	44%
"Increased Quantity"	20%

A comparison of data in Table AA and in Table Z show a slight disagreement between teachers and students regarding the effect of the ILP on home assignments. About twice as great a proportion of students as teachers reported an increase in out-of-class assignments. The majority, however, of students (60%) report no increase in out-of-class assignments. The proportion of students reporting an increase in assignments (29%) exceeded, but not significantly, that reporting a decrease (21%).

TABLE AA. EFFECTS OF ILP ON HOME ASSIGNMENTS AS REPORTED BY STUDENTS

Effects on Home Assignments	Proportion of Students
"Decreased Quantity"	21%
"No Effect"	39%
"Increased Quantity"	29%

Findings About Hypothesis 11

The hypothesis accepted. A significant majority of teachers and students reported that the IIF either had no effect or had decreased home assignments.

Hypothesis 12. The report card grades of students enrolling in two levels of a subject in consecutive trimesters will not differ significantly from those of students who allow a trimester to lapse between levels of a subject.

Report card grades of students taking Algebra 1 and 2, English 3 and 4, and American History 1 and 2 during 1970-71 were obtained. Report card grades of those who studied the subjects under three conditions were compared: (1) grades earned consecutively in the fall-winter, (2) grades earned consecutively in the winter-spring, and (3) grades earned with an intervening trimester (fall-spring). The comparisons are shown in Table BB.

TABLE BB. THE EFFECT OF A LAPSED TRIMESTER ON REPORT CARD GRADES

Course and Sequence	N	Proportion of Students Earning				
		A	B	C	D	F
English 3-4						
Fall-Winter*	142	20%	27%	27%	19%	7%
Winter-Spring*	188	12%	27%	29%	20%	12%
Fall-Spring*	220	14%	22%	33%	24%	8%
American History 1-2						
Fall-Winter*	139	21%	32%	19%	20%	4%
Winter-Spring*	178	13%	23%	26%	29%	9%
Fall-Spring*	154	13%	25%	31%	21%	10%
Algebra 1-2						
Fall-Winter*	148	12%	27%	23%	26%	12%
Winter-Spring*	106	10%	22%	31%	23%	14%
Fall-Spring	126	11%	23%	24%	28%	14%

*Significant differences between distributions of grades at least at the .05 level of probability.

The data in Table II show that students who took the English 3-4 and American History 1-2 in the fall-winter sequence generally earned significantly higher report card grades than those taking those courses in other sequences. However, students who allowed the winter trimester to lapse obtained higher report card grades than those taking the courses consecutively in the winter-spring terms.

In the case of Algebra 1-2, students taking the course in the fall-winter terms obtained significantly higher report card grades than those taking the courses consecutively in the winter-spring terms, but, not significantly higher than those who allowed the winter trimester to lapse.

The data indicate that "time of the school year" courses are taken is a relevant variable, but the presence or absence of a lapsed term is not.

Findings About Hypothesis 12

The hypothesis is accepted. The presence of a lapsed winter trimester did not significantly alter report card grades. The report card grades of students who allowed the winter trimester to lapse between level of courses were not significantly different from those who studied the course consecutively in the winter and spring. Generally students completing course series in the spring trimester, whether a trimester lapsed or not, obtained lower grades than those completing the same series in the winter trimester.

Hypothesis 13. A majority of parents and teachers will express satisfaction with the effectiveness and sufficiency of pre-program preparation.

Teachers and the sample of parents were asked to express an opinion

about the staff and community preparation that preceded the initiation of the ILP. Responses of both groups are reported in Table CC.

TABLE CC. OPINIONS OF TEACHERS AND PARENTS ABOUT PREPARATION FOR THE ILP

	Proportion Responding as Indicated			
	Teachers' Responses		Parents' Responses	
	Inadequate	Adequate	Insufficiently	Sufficiently
How effective was the pre-ILP orientation and preparation of the staff?	76%	24%	---	---
To what extent were you orientated to the ILP prior to its implementation?	---	---	48%*	52%*

*Not significantly different from .5.

A majority (76 per cent) of teachers expressed the opinion that pre-ILP staff preparation was inadequate, and one-half of the parents indicated satisfaction with community orientation. Forty per cent of the parents expressed a desire for an orientation meeting during the spring of 1970-71.

Teachers were also asked to make recommendations for a pre-ILP orientation at other schools. Responses centered around (1) a staff's need for orientation by ILP-experienced personnel, (2) the need for a staff to become cognizant of potential problems, (3) the need for a staff, by departments, to make decisions about necessary adjustments in course content, grading procedures, teaching strategies, etc., and (4) the need for time to restructure a quantity of lesson plans.

Finding About Hypothesis 13

The hypothesis is rejected. A substantial majority of teachers (76 per cent) expressed the view that pre-program preparation was inadequate. Approximately one-half of the parents reported inadequate orientation.

Hypothesis 14. A majority of teachers will report that sufficient school time has been allotted for daily classroom preparation.

Data were collected through the use of the teacher questionnaire. Responses are summarized in Table DD.

TABLE DD. ADEQUACY OF PREPARATION TIME

Preparation Time Assessment	Proportion of Teachers
"Assessed as adequate"	20%
"Assessed as inadequate"	80%*

*Significantly different from .5 (P=.01)

A majority of teachers (80%) assessed the school time available for classroom as inadequate.

Findings of Hypothesis 14

The hypothesis is rejected. It is important to note that expressions about this matter were not available from teachers at other schools for comparative purposes.

Hypothesis 15. A majority of teachers will report that sufficient instructional materials and equipment are available.

Data were collected through the use of the teacher questionnaire and are summarized in Table EE.

TABLE EE. AVAILABILITY OF INSTRUCTIONAL MATERIALS

Availability of Instructional Materials	Proportion of Teachers
"Sufficiently Available"	65%
"Insufficiently Available"	35%

The majority of teachers assessed the availability of instructional material as adequate.

Finding About Hypothesis 15

The hypothesis is accepted. A majority of teachers assessed the availability of materials as adequate.

Hypothesis 16. A significant majority of teachers will judge the independent time available to students to be unobjectionable.

Teachers were asked to assess the value of the independent time available to students during their eighty minute lunch period and to estimate the proportion of students who spend most of this time studying. Students were asked to name their usual activities during this time.

Data in Table FF show that teachers believe that most students (77 per cent) spend little, if any, time studying during their independent period.

TABLE FF. TEACHERS' ESTIMATE OF THE TIME SPENT BY STUDENTS STUDYING DURING INDEPENDENT TIME

Assessment	Proportion of Teachers Expressing This Belief
Believe that 10% of students spend most of their time studying during free period	77% of teachers
Believe that 25% of students spend most of their time studying during free period	9% of teachers
Believe that 50% of students spend most of their time studying during free time	14% of teachers

Teachers' summary assessment of independent time for students is depicted by the data in Table GG.

TABLE GG. TEACHERS' ASSESSMENT OF INDEPENDENT TIME FOR STUDENTS

Assessment	Proportion of Teachers Holding the Perception
Scale Position	
1 An Unnecessary Evil	46% of teachers
2 A Necessary Evil	5% of teachers
3 Neither an Evil nor a Benefit	17% of teachers
4 Somewhat Beneficial	23% of teachers
5 Beneficial	9% of teachers

The data indicate that teachers are in considerable disagreement concerning the value of independent time for students. One-half of the teachers perceive it as an "evil" and for the most part unnecessary: one-half hold a neutral view or see it as beneficial.

Students' reports of their activities are contained in Table III.

TABLE III. STUDENTS SELF-REPORT ABOUT INDEPENDENT TIME ACTIVITIES

Student Activity	Proportion of Students Reporting this Activity
Mostly study	24% of students
Mostly relax and study	19% of students
Mostly relax	41% of students
Mostly other	16% of students

Less than one-half of the students (43 per cent) report that they combine studying and relaxing: included are twenty-four per cent who report that they study most of the time.

Teachers were also asked to indicate where or not students on independent time interfered with or disturbed classes in session. Data reported in Table II show that a majority of teachers (83 per cent) report that their classes are disturbed by out-of-class students.

TABLE II. TEACHERS' REPORT OF DISTURBANCES BY OUT-OF-CLASS STUDENTS

Response	Proportion of Teachers Responding
Out-of-class students "Do disturb" classes	83% of teachers
Out-of-class students "Do not" disturb classes	17% of teachers

Non-systematic observations were made on several occasions during the fall trimester by the writer throughout the buildings and grounds. These observations revealed only occasional students in halls and on the east and

west campus other than at the beginning and ends of periods. A few students observed on the campus south of the complex of temporary buildings generally numbered from two to three based on the several instances that observations were made in that area.

Objectionable behavior was not noted during observations. Students tended to be courteous and friendly if approached.

Findings About Hypothesis 14

The hypothesis is rejected. One-half of the teachers reported perceiving "independent time" as objectionable and the majority of teachers (83 per cent) report that students disturb classes in session.

Hypothesis 17. The majority of parents, teachers, and students will express confidence in the Intensified Learning Plan.

Hypothesis 17 was developed to generate data that would summarize assessments of the ILP by teachers, parents, and students.

Teachers and sampled parents were asked to make a summary assessment of the Intensified Learning Program. Three possible choices were offered: (1) return to the semester plan; (2) modify the ILP; (3) accept the ILP in its present form. Responses of the two groups are reported in Table JJ.

TABLE JJ. SUMMARY ASSESSMENT OF THE ILP BY TEACHERS AND PARENTS

Group		Proportion of the Group Responding as indicated		
		Return to the Semester Plan	Modify ILP	Accept Present ILP
Teachers	December	21%	57%	22%
	May	44%	46%	10%
Parents		14%	24%	62%

Teachers' preference for the semester plan increased as the year progressed. The proportion recommending return to the semester plan increased from 41 per cent in December to 44 per cent in May. The majority, however, continued to express confidence that the plan could be beneficial.

Modifications of the ILP suggested by individual teachers on questionnaires centered on two and three themes.

1. The need to structure, reduce, or eliminate the independent time available to students.
2. The need to schedule teachers' teaching day as to allow for appropriate breaks and increased planning time.
3. The need to encourage students to take more than a minimum yearly course load.

Students were also asked if they perceived the ILP as an improved plan over the semester plan. Seventy per cent responded "yes", the rest said "no" (14 per cent) or were uncertain (16 per cent).

Finding About Hypothesis 17

The hypothesis is partially accepted. Although the majority of parents (86 per cent) and students (70 per cent) expressed confidence in the ILP, nearly one-half (44 per cent) of the experienced teachers at the end of the school year recommended returning to the semester plan.

THE IMPACT OF THE IMPROVED CURRICULUM ON THE MIDDLE SCHOOL LEVEL

Implementation

The IMP, upon the requests of the principals involved, was installed at three middle schools which served students from relatively non-affluent neighborhoods.

Previously, the schools operated an eight period school day with 45-minute periods, teachers taught six periods, and one period each was utilized for lunch and planning. Students had seven classes and lunch period. Under the IMP the schools operated a six-period day in which the teacher taught four courses and students were enrolled for five courses. Each class period was extended to 55 minutes.

Where team teaching exists teachers had one planning day weekly and students had an independent study period. At one school each team guided students' activities at this time. All schools had also initiated the concept of continuous progress in mathematics.

As at the high school level, approximately two-thirds of the students studied the first portion of a subject (i.e. English A), during the first trimester. The other one-third studied the subject during the second trimester. All students completed the second portion (i.e. English B) either the second or third trimester.

Data Gathering Methods

Data relative to the effects of the IMP at the middle school level were collected through interviews, from school record and schedules, but primarily through the use of a teacher questionnaire during the winter trimester.

Effects of the Intensified Learning Plan at Middle Schools

Objectives for the ILP at the middle school level were generally identical with those for the high school. The results of the analysis are reported in conjunction with appropriate objectives or issues.

OBJECTIVE: Provide an expanded curriculum for middle school students.

The foregoing objective is consistent with and furthers one of the aims of the middle school movement which is to provide increased opportunities for young adolescents to explore various subject and skill areas.

Under the semester plan in 1969-70 students of the three pilot schools studied seven courses in the fall and seven in the spring. Of these, five each term for eighth grades were courses in required subjects - science, mathematics, English, social studies, and physical education - leaving two electives each term. Sixth and seventh grades also were required to take reading, allowing one elective per term for them.

Under the trimester plan students studied five subjects each term allowing fifteen for the year. As required courses remained unchanged, every student gained one additional field of study during the year.

Finding: Middle school students studied one more course each under the trimester plan than previously under the semester plan.

OBJECTIVE: Maintain student achievement under the expanded curriculum.

Teachers were perceived as the prime source of student achievement and were asked two questions about classroom achievement.

1. "Did you cover as much content as previously under the semester plan?"

2. "Did your students learn as much?"

Teacher responses are reported in Table KK.

TABLE KK: REPORT OF TEACHERS ON STUDENT ACHIEVEMENT

Question	Proportion of Teachers Responding...		
	No	Uncertain	Yes
1. Have you covered as much of the course content during the fall trimester as you normally do in a regular semester?	20%	---	80%
2. Did your students learn as much and develop as much in-depth learning during the fall trimester as they normally do in a regular semester?	12%	16%	72%

The data show that the vast majority of teachers had covered as much content in the subject areas and felt that students have achieved as much. Eighty-six per cent, also, stated that they had evidence to support their positions.

Finding: The vast majority of teachers report that they are covering as much material as previously and that students are learning as much.

OBJECTIVE: Decrease teachers' daily and term student loads.

As the number of classes taught for a term decreased under the ILP from six to four, it would be expected that daily and term class loads of teachers would decrease. Data shown in Table LL, obtained from principals' class schedules, support that hypothesis.

TABLE LL: DAILY AND TERM STUDENT LOADS AT THE MIDDLE SCHOOL

Subject Area	1969-70 Semester Plan			1970-71 Trimester		
	Number of Daily Classes	Class Size	Daily Students Load	Number of Daily Classes	Class Size	Daily Student Load
English	6	30	180	4	31	124
Social Studies	6	29	174	4	29	116
Mathematics	6	30	180	4	31	124
Science	6	30	180	4	29	115
Aggregate	6	30	180	4	30	120

The data indicate that the decrease in classes taught per day did decrease the number of students for which teachers were responsible from a daily average of 180 in 1969-70 to 120 in 1970-71. Teachers, under the ILP, instructed about the same number of students per school year.

Finding: Teachers' daily and term students loads were substantially reduced.

OBJECTIVE: Improve teachers' attitudes toward teaching.

Teachers were asked about the effect of the ILP on their attitudes toward their profession. Their responses are reported in Table MM.

TABLE MM: EFFECTS OF THE ILP ON TEACHERS' ATTITUDES TOWARD TEACHING

Question	Proportion of Teachers Responding as Indicated		
	Decreased Enjoyment	Balanced Effect	Increased Enjoyment
How has the ILP affected the extent to which you enjoy teaching?	16%*	52%	52%*

*significantly different proportions.

Finding: The data show that a significantly larger proportion of teachers reported "increased enjoyment" of teaching than reported "decreased enjoyment" due to the ILP.

Miscellaneous Problem Areas

Data relative to several miscellaneous areas were gathered primarily through the use of a teacher questionnaire. These data are reported below.

Area 1: Student attentiveness

A significantly greater proportion of teachers (45 per cent) reported that student attentiveness had "increased" due to the ILP than reported it "decreased" (4 per cent). Others (50 per cent) reported "no effect".

Area 2: Teacher fatigue

A larger proportion of teachers (30 per cent) reported that teacher fatigue had "decreased" under the ILP than reported it "increased" (20 per cent). One-half of the teachers reported "no effect".

Area 3: Out-of-class assignments

Although no teacher reported that out-of-class assignments under the ILP had "increased", 36 per cent reported a "decrease". Others reported "no change".

Area 4: Adequacy of pre-project orientation

The vast majority of teachers (82 per cent) reported satisfaction with pre-project orientation.

Area 5: Adequacy of teaching materials and class preparation time

The majority of teachers (64 per cent) expressed satisfaction with both the availability of teaching materials and the at-school class preparation time.

Area 6: Value of independent study

Although ninety per cent of the teachers reported that students on independent study time did not disturb classes, only one-half of the teachers judged that students spent more than fifty per cent of their time studying. It may be held with some assurance that middle school students, if provided an option, do not choose to utilize a large portion of their independent time studying. This finding is consistent with other data gathered relative to student use of independent time.

Area 7: Attendance

In the expectation that the ILP might improve school attendance, relative data was obtained from central administrative records. Average daily attendance rates are reported in Table NN.

TABLE XX: ATTENDANCE AT MIDDLE SCHOOLS 1969-70 AND 1970-71

	School A		School B		School C		Aggregate	
	69-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71
Average Daily Attendance Rate	.94	.95	.92	.94	.95	.94	.95*	.94*

* Not significantly different.

Although the aggregate attendance rate increased for the three schools from .93 to .94, the change was not statistically significant. It cannot be concluded that the ADA rate was affected by the ILP.

Summary Assessment of the Intensified Learning Plan by Middle School Teachers

Middle school teachers, through an anonymous questionnaire, expressed solid confidence in the worth of the Intensified Learning Plan as reported in the data above.

They report specifically that

- (1) they are covering as much subject matter
- (2) students are learning as much
- (3) they have made substantial changes in their instructional methods
- (4) they are enjoying teaching more

Finally, teachers were asked to make a summary assessment of the ILP. Not one rated the ILP "unsatisfactory". Thirty per cent rated the ILP as "satisfactory with modifications"; seventy per cent of the teachers rated it "satisfactory" in its present form.

Finding: Middle school teachers overwhelmingly approved the Intensified Learning Plan.

SUMMARY

Summary of Major Finding at the High School

Data relative to the objectives and other areas in need of assessment were gathered during the first year of operation of the Intensified Learning Plan at one high school. Sources of data included students, parents, teachers, and administrators as well as school records and schedules, etc. Instruments included questionnaires, conferences, and textbook tests.

The data indicated that five major objectives were being attained: Objectives 1, 2, 5, 6, and 8. (See p. 3-5 for list of objectives)

Objective 1. Provide students with increased opportunities to study more subjects during a school year.

A substantial majority of students are able to study more subjects each school year. In 1970-71 approximately seventy per cent of the students exceeded the ten-course maximum load possible under the semester plan. In 1971-72 eighty-five per cent of the juniors will exceed that maximum and will, with sophomores, average twelve courses. (p.13)

Objective 2. Allow flexibility in the manner in which students may earn sufficient credits for graduation.

Students are exercising the option to select course loads to suit their individual needs and plans. Fifty seniors will have completed high school requirements after the second trimester in 1971-72, and nine juniors will complete their total requirements, exercising their option to graduate after three years of high school attendance. (p. 16)

Objective 6. Increase students' utilization of school services.

Approximately 40 percent of the pilot schools reported that they were engaging school "buses". Only about one-fifth reported "less", the remainder thirty percent reporting "no effect". (p. 11)

Objective 7. Decrease the total number of different students for whom instructors/teachers are simultaneously responsible.

The stated objective was stated as because teachers did carry a decreased student load per day and per hour under the plan. However, it came out that the total teacher load or role was disabled. The average number of courses per day increased for the school (11.4) and teacher (1.8) under the plan, and for two-thirds of the pilot schools (1.7) under the semester plan, and 40% of the pilot schools reflected general teacher fatigue. (p. 31)

Objective 8. Maximize use of classroom and equipment.

Greater utilization of the school plant has been realized. Fewer classrooms provided more courses for students during the school year. Students averaged 11.4 courses during 1970-71 utilizing only sixty-five per cent of the classrooms available.

The data did not clearly indicate that Objective 3, 4, and 7 were attained.

Objective 9. Nurture students' achievement by allowing more time per class and opportunity to focus on fewer subjects.

Much of the data indicated that student achievement was maintained. Textbook tests administered to pilot and control students at other

schools in two subject areas provided almost identical results. Report card grades did not vary significantly from those earned by pilot students in 1969-70 under the semester plan, although some slight tendency to polarize was present. Students generally reported that their grades were improved although parents noticed little change.

The expressed opinions of many teachers were in conflict with the data above because slightly more than one-half of the teachers, in May, reported that (1) they covered less content and that (2) the students learned less than previously under the semester plan. (p.17)

Objective 4 Increase the proportion of students who earn credits in electives.

The absence of an increase in enrollments in most electives prevents concluding that the ILP fostered growth of enrollments in these departments. As most students enrolled in more courses than previously, it is assumed that they chose to complete required courses rather than to explore electives. (p. 27)

Objective 7. Improve teachers' attitudes toward their profession.

Although approximately one-half of the experienced teachers reported that the ILP had not affected their professional attitudes, a significantly larger proportion (36 per cent) reported enjoying teaching "less" than reported enjoying teaching "more" (13 per cent). (p. 34)

In terms of problem areas and special issues the data support the statements that follow:

1. Teacher fatigue increased. Sixty-four per cent of the teachers reported increased fatigue under the ILP in December, 72 per cent

in May. The response was substantiated by comments on the teacher questionnaire. (p. 37)

2. The data about student attentiveness during the lengthened period was inconclusive. Teachers could not agree (dichotomized). Students claimed to be attentive seventy-five per cent of the time in most classes. (p. 38)
3. The presence of a lapsed term did not alter report card grades in three subjects: English, Algebra, and American History. Students taking these courses in the fall-spring sequence obtained report card grades that slightly exceeded those obtained by students taking the same courses consecutively in the winter-spring sequence. However, grades obtained in the fall-winter sequence generally proved significantly superior to those taken either in the winter-spring or fall-spring sequence. (p. 42)
4. Teachers failed to perceive value in independent time for students. Almost one-half of the teachers defined independent time for students as an unnecessary evil, and the majority (83 per cent) reported that classes were disturbed by out-of-class students. (p. 46)

Summary Assessment of the Intensified Learning Plan by Teachers, Parents, and Students at the High School

Although the majority of parents (86 per cent) expressed confidence in the potential of the Intensified Learning Plan and most students (70 per cent) perceived it as a better plan, a large proportion of experienced

teachers (44 per cent) recommended, at the end of the school year, returning to the semester plan.

Summary of Finding at the Middle School Level

Middle school teachers, through an anonymous questionnaire, expressed solid confidence in the worth of the Intensified Learning Plan.

Specifically they report that . . .

- (1) they are covering as much subject matter as formerly,
- (2) the students are learning as much,
- (3) they have made substantial changes in their instructional methods, and
- (4) they are enjoying teaching more.

In a final assessment, the vast majority (70 per cent) of the teachers noted the ILP "satisfactory" in it's present form, the remainder expressing approval if modified.

The Intensified Learning Plan attained it's major objectives to

- (1) expand the educational opportunities of students while simultaneously,
- (2) reducing teacher load.

Recommendations

The foregoing data will support considerable extension of The Intensified Learning Plan at the middle school level but only limited extension at the high school level. Implementation at additional high schools, particularly in neighborhoods varying in socio-economic status, would provide important additional evaluation data. Recommendations made by the staff at the pilot high school should be considered in designing pre-orientation plans. (p. 44)

Evaluation should continue and focus on the following issues:

- (1) General academic achievement
- (2) Specific achievement of the slower learner
- (3) The effect of the lapsed-trimester on academic achievement
- (4) The extent to which students choose early graduation in preference to an expanded curriculum
- (5) The influence of the lengthened period on teaching strategies
- (6) The effects on the quantity and quality of pupil-teacher interaction.

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APPENDIX

- A Teacher Opinionnaire, Middle School
- B Teacher Opinionnaire, High School
- C Parent Opinionnaire
- D Student opinionnaire

Appendix A

Middle School TEACHER QUESTIONNAIRE: ILP Random Sample

This questionnaire (for experienced teachers only) has the intent of gathering evaluative data relative to the Intensified Learning Program. Please respond with optimum accuracy and candor. Do not sign. Return directly to the Research Department, Room 32, East Annex.

Thanks,



Charles L. Evans
Director of Research

Instructions: Respond by encircling the appropriate numeral.

- | | | | |
|----|--|-----------------------|---------------------------|
| | 1 | 2 | |
| | (Middle School Teacher) | (High School Teacher) | <u>Circle one numeral</u> |
| 1. | Have you covered as much of the course content during the fall trimester as you normally do in a regular semester? | 1
No
20% | 2
Yes
80% |

Comment _____

- | | | | | |
|----|--|-----|-----------|-----|
| | | 1 | 2 | 3 |
| | | No | Uncertain | Yes |
| 2. | Do you feel that your students learned as much and developed as much in depth understanding during the fall trimester as they normally do during a regular semester? | 12% | 16% | 72% |

Comment _____

- | | | | |
|----|--|-----|-----|
| | | 1 | 2 |
| | | No | Yes |
| 3. | Do you have any evidence to support answers to #1 and/or #2? (Test results, units covered, etc.) | 13% | 86% |

What, if yes? _____

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- | | | | | |
|----|--|---------------|-----------------|--------------------|
| | | 11% | 57% | 30% |
| | | 1 | 2 | 3 |
| 4. | To what extent, if any, have you changed your teaching style, techniques, etc. to adjust to the longer period? | Little change | Moderate change | Substantial change |

If 2 or 3 are circled, what changes did you make? _____

5. (Answer only if you teach mathematics, social studies, science, or English exclusively.)
- a. What is your average class load? _____ students
- b. What is your daily load? _____ students
- c. How many classes do you teach daily? _____ classes

- | | | | | |
|----|--|-----------|-----------------|-----------|
| | | 16% | 32% | 52% |
| | | 1 | 2 | 3 |
| 6. | How has the ILP affected the extent to which you enjoy teaching? | Decreased | Balanced effect | Increased |

Comment _____

- | | | | |
|----|--|-----|-----|
| | | 79% | 20% |
| | | 1 | 2 |
| 7. | Did students who transferred in to your class from another school have unusual adjustment problems <u>due to the ILP</u> ? | No | Yes |

I yes, why? _____

- | | | | | |
|----|--|--------------|-----------|--------------|
| | | 4% | 50% | 45% |
| | | 1 | 2 | 3 |
| 8. | How has the lengthened class period affected the general attentiveness of your students? | Decreased it | No effect | Increased it |

Comments _____

- | | | | | |
|----|--|--------------|-----------|-----------|
| | | 30% | 50% | 20% |
| | | 1 | 2 | 3 |
| 9. | How has the lengthened class period affected your total day fatigue? | Decreased it | No effect | Increased |

Comment _____

10. How has the ILP affected the quantity of home assignments made by you?

40%	60%	—
1	2	3
Decreased it	No effect	Increased

Comment _____

11. How effective was the pre-ILP orientation and preparation of the staff?

17%	82%
1	2
Inadequate	Adequate

What orientation or preparation would you recommend for a staff entering ILP? _____

12. Is the time available at school for class preparation generally sufficient?

36%	64%
1	2
No	Yes

Comment _____

13. Are necessary instructional materials and equipment generally available?

36%	64%
1	2
No	Yes

If no, what is needed? _____

14. Do students during their free time, disturb your classes or in any way interfere with your instructional program?

91%	8%
1	2
No	Yes

If yes, please comment. _____

15. What per cent of students spend most of their free time studying (when not eating lunch)?

33%	22%	11%	16%	16%
1	2	3	4	5
10%	25%	50%	75%	90%

Comment _____

16. Rate "free time" for students at your school on the scale below.

14%	4%	14%	19%	<u>Circle one numeral</u>
1	2	3	4	47% 5
An unnecessary evil	A necessary evil	Neither an evil nor a benefit	Of some benefit to students	Beneficial to students

Comment _____

17. Rate the Intensified Learning Program.

1 -0-	30%	70%
Unsatisfactory. (Should return to the semester)	2 Satisfactory with important modifications	3 Generally satisfactory

Suggested modifications: _____

18. Other comments (optional) _____

Appendix B

High School TEACHER QUESTIONNAIRE: ILP

This questionnaire (for experienced teachers only) has the intent of gathering evaluative data relative to the Intensified Learning Program. Please respond with optimum accuracy and candor. Do not sign. Return directly to the Research Department, Room 32, East Annex.

Thanks,



Charles L. Evans
Director of Research

Instructions: Respond by encircling the appropriate numeral.

- | | 1
(Middle School Teacher) | 2
(High School Teacher) | Circle one numeral | |
|---|------------------------------|----------------------------|--------------------|-----------------------|
| 1. Have you covered as much of the course content during the fall trimester as you normally do in a regular semester? | | | Fall
1
No | 2
45%
Yes |
| | | | Spring | 63% 37% |
| Comment | _____ | | | |
| <hr/> | | | | |
| 2. Do you feel that your students learned as much and developed as much in depth understanding during the fall trimester as they normally do during a regular semester? | | | Fall
1
No | 2
10%
Uncertain |
| | | | Spring | 35% 26%
Yes |
| Comment | _____ | | | |
| <hr/> | | | | |
| 3. Do you have any evidence to support answers to #1 and/or #2? (Test results, units covered, etc.) | | | Fall
1
No | 2
95%
Yes |
| | | | Spring | 3% 97% |
| What, if yes? | _____ | | | |

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4. To what extent, if any, have you changed your teaching style to help students adjust to the longer period.
- | | Fall | 17% | 67% | 15% |
|--|---------------|-----|-----------|--------------------|
| | 1 | | 2 | 3 |
| | Little change | | No effect | Substantial change |
| | Spring | 13% | 60% | 27% |
- If 2 or 3 are circled, what changes did you make? _____
-

7. (Answer only if you teach mathematics, social studies, science, or English exclusively.)

- a. What is your average class size? _____ students
 b. What is your daily class size? _____ students
 c. How many classes do you teach daily? _____ classes

- e. How has the ILP affected the amount of which you enjoy teaching?
- | | 36% | 51% | 13% |
|--|-----------|-----------|-----------|
| | 1 | 2 | 3 |
| | Decreased | Unchanged | Increased |
| | | effect | |

Comment _____

7. Did students transferred in to your class from another school have unusual adjustment problems due to the ILP?
- | | 43% | 57% |
|--|-----|-----|
| | 1 | 2 |
| | No | Yes |

If yes, why? _____

8. How has the lengthened class period affected the general attentiveness of your students?
- | | Fall | 40% | 47% | 12% |
|--|--------------|-----|-----------|--------------|
| | 1 | | 2 | 3 |
| | Decreased it | | No effect | Increased it |

Comments _____

	Spring	45%	43%	12%
--	--------	-----	-----	-----

9. How has the lengthened class period affected your total day fatigue?
- | | Fall | 7% | 27% | 65% |
|--|--------------|----|-----------|-----------|
| | 1 | | 2 | 3 |
| | Decreased it | | No effect | Increased |

Comment _____

	Spring	3%	25%	72%
--	--------	----	-----	-----

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10. How has the _____ reflected the quantity of home assignments made at home?

	1	2	3
	Decreased	No effect	Increased

32% 46% 22%

it effect

Comment _____

11. How effective was the pre- and orientation and preparation for the staff?

	1	2
	Inadequate	Adequate

36% 24%

What orientation and preparation was _____ for the staff entering the _____

12. Is the time available at school for staff preparation generally sufficient?

	1	2
	No	Yes

49% 20%

Comment _____

13. Are necessary instructional materials and equipment generally available?

	1	2
	No	Yes

32% 67%

If no, what is needed? _____

14. Do students during their free time, disturb your classes or in any way interfere with instructional activities?

	1	2
	No	Yes

15% 85%

If yes, please comment. _____

15. What per cent of students spend _____ of their free time studying (when not at lunch)?

	1	2	3	4	5
	0%	25%	50%	75%	90%

10% 8% 13% — —

Comment _____

Appendix B, p.4

16. Rate "free time" for students at your school on the scale below.

				<u>Circle one numeral</u>
45%	5%	18%	22%	10% ₅
1	2	3	4	
An unnecessary evil	A necessary evil	Neither an evil nor a benefit	Of some benefit to students	Beneficial to students

Comment _____

	Fall	21%	57%	22%
17. Rate the Intensified Learning Program.		1	2	3
		Unsatisfactory. (Should return to the semester)	Satisfactory with important modifications	Generally satisfactory
Suggested modifications	Spring	44%	46%	10%

18. Other comments (optional) _____

Appendix C

Random Sample

Dear Parent:

This opinionnaire represents an attempt by the Research Department of the Fort Worth Independent School District to collect data relative to the effectiveness of the Intensified Learning Plan (Trimester Schedule). Your name was drawn as part of a random sample of parents of students attending Arlington Heights High School. Would you cooperate with this effort by responding to the questions below with candor? Do not sign. Return to the Research Department in the stamped envelope provided.

Thanks for your assistance,

Charles L. Evans

Charles L. Evans
 Director of Research and Evaluation
 Fort Worth Independent School District

Instructions: Circle the best answer in terms of your youngest child in high school. Comments are optional.

N= 240 Random Sample		41%	31%	18%	10%
1. My youngest child is in grade	9 10 11 12				
2. My youngest child is a	girl boy	45%		55%	
3. This child usually makes grades that are	below average average above average	5%	56%		39%
4. How many courses does your child plan to take this year?	11 12 13 14 15	39%	11%	28%	7%
5. How many courses do you plan to take this year during the next school year	10 11 12 13 14 15	18%	13%	44%	8%
6. Would you allow your child to attend on a trimester or a trimester earlier by than the minimum number of 11 courses?	No Yes	51%			48%
7. If a four-quarter plan were to be developed, would you chose for your child to attend a summer session rather than one of the other sessions?	No Undecided Yes	68%	26%		6%



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8.	What effect, if any, has the trimester plan had on your child's reading?	13%	68%	13%
		no change	no real change	Made somewhat higher grades
9.	At what time does your child's first class start?	55%	45%	
		7:10	9:30	
10.	At what time does your child's last class end?	12%	53%	36%
		1:30	2:05	4:30
11.	At what time does your child usually sit for lunch?	11%	44%	44%
		Period 2	Period 3	Period 4
12.	To what extent were you oriented to the trimester plan prior to its implementation?	48%	52%	
		Insufficiently	Sufficiently	
13.	Do you feel a need for an orientation session this spring?	60%	40%	
		No	Yes	
14.	What is your assessment, at this point, of the trimester plan?	14%	24%	62%
		Unsatisfactory	Satisfactory	Satisfactory
		(Return to Semester Plan)	if modified	

If unsatisfactory or in need of modification, please explain _____

Appendix D

STUDENT QUESTIONNAIRE (Exp. 10) INTENSIFIED LEARNING PROGRAM Random Sample

Instructions and Explanation

This questionnaire represents an attempt by the Research Department of the Fort Worth Public Schools to gather data from students relative to the effectiveness of the Intensified Learning Program (trimester). Please answer the questions as accurately as possible. Do not sign.

Thanks,



Dr. Charles L. Evans
Director of Research

Circle the best answer

		N=41		N=37			
		sophomore		junior		senior	
1. What is your classification?							
	freshmen						
2. How many courses did you take during							
..... the fall trimester?	2	3	4	5	6	Sophomores 12.1	
..... the winter trimester?	2	3	4	5	6		
..... or plan to take during the							
spring trimester?	2	3	4	5	6	Juniors 11.8	
3. How many classes did you take last							
year (1969-70) if you were in high							
school?							
..... during the first semester?	2	3	4	5	6	10.7	
..... during the second semester?	2	3	4	5	6		
4. How many credits do you plan to earn							
in high school?							
..... during freshman year?	3	4	5	6	7 plus	10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000	
..... during sophomore year?	3	4	5	6	7 plus		21 (15%)
..... during junior year?	3	4	5	6	7 plus		22 (21%)
..... during senior year?	3	4	5	6	7 plus		+ (29%)
5. What is your least liked required							
subject?							
During what trimesters do you plan							
to study this subject this year?							
	1st	2nd	3rd				
	45%	24%	30%				
	Some	Not quite	about the				
	better	as good	same				
6. How did your grades for the fall							
trimester compare with those							
earned last year? (Freshmen, do							
not answer.)							

7. What non-required (for graduation) courses did you take the first trimester?
 this trimester _____
 plan to take next trimester _____
8. How many days were you absent during the first trimester?
2.5 days
9. What portion of a class period are you generally attentive?
- | | | | | |
|------------------|-----------|------------|------------|------------|
| | 6% | 19% | 32% | 42% |
| Subject #1 ----- | 25% | 50% | 75% | 99% |
| Subject #2 ----- | 25% | 50% | 75% | 99% |
| Subject #3 ----- | 25% | 50% | 75% | 99% |
| Subject #4 ----- | 25% | 50% | 75% | 99% |
10. How has the trimester schedule affected the amount of homework assigned by teachers?
- | | | | |
|---------------------|------------|------------|---------------------|
| | 39% | 39% | 21% |
| Increased it | | No change | Decreased it |
| | 51% | 28% | 20% |
| Increased Enjoyment | | No change | Decreased Enjoyment |
11. How has the trimester schedule affected the extent to which you enjoy school?
 If "increased" or "decreased" is circled, please explain why _____
-
12. How many free periods (including the one in which you eat lunch) do you have?
 At what class periods are you free? 1 2 3 4 5 6
 Where do you usually go after eating? **22%** **40%** **16%**
 What do you usually do after eating? Study Relax Other
 How often have you been reprimanded or disciplined for misconduct during your free period? **18% study and relax**
84% None **16%** Once or twice **0-** Several times
13. Is the trimester plan a better plan than the regular semester plan?
70% Yes **13%** No **15%** Uncertain
- Comments (optional) _____
-