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#### ABSTRACT

An evaluative study was conducted in Springfield, Illinois high schools (1) to determine the effects of the double shift scheduling that was necessitated by severely overcrowded conditions and (2) to provide accurate and objective information from which rational judgements could be made. (CK)



U.S. DEPARTMAN CONTROL CONTROL

THE IMPLICATIONS OF DOUBLE SHIFT SCHEDULING IN SPRINGFIELD, ILLINOIS HIGH SCHOOLS

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# THE IMPLICATIONS OF DOUBLE SHIFT SCHEDULING IN SPRINGFIELD, ILLINOIS HIGH SCHOOLS

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#### INTRODUCTION

Increasing high school enrollments and growing voter resistance to the passage of bond issues for school buildings have converged to create a dilemma in many school districts across the country. School enrollments have reached or exceed one hundred percent of the maximum student spaces in teaching stations and school officials have been forced to consider ways of reorganizing the schools to alleviate this overcrowding.

From 1966 through 1968 educational planners in Springfield worked to achieve the best possible organizational arrangement for the district. Faced with overpopulation at all age levels, the Board of Education chose to reorganize schools from a K6-3-3 plan to a K5-3-4 organization. With slight exception, this arrangement permitted adequate housing for pupils at the early levels of education and passed the overload into the high school where it was felt the more mature students could better cope with conditions which were less than ideal.

In order to absorb a 29% increase in enrollment, all three high schools extended the length of the school day and adopted a staggered-shift schedule.



Although the staggered schedule had slight variations within each building, it was basically structured with three different starting times and three different dismissal times. The schedule provided an increase in facilities available during the first two periods and last two periods of the day and with the scheduling of the larger enrollment classes during the peak periods of attendance, it was possible to accommodate the increased enrollment within each building.

During the 1968-69 school year each of the three high schools operated with a staggered-shift schedule. Before the first school month had ended students, faculty, and administrators were expressing their concerns over crowded stairways and corridors, the confusion caused by students coming and going at different hours, and especially over the "poorer work atmosphere" in crowded facilities. Although classes were aintained at or near normal sizes, student safety was termed "critical" during passing periods. Attendance control was difficult and friction among students increased during the overlapping time.

In January, 1969, high school and central office administrators met to consider possible alternatives for the 1969-70 school year. Principals expressed the belief that totally separated double sessions, while necessitating less class time for students, might make possible improved conditions of teaching and learning. Representatives of the North Central Association and Office of the Superintendent of Public Instruction were contacted for their judgments and possible approvals of split session operation in the high schools as a temporary measure of better coping with the overcrowded conditions. Subsequently, a task force was established to search for solutions to the existing problems of overpopulation.



After intensive study of the problem, it was recommended that the Springfield school system implement a double shift schedule with a minimum overlap for all three high schools. Central office administration and the District #186 Board of Education accepted the proposal as a temporary plan of operation until more facilities could be obtained for the high schools. In September, 1969, with one-year approval from the North Central Association and the Office of the Superintendent of Public Instruction, the three high schools opened with a double shift plan in operation.

Juniors and seniors came to school at 7:30 A.M. and remained until noon. Freshmen and sophomores arrived at 12:30 and concluded at 5:00 P.M. Each session included five class periods of fifty minutes each. Students who enrolled in six subjects were permitted to attend for an overlapping period.

#### PURPOSE

The 1971-1972 school year was the third year of split-shift operations for the Springfield high schools. Approval from the North Central Association and the Office of the Superintendent of Public Instruction has been obtained for each subsequent year.

It is presently agreed by the majority of district professional personnel that the split-shift has served its basic intended purpose; that of eliminating severe conditions of overcrowding. However, many people have concluded that the double shift has, in a variety of ways, been detrimental to the high school educational program in Springfield.



3 . **§** 

The purpose of this evaluation study was to provide accurate and objective information on the effects of the double shift from which sound and rational judgements could be made.

#### REVIEW OF LITERATURE

The literature in the effects of split shifts is rather scant. A thorough review of educational journals and periodicals revealed only three articles on the topic, all published prior to 1965. Two of the three articles were concerned with alternatives to and ways of eliminating double sessions (Mayhew, 1965; Szuberla, 1964).

The article of most interest and relevance was based upon a survey conducted by Myers and Meredith (1963) on the three shift system in operation at the North Miami (Florida) High School. These investigators based their conclusions on questionnaire data, phone surveys, professional readings and group reports.

Their findings are summarized in the following 10 statements:

- (1) Parents accept the three shift day as a satisfactory-solution to crowded school district.
- (2) The majority of parents prefer this plan to an increase in taxes for additional buildings.
- (3) Students find the plan provides to a certain degree special opportinities for seniors, greater use of school equipment and facilities, and grade-level grouping.
- (4) No appreciable increase in discipline exists except in the library area.
- (5) The program apparently has no significant effect on the average or above average student; however, lack of time and space may have a negative reaction on the below average pupil.



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- (6) No serious problems in the area of communication can be attributed to this plan.
- (7) Even though the third shift aids in the solution of the problem of housing students, it curtails the sports program and the club activities.
- (8) Individual students find it difficult to receive help before and after school.
- (9) Individual faculty members feel a limitation in opportunities to become acquainted with the entire faculty.
- (10) Teachers on the third shift find it difficult to conduct personal business after 4:30 P.M.

#### PROCEDURE

In October, 1970 the superintendent expressed a desire for the completion of a thorough evaluation study on the effects of the double shift in Springfield's high schools. A committee consisting of three high school assistant principals and the administrative assistant for research and evaluation was formed and immediately began to draw up plans for carrying out the study. A series of meetings were held in the ensuing three months during which time evaluative criteria were discussed and selected and measurement instruments developed and field tested. Questionnaires were administered to all respondents during February and March, 1971 and reports by various members of the faculty and community were submitted in March and April. All data were collected by the end of April, 1971.

#### EVALUATIVE CRITERIA

To measure the effects of a scheduling procedure so broad its' application as the double shift many different evaluative criteria were



deemed necessary. Some of the effects are undoubtedly very subtle and if observed in isolation would appear largely unaffected. But if a large number of pertinent variables are examined in total, is likely that a picture or pattern may develop which would permit the formulation of generalizations concerning consequences of double shift scheduling. It was on this premise that the evaluative criteria were selected.

## Space Utilization and Safety

The primary reasons for adopting a double shift schedule was to alleviate crowded conditions at the three schools. The classrooms were filled to capacity and during breaks the halls were extremely crowded, noisy and hazardous. These conditions produced an atmosphere in the buildings which would appear to inhibit teaching and learning and to be incompatable with high quality scholarship. One purpose of this evaluation study was to determine whether indeed the double shift did improve space utilization and building safety.

## Attitudes and Opinions

The attitudes, opinions and feelings of the affected parties are important criteria in any kind of evaluation study. It appeared necessary in setting up the evaluation schema for the double shift study to provide an opportunity for students, teachers and parents to express their sentiments toward this unique scheduling procedure. Questionnaires covering a wide range of attitudes and opinions relative to the double shift were developed for each of the three groups. Randomly selected samples of students, teachers and parents representing all grade levels



and all three high schools completed the questionnaires. Copies of these instruments may be found in the Appendix section of the report.

## Academic Program

The primary (but certainly not the only) responsibility of the public schools is to offer an academic program that will allow the student to engage in certain learning experiences which will ultimately result in a happy, effective, successful and productive human beings and citizens. Whether the dougest ft enhanced or weak and the academic program was of utmost concern to the evaluation committee and so a variety of criteria were selected. These included grade point averages (GPAs), standardized test results, and subjective reports by parents, students and faculty.

## Non-Academic Program

Vitally important to the successful functioning of a high school are those programs and services which compliment and maximize the effectiveness of the academic program and at the same time make school and education a more valuable, interesting and enjoyable experience.

Such programs would include guidance and counseling, library and multimedia services, athletics, and the myriad of clubs and organizations that would fall under the heading of extra-curricular activities. Because of the unquestioned contribution of these programs to school life, it was deemed necessary to obtain as much and diverse information as possible concerning the extent to which the had been influenced by split scheduling.



## Discipline and Attendance

Some concerns expressed by faculties and administrators upon the implementation of the double shift were related to any changes that may have occurred in patterns of school attendance and changes in the number and types of discipline problems. Analyses of attendance reports for the past four years in the high schools were performed and requests were made of teachers, principals and a sist at principals for information on student discipline.

## Community

With the change downward in the number of hears spent in school, there has been a corresponding change upward in the amount of time students are at home or out in the community. The numbers of students affected are sufficiently large to have a substantial effect on various aspects of community functioning.

The director of the state employment service and the chief of police were contacted concerning possible effects of the double shift on their particular agencies. Other community officials were requested to provide information but either had no opinions or chose not to reply.



#### RESULTS

## Space Utilization and Safety

The intended purpose of the double shift was to relieve crown classroom conditions. Although numerical data on class size averages are not included in this report, there is no question that the space situation has improved. The initial report on the double shift, produced by a committee under the leadership of Paul Stone in April, 1970, provided some information on space utilization. Following are the comments taken from that report:

The double shift has aided in the available amount of classroom seats for students since the room serves double utilization. However, with this double use of a room, each teacher requires a desk, bulletin board, storage space, etc.; and from this point of view, there is a curtailment of actual "space" within the room as a result of the double utilization.

It has increased our use of space. Although there are rooms not used every period, we are serving more students. This year it has been possible to move a class out of a cold room or a room that needed repairs. There is also more space available for teachers to see students for extra help.

The April, 1970 report as well as questions on the faculty and student questionnaires provided information on improved safety conditions brought about by the double shift. Sixty per cent of the entire sample of students agreed that building safety had improved under the double shift while only 10% disagreed and the other 30% were undecided. A smaller percentage of faculty members felt that safety conditions were better under the double shift. At Lanphier only 24% of the faculty saw



improvements in safety as compared to 48% at Springfield High School and 56% at Southeast.

The committee report on safety follows:

The initiation of the two shift schedule has brought about much safer and more manageable conditions in the halls, on the stairwa s and in the locker rooms. The amount of student activity in these confined square footage areas has been spread out and conditions are very acceptable. From the standpoint of student safety, when students arrive and leave school, it is much more hazardous. During the winter, students are coming to school and going home in darkness; it is doubly hazardous when there is ice and snow on the ground. The traffic tie-up around the school at 5:00 P. M. is most dangerous for all concerned, and we are fortunate, indeed, that no serious accidents have occurred.

The halls are quieter and less crowded than last year. There is room on the stairways to have up and down traffic. We reduced the passing time 20% - from 5 minutes to 4 minutes.

# Attitudes and Opinions

## Parent attitudes and opinions.

A 13 item questionnaire, with 10 forced choice and three open-ended items was developed for the purpose of evaluating parents' attitudes and opinions toward the double shift. The parent was instructed to respond to each of the forced choice items by indicating his agreement, disagreement or indecision regarding the particular statements. The last three items required constructed responses. The respondent was asked to report his likes and dislikes about the double shift, and what changes if any should be made to improve the double shift schedule.

A randomly selected sample of 225 parents representing the three high school districts were sent the questionnaire along with a cover

letter exp ning the purpose of the study. A single mailing resulted in an 81% eturn and so no follow-up was done. Copies of both the questionnaire instrument and the letter are in the Appendix.

The results of the questionnaire may be found in Tables 1 and 2.

The percentages of parents responding to each question under each response category are listed by school and for the total group in Table Table 2 contains samples of typical answers to the three open-ended questions.

Responses to the 10 forced choice items of the questionnaire reveal a pattern of attitudes and opinions generally quite positive in nature.

Family life has not been profoundly disrupted under double shift scheduling according to parents. Of the total group of responding only 26% felt that their family life had been upset versus 66% who reported no disruptive effects resulting from split sessions. Transportation problems did not seem to be as severe as originally suspected. Only 38% of parents were reportedly inconvenienced as opposed to 58% who were not.

A majority of the parents were uncertain about any effects upon student achievement but 71% of them agreed that their children of high school age liked the double shift.

The bulk of the parents did not agree that interest and pride in school had been adversely affected nor did they concur with the statement that extra-curricular activities had been curtailed by two shift scheduling.

Slightly more than half of the parents (53%) favored continuation of the double shift and were opposed to returning to the crowded conditions of the traditional schedule by a 6-1 margin. Sixty-two per cent of the



parents were against changing from split shifts to a year-round type program. When asked their preference concerning continuation on the double shift or paying for a new high school, 42% favored the double shift, 46% would pay for a new high school and 13% were uncertain.

The open-ended questions provided the opportunity for parents to discuss their likes, dislikes and recommendations concerning the double shift. Some of the positive features of the double shift were:

(1) the less crowded conditions of the high schools which permitted more individualized instruction, (2) the students could pursue outside employment with the additional spare time available, and (3) parents have more help around home for babysitting and other household chores.

The dislikes expressed by parents included the lack of communication between upperclassmen and underclassmen, and the absence of school spirit and fun that exists in the more traditional type high school.

Transportation has presented problems to some parents, especially those with children in each of the two shifts at the high school and/or with children in high school as well as in the elementary or middle school grades.

The free time created by the double shift has aroused the concern of some parents who dislike the absence or partial lack of supervision their children receive outside of school. Other parents dislike the late hours students arrive home or the early hours they must leave, and the different family time schedules that must exist in a family consisting or more than one student.

The most frequent response to the question of changes that could be made to improve the double shift, was to build a new school. Some parents



Table 1

REPLIES TO QUESTIONNAIRE BY PARENTS OF STUDENTS

	Question			Pero	cent Answ	ering
				Ā	U	D
		_				
1.	Transportation problems have been cre	ated.	LHS	23	8,	70
	for our family by the double shift.		SHS	45	3	53
	•		SSE	45	5	50
		Entire	Grp.	38	5	58
2.	As a parent, I favor the continuation of	the	LHS	73	15	13
	double shift.		SHS	33	20	48
			SSE	55	10	35
		Entire	Grp.	53	15	32
3.	As a parent, I would prefer severly ov	er-	LHS	2.5	8	68
٠,	crowded schools to operating under a	<b>-</b>	SHS	3	13	84
	double shift.		SSE	13	15	73
		Entire	Grp.	13	12	75
4.	As a parent, I would perfer some type	of	LHS	28	10	63
- •	year-round school program to the exis		SHS	20	23	58
	double shift.	Ü	SSE	23	13	65
		Entire	Grp.	23	15	62
5.	Interest and pride in the schools have	oeen	LHS	25	18	58
- •	affected by the double shift.		SHS	45	23	33
			SSE	43	20	38
		Entire	Grp.	38	20	43
6,	In general, students in our family like	the	LHS	90	5	5
٠,	double shift schedule.	<del>-</del>	SHS	40	20	35
	adasio siiii delleatio.		SSE	78	5	18
		Entire	Grp.	71	10	19

Table 1 cont'd

	Question		Perc	ent Answ	ering
			A	Ŭ	D
		TIIC	13	0	80
7.	Our family life is disrupted by the double	LHS SHS		8 8	
	shift.	SSE	45 20	10	48 70
		രാഥ	20	10	70
	Entire	Grp.	26	8	66
8.	Academic achievement for children in our	LHS	18	65	18
•	family is higher under the double shift.	SHS	20	43	38
	Turing, to angular manufacture and the same	SSE	30	43	28
	Entire	Grp.	23	45	28
9.	As a parent, I prefer operating on the double	LHS	60	5	28
•	shift over paying for a new high school.	SHS	15	13	73
		SSE	50	13	38
	Entire	Grp.	42	13	46
10.	The double shift has sharply curtailed parti-	LHS	18	18	65
_,,	cipation in extra-curricular activities.	SHS	45	20	35
	1	SSE	40	10	50
	Entire	Grp.	· <b>2</b> 6	16	50



#### Table 2

## TYPICAL RESPONSES TO OPEN-ENDED QUESTIONS BY PARENTS

1. What do you like most about the double shift?

The older children can work at a part-time job and still get home before it gets too late.

I am glad the school is not so crowded.

I like the double shift because it helps a working mother who has girls or high school children to help at home. Also, we have a small boy and I don't have to have a babysitter.

2. What do you like least about the double shift?

Lack of individual help when needed at school.

. . . no beautiful memories to look back on.

Transportation when two children are on different shift. Public transportation is poor and overcrowded. Private transportation is expensive (second auto, license, taxes, insurance rates, and gas).

I believe it provides too much free time for some students to get into mischief because they have too much energy and no means to channel it into something constructive.

The only thing I don't like is the children having to go to school and come home when it is almost dark out.

Having three different time schedules for my family. One in grade school, one at middle school and one in high school, and one ending at 5:30.

3. What changes if any, could be made to improve the double shirt schedule?

Build a new school plus bring Springfield up to bare standard. It's pathetic.

Pass a bond issue and build another high school is my only suggestion.

I think having school year round would be better than the double shift. I can't see how you could make the double shift schedule improve... in any-way. It's a dumb shift.

I frankly do not like anything about it. Neither do I care for any more taxation in the respect than we already have.

Believe churches could be utilized such as they use different buildings on campuses. Even hiring buses to transport would be cheaper than building.



suggested the adoption of a year-round school concept, while others chose to ignore the problem of overcrowding and indicated a desire to return to the traditional one shift schedule. Several people favored the use of temporary classroom spaces that could be leased or rented.

## Student attitudes and opinions.

A 16 item forced choice and open-ended questionnaire was administered to a sample of 300 students who were selected by a stratified random sampling procedure from the four grade levels of each of the three high schools. The same response format used in the parent questionnaire was employed with the students. The results of the student questionnaire are found in Tables 3 and 4. A copy of the instrument is contained in the Appendix.

The general feeling of the students with respect to the double shift is quite positive in nature, and even more favorable than the attitudes and opinions expressed by parents. Students view the detrimental effects of split shift scheduling to be rather insignificant. A majority of students (62%) admit that there is less upperclassmen - underclassmen communication but deny that the double shift has lowered student morale (33%).

They do not think that transportation problems have been created (75%) nor that meetings with their counselors have been difficult to arrange. Half the students surveyed reported that their parents liked split shifts and a much greater number (82%) indicated that they liked it as well. Because of such an overwhelming student response in favor of two shift scheduling it was not surprising that 89% of those reporting were opposed to replacing it with some type of year-round school.



Reasons for likes and dislikes of double shift scheduling were reported on the open-ended portion of the questionnaire. Students from all grade levels reported that classes were smaller and the schools were much less crowded and less hazardous than before. They also felt that they received more individual teacher attention than would otherwise have been possible under traditional scheduling. Upperclassmen liked the long afternoons which allowed many of them to assume part-time employment. Younger students, who attended the afternoon session, liked sleeping late in the morning.

A frequently expressed dislike was the early rising hour for upperclassmen and late school dismissal by underclassmen. Students from all grade levels disliked the lack of communication between students attending the different shifts. Some students indicated that school spirit had been dampened, transportation problems created and difficulties encountered in scheduling counseling sessions.

Some suggested changes for improving the double shift were (a) to build more schools, (b) allow students to select the shift they wish to attend, and (c) to integrate all grade levels for at least a part of the school day. The most frequently appearing response, however, was to leave the double shift unchanged. Despite its faults, students felt that any alternative to the double shift, short of a new high school, would be unacceptable at this time.



Table 3

REPLIES TO QUESTIONNAIRE BY STUDENTS

	Question		Per ce	nt Answe	ring
			A	U	D
				2.2	o
1.	The double shift schedule has improved		59	33	8 <b>13</b>
	building safety conditions.	SHS	55	32	
		SSE	67	27	7
		Entire Group	60	30	10
2.	In general, I like the double shift.	LHS	79	3	18
		SHS	78	8	15
		SSE	88	6	7
		Entire Group	82	4	13
3.	The double shift schedule has created	LHS	20	4	76
•	transportation problems.	SHS	17	7	77
	transportation prosecution.	SSE	11	8	69
		Entire Group	16	6	75
4.	I would prefer some type of year round	l LHS	10	6	84
_•	school program to the existing double	SHS	17	11	81
	shift.	SSE	3	8	89
		Entire Group	7	8	85
5.	Upperclassmen and underclassmen do	not LHS	70	12	18
	communicate much under the double sh		54	25	21
		SSE	62	18	20
		Entire Group	62	18	20
6.	It is difficult to arrange meetings with	LHS	19	23	58
·	the counselor under the double shift.	SHS	18	19	63
		SSE	18	16	67
	्र । <b>र</b> ू	Entire Group	18	19	63



Table 3 cont'd

	Question		Per ce	nt Answe	ring
			A	U	D
7.	The double shift has lowered student	LHS	26	33	43
	morale.	SHS	30	29	41
		SSE	24	23	53
		Entire Group	27	28	46
8.	If it weren't for the double shift I would		24	38	38
	without a job.	SHS	30	35	35
		SSE	29	33	38
		Entire Group	27	36	37
9.	School seems to be less important	LHS	22	13	65
	under the double shift scheduling.	SHS	18	19	63
		SSE	23	13	57
		Entire Group	21	16	64
10.	The athletic program is better under	LHS	30	46	24
	the double shift.	SHS	30	48	23
		SSE	39	32	29
		Entire Group	33 .	42	. 25
11.	My parents seem to like the double	LHS	49	29	28
	shift.	SHS	48	27	25
		SSE	53	25	22
		Entire Group	50	28	23
12.	Working students view school as less	LHS	23	41	37
	important than their jobs.	SHS	27	41	28
		SSE	24	34	42
		Entire Group	24	42	37
l3.	Overcrowded schools would be prefer:		40	10	50
	to operating under the double shift.	SHS	48	15	37
	•	SSE	48	8	45



### Table 4

## TYPICAL RESPONSES TO OPEN-ENDED QUESTIONS BY STUDENTS

1. What do you like most about the double shift?

Male-Southeast-Sophomore: "not having to get up at 8:00."

Female-Lanphier-Junior: "You can go to school in the morning and work in the afternoon."

Female-Sophomore-Southeast: "Not too many kids in each class."

2. What do you like least about the double shift?

Female-Lanphier-Junior: "For one thing you have to get up at 5:00 in the morning and the student usually is so tired flat he falls asleep."

Male-Southeast-Freshman: "The fact that I get home at 5:00, and that it is too dark to do anything."

Female-Southeast-Senior: "The underclassmen can be around upperclassmen so they don't have any examples to follow. There is no real school spirit."

Female-Lanphier-Sophomore: "The e's no school spirit. We're like two different schools."

Female-Springfield-Sophomore: "Transportation is bad and costly (bus fare) \$3.00 every two weeks."

Male-Lanphier-Senior: "No time to get help from instructors. I would like to ask a question - How do you get help in this school if you cannot walk through the halls?"

3. What changes, if any, could be made to improve the double shirt schedule?

Female-Springfield-Junior: "Pass a bond issue! Build more schools."

Female-Springfield-Senior: "Giving us some kind of a break after two or three classes, like about 15 minutes."

Female-Lanphier-Freshman: "Bring in more communication between upperclassmen and underclassmen which would boost school morale and enthusiasm."

Freshman-Springfield-Female: "have it so that if you are a Frosh or Sophomore you can if you want to go to school on the 1st shift."

20

Male-Lanphier-Senior: "There isn't any way to improve the double shift in my view except to abolish it and this can't be done until another school is built."



## Faculty Attitudes and Opinions

A 32 item questionnaire was developed for purposes of measuring the attitudes and opinions of teachers toward the double shift. The first 28 items were of the forced-choice type and the remaining four were open-ended questions like those found in the parent and student questionnaires.

A randomly selected sample of 150 faculty members (50 from each building) completed the faculty questionnaire. Equal numbers of males and females from each shift were selected. The results for the forced choice section of the questionnaire appear in Table 5 and the examples of typical responses to the open-ended questions are found in Table 6.

The results of the questionnaire tend to suggest that teachers' opinions and attitudes toward double shift scheduling are generally quite negative. They felt very strongly that the double shift has had detrimental effects on both their personal and professional lives and on the lives of their students. Only 12% of the 150 teachers questioned indicated a preference for the double shift over the traditional schedule. A majority of the teachers (79%) disagreed with the statement that faculty morale was higher under the double shift and only 1% of the group felt they were more effective on the double shift.

Faculty members agreed that the double shift had adversely affected the students and their relationships with students. Although a majority of the teachers acknowledged that students liked the double shift (57%), they felt that it had increased tardiness (75%), created student leadership problems (88%), inhibited interaction between upper and underclassmen (98%) and reduced student involvement in school related activities (92%).



In response to questions concerning improved achievement and a reduction in discipline problems under two shift scheduling, teachers tended to disagree that either had changed for the positive.

Relationships between students and faculty appear to have been negatively influenced (61%), and both counselors and teachers have experienced some difficulties in scheduling conferences (44% and 81%).

Concerning the effects of the double shift on the schools in general, faculty members report that patterns of enrollment in some subject areas and departments had been altered (75%), safety conditions had improved (43% agree VS 28% disagree), there had been a decline in co-curricular activity participation (81%), library and resource material usage was down (81%) and interest and pride in the schools had adversely been affected (85%).

Slightly more than half (51%) of the faculty felt that the Central Office appreciated the problems created by the double shift but only a small minority (13%) believed that the community would prefer paying for a new school over continuation of the double shift. When asked about their preference for a year-round type program over that of the double shift, 38% of the teachers were for it, 27% undecided and 35% were opposed.

Some typical answers to each of the four open-ended questions are found in Table 6. Faculty responses to the question concerning those things they liked about the double shift indicated that since its implementation the buildings were less crowded, classes were smaller and there seemed to be less confusion. Some faculty indicated that the double shift provided more time for themselves and their families, extra time which they could spend in lesson preparation, leisure or to maintain a second job.



Faculty members expressed more dislikes than likes for the double shift. Those areas most seriously affected were "school spirit", lack of positive influence by apperclassmen on younger students, and reduced participation in extra-curricular activities. Included among these should also be increased discipline problems, about which many mambers of the various faculties expressed their deep concerns.

Tardiness, and absenteeism were problems to those teachers conducting classes during the first and last hours of the school day. They tended to feel that these classes are either too early or too late in the day to be conducive to quality teaching or learning.

The majority of the faculty members answering question on ways to improve the double shift responded by simply stating that it should be eleminated. Some teachers felt that the high schools could be operated more effectively on the traditional schedule despite the problems of overcrowding.

A commonly expressed opinion on the improvement of the split schedule, provided it had to be continued, favored the integration of upperclassmen and underclassmen in the two shifts. The rationale for this was that underclassmen suffer from the lack of communication with older students.

Some of the alternative to the double shift to be offered by the faculties were adoption of some type of year-round schedule, a new southwest high school and the development and implementation of modular scheduling.



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Table 5 REPLIES TO QUESTIONNAIRE BY FACULTY

	Questic	Per ce	nt Ansv	vering
		A	U	D
1.	The double shift has had a negative effect on student-teacher rapport.	61	16	23
2.	The double shift has a discustive effect on my family life.	<b>4</b> 5	12	43
3.	I would prefer to work on a double shift schedule.	12	18	74
4.	The double shift has affected patterns of enrollment in some subject areas and departments.	75	22	3
5.	The double shift schedule provides for improved building safety conditions.	43	28	28
6.	Faculty morale is higher under the double shift.	2	19	79
7.	There are fewer classroom discipline problems under the double shift schedule.	8	25	67
8.	In general students like the double shift	57	25	17
9.	Tardiness is a greater problem under the double shift schedule.	75	14	11
10.	Inter-faculty communication is somewhat inhibited due to the double shift schedule.	95	3	2-
ll.	I am a more effective teacher, principal, or counselor under the double shift than under the traditional schedule.	1	23	75
12.	Students generally tend to view school as a part time endeavor under the double shift schedule.	88	7	3
13.	Working students view school as less important than their jobs.	85	9	6
14.	Communication between upperclassmen and underclassme has been inhibited due to the double shift.	n 98	1	1
15.	The double shift has created student leadership problems.	88	9	3
<u>.</u> 6.	More students attend school social functions under the double shift.	0	24	76

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	rabio 5 done d	Α	<b>U</b> _	_D
17.	Student ach ent is greater under the double shift.	2	31	67
18.	The double has reduced the extent to which counselors work with some ints.	44	42	14
19.	Student in state of the state o	92	7	1
20.	The double are allows for more individualized instruction.	9	13	79
21.	I prefer wo under the double shift than a traditional shift.	12	12	76
22.	I think the some unity would prefer the double shift over paying for a high school.	60	27	13
23.	The Central Rice administrators do not fully appreciate the problems Reated by the double shift.	51	42	6
24.	Student-teacher conferences have been more difficult to schedule under the double shift.	81	8	11
25.	There has been a decline in co-curricular activity participation under the double shift.	81	17	1
26.	Library and resource center usage has been adversely affected by the double shift.	57	35	8
27.	Interest and pride in the schools have been affected by the double shift.	85	9	5
28.	I would prefer some type of year round program to the existing dou_ shift.	38	27	35



#### Table 6

## TYPICAL RESPONSES TO OPEN-ENDED QUESTIONS BY FACULTY

1. What do you like most about the double shift?

Lanphier-Male: "The school day is less chaotic due to fewer students here at any one time."

Southeast-Female: "I like getting started early then I have part of the afternoon to work at home. I would not want to be on the afternoon shift. If I were, I wouldn't like the double shift."

Southeast-Male: "I am on the second shift, and I enjoy sleeping late. 10:00 to 5:00 is a desirable shift for me."

Springfield-Male: "It gives me the opportunity to work a second job."

2. What do you like least about the double shift?

Southeast-Male: "Getting out at 5:00 when it's cold, dark and icy."

Lanphier-Male: "It hinders individual conferences and instruction."

Southeast-Female: "I believe if all four classes were together, it would help activity programs and I do believe these immature freshmen and sophomores could be helped by upperclassmen. Seniors are more mature and maybe some of it would rub off and help these lower classmen."

Southeast-Male: "Freshmen and sophomores are harder to control with the upperclassmen not in school."

Lanphier-Male: "... 7:25 class has severe tardiness and even cutting problems."

Springfield-Female: "By the end of the day my students and I are both too tired to be really alert or in the frame of mind to study."

3. What changes, if any, should be made to improve the double shift?

Southeast-Female: "The only alternative is to get rid of it."

Southeast-Male: "I think that at Southeast we are capable of running a "normal or regular school day" beginning at 8:30 and ending at 3:15."



#### Table 6 cont'd

Springfield-Female: "Division of upperclassmen and lower - if we must have the double shift let's have  $\frac{1}{2}$  of 9 through 12 in both morning and afternoon sessions. I think many better things might result."

4. What alternatives to the double shift would you suggest?

> Springfield-Female: "twelve month school - Students and faculty electing the three months vacation they wish. "

Springfield-Female: "Of course, the ideal situation would be a southwest high school. Until then, not much you could change. "

Southeast-Female: "The initiation of modular scheduling would remedy many of the problems with overcrowding and scheduling of classes.

Springfield-Male: "Try the year round schedule of 45 days in class 15 days out. "

## Academic Program

## Grade Point Averages

Educational researchers have argued, and convincingly so, that the grade point average (GPA) is a poor research and evaluation criterion.

GPAs are fraught with subjectivity, bias, and inconsistencies all of which combine to make them somewhat invalid indicators of academic success.

Despite the flaws associated with the GPA as a criterion measure, however, when used in conjuction with other indicators of academic achievement and when some controls have been applied (same schools and most of the same teachers), it can be an acceptable measure general of group achievement.

A Springfield assistant principal (Bretsch, 1971) undertook a study of differences in GPAs for two successive years, - the year just prior to double shift and the first year on two shift scheduling. Bretsch tested the statistical hypothesis that there would be no difference between mean GPAs for the two academic years, (Ho:  $\overline{X}_1 - \overline{X}_2 = 0$ ). Since he was interested only in testing whether the pre double shift mean was higher than the post double shift mean, a single alternative hypothesis was formulated (H<sub>1</sub>:  $X_1 > X_2$ ).

Table 7 below shows the results of the study.

Table 7

Means, Standard Deviations and Test of Significance of Differences
Between 1968-'69 and 1969-'70 GPA s for the
Three Springfield Public High Schools

11 1	ree phi mariem	45110 111611 <u>20</u>		
School Year	N	M	SD	t
1968-'69	29,883	3.092	1.19	13.8
1969-170	31,235	3.224	1.17	

Although the means were different, the difference was not in the hypothesized direction and therefore the null hypothesis of no difference could not be rejected.

Not only were the detrimental effects unsupported but in fact it appeared that GPA's were higher under split sessions. Further research with better controls of pertinent variables is obviously needed to establish the relationship between double shift scheduling and teacher grades.

## Standardized Test Results

Standardized achievement test results are frequently used as criterion measures in the evaluation of educational programs and would have been used extensively in the present study but for the limitations of the Springfield testing program. Although District #186 has had a testing program for over a decade, it has often been changed and has not covered all grades every year. At the high school level the testing program has been particularly weak, with only one grade level given an entire achievement battery (grade 9). This class has been tested only for the past two years while prior to that time 10th graders took the achievement tests. Due to these deficiencies in the testing program, comparisons involving standardized test scores were impossible to perform. The data were simply not available.

An occasional classroom teacher will use the same subject matter standardized test year after year to compare his/her group to a national norming population. A check into the availability of such test results revealed that most teachers dispose of their test results at the end of the school year. An exception was a physics teacher at one of the high schools



He has administered the same standardized physics test on a biannual basis for the past 6 to 8 years and has kept all the scores for this period. In the present study, the combined scores for the years 1965-and 1967 were compared to those for the double shift years of 1969 and 1971.

The standardized test used was the Cooperative Science Test - Physics Form A - published by the Educational Testing Service.

A t-test for differences between the mean scores for the pre and post double shift years was used to test the research hypothesis that the pre double shift mean (1965-67) would be greater than the post double shift (1969-71) r can. A .05 level of significance was used. Table 8 below shows the results of the analysis.

Table 8

Test of Significance for the Difference Between Mean Scores on the ETS Physics Test for the Years 1965-67 and 1969-71

	1965-67			1969-71	•	•	
n	X	SD	n ·	X	SD	Diff.	.t
204	66	13.57	140	63.5	14.09	2.5	1.65

<sup>\*</sup>p.<.05

These results support the hypothesis that physics achievement was higher for the pre double shift years of 1965-67 than for the years after implementation of double shift (1969-71).

Certainly these results must be interpreted with great care. The data represent a single subject matter area and classes taught by a single teacher. The results do, however, conflict with the GPA data presented



earlier that indicated, at best, that the double shift has had no effects on academic achievement.

### Subjective Reports

The only other information available on the achievement affects of double shift scheduling came from the subjective questionnaire instruments administered to parents and faculty. Parents were undecided about the implications of split shifts on achievement. Less than one fourth (23%) of the parents agreed that achievement was higher under the double shift, 28% disagreed that achievement was higher and 45% were undecidedeither way.

The faculty had stronger opinions of the effects on achievement of two shift scheduling. Only 2% of the teachers sampled thought achievement was higher under the double shift, 31% were undecided and 67% disagreed with the statement that achievement was up from pre double shift years.

These results, although quite subjective in nature, are significant in the sense that while most faculty members were convinced of the detrimental effects of the double shift on academic achievement, nearly half of the parents were unsure.

## Non-Academic Program

## Student Activities - Clubs

Data on the effects of split shifts on student activities were obtained through questions on the faculty and parent instruments and through a survey of faculty club sponsors. The question presented to parents was stated "The double shift has sharply curtailed participation in extra-



curricular activities". Twenty-six percent of the parents agreed,

16% were undecided and 50% disagreed with the statement. A differently

worded item of the faculty questionnaire stated "There has been a decline

in co-curricular activities participation under the double shift". To this

statement 81% of the faculty agreed, 17% were undecided and only 1% disagreed.

The survey conducted of club sponsors was unstructured in nature.

These faculty members were merely requested to indicate in writing

the effects of the split shift on their own extra or co-curricular programs.

Following are some unedited sample responses:

Yearbook. I have about 35 on the yearbook staff this year. The number is approximately the same. That is not the number one problem - section editors are upperclassmen and there is not time for them to work with the underclassmen except at noon - 12:00-12:30 and that isn't enough time. When we worked at 3:15 - all could work until 4:30 - 5:00, etc. Now at 12:30, when their work is just underway - underclassmen must go to class - even if they come early in the AM, the editors are in class. Yearbook can't be learned in a year- we use underclassmen to "teach the trade" and then they are ready for top editor duties by the time they are juniors or seniors.

The upperclassmen do a terrific job of supervising duties, etc., and when there is no time for the underclassmen to work with them it makes it hard on all concerned.

We have problems taking pictures - team pictures - Frosh. and Soph. have to be taken by class.

Math Club. Membership approximately 25. Attendance at noon hour meetings approximately 10. No satisfactory time to meet as a result of split shift. In the past our membership was approximately the same but attendance was approximately 20.

Drama Club. Average enrollment during two years when straight shift was in effect - 60. Enrollment for 1969-70 60, approximate enrollment to date - 100.

G.A.A. The Girls Athletic Association must meet at night rather than after school. Freshmen and sophmores do not come back for a 7:00 P.M. activity when they don't get home from school till 6:00P.M.



The enrollment in GAA during the 1967-68 school year was 96, 1969-70 was 59, and 1970-71 was 63.

Key Club. The membership in Key Club has remained fairly constant. This is due to the desire to keep the club at a fairly constant number and not to outside factors the number is approximately 30. The type of member has changed however. We are now only attracting the top students and not those of average ability.

Vocal Music. Our a capella choir now has 46 in it. It used to run between 70 and 80. The older students are hurrying to get out of school in some cases. In other situations, students seek jobs as soon as they are old enough. We feel this "squeeze" in the sophomore group and it gets worse in the older groups.

Future Secretaries. It has been difficult to hold meetings at 12:30 P.M. because most of the students in this organization have jobs. This group consists mainly of juniors and seniors.

Instrumental Music. From talking to faculty I find that band membership has been cut about 40%. The functions of the band are greatly limited due to present members who have outside jobs they might not ordinarily have and then not being able to place their loyalities to the school rather than the job.

Intramurals. The intramural directors feel that the double shift has caused fewer people to participate because juniors and seniors have jobs in the afternoon, and the freshmen and sophomores get home too late to come back at night.

These reports seem to indicate that while a few clubs and extra curricular program have been unaffected by the double shift, the majority have not. The numbers of participants were generally down, meetings were difficult to schedule, and the scope of activities have had to be reduced significantly in many instances.

#### Athletic Program

The effects of two shift scheduling on the athletic program are extremely difficult to accurately determine. Changes in coaching staffs,



in the ability levels of athletes, and in competition occur every year and so it is nearly impossible to pinpoint exact reasons why or why not an interscholastic athletic program is successful. Therefore, we were once again required to rely upon subjective opinion type data of questionable validity.

Following are two narrative reports on how coaches view effects of the double shift on the athletic programs:

Most of the coaches feel that the double shift has been detrimental to the athletic program. Some students who would normally take part in athletics get a job. The students, in most cases, are able to go to work at 12:30 and work for several hours in the afternoon. Practice for varsity athletics does not begin until 4:00 P.M., so most people have three or four hours before practice starts.

The coaches all agree that the split shift has caused difficulty, not in numbers participating so much as in schedules for the student athlete, availability of practice areas and the length of day.

The schedule problem is peculiar to the freshmen and sophomore boys. An attempt has been made to force their physical education class so that it falls either the tenth or the fifth period, thus enabling the boy who participates in athletics to begin his practice early. Conflicts arise when the coach directing the activity is scheduled for a class at a time when his athletes are free to practice. We often must cover for the coach whose traveling team leaves before his teaching assignment is completed.

Other conflicts arise over use of the athletic field and the basketball court. Physical education classes are scheduled in the area where football and basketball practice sessions are being held for varsity athletics. Junior varsity basketball cannot begin until 5:00 P.M. because the gym is used for physical education teaching stations.

Another difficulty has been the length of the school day not only for the athletes but also the coach who teaches a 7:30 class and must remain until long after the usual dinner hour to complete his coaching assignment. (One can argue that reimbursement is given for these activities, but it scarcely compensates for a fourteen hour day). The freshman and sophomore boy begins his day at 11:00 or 12:30 but does not return home until 8:00 P.M. at the earliest, thus interrupting family activities. This alone



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has caused more criticism from parents than any other one feature of the double shift.

It is the contention of our coaching staff that we have missed getting some good athletic prospects whose families, transferred into the area, have elected to live in one of the surrounding school communities (Chatham and Rochester specifically) where schools run a full day for everyone.

### Guidance and Counseling Program

Students and faculty differ as to the perceived effects of split shifts on the counseling program. Both groups were asked about difficulties encountered in arranging meetings between students and counselors.

Nearly two-thirds of all students sampled (63%) disagreed that meetings hard to schedule as compared to 18% who agreed and 19% who were undecided. In contrast to these figures were those of the faculty of whom 11% disagreed that the double shift had reduced counselor-student interaction, 44% who agreed and 42% who were unsure.

A survey of the high school counseling departments revealed the following information:

The double shift of students has caused problems in the organization of conference time for students and their counselor. Since students attend five hours of class, in a class period meeting a minimum length of time, teachers and students hesitate to request a conference with the counselor while the class is in session.

With classes beginning at 7:25 juniors and seniors experience difficulty in scheduling a pre-school meeting. The freshmen and sophomores have a problem, especially in the winter months, when meeting after 5:00 P.M.

It is the opinion of our counseling staff that the splitshift has a very adverse effect upon counseling.

- 1. The early starting time for school (7:30 A.M.) has caused attendance problems that involve counselors in situations that might have, with a later starting time, been avoided.
- 2. Students are unable to see their counselor as often as they wish.



- a. No study periods.
- b. Some students hesitate about requesting permission from a teacher to go to their counselor.
- c. Some teachers resent student leaving class to see counselor.
- d. Many students work in the afternoons which means they cannot stay after school.
- e. Students who come in afternoon cannot see their counselor early because of transportation problems.
- 3. Almost impossible to conduct any group counseling
- 4. Contact with teachers very difficult because of different times arriving and leaving.
  - 5. Jobs become more important than school.

## Library

The double shift has brought about changes in all of the high school libraries, some reportedly beneficial and others detrimental to the programs. High school librarians were requested to provide written reports on how they perceived the effects of split shift scheduling on library usage. Following are these reports:

More students were available to serve as library assistants during the single shift extended day. We usually had enough volunteers at the beginning of the year for two students each period of the day. With the double shift it is necessary to recruit assistants. We have had only one each period most of the time. It is difficult to get assistants for periods 1, 2 3, 8, 9, and 10.

1968-1969	14 members	(7 periods)
1969-1970	13 members	(10 periods)
1970-1971	ll members	(10 periods)

During the 1967-68 school year the library was used for a study hall and some driver education classes. This was poor utilization of this area but there seemed to be no alternative.

When the school went to the double shift schedule the library became available every period of the day and for a longer time during the day.

There are no figures to show that the library is being used more or less because of the double shift. Usage figures are being kept this year but have not been in the past.



studies in use the library on an individual basis. This has meant a considerable decrease in the total number of students using the library. Because of this, however, we feel that more teacher are bringing more of their classes to the library to work, and this has meant a more profitable use of the library by both attudents and teachers. (The teacher, as well as the librarian, is available for consultation.) In addition, the foreign language department has initiated this year an independent study program whereby students frequently come to the library to do research instead of going to class. An average of about 20 students come to the library each day under this program, and it seems to be working well.

#### Discipline and Attendance

#### Discipline

In the development of this evaluation study the committee attempted to select as many evaluative criteria as might be pertinent to the establishment of the important implications of the double shift. One of the foremost concerns expressed by members of the committee was whether any changes ir student behavior (discipline) had occurred since the implementation of two shift scheduling. Objective data on discipline were not available, but a written discussion by an assistant principal provides some interesting and thought-provoking insights into changes in student behavior he has seen over the past few years. The person who wrote the following report is the district's only assistant principal to have served in that capacity under both traditional and double shift scheduling and is, therefore, the most qualified individual to discuss the topic of discipline.

Mr. has mentioned that your Committee has asked for some evaluation of discipline on the so-called "double shift".

Needless to say, some identification of the word which has many meanings and conotations to many different people is probably necessary as well as determination of



what types of behavior should be included, i.e. truancy, tardiness, vandalism, parking problems, stealing and off-the-school campus problems are all a part of this complex area.

Without going into the many phiosophies of behavior here is the way I would evaluate the situation with a few comments listed:

- 1. Behavior within the classroom. I see very little change in this area if rated from the number of students referred to the office for behavior problems or from observation of classroom teaching in action. Several things might be mentioned that have relation to this area:
  - A. A more premissive attitude on the part of society. Students who did not have pencil or paper or complete an assignment used to be a "discipline" problem.
  - B. Addition of more personnel in this area to work with problem students-another assistant principal, a head counselor, special education classes for mentally handicapped, etc.
  - C. Several things might also be mentioned at this time:
    - (1) Students are more inclined to argue back with the teacher who is correcting them than ever before. This sometimes creates much more difficult problems when they do occur.
    - (2) Under the double shift, it is difficult for teacher and student to get together to solve a common problem, be it behavior, make-up work, discussion of a grade, etc.
- 2. Behavior outside the classroom This is where we see the big change in student behavior and, to a large degree, it has been brought on by the double shift.
  - A. Large number of students in and around the building for long periods of time not assigned to any class or under direct supervision.
  - B. Stealing has increased due to locker sharing free time for this type of activity with many people coming and coing throughout the building making supervision almost impossible.
  - C. Tardiness has increased, particularly early in the morning at 7:30 a.m. class

- D. Truancy has increased, particularly so in cutting a single class or two situation. With four eating places within a short distance from the school there is a definite attraction and strict and immediate student accountability is almost impossible (a student outside the classroom prior to the double shift was challenged immediately). In the area of truancy, students who have working parents have homes available to them both in the morning and afternoon, making truancy more possible.
- E. Vandalism has increased and the double shift is directly responsible. (Idle hands are the devil's plaything). A good example while not vandalism as such, would be in places where students stand or sit for several hours before class time -- morter has been slowly picked out from between bricks. The students probably do not even realize they are doing this as such unless it is called to their attention.
- F. Trespass and destruction of property on private property off campus area is perhaps the number one unsolvable problem and one directly attributed to the double shift. The people owning property in the vicinity of the school either call or come over to school and express their strong indignation at the trepass on their property. This is a strongly worded and almost daily occurrance. The potential one thousand students outside the building in the morning and again in the afternoon with no supervision can and is creating many problems.

In closing, we feel that there is a deterioration in the attitude of the younger students. They have had little contact with the older, more mature student who can set for them an example of good school citizenship. They also have less time to identify themselves with the academic and social aspects of the school.

#### Attendance

The double shift has obviously upset preestablished patterns of school attendance among high school students. The school day to which they had become accustomed has been drastically changed. For many students school is no longer the focal point of interest and pleasure. Large numbers of students hold down part-time as well as full-time jobs and others find outside activities to consume their spare time. Whether



the changes that occurred with the adoption of two shift scheduling had any effects upon school attendance was a concern of interest to the evaluation committee. In order to determine what, if any, changes in attendance had occurred, records for two academic year prior to the double shift and for the past two years were inspected and absentee percentages per month were calculated for the four academic years 1966-67, 1967-68, 1969-70 and 1970-71. The graphs on the following pages show the variations in absenteeism for each of the three high schools for the four academic years.

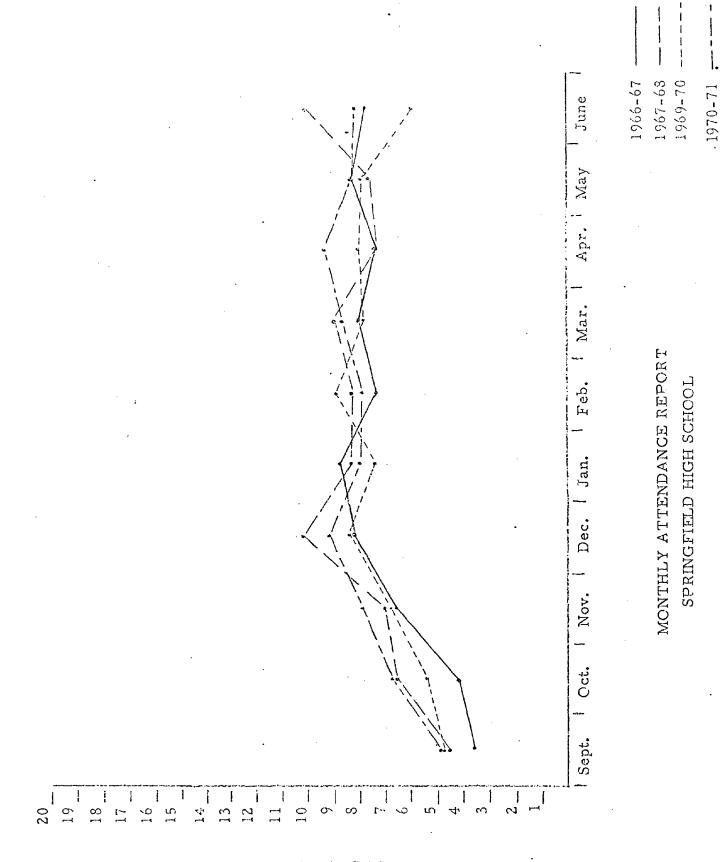
The Springfield High School results do not reveal any meaningful differences in absentee rates over the four year for which data were collected. The lines of the graph are quite close together and no single year appears to be systematically different from the others.

At Springfield Southeast High School absenteeism was clearly higher for the post double shift years than for the 1966-69 and 1967-68 pre double shift era. The 1970-71 absence rate was highest among all years for six of the 10 months students were in attendance. The other double shift year (1969-70) was either highest or second highest in absenteeism for the same number of months (6 of 10).

The Lanphier graph most dramatically illustrates changes in attendance patterns over the years just preceding and following implementation of the split shifts. With a single exception, absenteeism was higher for all months of attendance during the post double shift years of 1969-70 and 1970-71 than for the pre double shift years (1966-67 and 1967-68).

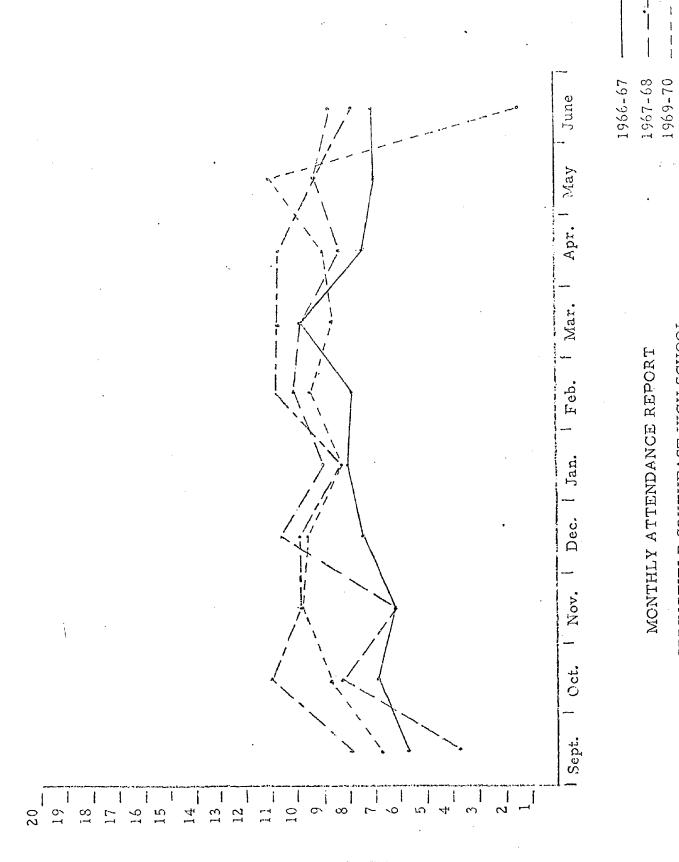


4.5



PERCENT ABSENT

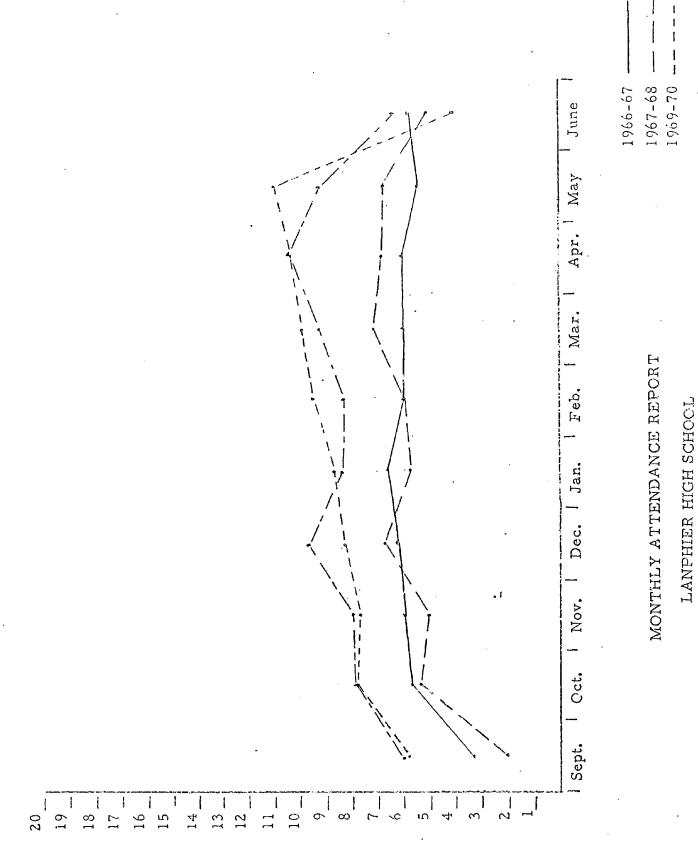




SPRINGFIELD SOUTHEAST HIGH SCHOOL MONTHLY ATTENDANCE REPORT

1970-71

PERCENT ABSENT



1970-71

PERCENT ABSENT

Although a direct casual relationship should not be assumed, a logical interpretation of the data would be that the double shift has been a contributory factor in increased absenteeism in the past two years.

## Effects on the Community

Two community agencies officials were contacted for purposes of determining the effects of the double shift on their particular areas of responsibility. The director of the State Employment Services and the acting chief of police were asked whether they perceived any chain the local employment picture or in law enforcement as a direct result of the double shift.

#### Employment

The director of the Illinois State Employment Service felt that, if anything, the double shift has had a positive effect on employment in Springfield. He indicated that there were many more students on the job market, but that they were not directly competing for jobs with unemployed adults. Students, he said, were primarily filling part-time slots and took low paying service type jobs that most adults shun. He also stated that engloyers were quite pleased that there was a pool of people who would take the more undesirable or part-time jobs for the minimum wage.

#### Law Enforcement

The implications of the double shift on law enforcement are not easily determined according to the acting chief of police (at this time of the survey). He was rable to discern any noticeable changes in applations of the law that might be attributable to the double shift scheduling procedure.



The chief did reveal that crime had increased over the past several years, but the rate of increase was no greater in the post double shift years than it had been for several years preceeding two shift scheduling.

## North Central Association Evaluations

All information reported to this point has been obtained within the community of Springfield, and mostly from people directly associated with the schools. Except for the two community agency officials, all sources of information on double shift effects were school faculty members, students and parents of students. Naturally, these were the people who would have the best inside view of the implications of double shift scheduling but one must recognize that their "closeness" to the problem under investigation could result in biased opinions, distorted perceptions, and emotional reactions which could affect the validity of the study.

A cross check on some of the information obtained from within the district, was accomplished by reviewing the North Central Association evaluation reports on Springfield High School and Springfield Southeast High School. The North Central evaluations, which are conducted every seventh—year, are in-depth analyses of a high school's many educational programs. The product of a North Central study is an evaluation report, written by the visitation committee, which do cribes strengths and weaknesses and contains recommendations for improvements.

Springfield Southeast North Central Evaluation

The Springfield Southeast North Central evaluation was conducted on November 30 and December 1st and 2nd, 1970 by a visitation team



composed of 26 members. At the time of the study, double shift scheduling had been underway for one and one half academic years.

Following are some of the comments made by visiting evaluators about the particular programs they were responsible for investigating.

Guidance Services: The necessity of split shift school organization results in an inaccessability of the counselors to the students and adds to the non-guidance functions of the counselor. Many quasi-administrative functions are now assummed by counselors district wide.

Mathmatics: There is a very small enrollment in the courses offered at 10th, 11th and 12th grade levels. This is doubtless due, in part, to the split shift, which limits the program possibilities for upper level students.

Since it is difficult for juniors and seniors to take many electives under the split shift schedule, consideration should be given to allowing good students to study a course like statistics and probability on an independent basis.

Music: Reinstating the single shift, 8 period day would definitely increase the enrollment of the music classes. "Work oriented" students who are encouraged by the double shift would be required to remain in school and take advantage of music course which would increase their cultural environment. If the double shift is not terminated it is recommended that a re-scheduling in the vocal area would be beneficial in order to change the a cappella choir rehearsal from 7:30 in the morning to a period later in the day which would be more conducive to good singing and learning and perhaps alleviate some of the "tired feeling" and apathy the students seem to feel at that time.

Science: The nature of the split shift schedule greatly restricts individual participation in science activities and student-teacher conference time outside the regularly scheduled class time.

Social Studies: The visitation committee agrees that many of the objectives of a good social studies program have been substantially met, and that the staff continues to work toward the excellence they wish to achieve. Some opportunity for students to participate in out of class program is provided, but this is complicated by a split shift school day.



In the conclusion section of the report the chairman of the evaluation committee stated that "Efforts should be made to have a full day of school for the students. The visiting team found the split shift unacceptable in this situation."

## Springfield High School North Central Evaluation

The North Central Evaluation committee visited Springfield High School on April 20-23, 1971 nearly two full years after implementation of double shift scheduling. The 26 member visitation team had some very definite attitudes, concerns and recommendations relative to the double shift. Some of their comments follow:

Business: Coupled with mid-year graduation, the split shift has had a serious effect on second semester enrollments in such terminal course as transcription, office practice and office occupations.

The split shift has caused many hardships on the attempt to maintain the high quality of instruction in this department.

Mathmatics: Due to the double shift and tight class scheduling there is insufficient time for staff and committee meetings.

Music: The split shift program seems to have had a negative influence on student participation, but quality programs yet exist in this discipline of the fine arts. It seems evident that continued split shift scheduling can only depreciate the quality of music at Springfield High School.

Physical Education: The double shift has further limited the physical education activities by reducing the number of available stations during a part of the school day when athletic teams are practicing. Students who are not scheduled for classes because of the double shift often loiter in the physical education area. This impedes proper use of the already limited facility and can be a health and safety hazard.



Social Studies: The staff's spirit of cooperation and their desire for excellence in the instructional program is commendable under what are crowded classroom conditions. The equally severe limitations imposed by the size of student population and the necessity of the split shift scheduling make effective instruction most difficult.

Student Activities: Job opportunities, created by the split shift, entices many qualified students away from school activities. In the area of student activities there is still a sincere attempt being made to retain the offerings as it existed under the program of a normal school day. With the split shift, problems are almost insurmountable to the point of developing a feeling of "is it really worth the effort and the dividends great enough of carry on."

Guidance Services: Before the double shift students found the counseling center more readily accessible because everyone had at least one study hall.

School Facilities: Teachers have stated repeatedly on evaluation forms that the double session is seriously affecting their effectiveness as teachers and the quality of the educational program. In many cases, teachers do not have facilities to prepare instructional materials which would improve instruction.

The students are being denied school learning experiences and relationships with other young people which can never be replaced -- one lives his high school years only once.

No department of the school, with the possible exception of Special Education, is able to provide in the present building (s) and with double sessions the kind of secondary program the students deserve.

School Staff and Administration: Adverse effects may result from limited opportunities for communication between teachers and between teachers and administrators when operating with double sessions. Meetings of the entire faculty are infrequent. The work lo d of administrators is increased under double sessions. The work day of administrators is increased to cover both sessions.

The Chairman's concluding remarks sum up quite well the opinions and attitudes held by other members of the visitation team toward split shift scheduling.

Although it operates efficiently only through the will of the staff, the double shift schedule is having an incisive effect upon Springfield High School students. It is true the minimum academic needs of students are be being met, but educators have long recognized that a good high school education demands more than just required academic subjects. By spending a limited number of hours per day at school, students tend to accept part-time employment which provides the lure of immediate financial gain and work becomes more important than education. Such areas as the fine arts, extracurricular activities and added study hours are relegated to secondary importance as is now becoming evident at Springfield High School.

The North Central results were unquestionably critical of the double shift. The committees seemed to recognize the need for split shifts but were very conscious of the negative implications on students and faculty alike and unanimously recommended reverting to a traditional type schedule when conditions permit. Until that time, however, they foresee a decline in the quality of education in Springfield's high schools.

#### SUMMARY

The subjective nature of most of the information reported herein prohibits an interpretation of results in precise and absolute terms but in general it may be concluded that the effects of the double shift have been negative.

Some differences of opinion exist between students, faculty, and parents on the extent to which problems have been created by double sessions. Students generally have quite positive attitudes toward two



shift scheduling and their parents see it as having both good and bad features but school people are extremely critical of the double shift and see as its only virtue, the relieving of overcrowded conditions.

The effects of split shifts on academic achievement is as yet undetermined. A study of grade point averages (GPAs) for the year preceeding and the st year on double shift scheduling found GPAs higher for the post double shift grading period. However, a comparison of mean scores on a standardized physics test revealed a significantly higher mean score for the pre split shift groups. Further research in the area of academic achievement definitely is needed.

The non-academic programs in the three high schools have all felt the effects of split shifts. Extra-curricular programs have been hard hit, with attendance down and interest at a low ebb. The athletic program has suffered because of time and space limitations created by double sessions. Counseling and guidance services have been more difficult to provide because of the elimination of study halls and because students are not in the buildings except at class time.

The report on discipline would tend to support the notion that more student behavioral problems are encountered since the inception of the double shift but other factors are also felt to contribute to this increase. An analysis of attendance for a four year period immediately prior to and immediately following split shift scheduling showed that absenteeism was up for two double shift years over the two years that preceded split shift scheduling.



The double shift has created a labor pool of students that has reportedly benefitted the community by releasing to the job market individuals who will take low pay, part-time service positions which are generally refused by unemployed adults.

Local law enforcement has been largely unaffected by the change in scheduling procedures, even though admittedly, crime is on the increase in the city. The acting chief suggested that there are other more plausible reasons for the rise in legal offenses by teenagers.

The reports of the North Central evaluation visitation teams were extremely critical of the double shift. In only three days of intensive study North Central evaluators were able to discern many adverse consequences of two shift scheduling. A very thought provoking opinion was expressed by one of the North Central evaluators upon completion of his task.

It is very difficult to comprehend why School District No. 186 which has the resources and the bonding power to provide critically needed school building facilities, has not met the obligation to its young people as most other cities in the state. Surely, there must be enough voters capable of understanding they are not getting full return from their investment in teacher time to assure a successful bond referendum in October, 1971.

#### CONCLUSION

This report is the culmination of much effort on the part of a few people in District #186 who given the responsibility of conducting a comprehensive evaluation study of double shift scheduling and its implications for Springfield's three high schools. What has resulted



is hopefully an accurate and most certainly an honest report of the double shift as perceived by many people both directly and indirectly affected.

One of the evaluation committee members concluded his portion of the study with a statement that probably reflects the feelings of many educators in the Springfield School District. "In our high schools we have created a schedule to provide room for students but in doing so we have destroyed much of the spontaneity, the fun and enthusiasm for school."

#### REFERENCES

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- Myers, I.P. and Meredith, N.C. Outcomes of a large high school using the three-shift system. The Clearing House, Jan., 1963, 302-304.

APPENDIX





# SPRINGFIELD PUBLIC SCHOOLS

EARL D. PATTON, Ed. D., SUPERINTENDENT SPRINGFIELD, ILLINOIS 62704

ADMINISTRATIVE CENTER
DISTRICT NUMBER 186
1900 WEST MONROE STREET

February, 1971

Dear Parent:

We are presently engaged in an evaluation of the implications of double shift scheduling in Springfield's three high schools. For this purpose we are gathering information from many sources including teachers, students, and parents. The results of this evaluation will be presented to the school administration and the Board of Education for their consideration in determining the future direction of our high school program.

A random sample of approximately 300 parents will receive this form. You have been included in this sample. It is very important that all parents in the sample complete the questionnaire and return it promptly in the enclosed envelope. Please base your answers on your own experiences, and on the attitudes and opinions you have formed of the double shift schedule since your son or daughter has been a high school student.

If you have any questions about the evaluation or the specific questionnaire to be completed please contact me at 525-3289.

Thank you.

Respectfully,

James K. Nighswander, Ph.D. Administrative Assistant for

Research, Development and

Program Evaluation

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# DOUBLE SHIFT EVALUATION

# PARENT QUESTIONNAIRE

Number of ch	ildren attending High	School	. N
School			Soph. Jr. St.
		((	Circle One)
Sex of student	(s) M F (Circle One)	Does your child	work? Yes No (Circle One)
Number of pa	rents employed outsid		One Both
Instructions:	Please provide all of of the questionnaire.	f the above informatio	n prior to the beginning
		below carefully, and er which most correct tatement,	
	The following abbrev	iations will be used:	
	A Agree U Undecided D Disagree		
l. Transporta	ation problems have b	een created for our fa	mily by the double shift
•	A	U	D
2. As a paren	t I favor the continuat	ion of the double shift	•
	Α	. U	D
	t, I would prefer sevenift schedule.	erely overcrowded sch	nools to operating under
	А	Ū .	D .
<ol> <li>As a paren existing do</li> </ol>	t, I would prefer som uble shift.	e type of year-round :	school program to the
	Α	U	D
5. Interest and	d pride in the schools		the double shift.
	Δ	. 11	D

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5					
6.	In general, s	tudents in our fam	ily like the double sh	ift schedule.	
		А	U	р	
7.	Our family lit	fe is disrupted by	the double shift.		
		А	<b>U</b>	D	
8.	Academic ach	nievement for chile	dren in our family is	higher under the d	ouble shift
		Α	U	D	
9.	As a parent, high school.	I prefer operating	g on the double shift	over paying for a n	ew
		Α	U ,	D	
10.	The double sh	nift has sharply cu	rtailed participation	in extra-curricula	r activities
		Α	U	D	
11.	What do you	like most about th	e double shift?		
		•			
					•
. ~	#u23 . T		a sala salaideo '		
12.	What do you	like least about th	e double shit?	<b>)</b>	

13. What changes, if any, could be made to improve the double shift schedule?

# DOUBLE SHIFT EVALUATION

# STUDENT QUESTIONNAIRE

	5	School											
	(	Grade	Frosh (C	. So	oph. One)	Jr.	Sı.	Sex		Do One)	you hav	ve a job?	Yes No (Circle One
	Į	instruc	tions:		-		all of t questi			ormati	on prior	to the	
				arou	nd the	e one a		which	. most	-		raw a ci cribes y	
				The :	follow	ving al	bbrevia	tions	will be	e used:			
				U U	Agree Indeci Disagr								
	1.	The d	ouble s	hift so	chedu	le has	impro	ved bu	ilding	safety	condition	ons.	
						Α			U			D	
	2.	In ge	neral,	I like	the d	ouble	shift.						
						Α			U			D	
	3.	The d	louble s	shift s	chedu	ıle ha	s creat	ed tra	nsport	ation p	roblems	for me	1.
						Α			U			D	
<b>6</b> 0	4.		ld pref e shift.	er sor	ne ty	pe of	year ro	und so	chool p	progran	n to the	existing	,
8						A			U		:	D ·	
	5.		rclassn e shift.	nen an	nd und	lercla	ssmen	do not	comn	nunicat	e much	under th	i <b>e</b>
						A			U		נ	Ď .	
	6.	It is d	lifficult	to ar	range	e mee	tings w	ith the	coun	selor u	nder $th\epsilon$	double	shift.
The state of the s					,	A	F		U		,		*
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7.	The double shift has lowered student morale.				
		Α	U	D .	
8.	If it weren't for the	double shift	I would be without a job.		
		А	U	D <sup>†</sup>	
9.	School seems to be	less import	ant under double shift sch	eduling.	
		А	U	D	
10.	The athletic progr	am is better	under the double shift.	,	
		Α	U	D	
11.	My parents seem t	o like the dou	uble shift.		
		Α	U	D	
12.	Working students v	riew school a	s less important than the	ir jobs.	
		Α	U	D	
13.	Overcrowded school	ols would be	preferred to operating ur	nder the double shift	
		А	<b>u</b>	Ď	
14.	What do you like m	ost about the	e double shift?		
				•	

15. What do you like least about the double shift?

16. What changes, if any, could be made to improve the double shift schedule?

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# DOUBLE SHIFT EVALUATION

## FACULTY QUESTIONNAIRE

School		Year Experience				
Grade level ta	aught	Teaching Shift	lst (Circle	2nd One)		
Subject Matte (Put C if Cour	r Taught iselor and A if Administr	Age	Sex	M (Circle	F e One)	
Instructions:	Please provide all the a you identify yourself by we do need all other reconstruction.  Read each statement be the one answer which me the statement.  The following abbreviate A Agree U Undecided D Disagree	name, however, quested information low carefully, and nost correctly desc	for purpos in, I then dray	es of an v a circl	alysis e around	
1. The doub	le shift has had a negativ	re effect on studen	t-teacher	rapport.		
	А	U		D		
2. The doub	le shift has a disruptive	effect on my fami	ly life.			
	А	· U		D		
3. I would p	refer to work on a doub!	e shift schedule.				
	A	U		D		
4. The doub and depar	le shift has affected patt rtments.	erns of enrollmen	t in some	subject a	areas	
	А	U		D		
5. The doub	le shift schedule provide	s for improved bu	ilding safe	ety condi	tions.	
	А	U		D		

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6.	. Faculty morale is higher unde	r the double shift		· ·
	А	τ	l D	)
7.	. There are fewer classroom dis	scipline problems	under the double sh	ift schedule.
	Α	τ	n D	i
8.	In general students like the do	uble shift.		
	A	Ū	D.	
9.	Tardiness is a greater problem	n under the double	e shift schedule.	
	Λ	U	D	
10.	Inter-faculty communication is	s somewhat inhibi	ted due to the double	e shift schedule.
	А	U	D	
11.	I am a more effective teacher, than under the traditional sched	principal, or cou lule.	unselor under the do	uble shift
	A	Ŭ	D	
12.	Students generally tend to view double shift schedule.	school as a part	time endeavor unde	r the
	; A	Ū	D	
13.	Working students view school a	s less important	than their jobs.	
	А	U	D	
14.	Communication between upperc due to the double shift.	lassmen and unde	rclassmen has been	inhibited
	А	U	D	
15,	The double shift has created stu	ident leadership p	roblems.	
	А	U	Ď	
16.	More students attend school soc	ial functions unde	r the double shift.	
	<b>A</b> ·	U	D	
17.	Student achievement is greater i	under the double s	hift.	
· •	А	U	D	
í		62 . 67 .	12	

18.	The double shift has red	uced the extent to v	vhich counselors wo	rk with students.
		A	U	D
19.	Student involvement in s	chool related activi	itics is reduced unde	er the double shift.
		A	U	D
20.	The double shift allows	for more individual	lized instruction.	
		A	U	D
21,	I prefer working under th	he double shift thar	n a traditional sched	ule.
		Α	U	D
22.	I think the community we high school.	ould prefer the dou	ble shift over paying	g for a new
		A	· <b>U</b>	D
23,	The Central Office admi by the double shift.	nistrators do not fo	ally appreciate the p	roblems created
		A	U .	D
24.	Student-teacher conferent double shift.	nces have been mor	re difficult to schedu	ile under the
		A	U .	D
25,	There has been a decline double shift.	e in co-curricular	activity participation	n under the
		Α	U	D
26.	Library and resource ca	enter usage has bee	n adversely affected	l by the double shift.
		Α	U	D
27.	Interest and pride in the	schools have been	affected by the doub	ole shift,
		A	ប	D
28.	I would prefer some type	of year round pro	gram to the existing	g double shift.
		A 3	υ	D
C <sup>∞</sup> Evy ERIC		63 6	8	

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What do you like most about the double shift? 30. What do you like least about the double shift? What changes, if any, should be made to improve the double shitt schedule?

32. What alternatives to the double shift would you suggest?

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