

THE PROBLEMS RELATED TO IMPLEMENTING  
4 X 4 BLOCK SCHEDULING  
IN VIRGINIA SECONDARY SCHOOLS:  
A DESCRIPTIVE CASE STUDY OF TWO SCHOOLS

by

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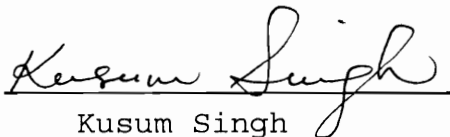
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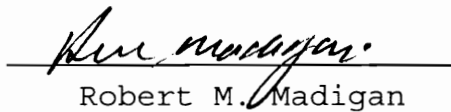
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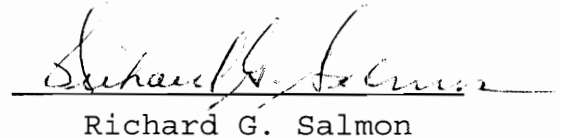
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Chairman: Glen I. Earthman

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(ABSTRACT)

American high schools have been criticized for failing to meet the demands of a rapidly changing society. These demands have resulted in the implementation of various educational reform measures and innovations.

One innovative effort in Virginia secondary schools has been the implementation of the 4 X 4 block schedule. In this scheduling arrangement, a student would complete four courses in a semester by attending four ninety-minute classes each day.

Change made in any organization is usually accompanied by problems. The purpose of this study was to determine the kinds and numbers of problems which were experienced related to implementing the 4 X 4 block schedule in Virginia secondary schools. This study also described some of the problem management strategies. In addition, the types of resources available and the relationship between the resources and the problem solutions were investigated.

The study involved surveying 28 schools which

implemented the 4 X 4 block schedule during the 1994-95 school year. The survey instrument was used as an initial screening device to identify two schools for case studies which demonstrated unique or revelatory cases in the implementation of the 4 X 4 block schedule.

The case studies were conducted using interviews to gather in-depth information from key members of each school. The interview protocols were developed to correlate with the survey instrument. Data obtained through the interviews were analyzed.

The findings indicated schools that implement the 4 X 4 block schedule will encounter varied kinds and numbers of problems unique to each school. The problems may be related to administrative, instructional, or school climate issues.

The administrators at each school used their available resources and creativity to manage problems. Those problems not satisfactorily resolved remained under study.

In a school where the perception existed that the school system was willing to do anything it could to help, educators were more contented and creative in solving problems. The perception of limited and withheld resources in a school contributed to squelching the persistence in solving problems.

This study presented clear implications for practice.

## DEDICATION

This study is dedicated to the two people who are always in my heart and who are always full of love, support and encouragement--my children, Sue Lynn and Lyle Cowlbeck.

Also, many thanks to a friend who has studied, typed, and commiserated with me during this study and all the other trying times, Rebecca Stevenson Lowry.

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## Chapter 1

### THE PROBLEM

#### Introduction

American high schools have been criticized for producing passive learners in an impersonal learning environment which fails to prepare students for the world of work. High schools are also criticized for using outdated teaching methods to teach fragmented curricula which lack real-life applications (Larson, 1992). The demands of a rapidly changing society, technology, and economy have produced those criticisms. Such demands are a great threat to any organization which fails to innovate. Innovation is necessary in order for an organization to continue to exist (Drucker, 1985). Unless people and organizations arm themselves with new knowledge and new approaches, they risk being out of touch (Lewis, 1989). Therefore, various educational reform measures and innovations have been introduced in an attempt to meet the challenge of those criticisms and their accompanying demands.

Change made in any organization, especially to a long-established organization such as a high school, is usually accompanied by problems. Those problems must be solved, or at least managed, in order to avoid failure. As Drucker (1985) stated, innovation is necessary for an organization to thrive, but failure to manage problems may result in

collapse.

During the past decade, restructuring has become the catchword for the changes that are taking place in education. Restructuring has different meanings for different people, and it may refer to all, or any part, of the educational system. The changes associated with restructuring include, but are not limited to, changes in the curriculum, modifications in the organization of instruction, variations in school governance, or steps taken simply to change the way people think. Upon analysis of various educational restructuring efforts, one would find American high schools spread across the continuum of all the possible changes which could be called restructuring. The focal point of those innovations which have been implemented is to increase student learning through an improved educational program (Lewis, 1989).

One of the recent restructuring efforts in Virginia secondary schools has been the implementation of the 4 X 4 block schedule. This method of scheduling is a fundamental change in the way secondary schools have organized students for instruction. In this scheduling arrangement, a student would complete four courses in a semester by attending four 90-minute classes each day.

From the results of a survey conducted by Michael Rettig (1994), 28 Virginia high schools used 4 X 4 block

scheduling during the 1994-95 school year. As a result of this scheduling innovation, problems were undoubtedly encountered. The problems each school encountered had to be managed or solved in order for block scheduling to be accepted as a feasible restructuring effort.

Since the number of schools implementing this scheduling procedure has more than tripled since the 1992-93 school year, there is a need to determine what problems occur in a high school when 4 X 4 block scheduling is implemented. These problems, real and perceived, may occur at the administrative, instructional, and school climate levels. By investigating the types of problems and how various school administrators have managed those problems, information can be gained which may assist administrators of 4 X 4 block scheduled schools, and those schools which plan to implement a 4 X 4 block schedule, to manage similar problems related to "change."

#### Statement of Problem

The following research questions were investigated in this study:

What were the kinds and numbers of problems encountered by administrators related to implementing the 4 X 4 block schedule in the 28 Virginia secondary schools presently using this schedule?

- A. What were the administrative problems?
- B. What were the instructional problems?
- C. What were the school climate problems?

How were the problems related to implementing the 4 X 4 block schedule managed by the administrators in the 28 Virginia secondary schools?

What types of resources were available to implement 4 X 4 block scheduling?

Was there a relationship between the problem solutions and the types of resources available?

#### Purpose

Drucker (1985) has stated that implementing organizational innovations usually creates problems and those problems must be solved, or at least managed, in order to prevent the rejection of the innovation. Therefore, the purpose of this study was to: 1) identify and investigate the kinds and numbers of problems experienced in 28 Virginia high school settings when a new educational practice, 4 X 4 block scheduling, was implemented; 2) describe the strategies used by the administrators to solve, or at least manage, those problems; 3) identify types of resources available; and 4) examine the relationship between available resources and the solutions which were used to manage the problems.

## Significance

The 4 X 4 block scheduling configuration is an example of a change in the daily schedule of the traditional comprehensive high school. The significance of this study is found in the examination of the problems related to organizational change and in the identification of possible solutions to these problems. By identifying the real and perceived problems which are encountered in implementing a change or innovation, in this case, the 4 X 4 block schedule in the high school, and describing possible solutions, problems and feasible solutions related to change in any organization may be identified. This study provides information to practitioners regarding possible problems encountered when organizational changes are being considered and implemented. An organization can approach a change process better if possible problems are identified and various strategies are offered as solutions. This study may be used as a "road map" for determining problems and possible solutions related to future organizational changes and it may be helpful to administrators who are thinking of making a schedule change at their schools.

## Definitions

The 4 X 4 block schedule is an instructional schedule that organizes students in four 90-minute classes per day,

five days a week. This schedule is also known as the intensive model, the concentrated model, 4:4 block model, or straight block model (Schoenstein, 1995).

An alternating or A\B schedule refers to any six-, seven- or eight-class schedule which is set up to accommodate one-half of the classes on alternating days of the week. Some alternating schedules are arranged for one-half of the classes to meet Monday and Wednesday and the other one-half of the classes to meet on Tuesday and Thursday. On Friday, all classes are held for shorter class periods. Other alternating schedules are arranged for one-half of the classes to meet on Monday, Wednesday, and Friday and then the other classes meet on Tuesday and Thursday, alternating the classes which meet on Friday every two weeks.

For the purposes of this study, a secondary school is defined as any public school in Virginia which includes grades nine to twelve.

#### Limitations

The data collected during this study are specific to the 28 Virginia secondary schools which used block scheduling during the 1994-95 school year. This research effort focused upon those 28 cases in an attempt to provide insights about problems and possible solutions associated

with the implementation of block scheduling. Although many educators undoubtedly will notice similarities to their specific situations, the findings of the study may not be generalized to other schools because of the purposive nature of the sample.

### Organization of the Study

Chapter 2 is a summary of the literature that 1) describes the traditional high school and its problems; 2) presents information concerning schedule changes implemented at the secondary level over the past four decades; 3) explains the benefits and concerns of the 4 X 4 block schedule; and, 4) discusses conditions in Virginia secondary education.

Chapter 3 explains the procedures which were used to conduct the study. A dual approach to gathering and analyzing data was used. A descriptive method, the survey instrument, was used to gather general information concerning the 28 Virginia secondary schools using 4 X 4 block scheduling in 1994-95. A qualitative method, the case study, was used to gather and analyze in-depth information concerning two schools which used the 4 X 4 block schedule in 1994-95.

Chapter 4 presents the findings of the study. Those findings include the data collected from the survey

instrument and from interviews with key people at the two schools chosen for case studies.

Chapter 5 summarizes the information from Chapter 4. This chapter also contains the conclusions, discussion, implications for practice, and topics for future research.

## Chapter 2

### LITERATURE REVIEW

#### Introduction

Some of the severest national criticism aimed at secondary schools began with studies such as James Conant's The American High School Today (1959). Criticisms covered in those reports peaked with the publication of A Nation at Risk in 1983. The reports forcefully stated that most high schools were failing America and that improvements had to be made. Citizens were hearing that secondary schools were not addressing America's need for higher standards necessary for our nation to succeed in a competitive world. Such reports produced a general lack of confidence of such magnitude that taxpayers were not sure that high schools could improve. From a financial viewpoint, one could not expect citizens to throw good money after bad. Therefore, taxpayers were looking for secondary school improvements which would be efficient without being costly (Carroll, 1990).

#### The Traditional High School and Its Problems

American secondary schools have not changed their basic form of time organization for the past 75 years. The schedule is driven by time and classes are forced to adhere to time constraints (Shortt & Thayer, 1995). The instructional day is divided equally into six or seven units

with time for a homeroom period and lunch. High schools rely upon the Carnegie unit, approved in 1909, which equates learning with time spent in class (Raubinger, et al., 1969; Carroll, 1990; Canady & Rettig, 1995). Reliance upon such time constraints encourages teacher-directed presentations to cover the material and discourages student-interactive learning (Shortt & Thayer, 1995).

Because some students need more time to learn, they become "Prisoners of Time" (National Education Commission on Time and Learning, 1994) in the traditional high school, where classes average 51 minutes no matter how well prepared the student is or how difficult the subject. Traditionally, a course is completed in one year. High school students usually experience this "prisoner" phenomena in January when they realize that their first semester's grades probably will cause them to fail the year's courses. Therefore, they either become discipline problems or they drop out.

At the other end of the continuum are the students who learn quickly. The traditional high school schedule affords few opportunities for acceleration and the numbers of classes which are available are usually reduced (Canady & Rettig, 1995). The Commission which published Prisoners of Time (1995) concluded that schools use time ineffectively because of the inflexible nature of the traditional school day.

The traditional high school climate has become depersonalized because teachers must deal with 150-200 students which, in many instances, causes more of an assembly-line approach to teaching students. Students, on the other hand, develop little rapport with teachers because they must deal with six, seven, or eight teachers. Discipline problems also escalate when there is more large group movement in the hallways and other gathering places in the school (Canady & Rettig, 1995).

Joseph Carroll jokingly stated (O'Neil, 1995) that the conventional schedule only had two things wrong with it: 1) it guaranteed that teachers didn't teach well--presentations had to be made every day and, 2) it guaranteed that students didn't learn well.

#### Master Schedule Modifications--1950's, 60's, and 70's

In an attempt at improving secondary schools, educators began experimenting with modifications to the organizational structure of the high school day--the master schedule. Shane (1965) listed the Trump Proposal as one of 40 grouping plans which had been introduced in U.S. schools or were being discussed by American educators as ways to improve public schools. The Trump Proposal called for limited large group instruction periods and multiple small classes and individual guided independent study. The flexibility

proposed by this plan became very popular. Polos (1965), Moore (1965), Gehret (1970), and Johnson (1971) set forth flexible or modular scheduling in secondary schools as a new way to develop excellence in education.

Other educators such as Holton (1969) suggested reducing tension by lengthening the periods in the schedule day and reducing their number. He also described the rotating schedule which would run a six-subject schedule but only meet five subjects per day, dropping a different subject each day. An even more radical change was suggested which involved teaching one subject at a time (Holton, 1969).

During the 50's, 60's and 70's, secondary schools all over the country were experimenting with variations on scheduling the instructional day. Several schools established a schedule allowing numerous short periods to allow students to take more electives (Brandt, 1995).

#### A 1980's Master Schedule Modification

Secondary schools in the mid-1980s were facing limited finances, declining enrollments, and harsh criticisms. Although several proposals had been made during the 50's, 60's, and 70's to change the high school schedule, no single plan seemed to be the solution. In 1989, an even more radical proposal, the Copernican Plan, was introduced. This plan involved the student in "macroclasses" in two possible

schedules. In one schedule, the student would enroll in a course taught four hours for 30 days, six subjects per year. In the second schedule, a student would enroll in two subjects taught two hours per day for 60 days at a time, again, completing six subjects per year. It would be possible for a student to be scheduled in 30- or 60-day courses in the same year. Such a scheduling arrangement would allow for blocks of time in the afternoon for seminars (Carroll, 1990).

#### The 4 X 4 Block Schedule and Its Benefits

The scheduling rave which appears to have begun spreading throughout Virginia high schools is the 4 X 4 block schedule. In the 4 X 4 block schedule, students take four 90-minute classes per day. Classes that traditionally meet for a year are completed in a semester.

Educators have listed several benefits of 4 X 4 block scheduling such as providing for more effective use of time, space, and resources and producing an improved instructional climate. The key component of block scheduling is that it provides for longer class periods (O'Neil, 1995). The 4 X 4 block schedule extends the instructional period to allow for uninterrupted quality time. By reducing the number of class changes, instructional time is gained (Canady & Rettig, 1993). Brandt (1995) equated remaining in class for 90

continuous minutes to a worker on the job who could concentrate for longer periods of time on a task. For example, how could we ever get anything done if we stopped every 45-50 minutes, moved to another location, and started a new project? Also, teachers of classes which have traditionally emphasized performance feel that performance-oriented learning takes extended blocks of time (Brandt, 1995; Wilson, 1995). In addition, technology, which has made information more available, also requires that the students have more time to process the information beyond accessing it (Shortt & Thayer, 1995).

School climate is positively affected in several ways. Because there is less movement in the school throughout the day, there is less opportunity for discipline problems. The 4 X 4 schedule also allows high school to become less depersonalized. Teachers usually only teach three classes per day and the number of students they meet during a semester averages 70-90, and students interact with only four teachers daily (Canady & Rettig, 1995; O'Neil, 1995; Schoenstein, 1995). Students are also less stressed because they only have to prepare homework in three or four subjects (Wilson, 1995).

Students can also accelerate easily. Under block scheduling, two years of a foreign language can be taken in one year or students may take additional advanced classes.

On the other end of the spectrum, students who fail may repeat a class in the second semester; thus, not having to wait a year to get back into the program (O'Neil, 1995; Canady & Rettig, 1995; Edwards, 1995).

Teachers feel that the 4 X 4 schedule is more manageable because there are fewer class preparations and they can devote 25 percent of their time to instructional planning (Edwards, 1995). Because students have an opportunity to take up to eight courses per year, the average class size is generally lower (Canady & Rettig, 1995).

Time for teachers to use innovations in the classroom and the availability of elective courses are other benefits of block scheduling. Because block scheduling is more flexible, innovations and courses can be geared to the students' needs (O'Neil, 1995).

Other reported benefits of 4 X 4 block scheduling have been improved daily attendance, a higher number of students making the honor roll, a higher number of earned course credits, and a higher number of students taking and passing Advanced Placement courses (Edwards, 1995).

A recent study conducted by the University of Minnesota (Freeman, Maruyama, Hole, Frederickson, and Springis-Doss, 1994) concluded that teachers did their jobs better and that students stayed more engaged in schoolwork and had a more

positive attitude toward school in 4 X 4 block scheduled schools. In addition, the research findings indicated significant differences in the perceptions of student attitudes about school climate and student safety in a 4 X 4 block scheduled school. The majority of teachers who have used the 4 X 4 block schedule do not wish to return to a traditional schedule (O'Neil, 1995; Edwards, 1995; Schoenstein, 1995).

#### Concerns with 4 X 4 Block Scheduling

Because the master schedule has major impact upon the total school environment, issues such as cost, course sequencing and staff development must be addressed in order to benefit from the 4 X 4 schedule (Canady & Rettig, 1995). No change can be successful unless all the stakeholders are involved. Therefore, the faculty and administrators of a school must be involved in the decision to implement the 4 X 4 block schedule. Newmann and Wehlage's (1995) research concluded that restructuring does not necessarily improve student learning. Shared goals must be prerequisite to organizational change in order for the restructuring activity to be successful.

Staff development is an issue that must be addressed. Teachers must be prepared to deal with students for an extended period of time which requires extensive training.

Additional concerns are related to covering the same amount of curriculum in each class and how to handle Advanced Placement courses and elective courses such as band (O'Neil, 1995; Shortt & Thayer, 1995). How to handle transfer students, how to handle sequential courses in the schedule, and how to address absenteeism especially when a student must be out for several days are also causes for concern (Wilson, 1995).

Cost may also present a problem. Those schools using a traditional six-period schedule can expect a 10 percent increase in staffing if class size is to remain the same or smaller (Edwards, 1995; Shortt & Thayer, 1995). The cost increase may or may not be feasible depending upon the budgetary conditions of a school.

In addition, some policy changes can be expected such as an early graduation policy if the 4 X 4 block schedule is implemented (Schoenstein, 1995). The traditional high school grants credit based upon earned Carnegie units (150 class hours = 1 Carnegie unit). The Virginia Department of Education has established the minimum number of credits for a diploma. Therefore, a student enrolled in a 4 X 4 block scheduled school would earn more than the established number of credits and possibly be able to graduate early. Policies related to Carnegie units may require amending.

### What's Happening in Virginia

Edwards (1993) stated that the traditional structure of Virginia's secondary schools was not promoting a successful educational experience among students. In 1989-90 the number of Virginia graduates reported was less than 75 percent of the freshman class enrolled in 1986, Only nine Virginia school divisions had a 90 percent or better graduation rate. Although those numbers may not be entirely accurate because of the number of students transferring in and out of the state, such data added to the general perception that Virginia secondary schools were not as successful as they should be.

Virginia educators were also involved in restructuring efforts across the state in attempts to improve student performance. The time seemed ripe for the introduction of a different scheduling model (Edwards, 1993).

The movement toward block scheduling has occurred at a very rapid pace. In 1992-93, less than five Virginia high schools used any form of block scheduling (O'Neil, 1995). In 1994-95, twenty-eight Virginia secondary schools were using the 4 X 4 block schedule (Rettig, 1994). The number has increased to 58 in the 1995-96 school year (Edwards, 1995), which represents 20 percent of Virginia secondary schools.

## Summary

Criticism of secondary schools has produced a variety of attempts at school improvement. Many educators agree that scheduling is a valuable but overlooked resource for school improvement (Canady & Rettig, 1995). American schools are rapidly changing schedules to provide longer blocks of time to allow for a variety of instructional activities within a class period (Brandt, 1995; Canady & Rettig, 1995).

Newmann (Brandt, 1995) has concluded, reorganizing the instructional day through the implementation of variations in the traditional daily schedule is a useful tool which may improve student learning. Edwards (1995) stated that use of the 4 X 4 block schedule can recreate a public school system. Mahaffey (1995) stated that one of the keys to student success is the effective use of time.

Although time is only one of the resources that may be used to change a school, time interacts with all the elements of a high school including staff development, governance, climate, student learning, and technology (Shortt & Thayer, 1995). The most recent innovation in Virginia secondary schools is the 4 X 4 block schedule which is a fundamental change in the traditional schedule.

## Chapter 3

### METHODOLOGY

#### Introduction

In a survey of 288 Virginia secondary schools, Rettig (1994) found that 96 schools were no longer organized in the traditional single-period day configurations, but had changed to some type of block schedule. The majority of those schools (N=68) were using the six, seven, or eight A/B block schedule in some form of alternating day schedule. Less than 10 percent of the schools (N=28) had changed to the 4 X 4 block schedule. (see Table 3.1)

The unique characteristics of the 4 X 4 block schedule make it a more radical change from the standard Carnegie unit than the other types of block schedules. Usually students require an entire school year to complete a class, but in the 4 X 4 block schedule, the content requirements of the subject matter must be completed in a semester. In the 4 X 4 block, only four subjects are taught per day which means the typical 50-minute instructional period per class is extended to 90 continuous instructional minutes. Because of such radical changes, this study was an investigation of the problems encountered by educators when the 4 X 4 block schedule was implemented at 28 Virginia secondary schools and how those problems were managed.

Table 3.1

1994-95 Virginia Secondary Schools Using Block Schedules

Types	Number of Schools	Percentage
6 A/B Block	16	5.6%
7 A/B Block	38	13.2%
8 A/B Block	10	3.5%
4 X 4 Block	28	9.7%
Other Block	4	1.4%
<b>TOTAL</b>	<b>96</b>	<b>33.3%</b>

Note. From "Directory of High School Scheduling Models in Virginia, 1994-95 School Year," Michael D. Rettig, James Madison University. Adapted with permission.

## Research Design

The research was designed according to the methods that would answer the research questions. The research questions were stated in Chapter 1, "Statement of Problem."

The research questions indicated that general information must be gathered concerning the 28 schools using the 4 X 4 block schedule during the 1994-95 school year. A survey instrument was used to gather this general information, which is a descriptive method.

In addition, the research questions required in-depth information to be gathered. A qualitative method, case study, was used to gather and analyze this detailed information.

Because of the information which was required to answer the research questions, two methods of gathering data were employed. A combination of descriptive and qualitative methods were used in this study.

## Population

The schools used in this study were the 28 Virginia secondary schools identified by Rettig (1994) as using the 4 X 4 block schedule during the 1994-95 school year. The 28 schools were geographically scattered throughout the Commonwealth and were representative of the whole range in size of schools in Virginia. One school was from the largest

school division in the state, Fairfax, while others were from smaller, rural school divisions, such as Smyth and Floyd Counties. Those 28 schools comprised the entire population of secondary schools which used the 4 X 4 block schedule in Virginia during the 1994-95 school year. The administrators surveyed were selected from those 28 secondary schools. Table 3.2 contains a complete listing of the 28 Virginia high schools that used the 4 X 4 block schedule during the 1994-95 school year.

## Instrumentation

### The Survey Instrument

The survey instrument item topics were selected from "points to be considered" by Canady and Rettig (1995) related to policy, cost, staff development, transfer students, minutes per course, and graduation requirements. Additional topics were selected from current literature and from informal interviews with administrators and teachers. Course curriculum problems, contractual issues, and teaching techniques were not covered in the survey. Additional survey instrument questions were related to school climate and culture. Questions related to school demographics, available resources, and influences were also included. Finally, administrators were asked to speculate concerning the longevity of 4 X 4 block scheduling. Two administrators were

Table 3.2

4 X 4 Block Schedule Plan Schools in Virginia 1994-95

<u>County/City</u>	<u>School</u>
Accomack	Tangier Combined Arcadia* Nandua*
Amherst	Amherst County
Appomattox	Appomattox
Augusta	Stuarts Draft
Bedford	Liberty
Brunswick	Brunswick
Chesterfield	James River* Monacan
Fairfax	Thomas R. Edison*
Floyd	Floyd
Henry	Magna Vista
Isle of Wight	Windsor Smithfield
King George	King George
Madison	Madison County
Orange	Orange County
Pittsylvania	Dan River
Prince William	Potomac
Pulaski	Pulaski County*
Richmond City	Richmond-Community*
Shenandoah	Central Strasburg Stonewall Jackson
Smyth	Chilhowie Combined*
Williamsburg-James City	Northwood Lafayette

Note. From "Directory of High School Scheduling Models in Virginia, 1994-95 School Year," Michael D. Rettig, James Madison University. Adapted with permission.

\* = Non-respondents

asked to review the questions to locate inadequacies and defects in the survey instrument. They agreed that topics had been covered adequately.

The 21 item survey instrument was sent to the 28 administrators who implemented 4 X 4 block scheduling in 1994-95 (Appendix B). The first ten items required the respondent to circle "yes" or "no" to items related to problems of cost, policy, sequencing, staff development, transfer students, climate, and community perception problems. If the administrator circled "yes" which indicated that a problem existed, then, the administrator was asked to give a specific example of the problem. Next, if in the administrator's judgment the problem had been resolved, then, the administrator was asked to explain the resolution.

The next four items were questions concerning how long 4 X 4 block scheduling had been in place, how the administrator heard of the model, the major reason for the change to 4 X 4 scheduling and the outside influences to change to a 4 X 4 block schedule.

The next five items asked for demographic data and the last two items required the administrator to speculate concerning possible recommendations for improvement and length of time the 4 X 4 scheduling model was anticipated to remain in effect.

### The Interview Protocol

The purpose of the interviews was to gain in-depth information concerning what the administrators had indicated in the survey instrument. The interview protocol questions were developed to correlate with the administrator's original survey instrument questions. Specific questions were asked concerning the problems indicated by the administrators of the two schools involved in the case studies. The same questions were asked of a faculty member and a representative of both the Student Council Association (SCA) and Parent/Teacher Association (PTA) of the two schools to be studied.

### Methodology

Survey instruments were mailed during January, 1996, to the principals of the 28 Virginia secondary schools using the 4 X 4 block schedule during the 1994-95 school year. A cover letter was mailed with each survey instrument to explain the purpose of the study. (See Appendices A and B for Principal's Letter and Survey) Stamped, self-addressed envelopes were enclosed to facilitate the return of the completed survey instruments.

The administrators were asked to return the survey instruments within 10 days after they were mailed. A follow-up phone call was made on the fourth day after the

return date of the survey instruments. Analysis of non-respondents was made after the survey instrument collection period had been completed. The analysis ensured that respondents were typical in their responses. Analyses of non-respondent demographic data determined non-respondent schools reflected respondent schools. After the survey instruments were completed, the data was summarized and categorized grouping answers according to how they were alike and different using the database program, First Choice.

The survey instrument was also used as an initial screening device in order to identify two schools upon which to perform case studies. The two schools chosen for case studies represented the contrast between a school which had 4 X 4 block scheduling in place for three years and was experiencing few, or what the administrator referred to as "slight", problems and one which had implemented 4 X 4 block scheduling for two years and was discontinuing the schedule for the next school year. Criteria used to select the two schools also included how long the scheduling was anticipated to remain in place and the types of problems experienced.

After the two schools were selected, interviews were held during January and February with an administrator from each school, a faculty member, a Student Council Association

(SCA) representative, and a Parent/Teacher Association (PTA) representative (See Appendixes C, D, E, and F for Principal's, Faculty's, SCA Representative's and PTA Representative's Interview protocols). The interviews were recorded.

Interviews were used to gain insight into problems the schools had experienced with the implementation of the 4 X 4 block schedule. In-depth information was gained concerning the types and numbers of problems experienced and the reasons why 4 X 4 block scheduling was considered a viable scheduling model. Perceptions concerning the management of those problems, influences upon the decision to become 4 X 4 block scheduled, and the resources available were also gained through this interview technique.

### Data Analysis

As the survey instruments were returned, they were examined in order to determine whether sufficient information had been furnished for the analysis. Any principal returning an incomplete or ambiguously answered survey instrument was interviewed by phone for clarification.

Descriptive statistics related to the kinds and numbers of problems were tallied from the "yes-no" responses. Open-ended data were categorized according to the responses

which were alike. Unique information was in single category groupings.

Two schools were chosen to be visited after the information from all of the surveys had been summarized. In-depth information was gathered from interviews with key persons at the two schools in order to complete case studies. The two case studies represented contrasting examples of what occurs at a secondary school when 4 X 4 block scheduling was implemented.

The interview data were triangulated (data source triangulation) to compare the points of agreement and disagreement. This triangulation was conducted using the four sources of information within the same school. Points upon which the four interviewees agreed and points of disagreement were noted.

A cross-case analysis was conducted using mixed strategies which combine variable-oriented and case-oriented methods. Certain themes were noted in the interviews. Those themes were coded. Then the themes were placed in matrices using the codes from the interview data of both schools. The "Rules of Thumb" listed by Miles and Huberman (1994) for matrix display were followed. In "making sense" of the displays which were generated, the tactics suggested by Miles and Huberman were used. Then, the information from each case was summarized and analyzed according to the

themes.

From the information collected and the analysis of the content, a narrative was written which described problems which seemed to present themselves within a school when the 4 X 4 block schedule was implemented. Methods which may be used to resolve some of those problems were also described. The narrative provided information which may prove valuable to administrators considering the implementation of 4 X 4 block scheduling or any other fundamental change to the traditional secondary school.

## Chapter 4

### RESULTS

#### Introduction

The purpose of this study was to provide answers to the research questions presented earlier in Chapter 1:

1. What were the kinds and numbers of problems encountered by administrators related to implementing the 4 X 4 block schedule in the 28 Virginia secondary schools presently using this schedule?
  - A. What were the administrative problems?
  - B. What were the instructional problems?
  - C. What were the school climate problems?
2. How were the problems related to implementing the 4 X 4 block schedule managed by the administrators in the 28 Virginia secondary schools?
3. What types of resources were available to implement 4 X 4 block scheduling?
4. Was there a relationship between the problem solutions and the types of resources available?

The results of the information gathered from the survey instruments and interview protocols are presented in this chapter.

## The Survey

A survey instrument was mailed to the administrators of the 28 Virginia secondary schools which implemented the 4 X 4 block schedule during the 1994-95 school year. Of those 28 survey instruments, 21 were completed and returned, representing a seventy-five percent return rate. Follow-up phone calls were made to the non-respondents who indicated they could not participate in the study because of the numbers of requests which they received daily.

After reviewing the demographic information obtained by phone calls, a determination was made that the non-respondents did not represent a group different from the respondents.

## Survey Results

A summary of the kinds and numbers of problems encountered by administrators and the number of problems resolved is found in Table 4.1. In some instances, administrators gave multiple responses; therefore, the number of responses may be more than the total number of respondents.

### Administrative Problem: Cost

Nine of the respondents indicated they had experienced a cost problem related to the need for additional staff members to accommodate the increase in the number of

electives. Six administrators managed the problem by hiring additional teachers, full- and part-time, by reaching an agreement with the existing personnel to teach additional classes, or by increasing the student/teacher ratio for elective courses. Three administrators did not feel the problem had been resolved at their schools. (see Table 4.1)

Six of the respondents indicated they had experienced a cost problem related to the need for additional materials. One administrator resolved the problem by using discretionary funds for additional materials while the other four received additional funding from the central office. One of the respondents who experienced problems related to the cost of copying additional materials did not feel the problem had been resolved. School personnel, however, were working on ways to conserve paper. One other administrator noted there was a 10 percent increase in paper needs the first semester, but paper needs were less during second semester.

Seven respondents felt they had experienced cost problems in accommodating an increased number of courses. Additional staff and materials were previously listed as concerns by those same respondents. Five stated the problem had been resolved through additional funding from the central office. Two respondents still felt the situation had

not been resolved.

Administrative Problem: Policy

Eleven respondents felt they had experienced problems related to policies. The policies which had caused problems were those concerned with attendance, Advanced Placement (AP) classes, examinations, discipline, grading periods, graduation requirements, and Virginia High School League (VHSL) eligibility requirements. Nine administrators indicated the problems had been resolved by revising or adopting new policies and asking for waivers. Two respondents did not feel the problem had been resolved at their schools, although one was working on a plan.

Instructional Problem: Sequencing Courses

Only four respondents indicated a problem with sequencing classes in foreign language. One school administrator did not feel the problem had been resolved because of lack of personnel. The other three respondents felt the problem was resolved through the use of a computer master scheduler and through the efforts of the guidance department in scheduling the proper sequence of classes.

Instructional Problem: Staff Development

Eight administrators had experienced problems dealing with staff development issues. Four respondents stated their teachers needed staff development which would assist them to teach for 90 continuous minutes. The other four respondents

each listed different reasons: time to do the staff development, development of pacing guides, a plan for staff development, and how to require teachers to attend staff development programs. All of the administrators indicated their problems had been resolved. Staff development programs were offered which were voluntary while others were mandatory. Administrators used local expertise and discussion groups. Some in-service programs were offered during the summer and some were offered during the school year. Administrators did not refer to the cost of staff development as an administrative problem in the survey information.

#### Instructional Problem: Transfer Students

Fourteen administrators indicated dealing with transfer students was a problem in a 4 X 4 block schedule. Thirteen respondents stated the problem existed when a student transferred in from a school with a traditional 6- or 7-period day. One administrator mentioned a problem arose when a student transferred from the 4 X 4 block schedule to a traditionally scheduled school. Five schools had established instructional programs for transfer students who enrolled in their schools, while two indicated each student's program was handled individually. Seven respondents did not feel the problem had been resolved although one administrator stated they were "doing their

best to provide a credit-bearing schedule."

School Climate Problems: Student, Staff, Community

Three respondents stated students had problems with the 4 X 4 block schedule. One problem was caused by students not understanding what the block schedule meant. The problem resolved itself as the students began to "like" the schedule. Two other problems were related to course selections: (1) Students experienced problems in selecting eight courses and, (2) students who were enrolled in Advanced Placement (AP) classes were concerned that they would be unable to master course content and retain sufficient information. To resolve the first problem, counseling appointments were set up to include parents and students at registration. The second problem was resolved by designing Advance Placement (AP) classes to run all year.

Five administrators felt staff members had problems with the 4 X 4 block schedule. Two stated their teachers were reluctant to change, and three indicated the adjustment to teaching 90 minutes had caused staff problems. The reluctance to change to a 4 X 4 block schedule was resolved differently at the two schools: at one school, the decision to implement the new schedule was made by the school board. At the other school, the decision was made when the staff endorsed it. Adjusting to teaching 90 minutes was successfully resolved at two schools through the use of

staff sharing and staff development. One respondent did not feel the problem had been resolved.

Eight respondents felt there were problems in the community which arose when the 4 X 4 block schedule was implemented. Three indicated their communities perceived the chorus and band programs would be negatively affected. One administrator stated the community was concerned about club meeting time. Four other administrators each listed separate concerns of the community: the sequencing of language courses, the availability of higher level math/science classes instead of vocational electives, the effect on Advanced Placement (AP) classes, and the added stress to the slow learner in trying to keep up. The concern with sequencing of language courses was resolved by conferences with the parent, student, and guidance counselor. A master scheduling program was also used to program students' schedules to ensure proper sequencing. In order to replace some of the vocational electives with higher level math/science classes, the vocational completion requirement for all graduating students was removed. Advanced Placement (AP) classes were scheduled as one year classes. Staff development was used to teach strategies in dealing with the slow learner in 90-minute instructional settings. Although one respondent indicated the band and chorus issue was not resolved, two administrators reported

(1) band membership had increased and, (2) the band and chorus problem was "more perceived than realized." Three administrators still felt their community problems had not been resolved.

Table 4.1

Survey Summary of Problems Reported by Administrators and  
the Number of Problems Resolved

Problem	# Reported	# Resolved
Administrative		
Cost of Additional Staff	9	6
Cost of Additional Materials	6	5
Cost of Increased Courses	7	5
Policy	11	9
Instructional		
Sequencing Courses	4	3
Staff Development	8	8
Transfer Students	14	7
School Climate		
Student	3	3
Staff	5	4
Community	8	5

Note. N = 21.

### Length of Time 4 X 4 Block Schedule Used

Of the 21 schools which reported, two schools had been using the 4 X 4 block schedule for three years. Nineteen of the schools were in the second year of 4 X 4 block scheduling.

### How Administrators Learned of 4 X 4 Block Schedule

The administrators reported they had learned of 4 X 4 block scheduling through attendance at conferences, through reading articles and other literature on restructuring and scheduling options, visits to other schools, and from central office personnel. Nine school administrators indicated they, along with school committees, had visited schools to observe the 4 X 4 block in action after having read about various alternative schedules. Also, nine administrators reported having attended conferences on alternative scheduling. Only two respondents indicated central office personnel had first introduced them to the concept.

### Why Schools Implemented the 4 X 4 Block Schedule

Eight administrators reported the 4 X 4 block schedule had been implemented to increase the number of course offerings which a student could choose. Six respondents indicated the desire to improve instructional time and to help students and teachers by reducing stress were the reasons for implementing the 4 X 4 block schedule. Three

felt the students would benefit from having less classes at one time. Those reasons indicated by individual administrators were to eliminate study hall, to increase graduation requirements, to increase flexibility, and as a part of the school renewal program, a self-evaluation method from the Southern Association of Colleges and Schools (SACS). One administrator stated, "Since there's not much we do to make a physical change, actually this makes an improvement which is a physical change."

#### Influences to Change to the 4 X 4 Block Schedule

Twelve of the administrators reported no outside influences to change to the 4 X 4 block schedule. Two indicated the central office strongly influenced the change, while two indicated some influence from the central office. Three reported the faculty strongly influenced the change, and two stated that the parents were the strongest influence. Three also included research and workshops as strong influences.

Table 4.2 summarizes the influences to change to the 4 X 4 block schedule and the number of problems experienced at each reporting school.

Table 4.2

Influences to Change to 4 X 4 Block Schedule and Number of Problems Related to the Change

Respondent Schools	# of Rept'd Problems	Influences
1	5	None
2	1	School Board--Strong Faculty --Strong
3	5	None
4	4	None
5	2	None
6	1	None
7	4	Faculty --Strong School Board--Some Parents --Little
8	10	Research --Strong Workshops --Strong
9	3	None
10	3	None
11	5	None
12	5	None
13	2	Parents --Strong School Board--Little
14	2	None
15	5	None
16	7	None
17	2	None
18	1	Faculty --Strong
19	2	Research --Strong
20	1	School Board--Strong
21	3	Strong

### Available Resources

Administrators reported requested resources were not withheld. Those administrators encountering cost problems either received additional funding from the central office or "made do" the first year and included the request for additional funds in the next year's budget which was approved. The decision to adopt the 4 X 4 block schedule often was made after the budget process for the school system had been completed.

### Expected Longevity of the 4 X 4 Block Schedule

Twenty of the schools indicated there was a commitment to continue the 4 X 4 schedule. One school administrator felt the schedule would not continue after the 1995-96 school year.

### Selection of Case Studies

The two schools selected for case studies were chosen according to the stated criteria. School A was chosen to represent the school which had the 4 X 4 block schedule in operation for the longest time with no major problems. The administrator of School A indicated on the survey instrument that the 4 X 4 block schedule would continue indefinitely. School B was chosen to represent the school which had experienced problems to the extent that the 4 X 4 block schedule was being discontinued.

## Description of Schools

School A had an enrollment of 1400 and School B had an enrollment of 1500. School A and School B were similar in identifying the problems related to cost of additional staff, sequencing languages, and the community perceptions of the 4 X 4 block schedule on the survey instrument. School A had been using the 4 X 4 block schedule for three years and expected to stay on that schedule indefinitely. School A, a rural school, was the only high school in the county and enjoyed a slightly de-centralized governance because the principal made many decisions without consulting the superintendent or central office staff. As indicated, the superintendent intervened at times for specific purposes. For example, the superintendent made the decision to get rid of the activity period in favor of concentrating on academic areas.

School B was in a more tightly structured school division. This school was in a suburban area and was one of eight high schools in the county. Many decisions were made at the school board office without input from the principal. School B's superintendent and central office staff allowed the school to develop a School Council which brought recommendations to the school board for approval.

Both School A and School B were allowed to try the 4 X 4 block schedule after each school had investigated

alternative schedules. Both schools encountered similar numbers of problems. But, School A was continuing to use the 4 X 4 block schedule while School B was discontinuing the 4 X 4 block schedule for the following year. Those schools represented contrasting cases of the implementation of the 4 X 4 block schedule.

### The Interview

A total of eight interviews were conducted with four key persons from each of the two schools chosen for case study. An administrator, a faculty member, a Student Council Association (SCA) representative and a Parent/Teacher Association (PTA) representative from each school were interviewed.

The interview followed the outline of prepared protocol questions (See interview protocols, Appendices C, D, E, F). Each interview lasted between forty-five minutes to one and one quarter hours. The interviews were held in the schools and were arranged by the administrators of each school. Each interviewee was informed of the purpose of the study and consent was obtained for the interview and for permission to tape the interview. The researcher took the opportunity to seek clarification of the responses when necessary. However, caution was taken not to indicate a probable answer to a question.

The following information represents the responses to questions from the interview protocols which were used to form conclusions to the four research questions presented in Chapter 1.

## School A

### Interview Results

**Protocol Question #1: Would you describe the problem indicated on the survey in more detail?**

**Protocol Question #2: In your opinion, what caused the problem?**

**Protocol Question #3: How were you able to manage the problem as you did?**

The responses to those three questions were intended to assist in answering research questions 1, 2 and 4. Those questions were also designed to correlate with the administrative and instructional problems indicated by the administrator on the survey instrument.

#### Administrative Problems: Cost

The administrator from School A stated the administrative problems of cost involving additional electives, additional materials, additional staff and other costs related to accommodating an increased number of courses occurred when the 4 X 4 block schedule was

implemented. He also included the cost of staff development as one of the administrative problems which occurred. A summary of the responses is shown in Table 4.3 at the end of this section.

Additional Electives. In the interview, the administrator stated 16 additional electives were needed when the school implemented the 4 X 4 block schedule. The need occurred because the students would now be earning eight credits per year while previously they would earn only seven credits. Although all types of electives had to be added, the administrator chose to add more advanced math/science electives.

The faculty member agreed more electives were added, but in the area of advanced English and college "prep" classes. Cost was also considered to be a problem by the faculty member. Before an elective was adopted, cost was the major factor to be considered. The faculty member felt more money was needed to increase elective offerings. Photography was used as an example of a class which had not been added as an elective because of its prohibitive cost.

Although the parent was aware several electives had been added to the instructional program, her observation had been that cost was a major concern in adding electives. However, she felt more and "meatier" electives were needed. Cost should not be an important factor in selecting

electives. She did not think sufficient foreign language or advanced math classes were offered.

The student was not aware of any cost concerns related to the addition of electives. This student had taken several electives and could not think of any courses which were lacking in the curriculum.

Additional Staff. The administrator stated the addition of electives and the increase in the number of middle school students enrolling in the high school had contributed to the problem of scarcity of staff during the first year the 4 X 4 block schedule was implemented. The budget had already been approved before the decision to change the schedule was made; therefore, no additional staff members could be hired. In order to resolve the problem of hiring additional staff, study halls were eliminated and teachers were required to teach a class instead of keeping study hall. The second year, the budget was increased to reflect the need for additional staff and nine staff members were added.

The faculty member agreed nine staff members had been added the second year of implementation. Another factor which added to the need for staff was the increase in the number of ninth graders entering the high school. At least, 100 more freshman entered than the number of seniors who graduated. Since this faculty member was a computer technology teacher, her classes remained stable in size

because of the availability of computer stations.

The parent felt additional staff would need to be hired when the block schedule was implemented; but, information concerning the cost of this change was basically low-key.

The student did not know of any costs related to additional staff when the 4 X 4 block schedule was implemented.

Additional Materials. The administrator felt only additional reading materials in English were needed when the 4 X 4 block schedule was implemented. The school board office funded \$7000 for materials in the first year. In the following years, funds were budgeted for additional materials.

The faculty member needed no additional materials for the classes she taught, but she knew the cost of materials was a major concern when new electives were being considered.

Again, the parent repeated there was very little concern with cost among parents and the community. Cost was a "very low-key issue."

The student did not know of any cost related to additional materials.

Staff Development. The administrator pointed out staff development could be an administrative cost problem as well as an instructional problem. Because teachers wanted to

tour other schools to observe alternative schedules in action, travel could have been an expense. The administrator was able to keep travel to a minimum by bringing guest speakers to the school. Peers were used to conduct in-service training in varied teaching techniques ("in-house expertise") and group leaders were paid in recertification points. A network was established to share with other schools.

The faculty member agreed with the staff development plan used at the school. She was able to go on a few observation trips but sharing learning experiences with the other teachers helped to create bonds.

The parent thought staff development would be costly when she first heard of the 4 X 4 block schedule. Parents had been told staff development was a condition that would be met before the 4 X 4 block schedule was implemented. She knew some teachers had been involved in staff development programs, but she didn't know if all teachers had participated. She felt staff development would help teachers learn to manage 90 minutes of instructional time. But, she also knew some teachers might not use what they had learned.

The student was not aware of specific costs related to staff development. She knew there had been instructional technique changes in the classroom which might have been caused by workshops.

Table 4.3

School A: Administrative Problems Related to Implementing  
the 4 X 4 Block Schedule and Possible Resolutions

Categories	Responses
Additional Electives and Cost:	
Administrator	Had to increase from 7 to 8 classes per student per year Added 16 electives with \$7000 additional funding from central office Eliminated study halls allowing more teachers to teach classes Added more advanced math/science
Faculty Member	Agreed electives were added Knew the decision to add an elective was tempered by the cost Wanted more instructional money to add costlier electives
Parent	Felt there would be a cost associated with adding electives Did not think enough useful electives were available Wanted 5 years of foreign language
Student	Knew electives were added Heard nothing of cost factor
Additional Materials and Cost:	
Administrator	Purchased additional reading materials for English
Faculty Member	Did not need any additional materials in her math/computer classes Knew a few materials had to be purchased for some of the electives
Parent	Not a concern, "low key" item
Student	Did not hear of any problems
Additional Staff and Cost:	
Administrator	Did not have enough staff the 1st year because of increase in electives and more students from the middle school Made adjustments in electives Increased budget request to add 9 teachers the 2nd year

Faculty Member	Knew teachers had to be added
Parent	Felt more teachers were needed when heard of the additional electives, but basically a "low-key" issue
Student	Was not aware of the need for teachers and did not hear of cost factor

Staff Development and Cost:

Administrator	<p>Knew teachers needed to observe the Block Schedule</p> <p>Knew teacher training was needed because of the fear of 90-minute classes</p> <p>Avoided cost by using in-house expertise</p> <p>Kept travel to a minimum</p> <p>Brought "low-cost" speakers in from surrounding schools using the Block Schedule</p> <p>Built a "net-work" with other block-scheduled Schools</p>
Faculty Member	<p>Felt staff development plan was good</p> <p>Knew the use of in-house expertise encouraged bonding between teachers</p>
Parent	<p>Knew staff development was a condition of changing to the Block Schedule</p> <p>Did not know if all staff had been trained</p>
Student	<p>Did not know about specific staff development programs but, knew that something had caused the teachers to change their teaching in the classroom</p>

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## Instructional Problems

The administrator of School A indicated on the survey instrument there were instructional problems related to sequencing of classes. When the administrator was interviewed, he also mentioned instructional problems related to an activity period, class size, evaluation, fine arts, scheduling balance, staff development, and transfer students. This information is presented in Table 4.4 at the end of this section.

Sequencing. The administrator felt problems would arise in sequencing foreign language and math courses. Therefore, the guidance department was directed to hold scheduling conferences with parents and students. Because of a lack of personnel, the foreign language sequencing was very difficult. Several students waited an entire year between foreign language semesters. But, now the problem was solved because additional staff had been hired.

The faculty member did not think sequencing was a problem. In teaching higher level math, she felt some review was necessary, but students quickly "catch up to speed." More review is needed when students don't get sequential courses in a timely manner.

The parent remembered sequencing was a concern voiced at the Public Forums. She felt "doubling up", taking more than one language, math, or science in a school year, might

be the answer.

The student did not feel sequencing was a problem. "I waited a year and I didn't have a problem. I was a little rusty, but review gets you back."

Class Size. The administrator realized the adoption of the 4 X 4 block schedule for the school would be a problem because the budget had already been approved meaning no additional staff would be hired. Therefore, class sizes were larger than had been reported at the Public Forums. Nine additional teachers were hired the following year.

The faculty member did not notice large class sizes during the first semester. In subsequent semesters and years, the class sizes have steadily increased. She felt the size increase was because of "repeaters". Also, the "doubling up" had increased which was not expected. As far as the faculty member was concerned the only solutions were to make a policy concerning "doubling up" or hire additional staff.

The parent was not concerned with large class sizes because the growth in the community had caused large class sizes at all schools. The parent had not heard anything about large class sizes from her children.

The student stated she had not seen large class sizes in any of her classes.

Evaluation. The administrator stated the 4 X 4 block

schedule would be successful only if administrators monitored the use of staff development strategies. He stated teachers' classes must be constantly monitored to make sure activities changed on the average of every 30 minutes.

The faculty member agreed evaluations were being held more often; but, she was not concerned with changing activities every 30 minutes. She knew varied activities were expected. Staff development had helped prepare the teachers for these activities.

The parent stated she knew there was an emphasis system-wide to improve teaching strategies. When asked about the evaluation process, she realized this emphasis had begun the same time the 4 X 4 block schedule was implemented.

The student observed teaching strategies were being monitored frequently in the classrooms.

Staff Development. The administrator had emphasized teacher training from the beginning of the implementation of the block schedule. He felt the concern of teaching 90 minutes caused the teachers to invest lots of time in staff development. Teachers never complained about attendance at staff development programs.

The faculty member agreed the in-service programs were invaluable. She felt the workshops which concentrated on how to teach "at-risk" students for 90 minutes were the best. She also liked sharing ideas with teachers at other schools.

The parent again stated one of the conditions which caused everyone to agree with changing to the block schedule was the staff development plan which stated all faculty members would receive in-service training in how to vary activities for a 90 minute lesson. She stated "I don't know how good it's been; but, they either didn't all take it or they're not using what they learned."

The student said she knew something was happening through the years because the teachers were doing more fun things in class.

Fine Arts. The administrator knew additional classes had to be added because the students needed eight per year. Therefore, some students were earning two credits per year in fine arts. By the time a student graduated, he might have earned 25 percent of his credits in this area. The administrator felt his job was to make sure all classes were meaningful. In order to remove the ability to make eight credits in fine arts, he suggested the fourth block might be divided into two 45-minute sections to teach two electives.

The faculty member disagreed with the administrator. She felt earning eight credits in fine arts was fine if "that's what the student was interested in." She made the point "no one would be concerned if 25 percent of the credits were earned in the vocational area. Let them excel in what they're good at."

The parent agreed with the administrator. She felt more electives were needed. "Electives needed to have more substance." Some electives were nothing but "time-fillers."

The student stated she enjoyed her electives. She mentioned several computer classes she had taken which taught her how to word process, make spreadsheets, and design graphics. She added she was receiving credit for "office assistant"; therefore, students could pick and choose electives which did not require a lot of work.

Activity Period. The administrator felt there was no time to build an activity period into the schedule. During the first year, 10 minutes were taken from each block one day per week to allow club meetings of 40 minutes every week. A change in philosophy of the superintendent and supervisory staff caused more emphasis to be placed on academics and the activity period was removed from the schedule. The administrator did not feel all students could participate in after-school meetings. Therefore, he felt the problem of providing club time/socialization time had not been resolved.

The faculty member agreed there was a need for some time for the students to be involved in activities during the day. She stated there had been only one pep rally all year. "Last year I noticed the seniors were ready to graduate because this has not been a 'fun' year. They went

through the day with no 'fun' things." Because clubs were responsible for dances and other fun activities, the activities had stopped. Club participation after school was limited because of driving and working students. The teacher felt just having "fun" activities was not the only reason for club membership. She also felt "kids need to learn how to put something back in the community." For example, students should belong to clubs such as Earth Club and Recycling Club.

The parent felt the students were missing the social aspect of high school. She stated a major part of growing up was how to interact in meetings which required one to respect others' opinions in making choices.

The student was not concerned with the lack of an activity period. "I don't know. I go to things after school."

Scheduling Balance. The administrator felt students should take two core subjects and two electives. The guidance department was directed to work with parents and students to balance schedules to reduce stress.

The faculty member agreed with the administrator concerning the balancing of students' schedules. But, she felt the students should take the responsibility to balance their schedules.

The parent knew the students' schedules were balanced

and that guidance counselors would help students who needed assistance.

The student had never been to guidance to balance her schedule, but she felt guidance would work with anyone to make needed changes.

Transfer Students. The administrator set up an instructional program for students transferring from a traditional 6- or 7-period day to the block schedule. The instructional program was the Advancement Center.

The faculty member had never had a student who had come to her class from the Advancement Center, but she knew of the program. She also had talked to teachers who found the Center very helpful to transfer students. "I do not see a transfer student coming in and walking right into the classroom." She felt the Advancement Center helped students through a difficult situation.

The parent had heard of the Advancement Center at the Public Forums. She felt the concept was very good because she realized transfer students would have a difficult time.

The student had heard of the Advancement Center, but she had never known anyone who had been in the program.

Table 4.4

School A: Instructional Problems Related to Implementing the  
4 X 4 Block Schedule and Possible Resolutions

Categories	Responses
Activity Period:	
Administrator	Felt there was no time for student socialization Had previously attempted 10 minutes from each class one day a week to build a 40 minute activity period, but philosophy of school board was academics only
Faculty Member	Agreed with need for activity period Only students who drove and didn't work could meet after school
Parent	Felt students were missing social aspect of high school
Student	Did not think was a problem
Class Size:	
Administrator	Added electives and received additional students, needed more staff Did not hire until the 2nd year Class sizes were large but now better
Faculty Member	Did not see in her classes until 2nd semester Felt it was because of "repeaters" and "doubling up" Felt a policy needed to be written
Parent	Did not feel there was a problem Class sizes are large in the division
Student	Felt classes were small
Evaluation:	
Administrator	Felt teachers must be evaluated to ensure varied strategies were being used in the classroom Should check for 30-minute intervals
Faculty Member	Realized evaluation was more frequent Was aware of the expectation of varied activities
Parent	Knew there was an emphasis on evaluation

Student Had seen administrators in class often

Fine Arts:

Administrator 25 percent of earned credits may be fine arts  
Guidance was assigned to schedule and  
to look at fine arts being a year's  
commitment

Faculty Member Felt was a good idea  
Allowed the student to succeed

Parent Had a problem with it  
Would not allow her children to  
take 8 classes of fine arts

Student Felt 8 credits for fine arts  
was a good idea

Sequencing:

Administrator Math and Foreign Language was a  
problem, number 2 Complaint of parents and  
students  
Tried to resolve by using guidance and  
parent/student conferences

Faculty Member Did not see as a problem  
Reviewed more

Parent Heard concern at Public Forums  
Recommended "doubling up"

Student Did not worry, review was fine

Scheduling Balance:

Administrator Felt students should have a balanced  
schedule with 2 "hard" courses and 2  
"easy" courses  
Had instructed guidance to build student  
schedules and hold conferences

Faculty Member Agreed with this arrangement, but felt  
students should take the responsibility

Parent Felt balancing was good, but wanted  
quality of electives to improve

Student Knew guidance would help balance

Staff Development:

Administrator Staff needed training to teach 90  
minutes  
Shared in-services with other schools  
Staff gave up time to attend

Faculty Member Felt useful to train

Parent Was a condition of the change

Student	Some are not using what was learned Has noticed changes, teachers are doing different types of activities
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Transfer Students:

Administrator	Knew transfer students were a problem Had established an Advancement Center
Faculty Member	Had received no students from the Center but knew of its existence Had heard of its success from other teachers
Parent	Knew transfers were a problem Knew of Advancement Center
Student	Had heard of Advancement Center Did not know anyone who used

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### Administrative Problems: Policy

Changing to the 4 x 4 block schedule required revising and adding several policies. The administrator of School A indicated on the survey instrument the examination policy created some problems. During the interview, other policies related to attendance, graduation requirements, senior enrollment, and Virginia High School League (VHSL) eligibility were discussed. This information is summarized in Table 4.5 at the end of this section.

Attendance. The administrator stated an attendance policy had to be established when the 4 X 4 block schedule was implemented. Previous to having the policy, attendance at the high school had been poor. After implementing the 4 X 4 block schedule, the end-of-the-year attendance report showed a 94 percent average attendance for the year which he felt was extremely good for a high school.

The faculty member agreed attendance had greatly improved with the advent of the attendance policy. She thought the policy was a plus because it not only improved attendance but it placed the responsibility of being at school on the student. Students realized missing one day in the block schedule was equivalent to missing two days under the traditional schedule.

The parent was aware of the attendance policy. She agreed an attendance policy was important. "We needed it."

But, she felt the high school now had no incentive programs for good attendance. Because the high school did not take any time for assemblies or club meetings, the previous "perfect attendance" awards given at the end of every six weeks during an assembly were no longer available as a part of the social aspect of the school. She added she had heard of a transitional program at the middle school which would help those students understand the high school policies. The last six weeks at the middle school would be run like the block schedule at the high school.

The student knew the attendance policy had made a difference among her friends. Everyone she knew had started coming to school every day.

Examinations. The administrator stated that the examination exemption policy which had been in place was removed. An examination exemption policy no longer existed. "Everybody has an exam of some kind."

The faculty member agreed all students should take some kind of an examination.

The parent knew the examination exemption was removed, but she felt a flexible examination schedule was in place. The examination parameters were not as formal as those she remembered when she was in school.

The student knew the examination exemption had been removed. She indicated some students might want to return to

the traditional schedule in order to have examination exemptions again.

Graduation Requirements. The administrator stated that the graduation credit requirements had increased since the implementation of the 4 X 4 block schedule. In order to graduate the student must have a minimum of four less than the maximum credits available. Therefore, a student who had been in the block schedule four years would need 28 credits to graduate (4 years x 8 credits = 32 credits - 4 credits = 28 credits). He stated that this "upped" the requirements from the number of credits required to earn a diploma under the traditional schedule.

The faculty member was aware the students had to earn more credits because there was an opportunity to earn eight credits per year.

The parent was aware the students could earn 32 credits under the 4 X 4 block schedule.

The student was not sure exactly how many credits she had to earn to graduate, but she offered to get the information from her book bag. "Yes, I know, I keep it in my book bag."

Senior Enrollment. The administrator allowed seniors to leave school when they had completed their credit requirements, which meant some seniors could leave school at the end of the first semester if they had completed English

12 and government. The only compelling regulation for those seniors to remain in school after the first semester of the senior year was athletic eligibility. (A student must be enrolled in three classes per semester to be eligible for athletics.) He felt students who were going to work or wanted to enroll in college should be allowed to leave as soon as credit requirements were met. He stated that he tried to hold on to those students who were planning to attend a four-year college. He also added sometimes he could get rid of behavior problems by letting seniors go at semester who had completed the graduation requirements. He stated the "down side" was those students were dropped from membership; therefore, his March 31 membership number was down which resulted in a loss of \$12,000-14,000 the first year of implementation. He also felt the guidance counselors were aware of individual student's needs and would plan schedules accordingly.

The faculty member felt allowing seniors to leave in January did not pose a problem. She felt more seniors had chosen that option the first year the block schedule was implemented, but in following years less had left. She stated that there were two reasons for less seniors leaving after the first year: (1) athletic eligibility and (2) the novelty wore off. "The first year they didn't realize they would be out of school in January."

The parent did not agree with the policy to allow seniors to leave in January. She felt guidance was attempting to balance schedules placing English 12 in one semester and government in the other, but then the students were leaving after one class. She wanted students to stay in school all day. "You're just encouraging them (students) to be lazy." She felt a stronger policy should be written in addition to the athletic eligibility.

The student stated that some of her friends left at semester, but she did not plan to leave. "I won't because I play sports."

Virginia High School League (VHSL) Eligibility. The administrator requested a waiver from the Virginia High School League. The previous policy stated that in order to be able to play in Virginia High School League sponsored activities, a student must pass the majority of his course work which translated into four of six classes or five of seven. Under the 4 X 4 block schedule, a student must pass three of four classes which meant the student must be enrolled in at least three classes per semester.

The faculty member knew about the regulation change but was not involved with athletics.

The parent was aware of the regulation. "Yes, you have to go three of four to be involved in sports."

The student said that she was aware of the rule. "I

play three sports, so I cannot leave early because of the three-rule."

Table 4.5

School A: Administrative Policy Problems Related to  
Implementing the 4 X 4 Block Schedule and Possible  
Resolutions

Categories	Responses
Attendance:	
Administrator	Attendance had been poor before the block Established an attendance policy Now overall attendance was 95%
Faculty Member	Knew attendance had improved Liked policy because placed some responsibility back on student Students knew missing 1 day was equivalent to missing 2 traditional days
Parent	Felt we needed the attendance policy, but lack of activity period results in no time to recognize perfect attendance as before
Student	Knew attendance improved with the policy
Examinations:	
Administrator	Established a policy that everyone would take an examination of some kind, no exempt policy
Faculty Member	Agreed with exam policy
Parent	Knew the exam exemption was removed, but felt the exam schedule and parameters were flexible
Student	Did not worry about the exam policy
Graduation Requirements:	
Administrator	Had to increase requirements Wrote new regulations for graduation requirements
Faculty Member	Knew had to increase requirements because students could earn 32 credits

Parent	Knew student could earn 32
Student	Knew about increase, kept information in her book bag
Senior Enrollment:	
Administrator	Had written no regulations Seniors could leave when completed credit requirements in January Lost money on membership Tried to hold those going to a 4-year college VHSL regulations were the only rules holding the seniors, and that would only affect athletes
Faculty Member	Fewer left this year than last Last year's group did not realize they graduated so quickly
Parent	Felt Seniors should go to school all day and not be allowed to leave in January.
Student	Knew some of her friends left early, but played sports so would not be leaving early

Virginia High School League (VHSL) Eligibility:

Administrator	Requested waiver for a 3 of 4 rule rather than a 4 of 6 rule.
Faculty Member	Knew policy had to be revised but was not on that committee
Parent	Knew you had to go attend and pass 3 of 4 classes per semester
Student	Played 3 sports and was aware of the regulation

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Protocol Question #4: Did you perceive any change in school climate or culture of the school? If so, how was it managed?

Protocol Question #5: Did you perceive any school climate related problems with the students? If so, how were they managed?

Protocol Question #6: Did you perceive any school climate related problems with the staff? If so, how were they managed?

The responses to these three questions were also intended to assist in answering research questions 1, 2, and 4. These questions were designed to correlate with the school climate problems, if any, the administrator had indicated on the survey. This information is summarized in Table 4.6 and Table 4.7.

#### Overall School Climate

The administrator stated that the school climate was very positive. The students were experiencing feelings of success. Good lines of communication existed. Electives were useful and they were adapted to meet the needs of the child. He felt there were two main factors causing the positive school climate: (1) flexibility and (2) communication. He added from a school-initiated survey, 90 percent of the students and 89 percent of the parents liked the 4 X 4 block schedule.

The faculty member felt there was an overall positive climate among the students and staff.

The parent remarked "Overall, it's fine. My daughter loves it."

The student stated "everybody likes it."

#### School Climate: Student Problems

The student problems which affected school climate basically fell into eight categories as the interview information was obtained: boredom, homework, honor roll, class participation, discipline, and socialization. The following information is summarized in Table 4.6.

Boredom. The administrator indicated the biggest complaint from the students was that the teachers lectured too much. He felt the staff development programs and the administrative monitoring in the evaluation process would resolve this problem.

The faculty member said that she was still hearing from her students that the same teachers were lecturing too much. She added she was hearing less complaints than the first year. She felt some of the older teachers were having a hard time adjusting to a 90-minute class.

The parent said that her daughters told her some teachers made the class interesting, but for the others: "They cannot believe how long the class is."

The student said she was concerned when she first heard

the classes were going to be 90 minutes long. But, her teachers made the class interesting. She added some of her friends had complained about their teachers, but she only heard those complaints when she was in the 9th grade, "when it (4 X 4) first happened. Most teachers change what they do."

Homework. The administrator stated that students only have to worry about doing homework in four classes per day. He had recommended to teachers they allow 10 minutes at the end of the class period to start homework. He felt the students were less stressed about completing homework.

The faculty member agreed with the administrator. She said that students could relax more when they only had to complete homework in four classes per day.

The parent stated that some teachers allowed students to complete all of their homework in class. Others only designated the last 10-20 minutes of class for this activity. She felt her daughters were bringing lots of homework home in the advanced classes.

The student stated that she was definitely less stressed and had less homework since she only had work in four classes.

Honor roll. The administrator emphasized the students were experiencing more success in the classroom which he attributed directly to the fact that they now only

had four classes to study at a time. "The kids meeting success increased dramatically. Kids were making Honor Roll who had never made it before in their lives." He added guidance had done a great job balancing students' schedules to fit two "hard" classes with two "easy" classes. He felt kids in athletics and other after-school activities benefited from this balancing of classes.

The faculty member agreed more students made better grades. She added one should not look at the electives as being "watered down." Students just didn't have to do as much work or study as hard if they only had to prepare for four classes.

The parent also agreed students should make better grades if they only had to prepare for four, while two were usually electives. She felt grade point averages (GPA's) should improve. But, she added another important idea: students who maybe hadn't done well in the elementary or middle school grades could concentrate on four subjects. She also added since there was the opportunity to earn 32 credits, a student who wasn't "tracking" in the academic subjects as a 9th grader had a chance to "double up" and take the classes to get into a college-prep course of studies. Changing a chosen course of studies was not so easy in the previous schedule because you would have to go to summer school to earn the additional credits.

The student felt she was getting more help in classes; therefore, she was making better grades. She didn't know if more students were making Honor Roll, but she thought they ought to because they only had to study for four subjects. She was aware the guidance department would help her balance her schedule.

Class participation. The administrator stated that students enjoyed class more because the longer class periods allowed for more student/teacher involvement.

The faculty member agreed there was more time to work with students individually. She also stated that the students enjoyed the classes because of the varied activities and group work. She said that the electives which kept the students involved were the students' favorites.

The parent said that sometimes the classes called for more student/teacher involvement. She cited her daughter's Advanced Placement government class which had enough time to have a mock General Assembly meeting.

The student said that she had more study time with the teacher. "Kids are participating a lot in class."

Discipline. The administrator stated that student disciplinary problems had decreased because the students had less time in the halls. He felt most of the disciplinary problems were coming from classes of teachers who were

lecturing too much. He felt this problem could be resolved through lesson plan checks and through the teacher evaluation process. He added there was a tendency the second year for teachers to become lax in the classroom and allow too many breaks. He stated that teachers should follow their first year procedures. Also, he added that for some students there might be a tendency for the novelty of the 90-minute block to wear off and more disciplinary problems might develop in the future.

The faculty member agreed there were fewer disciplinary problems. She attributed the improvement to the fact that fewer students were in the halls at break times because breaks were at different times in different classes. She felt in-class discipline had also improved because students were more involved in the class activities.

The parent stated that she was not aware of any difference in student disciplinary problems at the high school. She still heard about fights and other incidents, but no more than usual. She thought hall incidents should decrease since students were not in the hall as much for class change.

The student stated, "It (discipline) seems like it's gotten better. There's not a bunch of people in the office all the time like before."

Socialization. The administrator stated that there was

not enough time for the students to socialize. A 10-minute break was between first and second block, there was a 30-minute lunch period, and then there was a 6-minute break between third and fourth block. No time was built in for club meetings or any organization meetings. The administrator had not been able to resolve this problem. He felt an activity period was needed.

The faculty member agreed there was no time to socialize. She stated that only one pep rally had been held all first semester.

The parent felt her oldest daughter who had experienced the traditional schedule for one year missed the social part of high school the most. "The social aspect of high school is a very important part of growing up." She added her younger daughter who had never known anything but the way it was now, had no idea what she had missed.

The student stated: "We get ten minutes between first and second block and that's a lot of time."

Table 4.6

School A: Student Problems Affecting Climate and Possible Resolutions

Categories	Responses
Boredom:	
Administrator	Has heard complaints concerning the same teachers Has provided staff development Has monitored classrooms
Faculty Member	Has still heard complaints, but not as much
Parent	Has heard some classes are "forever"
Student	Heard from some of her friends, but felt her teachers were interesting
Homework:	
Administrator	Felt had to only work on 4 classes Had designated 10 minutes in class
Faculty Member	Felt easier to concentrate on 4
Parent	Has seen a lot of homework in advanced classes Has heard some teachers allow students to do all homework in class time
Student	Felt there was less homework in 4
Honor Roll:	
Administrator	Increased number because only 4
Faculty Member	Felt number had increased, but did not consider any "watering down"
Parent	Felt more were on Honor Roll because only have to prepare for 4 and 2 are electives
Student	Was not sure if more were on Honor Roll, but felt they should be with only 4

Class Participation:

Administrator	Felt student/teacher interaction had increased because of longer class time Felt teachers had to keep students involved
Faculty Member	Had more time to work with students Had to keep students involved
Parent	Felt students were more involved sometimes
Student	Felt more study time with teacher Felt students were participating

Discipline:

Administrator	Felt less discipline problems because less time in halls Other discipline problems might arise in boring classes or if teachers were lax in controlling break times Felt administrator must monitor
Faculty Member	Felt discipline was better in halls and classes
Parent	Did not feel there was a difference
Student	Felt discipline had gotten better

Socialization:

Administrator	Did not think students had enough time, needed activity period
Faculty Member	Did not think students had time to be in clubs
Parent	Felt students were missing social aspect of high school
Student	Did not feel time was needed

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### School Climate: Staff Problems

The information obtained during the interviews concerning the staff problems which affected school climate fell within the following categories: resistance to change, planning, class size, and socialization. This information is summarized in Table 4.7.

Resistance to change. The administrator felt some members of the faculty were fearful when the 4 X 4 block schedule was in discussion stage. The problem with some teachers was the realization "they couldn't do it (teach class) the same old way." He suggested the only way to solve this situation is to talk about 4 X 4 block scheduling for at least a year before implementation. He stated that the 4 X 4 block schedule had been implemented at his school in eight months, which he did not feel was enough time to "bring everyone on board." He emphasized everyone must be kept apprised of what is going on and organize sessions to ensure everyone has input. In order to ease the transition, the administrator removed all supervisory duties from the teachers for the first year. Then he set up a schedule of weekly in-service training to help teachers learn to plan a 90-minute lesson. The administrator repeated "planning was the key."

The faculty member stated that she knew she had to change. She agreed the first year there was lots of fear.

She knew some teachers were resistant to the change. Some of those same teachers are still talking about going back to the traditional schedule. "They were used to doing things in a certain way, and they don't feel they have enough time in the block schedule." The faculty member also stated that the first year of the block implementation, they had no supervisory duties; but, now they have duties such as bus duty and hall duty.

The parent knew staff development programs were planned to help teachers learn to teach for 90 minutes. She also stated "some (teachers) have refused to take advantage of the methods learned."

The student stated that in most classes teachers change around what they do.

Planning. The administrator stated that teachers must plan for the 90-minute instructional block. He scheduled several in-service programs for that purpose.

The faculty member agreed the staff has spent a lot of time involved in staff development programs. She added that the staff development has paid off because she feels all faculty members have prepared extensive plans for every day's lesson. She felt a teacher cannot have "down time" in any classroom in the 4 X 4 block.

The parent stated that the teachers her children have had appear to have done a lot of planning. She knew staff

development was planned to help teachers adjust to the 90-minute block. She repeated that those staff development programs were a condition of agreeing to change to a 4 X 4 block. Parents were assured at the Public Forums that the staff would be trained.

The student stated that after the first year, she could tell the teachers were planning extensively. They were doing lots of activities in the classroom.

Class Size. The administrator stated that class sizes were large the first year of implementation of the 4 X 4 block schedule. He was able to hire more staff members the second year.

The faculty member agreed the class sizes were larger the first year, but the size did not affect her classes because her student numbers were based upon the number of computer work stations. She understood no additional staff members could be hired because the budget had already been finalized and more students came from the middle school than were anticipated. She repeated that rules must be set for repeaters and "doubling up" in order to prevent class sizes from getting out of hand. She indicated the other members of her department had been discussing how math class sizes seemed to get larger and larger each year.

The parent was not concerned with large class sizes because she knew the community was growing at a rapid rate.

The student stated that she did not see any difference in the class sizes.

Socialization. The administrator felt there was less socialization among the staff members because of the 4 X 4 block. He attempted to balance planning times all over the building; but, he suggested that he would try having the School Improvement Committee meet during those times to make the most of a 90-minute planning period. He felt teachers could have quality team-planning; but, he had not observed any evidence of joint planning sessions.

The faculty member agreed she had observed less socialization among the faculty members.

The parent considered the socialization problem just a student problem.

The student stated that she did not see a need for socialization among teachers during the day. "Why don't they just meet after school like we do?"

Table 4.7

School A: Staff Problems Affecting School Climate and Possible Resolutions

Categories	Responses
Resistance to Change:	
Administrator	Talked about process for 1 year Emphasized 90-minute planning Removed supervisory duties 1st year
Faculty Member	Knew must change Resisted because they were use to doing the same old thing Lots of fear the 1st year
Parent	Knew staff development was a condition of the schedule change Felt some have not taken advantage of the training
Student	Felt teachers have changed
Planning:	
Administrator	Felt planning has been extensive
Faculty Member	Felt planning has been extensive
Parent	Felt planning has been extensive
Student	Could tell planning after 1st year
Class Size:	
Administrator	1st year a problem, not 2nd
Faculty Member	Felt problem from repeaters, "doubling up"and more 8th graders
Parent	Did not hear of a concern
Student	Did not see any difference
Socialization:	
Administrator	Felt less socialization
Faculty Member	Felt less socialization
Parent	Did not see with teachers
Student	Did not see with teachers

**Protocol Question #7: Did the community perceive any problems with the 4 X 4 block schedule?**

The responses to this question were also intended to assist in answering research questions 1, 2 and 4. In addition, this question was designed to correlate with the problem indicated by the administrator on the survey.

Community Perception Problems

The information obtained from this interview question basically fell into the following categories: communication, usefulness of electives, sequencing of courses, harmful effects to fine arts program, and complaints related to lecturing. This information is summarized in Table 4.8 at the end of this section.

Communication. The administrator stated that along with talking about the 4 X 4 block schedule "in house" for a year, you must also bring the community along. He set up several Public Forums to discuss the implications of the 4 X 4 block schedule. Community members were involved in making a presentation before the school board when the request was made to change to the 4 X 4 block schedule.

The faculty member felt the community was behind the change of schedule because of the excellent communication. She stated that every January a Curriculum Fair is held to invite everyone to the school to talk about the course

offerings and the educational opportunities available at the school. "The public is starting to back what's going on."

The parent attended the Public Forums. She felt the meetings were very informative. She added that people did not take advantage of attending the meetings to learn more. She stated "the people voiced concerns and asked question, but I didn't really remember anyone being forcefully against it." One point which she did not feel was clearly communicated to the parents was the report card issue. Parents did not clearly understand only two report cards would be sent home before the class was over. She feels more report cards are needed. "The semester slips up on you." She also stated she did not like the idea that seniors can leave in January or leave during the day.

The student felt the communication was good. She understood what was happening and her parents did also.

Usefulness of Electives. The administrator felt a variety of electives were available to meet the needs of the students. He had surveyed the students, parents, and faculty to obtain suggestions for electives.

The faculty member felt electives which met the needs of the students were useful. She had not heard any complaints from the community concerning the electives.

The parent felt she was speaking for other parents whose children had electives which were "time-fillers." She

wanted more advanced classes offered, especially the fifth year of foreign language.

The student felt everyone was happy with the electives offered. She stated her electives were worthwhile and her needs were being met.

Sequencing of Courses. The administrator stated the fear of allowing too much time to elapse between math and foreign language classes was the second largest complaint of parents. He felt the problem was resolved through parent/student conferences with the guidance counselor. He stated accommodations must be made to meet the needs of the parents as well as the students.

The faculty member, who taught math, felt the fear of sequencing incorrectly was unfounded. She stated kids were able to catch up quickly; but, she was aware the sequencing problems were a major fear of parents. She also felt the guidance department would handle each case individually, as long as the student or parent requested a change.

The parent remembered the sequencing problem was a major concern at the Public Forums. Parents wanted assurances that a year's time would not lapse between math sequential classes or levels of foreign language classes.

The student had experienced a year's lapse of time between Algebra II and Math Analysis. She had elected not to change her schedule. She felt she was able to catch up with

no problem.

Harmful effects to fine arts. The administrator stated two judges in the community were vocally against the 4 X 4 block schedule at the Public Forums because they perceived the fine arts program would be adversely affected. Therefore, the administrator made a regulation which required any student participating in chorus or band to make a year's commitment to the programs. This regulation resolved the problem with the two community leaders.

The faculty member agreed with the fine arts' regulation because chorus and band had to depend upon a full, experienced group of students performing in fall, winter, spring, and end-of-year programs.

The parent understood the fine arts requirement; but, she did not want her children to earn eight credits of fine arts to graduate. She preferred her children take advanced electives.

The student felt the fine arts regulation was fine.

Complaints related to lecturing. The administrator stated "too much lecturing" was the number one complaint of parents. He had assured the complainants staff development programs and teacher evaluation procedures will remedy the problem.

The faculty member stated she still hears complaints but not as much.

The parent stated she still hears some complaints, but the number has drastically reduced. "As with any business, you've got the employees that refuse to make changes."

The student stated she knew her parents liked the 4 X 4 schedule. They had never complained.

Table 4.8

School A: Community Perception Problems and Possible Resolutions

Categories	Responses
Communication:	
Administrator	Allowed time for communication Held Public Forums/Presentations Felt communication was good
Faculty Member	Felt communication was good Held a curriculum fair
Parent	Attended Public Forums Felt communication was good Disappointed with level of participation of parents
Student	Felt communication was good
Usefulness of Electives:	
Administrator	Used surveys for parental input
Faculty	Believed electives are perceived as useful/meet student needs
Parent	Wanted more electives with substance, not "time-fillers"
Student	Felt electives were helpful
Sequencing of Courses:	
Administrator	Number 2 complaint of parents Math/foreign Language difficult Used guidance and conferences
Faculty member	Not a problem, students caught up
Parent	Observed there were many Questions/Concerns at Public Forums
Student	Felt could catch up
Harmful Effects to Fine Arts:	
Administrator	Needed to make regulations for 1 year commitment to programs
Faculty Member	Needed to commit to 1 year at least
Parent	Saw no problem with harming program

Student did not perceive a problem

Complaints Related to Lecturing:

Administrator	Number 1 Complaint of parents Used teacher evaluation process and staff development programs
Faculty Member	Has still heard complaints, but not as much
Parent	Has heard complaints, but only about certain teachers
Student	Has gotten better each year

Overall Community Perceptions:

Administrator	Liked by the community
Faculty Member	A "big plus" for the community Have made presentations in support
Parent	Remembered no one forcefully against Don't like seniors being able to leave
Student	Liked by parents

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**Protocol Question # 8: Explain the outside and inside influences to change to a 4 X 4 block schedule.**

The responses to this question were intended to assist in answering research questions 1, 2, and 3. A summary of the responses is shown in Table 4.9.

Influences Outside the School Building

The administrator stated there were no outside influences to change to the 4 X 4 block schedule. The faculty member and the parent also agreed there were no outside influences to change the schedule. The parent added "our Assistant Superintendent supported the teachers." But, there was no pressure to change to a 4 X 4 block schedule.

The student stated she did not know of any outside influences.

Influences Inside the School Building

The administrator, faculty member, parent, and student agreed the only influence to change to the 4 X 4 block schedule was the teacher influence.

The administrator remembered a group of teachers had come to him requesting they be allowed to investigate the 4 X 4 block schedule. He agreed they could start the investigation with the condition they also investigate other alternative schedules such as the alternating day.

The faculty member stated someone on the staff had a relative who was teaching in a 4 X 4 block scheduled school. After talking with the relative, the staff member began to discuss the possibility with other staff members. Once the group in favor of the change was large enough, they approached the principal. The faculty member added the teachers had lots of input.

The parent stated she had heard it was the teachers' group who wanted to change all along. She repeated the Assistant Superintendent supported the teachers as soon as the decision was made to ask approval of the school board.

The student remembered her dad had been on the teacher committee. He had talked about how much he could get done in a class 90 minutes long.

Table 4.9

School A: Outside and Inside Influences to Change to the  
4 X 4 Block Schedule

Respondent	Outside Influences	Inside Influences
Administrator	0	Teachers
Faculty	0	Teachers and Administrators
Parent	0	Teachers
Student	0	Teachers

**Protocol Question # 9: What available resources did you receive?**

The responses to this question were intended to assist in answering research questions 3 and 4. A summary of these responses is found in Table 4.10.

The administrator stated the school board office had given \$7000 in additional funding to buy materials the first year of implementation and his budget requests had been approved for additional staffing the second year. No other resources were received. He also was aware he had lost approximately \$12,000-\$14,000 because of the drop in membership when seniors left school at the end of the first semester in January.

The faculty member felt the resources have stayed the same. She stated a little more funding would help the elective programs. But, she added "our school board wants to do as much for us as they can possibly do."

The parent felt the resources were there, but she would like to have seen more.

The student stated she did not know about the resources; but, "I can't think of anything else I'd like to have."

Table 4.10

School A: Available Resources for the Implementation of the  
4 X 4 Block Schedule

Respondent	Resources
Administrator	Central Office gave money for materials No increase in staff the 1st year Budget approved for increases in staff and materials the 2nd year
Faculty	Resources have stayed the same Need more money for electives School Board is doing as much as it can
Parent	Resources are available Need to continue the availability
Student	Did not know about resources, but felt everything necessary was available

**Protocol Question #10: What kind of support did you receive from the faculty? school board? Superintendent? Community?**

The responses to this question were intended to assist in answering research question 3. A summary of the responses is found in Table 4.11.

The administrator felt he received strong support from faculty, school board, Superintendent, and community. He conducted a survey and found 91 of the 94 teachers liked the block schedule. He also found 90 percent of the students and 89 percent of the parents liked it.

The faculty member agreed with the idea that the block schedule received strong support. She felt approximately 3 percent of the teachers did not like the new schedule.

The parent stated "the block schedule received lots of support from everyone."

The student agreed everyone supported the change to the block schedule. She added all of her friends and their parents liked the 4 X 4 block schedule.

Table 4.11

School A: Support for the Implementation of the 4 X 4 Block Schedule

Respondent	Support			
	Faculty	Sch. Bd.	Supt.	Community
Administrator	X	X	X	X
Faculty Member	X	X	X	X
Parent	X	X	X	X
Student	X	X	X	X

Note. X = Strong Support.

**Protocol Question #11: What are your major reasons for continuing (or not continuing) 4 X 4 block scheduling?**

The responses to this question were intended to assist in answering research questions 1, 2, 3, and 4.

The administrator felt the school should continue with the 4 X 4 block schedule because of four reasons: (1) flexibility; (2) student success rate; (3) the opportunity to get back on "track" or change "tracks"; and, (4) the ease with which students and parents could be accommodated. He looked forward to the 4 X 4 block schedule continuing indefinitely.

The faculty member added her reasons for continuing the 4 X 4 block schedule: (1) Repeat classes can be taken quickly; (2) Students can change "track" easily; (3) Students had four classes to prepare for instead of seven; (4) Teachers change every semester, every 90 days; (5) Students have the opportunity to take a combination of academic and vocational electives; (6) Students experience success; and, (7) Because students only have to concentrate on four subjects, they appear to be more motivated to do their work.

The parent also felt the 4 X 4 block schedule should continue. Her reasons were: (1) Students can change "track" by doubling up; (2) Flexibility; (3) The number of

classes to prepare for and concentrate on are limited; and, (4) Students may take a variety of classes.

The student's reasons for continuing the 4 X 4 block schedule were: (1) only four subjects to prepare for each day; (2) homework help in class; (3) more individual help from teachers; and, (4) more experiences in the classroom.

School B

Interview Results

Protocol Question #1: Would you describe the problem indicated on the survey in more detail?

Protocol Question #2: In your opinion, what caused the problem?

Protocol Question #3: How were you able to manage the problem as you did?

The responses to these three questions were intended to assist in answering research questions 1, 2 and 4. These three questions were also designed to correlate with the administrative and instructional problems indicated by the administrator on the survey instrument.

Administrative Problems: Cost

The administrator of School B indicated the cost involving staff additions was a problem when the 4 X 4 block schedule was implemented. During the interview, other cost problems were mentioned including the costs related to additional electives, additional materials and staff development. A summary of the responses is shown in Table 4.12 found at the end of this section.

Additional Electives. The administrator commented that several electives were added to the schedule because the

students were now going to earn eight credits per year instead of six. A condition of the implementation of the 4 X 4 block schedule set by the central office was that no additional funding would be required. Therefore, the administrator asked teachers to continually look at ways to teach "no-cost" electives.

The faculty member was not sure how many electives had been added to the schedule. Some electives were available, but she had not observed "all these wonderful things." Therefore, she felt no cost was involved in adding electives.

The parent knew several electives had been added in science. She did not believe that cost was a factor in adding electives.

The student had not realized how many electives had been added until she saw a brochure her brother had gotten in the middle school. She did not know of any cost related to adding those electives.

Additional Staff. The administrator had previously stated that no cost could be incurred if the 4 X 4 block schedule was allowed. Therefore, no additional staff was added. In addition, the central office staff projected the number of students to be much lower for the 1995-96 school year because an additional high school was opening. Therefore, eleven teachers were "surplused," which meant

they still had jobs in the county, but not at School B. When the school year opened, a smaller number of students than anticipated actually went to the new high school. A major problem developed because the administrator had fewer teachers than anticipated to teach the regular classes as well as no additional staff to teach the added electives. The situation eased during the year as some of the "surplus" teacher positions were re-hired according to the student population, not because of the 4 X 4 block implementation.

The faculty member remembered how depressed everyone was when the 4 X 4 block was implemented with fewer staff members than had been anticipated. She felt that no cost was incurred for additional staffing because the school lost staff positions.

The parent believed the 4 X 4 block schedule cost less for staffing because teachers who previously only taught four or five classes per year would be teaching six classes per year.

The student heard there would be less cost for staffing because each teacher would teach at least one additional class per year as an elective.

Additional Materials. The administrator felt very few additional materials were needed because several hundred students left School B to attend a new high school. Therefore, materials were on hand for the first year of the

4 X 4 block implementation. If additional materials were needed, such as art supplies, the administrator felt the cost was minimal.

The faculty member felt very few materials had to be purchased because many materials were left over from the student enrollment was much larger. She knew that plenty of textbooks were available. If any new electives required additional materials, the cost was minimal because everyone knew the electives were to be "no-cost."

The parent felt there would be no cost involved because all the literature she had read indicated the implementation of the 4 X 4 block schedule would reduce cost.

The student felt no additional money from the county was used to buy additional materials when the 4 X 4 block was implemented. "I feel like the departments here raise their own money." She had noticed new textbooks in some of the electives, but she didn't know if those books were ones which hadn't been used when the school was much larger.

Staff Development. In order to observe various alternative scheduling practices, the administrator had established several committees to visit other schools. He kept the cost to a minimum. After the 4 X 4 block became the most prominent choice, the principal of Asheboro High School came to School B for a staff development program. The central office staff presented other staff development

programs. Any costs were paid from "in-school" money.

The faculty member was a member of some of the committees which visited other schools. She also attended several of the staff development programs. She was not aware of any costs related to staff development.

The parent traveled with the teachers to various schools. She also traveled on her own to additional schools to observe alternative schedules. She indicated that she had made many phone calls and researched the 4 X 4 block schedule on her own. She knew that several staff development programs had been made available to the teachers. As far as she knew, no costs were associated with the staff development programs.

The student did not know of any costs associated with staff development.

Table 4.12

School B: Administrative Problems Related to Implementing  
the 4 X 4 Block Schedule and Possible Resolutions

Categories	Responses
Additional Electives and Cost:	
Administrator	Had to increase from 6 to 8 classes per student per year Was not allowed to incur cost Relied on teachers to develop no-cost electives
Faculty Member	Agreed a few electives were added Felt no cost was involved
Parent	Felt several electives were added Was not concerned with the cost
Student	Realized many electives had been added when saw a brochure
Additional Materials and Cost:	
Administrator	Had leftover materials from larger student body the previous year Felt cost of materials was minimal
Faculty Member	Did not need any materials Had leftover materials Felt any costs were minimal
Parent	Felt no cost would be involved
Student	Did not know about cost
Additional Staff and Cost:	
Administrator	Knew he would not be allowed to increase cost by hiring staff Lost 11 teachers in "surplus" process Had to increase class size until positions were re-hired
Faculty Member	Remembered the depressed feelings everyone had when teachers were "surplused" and the 4 X 4 block was implemented at the same time
Parent	Felt teachers who had previously only taught 4 or 5 classes per year would now teach 6 Felt staffing would cost less
Student	Heard there would be less cost for staffing

Staff Development and Cost:

	because teachers would teach more
Administrator	Knew teachers needed to observe the Block Schedule Knew teacher training was needed Managed to keep cost to a minimum by bring guest speakers to the school Used central office staff of in-service
Faculty Member	Felt minimal cost for staff development Was a member of a committee which observed Block Scheduling Attended several in-service programs
Parent	Traveled to other schools with teachers and on her own Researched the Block Schedule Knew staff development programs had been held Felt little cost was involved
Student	Knew of no costs related to staff development

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## Instructional Problems

The administrator of School B indicated on the survey instrument there were instructional problems related to sequencing of classes, staff development, and transfer students. When the administrator was interviewed, she also mentioned instructional problems related to class size, evaluation, fine arts, and scheduling balance. The activity period problem was also discussed during the interview. This information is presented in Table 4.13 at the end of this section.

Sequencing. The administrator felt there were sequencing problems in the foreign language classes. Students had been allowed to schedule for themselves and some had not chosen languages in a timely sequence. The guidance department had been directed to work more closely with the students. Math sequencing had not been a major problem because teachers were reviewing more. A standardized test had been developed in Algebra I by the central office staff to ensure that students county-wide were learning Algebraic concepts. The administrator indicated that sequencing of courses was in need of constant review and evaluation.

The faculty member agreed sequencing was a problem in the foreign language courses. She also added that the English department was concerned with the Honors courses

sequence.

The parent stated her child's course sequencing had not run as smoothly as she had hoped. She blamed the problem on the county school administration because resources had not been provided as necessary to implement the 4 X 4 block schedule successfully. She said that she had observed sequencing run smoothly in school after school funded properly. She indicated there were sequencing problems in foreign language and Honors courses.

The student stated she had a major problem in sequencing. She had scheduled her Spanish III Honors class for the spring semester of the present school year after having Spanish II Honors class, in a traditional 6-period schedule, the previous school year. Therefore, she did not take a language course for a summer and a semester. She dropped the class because there was no time for the review she had anticipated doing on her own.

Class Size. The administrator stated class sizes were large because of the teachers who had been "surplused" from the school, not because of the implementation of the 4 X 4 block schedule.

The faculty member agreed the class sizes had started out extremely large. She had 32 in one English class. She also stated the county school administration had made some adjustments, and this semester her class sizes were

"beautiful." She now had three classes, each with no more than 23 students.

The parent also agreed the class sizes were large because of the incorrect projections of the number of students who would leave School B to attend the new high school. Teachers, who should have stayed, were "surplused."

The student stated her Honors courses were small in size. She knew the regular classes had larger numbers of students which she attributed to the "surplus" teacher process.

Evaluation. The administrator said that the teachers, as well as the overall 4 X 4 block schedule, were being evaluated constantly. As an incentive for the teachers to try creative teaching strategies, the administration agreed not to formally evaluate teachers during the first semester of implementation of the 4 X 4 block schedule.

The faculty member agreed the administrators were constantly monitoring the classrooms in the evaluation process. "Our administration has done a very good job of coming into the classroom and monitoring what they're hearing."

The parent agreed the evaluation process was strong at the school. "This administration will do anything to help the students."

The student stated that she sees the administrators

everywhere. "They're even more involved with students" which she explained meant the administrators were taking time to discuss situations arising from the 4 X 4 block schedule, like sequencing and elective descriptions.

Staff Development. The administrator arranged for several in-service programs to help the staff prepare for the 4 X 4 block schedule. Staff development programs were held in the spring and summer previous to the implementation of the schedule. Many of the staff members attended, but not all. The central office personnel had also presented programs on staff development days which she felt were very beneficial.

The faculty member agreed staff development programs had been offered. There was a mixture of feelings about the usefulness of the in-service presentations. As she stated, "Some were very good. Some were a waste of time." The faculty members, she felt, left the in-service programs still concerned about the 4 X 4 block schedule. They did not feel prepared.

The parent knew staff development programs had been offered. "Teachers wanted as much (staff development) as they could get."

The student knew staff development days were built into the school calendar, but she was not aware of specific in-service programs.

Fine Arts. The administrator stated the major reason for looking at alternative scheduling was because students and parents wanted more opportunities for students to be involved in the fine arts program. Therefore, there was no problem with earning two credits per year in any fine arts program.

The faculty member agreed the fine arts program emphasis was not a problem. She stated the students and parents were happy with all the course offerings.

The parent as a member of the School Council was instrumental in bringing the 4 X 4 block schedule to School B. Her son had taken a correspondence course in history through the University of Tennessee because he could not "fit" music classes in with the Honors courses and other required courses under the traditional 6-period day schedule. She was very happy with the multiple credits a student could earn in the fine arts programs.

The student felt the individual student should be allowed to set priorities for himself. If music was "your thing" then take all music classes. She was the Editor of the school newspaper. Therefore, her electives were in journalism which she felt would look great on a college application.

Scheduling Balance. The administrator felt student schedules should be balanced and checked carefully for

sequencing problems. The guidance department was directed to work with each student and parent. Originally there was a problem when students chose their own schedules. Now, guidance counselors were involved with individual student schedules. The "down side" was guidance counselors actually had to schedule two times per year because of "repeats" and individual needs.

The faculty member felt the guidance counselors worked very hard to balance schedules. She also gave faculty members credit for alerting guidance counselors to potential sequencing problems.

The parent stated the administration and guidance department were always willing to help balance schedules. As a member of the School Council and the Parent\Teacher Association president, she had never had any problems. Some parents had complained to her concerning some difficulties, but she felt those problems were created because the parents had not gone through the proper channels, instead listening to hearsay.

The student stated before she dropped Honors Spanish III, she had the option of going to the guidance counselor to change her schedule. She chose not to because she was sure she could review a couple of weeks before class started. She failed to consider examinations for the first semester courses would require study up until the new

semester started. In retrospect, she wished she had gone to guidance because she knew they would have helped her arrange her schedule better.

Transfer Students. The administrator felt handling transfer students was always a problem regardless of the schedule. Under the 4 X 4 block schedule, the transfer student was assigned to a guidance counselor who would help the student select two or three classes to take and then be assigned to spend the fourth block in the Transfer Center trying to catch up in those classes. "There is no perfect system unless the entire United States was on the same scheduling system." Emphasis was placed upon working with the individual student.

The faculty member stated that "catching a student up" was very difficult. A lot depended upon the motivational level of the student. She knew the Transfer Center was available and she had seen students do well who transferred to School B. She had also seen transfer students perform very poorly.

The parent was aware of the Transfer Center. "We don't really have a properly funded center." She knew transfer students were handled on an individual basis by the guidance department.

The student was not aware of the Transfer Center. She had known several transfer students and she felt they liked

the 4 X 4 block schedule best. She knew one girl who had dropped out of Honors English to enter a "Z" class because she could not catch up. (Students were tracked in Honors classes for the gifted, "Z" classes for the above average, "Y" classes for the below average, and "X" classes for remediation.)

Activity Period. When asked about an activity period, the administrator stated time for clubs had never been built into any schedule at School B. "Our clientele live very close and transportation is not a problem."

The faculty member agreed an activity period had never been built into the schedule. She wanted more assemblies and pep rallies to be built into the school day, but she also knew that many teachers "could not handle" interruptions to their planned lessons.

The parent did not think an activity period was necessary. "We're not rural."

The student agreed an activity period had never been in the schedule. "School get's out at 1:45 p.m. which gives us ample time to do something in the afternoon."

Table 4.13

School B: Instructional Problems Related to Implementing the  
4 X 4 Block Schedule and Possible Resolutions

Categories	Responses
Activity Period:	
Administrator	Had never had an Activity Period Felt students lived close enough and transportation was not a problem
Faculty Member	Agreed there was never an Activity Period Felt students needed assemblies and pep rallies Knew assemblies caused staff members to become very upset
Parent	Felt only rural schools needed an Activity Period
Student	School was out at 1:45 p.m. Should have activities in the afternoon
Class Size:	
Administrator	Knew class sizes were large because of a shortage of teachers Was not related to the 4 X 4 Block Teachers had been added
Faculty Member	Had started out with very large classes Teachers had been added Classes were "beautiful"now
Parent	Knew class sizes were large because the county had "surplused" teachers
Student	Honors courses were small Regular classes were large because of "surplused" teachers
Evaluation:	
Administrator	Was evaluating teachers and 4 X 4 Block Schedule constantly Had not evaluated teachers during 1st semester of implementation to encourage creativity
Faculty Member	Felt administration was constantly evaluating teachers Felt they stayed on top of trouble

spots

Parent Agreed the evaluation process was strong at the school  
Stated the administration would do anything to help the students

Student Stated the administrators were everywhere  
Administrators were taking time to answer student questions

Fine Arts:

Administrator Was the major reason for looking at alternative scheduling  
No problem with earning 8 credits in the fine arts programs

Faculty Member Felt students and parents wanted more involvement in the fine arts programs

Parent Was instrumental in researching schedules which would allow students to take more electives  
Wanted students to receive multiple credits in the fine arts programs

Student Felt students should take credits in their interests

Sequencing:

Administrator Felt there were sequencing problems in foreign language  
Had originally given students too much freedom in choosing courses  
Math was not a problem because of the review  
Felt sequencing needed to constantly be monitored

Faculty Member Agreed foreign lang. sequencing was problem  
Felt Honors English courses were also a problem

Parent Felt her child's sequencing had not gone smoothly  
Blamed the county for not funding properly

Student Had experienced a foreign lang. sequencing problem  
Had to drop an Honors Spanish III class

Scheduling Balance:

Administrator Felt schedules should be checked by guidance to balance properly  
Had a problem when students scheduled themselves

Faculty Member Felt guidance counselors worked hard to help students balance schedules  
Also, felt faculty member helped advise

Parent Felt the administration and guidance were always willing to help  
Complaining parents usually had not followed procedure

Student Realized she should have gone to guidance with her foreign lang. course problem  
Knew guidance would have helped

Staff Development:

Administrator Arranged for several staff development programs to ease concerns of staff  
Felt staff development was beneficial

Faculty Member Mixed feelings among staff members  
Some staff felt a waste of time  
Some staff felt they were not prepared

Parent Knew staff development programs had been offered  
Felt all staff wanted the in-service training

Student Knew staff development days were built into the school calendar  
Not aware of specific in-service programs

Transfer Students:

Administrator: Felt handling transfer students was always a problem  
Student was 1st assigned to guidance where a choice of 2 or 3 courses was made  
4th block was spent in the Transfer Center

Faculty Member Felt dealing with transfer students was very difficult  
Knew Transfer Center was available  
Student's success depended on his motivational level

Parent Aware of Transfer Center  
Blamed county for not funding a proper center

Student Was not aware of Transfer Center  
Knew some students had to drop back in their classes  
Felt transfer students liked the 4 X 4 Block Schedule

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### Administrative Problems: Policy

Changing to the 4 X 4 block schedule also required revising some policies at School B. The administrator indicated on the survey instrument the examination policy and some discipline policies created problems. During the interview, other policies were discussed such as those related to attendance, graduation requirements, senior enrollment, and Virginia High School League (VHSL) eligibility. This information is summarized in Table 4.14 at the end of this section.

Attendance. The administrator did not have a problem with the county attendance policy when the 4 X 4 block schedule was implemented. The average daily attendance at School B had always been in the 96 - 99 percent range.

The faculty member did not have any knowledge of a change in the attendance policy, but she noticed students were attending class better.

The parent did not know the attendance pattern of the school. From the research she had read, she expected attendance to be better under the 4 X 4 block schedule.

The student stated her attendance was not good because she usually accompanied her father on business trips, which were excused absences. She felt her friends were attending school more than usual.

Examinations. The administrator stated the county

school administration would not allow the senior examination exemption to change for individual schools. Therefore, seniors who missed no more than five days a semester and maintained at least a "B" average were exempted from examinations. At School B, the five-day rule was made more specific by stating that seniors could not miss more than three days before the mid-semester, which would be the mid-term examination, and no more than two days after the mid-semester for the final examination, which would be at the end of the semester.

The faculty member did not know of any changes in the examination exemption policy.

The parent did not know of any changes in the examination exemption policy. In addition, she stated that the county school administration wanted all the high schools to be alike. The other high schools, which were not on the 4 X 4 block schedule, took examinations on a two per day, three-day cycle. Therefore, School B "took one day off" because School B only needed a two-day cycle to take two examinations per day.

The student knew of the senior examination exemption, but she really didn't pay attention to it because she knew she would never qualify. She was aware that School B was dismissed on a half-day schedule at mid-term examinations.

Graduation Requirements. The administrator stated the

county policy for the number of credits required for graduation could not be changed for a single school. Therefore, the graduation requirements for School B were not increased. Students who were sophomores last year could graduate as seniors this year. The administrator did not feel this was a problem because most of the students enrolled in community college or went to work to earn money for college in the fall, although 20 - 40 students might graduate early or leave at semester.

The faculty member disagreed. She felt allowing students to graduate early was a problem. She did not think students should leave school early. Also, there was another problem: students were transferring to School B from other schools in the county because they had heard you could graduate early. Later, in the interview, she recalled a student who benefited greatly from leaving school early. Therefore, the faculty member decided a policy should not be stated, but each student should be treated according to circumstances.

The parent did not think students should graduate early. She wanted to see the graduation requirements increased.

The student referred to her class as the "guinea pig" class. As freshmen, they were on the 6-period day, as sophomores and juniors, they were on the 4 X 4 block

schedule. Next year as seniors, they'll be on the 7-period alternating schedule. "We can get away with a lot of stuff because we're the guinea pigs." She had friends who were graduating early, but she felt most people were going to do what their group did: stay for more Advanced Placement classes, take more electives, go to the Tech Center, or graduate early.

Senior Enrollment. The administrator had no compelling regulations to hold seniors after the mid-term if they had met their graduation requirements, except the regulations for participation in athletics. In order to keep the class somewhat "bonded", the seniors who left school early received all class activity information and could attend any class functions.

The Faculty member knew there were no regulations to hold seniors in school.

The parent felt there should be regulations compelling seniors to stay in school. She suggested arranging the schedule offering senior English in first semester and government in second semester.

The student once again stated, "We can get away with a lot of stuff."

Virginia High School League (VHSL) Eligibility. The administrator stated the athletic eligibility policy had to be changed. Basically, rather than basing the rule on the

majority of periods per day spent in school, the rule was now based on the majority of hours spent in school.

The faculty member was not aware of the Virginia High School League eligibility rules.

The parent indicated her children had not been in sports; therefore, she was not aware of the rules.

The student said the athletic director changed the eligibility rule from five-out-of-six periods to the majority of hours per day, which meant attending three-of-four blocks per day.

Discipline. The administrator of School B mentioned that certain county-wide suspension rules had to be waived because suspending for one day under the 4 X 4 block schedule was equivalent to being suspended for two days at the other high schools.

The faculty member stated discipline was handled fairly by the administrators.

The parent was not aware of any discipline-related policies because her children had not been in problems at school.

The student did not notice any changes in the discipline policy.

Table 4.14

School B: Administrative Policy Problems Related to  
Implementing the 4 X 4 Block Schedule and Possible  
Resolutions

Categories	Responses
Attendance:	
Administrator	Had never been a problem Average daily attendance ranged between 96-99 percent
Faculty Member	Knew of no change in attendance policy Felt students were attending better
Parent	Expected the attendance to be good
Student	Was absent because of family trips Felt her friends were attending better
Examinations:	
Administrator	Could not change county-wide senior examination exemption Specified number of days to be missed before the mid-term examination
Faculty Member	Did not know of any changes in the senior examination exemption
Parent	Did not know of any changes Felt the county wanted all the high schools to be alike School B did not hold school one day while waiting for the other high schools to complete their examination schedules
Student	Did not pay attention to the senior examination exemption Knew School B dismissed half days during mid-term examinations
Graduation Requirements:	
Administrator	Was not allowed to raise the graduation requirements because of the county-wide policy and the other high schools Students were graduating early, as much as a year, and also leaving in mid-year 20 - 40 students graduated early each year Felt was not any real problem

Faculty Member	Disagreed with allowing all students to graduate early Felt decision should be made on an individual basis
Parent	Wanted graduation requirements to be increased Did not like early graduation option
Student	Referred to her class as the "guinea pig" class Felt the individual would decide with his friends about early graduation

Senior Enrollment:

Administrator	No regulations to hold seniors in school after credits were completed Tried to keep early gradulators bonded to class Knew athletes were compelled to stay
Faculty Member	Knew there were no regulations to hold seniors
Parent	Did not like the idea that seniors were not compelled to stay in school Wanted the schedule to be arranged with English 12 in 1st semester and government in the other
Student	"We can get away with a lot of stuff"

Virginia High School League (VHSL) Eligibility:

Administrator	Had to change the regulations from 5 of 6 periods to 3 or 4
Faculty Member	Not aware of regulations
Parent	Not aware of regulations because her children were not in sports
Student	Knew the new regulations

Discipline:

Administrator	Requested waiver for number of suspension days because 1 day on the 4 X 4 block was equal to 2 days in the traditional schedule
Faculty Member	Felt discipline was handled fairly
Parent	Not aware of disciplinary policies because her children had not been problems at school
Student	Did not notice any changes

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Protocol Question #4: Did you perceive any change in school climate or culture of the school? If so, how was it managed?

Protocol Question #5: Did you perceive any school climate related problems with the students? If so, how were they managed?

Protocol Question #6: Did you perceive any school climate related problems with the staff? If so, how were they managed?

The responses to these three questions were also intended to assist in answering research questions 1, 2, and 4. These questions were designed to correlate with the school climate problems, if any, the administrator had indicated on the survey. This information is summarized in Table 4.15 and Table 4.16.

#### Overall School Climate

The administrator stated that the school climate could basically be described as positive. The first concern of the administration is "how we can best serve our students." The general student atmosphere was much calmer. The students liked the 4 X 4 block schedule. In fact, they liked the 4 X 4 block so much that they staged a walk-out in support of it. They circulated petitions to try to convince the school board to let School B keep the 4 X 4 block schedule. The administrator felt the faculty "was pretty much in favor

of the 4 X 4 block schedule." In addition, the administrator stated, "There's no schedule that everyone is going to be satisfied with. I think that as things progress you constantly need to re-evaluate and re-examine and make those changes as necessary."

The faculty member stated that the students "love" the 4 X 4 block schedule. She added that the climate problems existed basically with the staff. When 4 X 4 was introduced, at the same time, the teachers were aware a large number would be "surplused" because the new high school was opening. The faculty wanted to support the 4 X 4 block schedule because the principal really wanted it. Basically, the English department, some teachers in foreign language, and some teachers in science had never "bought into" the 4 X 4 block schedule. Now, hearing about the 7-period alternating day for next year, "the entire faculty here is upset." One positive point with the faculty has been that the 4 X 4 block provides a "breath of fresh air" when students change classes mid-way in the year.

The parent stated she had been on the School Council for six years, and she felt she knew more about the 4 X 4 block schedule than anyone. While visiting other schools, she realized what fit one high school did not necessarily fit another. She indicated the 4 X 4 block schedule was the correct one for School B. The students really liked the

block schedule. They staged a walk-out to keep it.

The student agreed the student body definitely liked the 4 X 4 block schedule. She felt the general atmosphere of the school was "laid back." She indicated the 4 X 4 block schedule brought people together because "you're in class for a longer period of time, and eight classes lets you meet eight sets of people." She added that the faculty was somewhat divided in their feelings toward the 4 X 4 block schedule: "foreign language has mixed opinions, science loves it, and most of English likes it."

#### School Climate: Student Problems

The student problems affecting school climate also basically fell into eight categories as the interview information was obtained at School B: boredom, homework, honor roll, class participation, discipline and socialization. The following information is summarized in Table 4.15 found on page 132.

Boredom. The administrator stated the students originally said, "Oh, god, the classes are so long, but the day seems to end in no time." Most teachers were using a variety of creative strategies to make the classes very interesting. The evaluation process and constant monitoring has caused the teachers to change their methods.

The faculty member said her students complained about the same teachers lecturing too much, but the administration

was trying to monitor those situations. She added the length of time in class was a "killer" for the lower level students.

The parent stated her daughter talked about being bored some, but the main thing she heard was about one teacher who complained about the 4 X 4 block schedule all the time. Her daughter felt the teacher could have done a lot more in class if she had stopped complaining so much and taught.

The student said her classes were not boring. The teachers used lecture with more visual aids.

Homework. The administrator had received no complaints concerning homework.

The faculty member had heard students say they had less homework but, she did not feel that was the case. She explained that the students only felt they had less homework because they had four subjects instead of six.

The parent commented having homework in only four subjects had helped the special education students.

The student said it was great to prepare for only four classes.

Honor Roll. The administrator did not notice any difference in the number of students who were on the Distinguished Honor Roll. The number of students on the regular Honor Roll showed definite growth.

The faculty member did not know for sure, but she felt

the number of students making Honor Roll had increased. She said most teachers gave the students 10 - 15 minutes to get their work in class and work in groups.

The parent stated more average-type kids made the Honor Roll. She added, "It's easier to study four than six or seven." The parents of special education students had told her how much the 4 X 4 block schedule had helped their children. In fact, next year some of those parents were thinking of enrolling their children in only four subjects instead of the 7-period alternating schedule.

The student felt the number of students on the Distinguished Honor Roll would probably be the same because the students who work hard are going to work hard under any schedule. She felt the regular Honor Roll would have larger numbers of students because "even an OK student who is willing to do the work can do well under this schedule." But, she added that "somebody who doesn't try, no matter what schedule you have, it doesn't get better."

Class Participation. The administrator felt student involvement in class had increased because the teachers were able to use a variety of methods in the classroom.

The faculty member stated she really liked how she could do all kinds of activities in class, involving the students. The only drawback was the lack of time to do in-class reading because the pacing was so fast.

The parent knew students were more involved in class. She particularly liked the fact that complete science labs could be done in less days. The chemistry teacher had told her of one lab she had finished in one day which she had never finished in one class period before.

The student talked about the "really great discussions and debates" in class. She felt having everyone involved "livened up" the class.

Discipline. The administrator felt there were fewer student disciplinary incidents. There was a "calming" atmosphere in the school. The administrator commented that students were in the hall less which could account for some of the decrease in the disciplinary problems. She added that less disciplinary incidents could be attributed to teachers changing their teaching methods.

The faculty member felt there were less student disciplinary problems. She indicated the students were relaxed and positive.

The parent had not heard of any disciplinary problems, but she stated the research on 4 X 4 block scheduling had indicated student discipline would be better.

The student felt the freshmen had the toughest time. She explained that they had been together in elementary school, they joined others at the middle school, and then they were split up to go to different high schools. She felt

the number of disciplinary incidents was directly related to the maturity level of the students.

Socialization. The administrator realized the students had very little time to socialize. Therefore, a 12-minute break had been built into the schedule between first and second block.

The faculty member felt the students did not have enough time for pep rallies and other social events during the day.

The parent felt the 12-minute break was all that was necessary.

The student said, "We love our 12-minute break. That's our leisure time. It's bad when we have half-day schedules and we don't get to have our break."

Table 4.15

School B: Student Problems Affecting School Climate and Possible Resolutions

Categories	Responses
Boredom:	
Administrators	Felt teachers were using a variety of activities Was constantly monitoring
Faculty Member	Had heard some complaints Felt the administration was monitoring Stated the lower level students were having problems
Parent	Had heard some complaints from her daughter
Student	Felt teachers used lecture with more visual aids
Homework:	
Administrator:	Had no complaints
Faculty Member	Heard students talking about less homework Was related to having 4 subjects
Parent	Felt homework in 4 subjects had helped special education students
Student	Liked preparing for only 4 classes
Honor Roll:	
Administrator	No change in Distinguished Honor Roll Regular Honor Roll numbers increased
Faculty Member	Felt the number must have increased Teachers were helping students in class more
Parent	Felt more average students were making the Honor Roll Special Education students were also able to make the Honor Roll Only studied 4 subjects
Student	Did not think Distinguished Honor Roll had increased Even an OK student can make Honor Roll now
Class Participation:	
Administrator	Felt student involvement had increased

	because of the variety of activities
Faculty Member	Said she was able to do all kinds of activities Reading aloud was not done as much
Parent	Knew students were more involved in class
Student	Described really great discussions and debates in class

Discipline:

Administrator	Felt less student disciplinary problems Described the school atmosphere as calm Students were in the halls less Less problems might be attributed to better teaching activities
Faculty Member	Described students as relaxed and happy Felt there were less disciplinary problems
Parent	Did not know about disciplinary problems Research literature had indicated less problems
Student	Felt freshman had a tough time because they were split from their friends at middle school to attend different high schools Felt disciplinary problems were related to the maturity levels of the students

Socialization:

Administrator	Felt the students needed a little time Built a 12-minute break between 1st and 2nd block
Faculty Member	Felt the students did not have enough time
Parent	Felt the 12-minute break was adequate
Student	Stated students "loved" the break

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### School Climate: Staff Problems

The information obtained during the interviews concerning the staff problems affecting school climate fell within the following categories: resistance to change, planning, class size, and socialization. The information is summarized in Table 4.16.

Resistance to Change. The administrator commented that a major problem existed among the staff members because some were resistant to change and very vocal about it. The year before the 4 X 4 block schedule was implemented, the faculty had turned down the option to go to a 7-period alternating day. Some faculty members were disgruntled with the 4 X 4 block schedule because the schedule required a major change in the way they taught. The English department was particularly disgruntled because under the 6-period day, those teachers taught four periods, had one period for evaluation of student writing, and one period for planning. The English department teachers felt they had worked so hard to obtain this special period for evaluation of student work and now they had lost it in the 4 X 4 schedule. Some other faculty members just "could not handle the change." The administrator felt staff development programs had lessened some of the resistance to change.

The faculty member felt some teachers had a very difficult time adjusting to the 90-minute teaching periods.

Some teachers "can't get away from the same lesson plans they've used for the past 10 years!"

The parent felt the English teachers were the ones most vocally disgruntled at the change. They didn't want to give up their special period. Also, the foreign language teachers were concerned about sequencing. Some teachers just didn't want to change.

The student stated her teachers worked very hard to make the 4 X 4 block schedule work.

Planning. The administrator felt teachers were planning extensively. She was not sure whether the extensive planning was a "function of wanting to or having to." Without having extensive plans, the teacher would not be able to cover everything in one semester.

The faculty member stated that it was wonderful to be able to plan to do so much in class. She felt the pacing of teaching could be very stressful at times under the 4 X 4 schedule. She also added that making plans for a substitute teacher was a "killer." She commented that the English department teachers felt particularly stressed because they could not give attention to the writing process as they had under the 6-period day. She felt most of the teachers "worked their brains out" making lesson plans.

The parent was sure extensive lesson plans were being prepared by the teachers. She also stated that the English

teachers were not happy because they had lost their extra period. She felt the foreign language teachers also had mixed feelings toward the 4 X 4 block schedule.

The student said, "My teachers are very well planned. The class runs like clock-work."

Class Size. The administrator felt some teachers were disgruntled because they thought they would get a better "deal" in the number of students in class than what actually happened. The "surplus" process came simultaneously with the implementation of the 4 X 4 block schedule. Additional teachers placed in the school eased this problem.

The faculty member agreed classes were huge, but she knew the large class sizes were not caused by the 4 X 4 block schedule. They were caused by incorrect student number projections and "surplusing" too many teachers. She observed a decrease in class size as more teacher positions were re-hired at School B.

The parent blamed the county school administration for not having the correct number of teachers at School B to start the 4 X 4 block schedule.

The student comments were in agreement with the parent. She also had noticed more teachers were back at School B.

Socialization. The administrator felt the staff was quite fragmented. The extra period which the English teachers had under the 6-period day had become a point of

contention all over the county as well as in School B. The implementation of the 4 X 4 block schedule removed that extra period from the English teachers but it did not result in more socialization among the teachers. The administrator indicated secondary teachers seem to stay in departmental groups with little cross-over involvement.

The faculty member, who was an English teacher, realized that the extra period during the 6-period day had caused some dissension within the school. Apparently the implementation of the 4 X 4 block schedule did not ease the disgruntled attitudes among the teachers although the English teachers no longer had that period. In fact, now that the decision has been made to go to the 7-period alternating day, the English teachers were not going to ask for the "evaluation" period. "We don't want to start anything, we're trying to get along with everybody."

The parent stated there was much dissension among the faculty members at School B. She felt the discontent had started before the implementation of the 4 X 4 block schedule.

The student commented that she did not see the teachers together very often except in departments. The 4 X 4 block schedule did not cause the teachers to socialize more.

Table 4.16

School B: Staff Problems Affecting School Climate Problems and Possible Resolutions

Categories	Responses
Resistance to Change:	
Administrator	Felt a major problem existed among the faculty Had turned down the 7-period A/B day the previous year Some didn't like because it required a major change in the way they taught English dept. lost an evaluation period when the 4 X 4 block was implemented Felt that staff development programs had helped
Faculty Member	Some teachers were having a very difficult time adjusting Some teachers couldn't use the same lesson plans they'd used for the last 10 years
Parent	Felt the English dept. was disgruntled Felt foreign language also disliked Some teachers did not want to change
Student	Felt her teachers worked very hard to make the 4 X 4 work
Planning:	
Administrator	Felt teachers were planning extensively Did not know if it was related to wanting to or having to
Faculty Member	Felt it was wonderful to be able to plan so many activities English teachers felt stressed without the evaluation period for grading student writing
Parent	Felt sure extensive planning was being prepared English teachers were not happy
Student	Felt her teachers were very well planned
Class Size:	
Administrator	Felt teachers were disgruntled because had expected small classes but then the "surplusing" of teachers occurred Eased when teacher positions were re-hired
Faculty Member	Knew what had caused the large class sizes

	Felt the situation was better
Parent	Blamed the county for lack of funding and incorrect student number projection
Student	Blamed the county but had seen more teacher positions re-hired.
Socialization:	
Administrator	Additional English evaluation period had caused dissension among the staff 4 X 4 block removed that period but feelings were still high Secondary teachers tend to stay in depts.
Faculty Member	Realized the tension over the extra period Tension did not ease when the 4 X 4 block was implemented English teachers did not ask for the extra period under the upcoming 7-period A/B
Parent	Felt there was much dissension among the faculty at School B Was sure it started before the 4 X 4
Student	Did not see the teachers together very often except in depts.

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**Protocol Question #7: Did the community perceive any problems with the 4 X 4 block schedule?**

The responses to this question were also intended to assist in answering research questions 1, 2 and 4. In addition, this question was designed to correlate with the problem indicated by the administrator on the survey.

Community Perception Problems

The information obtained from this interview question basically fell into the following categories: communication, usefulness of electives, sequencing of courses, harmful effects to fine arts program, and complaints related to lecturing. This information is summarized in Table 4.17 found at the end of this section.

Communication. The administration felt the communication concerning the 4 X 4 block schedule with the community had been good. The School Council was involved in every step of the implementation. Several Open Meetings were held and she felt the community was excited about the implementation of the 4 X 4 block schedule. The dissenting views which she heard were basically from adjoining high school communities and not from School B's community. Also, the misinformation which was rampant came from other communities.

The faculty member felt there was very good

communication with School B's community members. She felt the investigation of the 4 X 4 block schedule had been lengthy and a number of parents had been involved in the search to find the best alternative schedule. At first, the parents had mixed feelings about the 4 X 4 block, but now they liked it. In fact, at Back-to-School Night, the parents were circulating petitions in support of the 4 X 4 block schedule.

The parent had been in charge of getting 4 X 4 block schedule information out into the community. She felt a good job of communicating had been done in School B's community. She did not feel the county school administration had done a good job in presenting the 4 X 4 block schedule to the parents of the other county high schools. She personally had made sure the monthly newsletters and surveys were sent to School B's community. She also arranged to discuss the 4 X 4 block schedule at Parent\Teacher Association meetings. She helped organize the Open Meetings. She was shocked when she attended Open Meetings at other high schools and heard parents she had personally contacted concerning the 4 X 4 block schedule say that they knew nothing about it.

The student felt the 4 X 4 block schedule was communicated well throughout School B's community. She felt the county school administration should have sent out a newsletter to all high school communities explaining the

pro's and con's of the 4 X 4 block schedule and the 7-period alternating day.

Usefulness of Electives. The administrators felt all the electives offered were "worthy" electives. She had heard no comments to the contrary.

The faculty member described the available electives as worthwhile. She also felt more electives should be offered.

The parent said, "My child's electives were great." The whole purpose of the 4 X 4 block schedule was to allow students an opportunity to take electives that they could not "fit in" the traditional 6-period day.

The student felt the usefulness of an elective depended upon the teacher. She also stated, "I think the majority of the electives really are geared to some goal of helping students." There are probably serious electives and "fun" electives. The number of keyboarding electives has skyrocketed.

Sequencing of Courses. The administrator did not hear complaints from the community concerning sequencing of courses such as math or foreign language.

The faculty member thought parents were concerned with the sequencing of Advanced Placement and Honors classes.

The parent felt sure the middle school parents did not understand the sequencing problem.

The student, who had experienced a problem, felt

sequencing problems were a very "real" fear.

Harmful Effects to Fine Arts. The administrator knew parents were concerned about the fine arts programs in a 4 X 4 block schedule. Therefore, at the onset of the 4 X 4 block schedule, the student was required to commit to a year program of band or chorus. This commitment meant the student would earn two credits for the year.

The faculty member knew parents had been concerned but, as soon as the one-year commitment was in place, parents liked the 4 X 4 block schedule. She added that other programs should probably have the same commitment rule, such as the newspaper staff and the yearbook staff.

The parent knew the one-year commitment to band and chorus had been made because of the parental concern.

The student realized the necessity of the one-year commitment to band and chorus. "Everybody needs to do his own thing."

Complaints Related to Lecturing. The administrator had heard few complaints concerning too much lecturing in the 4 X 4 scheduled classes. She felt most teachers were experimenting with new teaching techniques. The teacher evaluations and administrative monitoring were used to make sure teachers were using multiple teaching activities.

The faculty member said she still heard from some students that "Mrs. So-and-So was still lecturing too much."

She added the administration was quick to monitor the complaints.

The parent stated she had heard some complaints but felt the teaching would get better.

The student stated that her teachers lectured very little. Her classes were great.

Table 4.17

Community Perceptions of the Implementation of the 4 X 4  
Block Schedule of School B

Categories	Responses
Communication:	
Administrator	Felt communication with School B's community was good Held Open Meetings Felt those who wanted to find out came
Faculty Member	Felt there was very good communication with School B's community Involved parents in investigation of 4 X 4 block schedule Parents petitioned to keep 4 X 4 block schedule
Parent	Was in charge of communication to parents Presented information in newsletters, surveys, and PTA meetings Felt a good job was done in School B's zone Felt county had not done a good job of informing everyone
Student	Felt county did not present information to all high school parents properly Should have sent newsletter to everyone with "pro's" and "con's" of 4 X 4 block schedule and any other schedules being considered
Usefulness of Electives	
Administrator	Described electives as "worthy" Heard no complaints about electives
Faculty Member	Felt electives were worthwhile
Parent	Felt her child's electives were great Previously, her child could never fit everything in
Student	Thought usefulness of electives depended upon the teacher

Felt there were serious and fun  
electives  
Felt the majority were geared to  
helping students

#### Sequencing of Courses

Administrator	Not a major concern from parents Monitored constantly Wanted more guidance involvement
Faculty Member	Most of concern was with AP courses and Honors courses
Parent	Thought middle school parents did not know the problems
Student	Felt this was and should be a major concern

#### Harmful Effects to Fine Arts

Administrator	Eased concern by immediately requiring a year's commitment to band and chorus from students
Faculty Member	Knew 1st concern in the community Neighborhood liked 4 X 4 as soon as year-commitment regulation was made known
Parent	Was happy when school administration made the one-year-commitment rule
Student	Felt everyone was happy doing his own thing and students who liked chorus or band felt the one-year commitment was needed

#### Complaints Related to Lecturing

Administrator	Used constant monitoring and evaluation process to hit any complaint spots Felt most teachers were experimenting with new teaching techniques
Faculty Member	Still heard some complaints from students Felt administration was doing a good job staying on top of situation
Parent	Had heard some complaints but knew things would improve
Student	Heard very little complaining Felt her teachers were great

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**Protocol Question # 8: Explain the outside and inside influences to change to a 4 X 4 block schedule.**

**Also, because School B is discontinuing the 4 X 4 block schedule, what negative outside and inside influences were at work?**

The responses to these questions were intended to assist in answering research questions 1, 2, and 3. A summary of the responses is shown in Table 4.18.

#### Positive Influences Outside the School Building

The administrator felt the strongest outside influence to change to the 4 X 4 block schedule was the School B parents. The other outside influences came from the Superintendent and the Central Office Staff who urged looking at alternative schedules.

The faculty member agreed the parents of School B were a major influence causing the change to the 4 X 4 block schedule. She also felt that the literature about the 4 X 4 block schedule was very persuasive.

The parent knew she had been one of the parents who was a major influence causing the switch to the 4 X 4 block schedule.

The student felt the parents and the Superintendent were important outside influences causing the switch to the 4 X 4 block schedule.

### Positive Influences Inside the School Building

The administrator, the faculty member, the parent and the student agreed the students, some of the faculty members and School B's administration were the inside influences causing the switch to the 4 X 4 block schedule.

### Negative Influences Outside the School Building

The administrator felt a small, but vocal group of other county high school parents influenced the school board to direct the administrators of School B to discontinue the 4 X 4 block schedule. Therefore, the small group of parents and the school board were negative influences. She also felt that misinformed teachers from the other high schools had caused their students to reject the 4 X 4 block schedule before they knew what it was.

The faculty member agreed the small group of other county high school parents had influenced the school board. She also felt realtors of clients moving into the area did not care for the 4 X 4 block schedule because of the problem with transfer students.

The parent felt the school board did not act in the best interest of the children.

The student felt a small group of other county high school parents had been the driving outside negative force.

### Negative Influences Inside the School Building

The administrator, faculty member, parent, and student

felt several faculty members were against the 4 X 4 block schedule from the beginning.

Table 4.18

Positive and Negative Influences at Work in School B

Respondent	Pos. Outside Influ.	Pos. Inside Influ.
Administrator	School B Parents Superintendent Central Office Staff	Students Some Faculty Administration
Faculty Member	School B Parents Literature	Students Some Faculty Administration
Parent	School B Parents	Students Some Faculty Administration
Student	School B Parents Superintendent	Students Some Faculty Administration

Respondent	Neg. Outside Influ.	Neg. Inside Influ.
Administrator	Other School Parents School Board Other School Faculties	Some School B Fac.
Faculty Member	Other School Parents School Board Realtors	Some School B Fac.
Parent	School Board	Some School B Fac.
Student	Other School Parents	Some School B Fac.

**Protocol Question # 9: What available resources did you receive?**

The responses to this question were intended to assist in answering research questions 3 and 4. A summary of these responses is found in Table 4.19.

The administrator felt another school had been given more consideration in funding. School B was told to implement an alternative scheduling program without incurring the need for additional funding. Another school in the county received funding for its pilot of an alternative schedule. School B's Central Office Staff did assist in staff development programs training teachers in methods to use for 90-minute classes. When student number projections were made, School B lost staff members in the "surplusing" process.

The faculty member felt the county school administration did not give School B the funding to make the 4 X 4 block schedule successful. She had attended staff development programs presented by Central Office Staff.

The parent felt the county school administration withheld resources from School B and funded another school in the county.

The student made the statement: "It doesn't look like there's much money to go around in the county."

Table 4.19

School B: Available Resources for the Implementation of the  
4 X 4 Block

Respondent	Resources
Administrator	Encouraged to try alternate schedule Must implement 4 X 4 block schedule without incurring any additional funds Felt another school had received funding for its alternate schedule Central Office Staff provided in- service programs Lost staff because of incorrect student projections
Faculty Member	Felt the county school administration did not give School B the necessary funding to make the 4 X 4 block schedule successful
Parent	Felt the county school administration withheld resources to make the 4 X 4 block schedule successful
Student	Did not think there was enough money provided to the school

**Protocol Question #10: What kind of support did you receive from the faculty? school board? Superintendent? Community?**

The responses to this question were intended to assist in answering research question 3. A summary of the responses is found in Table 4.20.

The administrator felt School B received average support from the faculty, no support from the school board, strong support from the superintendent, and strong support from the School B community. The administrator felt that the school board gave no support to the 4 X 4 block schedule implementation because the process had to be done without requiring any additional funding. Also, when the nine county high school principals recommended the 4 X 4 block schedule for all the high schools, the school board voted against the 4 X 4 block schedule and recommended another alternate schedule preferred by the small group of vocal parents. The faculty member, parent, and student agreed with the administrator.

Table 4.20

School B: Support for the Implementation of the 4 X 4 Block Schedule

Respondent	Support			
	Faculty	Sch. Bd.	Supt.	Community
Administrator	X-	0	X	X
Faculty Member	X-	0	X	X
Parent	X-	0	X	X
Student	X-	0	X	X

Note. X = Strong Support. X- = Average or Partial Support.  
0 = No Support.

**Protocol Question #11: What are your major reasons for continuing (or not continuing) 4 X 4 block scheduling?**

The responses to this question were intended to assist in answering research questions 1, 2, 3, and 4.

The administrator, faculty member, parent, and student knew that the 4 X 4 block schedule would not be continued at School B for the following school year. They all agreed the reason for not continuing the 4 X 4 block schedule was because the school board had decided that all high schools in the county would have the 7-period alternating day schedule for the next year. The respondents agreed the school board had made this decision based upon the influence of a small, but vocal, group of parents, from other high schools in the county, who had actively campaigned against the 4 X 4 block schedule in favor of the 7-period alternating day.

The respondents were unhappy the 4 X 4 block schedule would not be continued. The administrator felt the 4 X 4 block schedule provided more opportunities for students to choose electives. Also, the 4 X 4 block schedule appeared to create a calming atmosphere among students at the school. The faculty member felt she had been able to do many more activities in class through this scheduling arrangement. The parent liked the availability of more electives for

students. She also felt the 4 X 4 block schedule provided more flexibility for failing students who could be given more chances to take classes. The student liked the flexibility in the 4 X 4 schedule which allowed students to move from Honors to Z-level classes. She also felt a student could remember information easier and get better grades in a 4 X 4 block scheduled school.

## Chapter 5

### FINDINGS

#### Introduction

A survey instrument was mailed to the 28 administrators of the Virginia secondary schools which were 4 X 4 block scheduled in the 1994-95 school year. The survey instrument was designed to obtain initial data concerning the problems related to the implementation of the new schedule.

Information was also obtained concerning how those problems were managed. From the information received, two schools were chosen to be involved in case studies. One school represented a school which had the 4 X 4 block schedule in place the longest with relatively minor problems, as indicated by the administrator. The other school chosen represented a school which was experiencing greater problems. The problem severity was determined by the numbers of problems and by how long the 4 X 4 block schedule was expected to remain in place.

Presented in this chapter are a summary of the findings, conclusions, discussion, implications for practice, and recommendations for future research which resulted from this study.

## Summary of Findings

### Summary of Survey Findings

Of the 28 survey instruments which were mailed, 21 were returned, which represented a 75 percent return rate.

Follow-up phone calls were made to the non-respondents who indicated they could not participate in the study because of the number of requests which they received daily.

All of the administrators indicated they had experienced one or more problems related to the implementation of the 4 X 4 block schedule. The administrative problem related to policies occurred most frequently (52 percent). Eighty-two percent of the administrators experiencing a policy problem indicated they had resolved the problem by revising or adding policies or by asking for waivers. The policies requiring attention listed by the administrators were those related to attendance, Advanced Placement (AP) classes, examinations, discipline, grading periods, graduation requirements, and Virginia High School League (VHSL) student eligibility.

Cost was an administrative problem which was listed by 48 percent of the respondents. The cost problem was related to adding staff (43 percent), purchasing additional materials (29 percent), or adding electives (33 percent). The administrators managed the cost problems in a variety of ways: additional funding from the central office, funds from

discretionary monies, or preparation of the following year's budget to handle the increase. If funding was not available immediately, administrators worked around the situation: teachers agreed to teach extra classes, teacher/student ratio was larger in some classes, study halls were eliminated to free teachers to teach, and the use of materials such as paper was monitored.

The administrators indicated the most frequently occurring instructional problem was dealing with transfer students (67 percent). Only 50 percent of the administrators felt the problem had been resolved through the use of special study centers or through devising individual plans for the transfer students.

A problem with staff development was indicated by 38 percent of the administrators and the problem with sequencing of courses was indicated by 19 percent of the administrators. The administrators indicated a high rate of success in managing those two instructional problems. Seventy-five percent of the principals felt they had managed the sequencing problem through the use of a computer master schedule program and through more involvement of the guidance department. One hundred percent of the principals felt the staff development problem had been managed: voluntary and mandatory in-service programs were offered during faculty meetings, staff development days, and the

summer. The programs were provided by in-house experts, central office staff, and guest speakers.

The most frequently occurring school climate problem indicated by the administrators (38 percent) was related to the community perceptions of the 4 X 4 block schedule. Thirty-eight percent of the principals indicated that the community perceived the band and choral programs would be harmed. Additional concerns of the community were time for clubs, sequencing of courses, the educational value of electives, impact on Advanced Placement (AP) classes, and the added stress to the slow learner. Sixty-three percent of the administrators felt the community perception problems had been resolved. Principals indicated students involved in the music programs usually made a one-year commitment which actually strengthened the programs. Other concerns were solved through parent\student\guidance conferences and the use of the computer master schedule program. Electives were monitored and special arrangements were made for Advanced Placement (AP) classes which usually became one-year courses. "How to teach the slow learner" was the topic of staff development programs.

Fourteen percent of the administrators indicated that student problems which affected school climate existed and twenty-four percent felt there were staff problems which affected the school climate. One hundred percent of the

administrators felt the student problems had been managed and 80 percent felt the staff problems had been managed.

Administrators indicated students did not understand the 4 X 4 block schedule at first, but as time passed, they began to like it. Other student problems were related to course selections and the concern about Advanced Placement (AP) classes. Conferences were set up with parents, students, and guidance counselors to resolve course selection problems and Advanced Placement (AP) classes were usually designed to run all year.

Administrators indicated that staff problems were basically related to resistance to any kind of change. Some of the problems were from staff members who did not want to change the schedule while other problems came from staff members who feared or did not want to make an adjustment to teaching 90-minute classes. The staff problems were resolved through administrative decisions to change and through the establishment of extensive staff development programs to train teachers in appropriate 90-minute teaching techniques.

Administrators indicated they had learned of the 4 X 4 block schedule through attendance at conferences, reading articles and other literature, visits to other schools, and from central office staff. Forty-three percent of the administrators had visited schools to observe the 4 X 4 block schedule and the same number had attended conferences

on alternative scheduling. Only 10 percent indicated that central office staff had first introduced them to the concept.

Those reasons given most frequently for implementing the 4 X 4 block schedule were to increase the number of course offerings (38 percent); improve instructional time (29 percent); reduce stress (29 percent); reduce number of classes at one time (14 percent). Other reasons were to eliminate study hall, to increase graduation requirements, to increase flexibility, and as part of the school renewal process.

Influences to change came from both the outside and inside. Fifty-seven percent of the administrators stated there were no outside influences at work pressuring them to change to the 4 X 4 block schedule. Forty-three percent indicated outside influences from the central office staff, parents, and current literature and workshops. Fifteen percent felt strong inside influence came from the faculty. There was no relationship between the number and kinds of problems reported by each administrator and the type of influences to change to the 4 X 4 block schedule.

None of the administrators indicated that resources were withheld. Some received additional funding while others waited a year and included additional funding in their school's budgetary requests.

Of the 21 responding administrators only one indicated that he would not continue with the 4 X 4 block schedule for the following school year. Twenty administrators anticipated using the 4 X 4 block indefinitely.

#### Case Study Findings

School A administrator had used the 4 X 4 block schedule for three years and expected this scheduling arrangement to last indefinitely. School B administrator had used the 4 X 4 block schedule for two years and the schedule was being discontinued for the following school year.

#### Administrative Problem: Cost Associated with Implementing the 4 X 4 Block Schedule

Additional Electives. Both administrators had to increase the number of electives because the students would be taking more courses each year. Administrator A received \$7000 to use for materials while Administrator B was encouraged to implement the 4 X 4 block schedule, but without incurring any additional expense. Administrator A resolved the problem by eliminating study halls to free teachers to teach and adding electives, planning for the cost of each. Faculty member A wished for "costlier" electives while Parent A introduced the concern about the value of electives. Administrator B relied on teachers to develop no-cost electives. The other interviewees basically

agreed with the administrators' comments.

Additional Materials. Administrator A had received some extra money to purchase materials. Because School B was expected to have a smaller student body, Administrator B used leftover materials (materials on hand when a larger number of students was enrolled) to keep a no-cost policy. Information was substantiated by other interviewees.

Additional Staff. Administrator A did not have enough staff the first year of implementation, but he was allowed to add nine additional staff members the second year. Administrator B was not allowed to add staff and he, because of miscalculations on the number of students leaving his school to enroll in a new high school, lost eleven staff members. Administrator A resolved this problem by releasing teachers from duties to teach additional electives, increasing class sizes, and by requesting nine teachers in the next budget year. The other interviewees for School A were in agreement. Administrator B managed the problem by increasing class sizes. Faculty member B recalled how School B's faculty had been very depressed about the loss of teachers at the same time the 4 X 4 block schedule was implemented. The parent and student from School B indicated that the teachers would just have to work more.

Staff Development. Both administrators knew their staff members needed to become familiar with the 4 X 4 block

schedule in action and then they needed to implement staff development programs to ease the faculty fear of teaching 90-minute classes. Administrator A kept cost to a minimum by bringing in speakers from other block scheduled schools. He also set up a "net-work" system with other 4 X 4 block scheduled schools. Faculty A felt the staff development programs helped to build bonds at School A. Parent A was concerned all the faculty may not have participated in staff development. Student A observed the results of staff development in better teaching techniques. Administrator B also kept staff development cost to a minimum by using central office staff. The other interviewees agreed with the administrators' comments.

#### Instructional Problems Related to the Implementation of the 4 X 4 Block Schedule

Activity Period. Administrator A did not feel that a 4 X 4 block schedule allowed for students to socialize unless modifications were made periodically in the class time. He had resolved this problem by using ten minutes of each class one day every two weeks to build a 40-minute activity period which was used for club and other organizations' meetings. Only those students who could drive and who did not work could attend after school meetings. The faculty member and parent agreed, but the student, who drove and did not work, did not think this was a problem.

Administrator B did not think an activity period was necessary. A 12-minute break had been built into the school day in order for the students to socialize between first and second blocks. The other interviewees of School B agreed because most students lived near the school, transportation was not a problem, and school was released at 1:45 p.m. The faculty member wanted more assemblies and pep rallies.

Class Size. Both administrators had to deal with large class sizes. Administrator A knew that class sizes would improve the second year because he would be allowed to hire more teachers. The other interviewees had not noticed the classes were large. The faculty member mentioned writing a policy to prevent "doubling up", a practice allowing a student to take multiple classes in the same discipline at a time, to prevent large class sizes.

Administrator B also knew class sizes were large. The staff would not be increased until student numbers were verified at School B. Teachers, in the second semester of the second year of implementation, were beginning to experience smaller class sizes. Other interviewees agreed.

Evaluation. Both administrators agreed the evaluation process had been stepped up. The increased evaluation assisted in verifying that teachers were using varied teaching techniques. The amount of evaluation was increased at both schools and classes were monitored constantly.

Teachers, parents, and students were aware of the emphasis on evaluation.

Fine Arts. Administrator A felt there was a concern because 25 percent of a students' credits could be earned in fine arts. He handled any possible concerns by assigning increased responsibilities to the guidance counselors. The other interviewees disagreed with the administrator and felt students should be allowed to take as many fine arts classes as they could fit in their schedules.

Administrator B indicated the major reason for implementing the 4 X 4 block schedule was to allow students to take more fine arts and other program electives. The guidance counselors were also heavily involved in scheduling matters at School B. The School B interviewees wanted the students to earn as many credits as possible in their areas of interest.

Sequencing. Administrator A felt there were sequencing problems in foreign language and mathematics. Administrator B was aware of sequencing problems in foreign language. Both administrators were trying to resolve the problems by using parent\student\guidance counselor conferences and by monitoring constantly. Parent A agreed with the administrator. She had heard the concerns voiced at the Public Forums. Faculty member A and student A were not as concerned.

Administrator B admitted she had allowed the students too much freedom in scheduling the first year of the 4 X 4 block schedule implementation. Parent B blamed the county school administration for the problem. Student B had experienced a bad situation with sequencing in Honors Spanish III and had to drop the class.

Scheduling Balance. Everyone agreed the students' schedules should be checked and balanced in order to ensure their more difficult classes and electives were evenly distributed in both semesters. The guidance department was expected to resolve the problems in a professional manner.

Staff Development. Both administrators realized the staffs needed training to ease the fear of teaching 90-minute classes. At School A, the administrator arranged to share in-service programs with other 4 X 4 block scheduled schools. The other School A interviewees agreed. Parent A raised a concern of whether teachers were using what they learned or not. Student A and Faculty member A felt the in-services were useful and teachers used what they learned.

Administrator B also felt the in-service programs offered at School B were beneficial. Faculty member B commented some of the in-service programs had been good while others were a waste of time. She felt several teachers had started the 4 X 4 block schedule feeling very concerned and feeling they were unprepared.

Transfer Students. Everyone felt dealing with transfer students was a difficult task. School A had an Advancement Center with teachers to help the transfer students. Faculty member A said the Center was successful. The other interviewees agreed.

School B had a Transfer Center, but usually the guidance counselors dealt with the transfer students on an individual basis. Parent B again blamed the county school administration for not funding the 4 X 4 block schedule properly which would have provided for a center with teachers. Student B knew some students who had to drop courses because they couldn't catch up.

Administrative Policy Problems Related to the Implementation of the 4 X 4 Block Schedule

Attendance. Administrator A was concerned about attendance but even more when the 4 X 4 block schedule was implemented because missing one day was equivalent to two days. Therefore, the county school administration agreed to adopt an attendance policy. The administrator stated the attendance at the high school was now averaging 95 percent monthly. The other School A interviewees agreed attendance had increased with the establishment of the attendance policy.

Administrator B felt School B did not have an attendance problem. She stated the student average daily

attendance ranged between 96 - 99 percent monthly. Therefore, no new policy was established. The other interviewees felt attendance had improved with the implementation of the 4 X 4 block schedule.

Examinations. Administrator A discontinued the examination exemption policy when the 4 X 4 block schedule was implemented. Students were required to take mid-term examinations at mid-semester and final examinations at the end of the semester. The type of examination was flexible. The interviewees from School A agreed.

Administrator B stated she was not allowed to change the county-wide policy of senior exemption from examinations with no more than five days' absence and a B average. Parent B expressed concern the county school board wanted all the high schools in the county to operate the same. She described the 3-day examination schedule for all the schools although School B only required a 2-day examination schedule. Rather than change the policy for School B, the students at School B did not attend school the third day of examinations. The other interviewees agreed.

Graduation Requirements. Administrator A increased the graduation requirements to ensure students did not leave earlier than the senior year. He increased the requirements because students now had the opportunity to earn thirty-two credits. The interviewees agreed.

Administrator B stated she was not allowed to increase graduation requirements because of the other high schools in the county. The county-wide policy could not be changed. The administrator was not concerned with students graduating earlier than four years in high school. Student B also did not think leaving school before the senior year was a problem. The other interviewees disagreed.

Senior Enrollment. Neither administrator had written any regulations compelling seniors to stay both semesters of the senior year. Parent A did not like the idea of seniors leaving school in the middle of the year. She also did not like allowing students to leave early every day. Faculty member A felt fewer students left this year than in previous years because they were beginning to realize when they left they graduated and Student A felt only a few students graduated early.

Administrator B attempted to keep early gradulators bonded to the class through newsletters and attendance at activities. Parent B did not like the idea of allowing students to graduate early or leave early.

Both administrators felt the students who were going to college were enrolling in college the second semester or working to earn money for college. Loss of revenue to the school system for the drop in average daily attendance did not concern them.

Virginia High School League (VHSL) Eligibility. Both administrators had requested waivers from the Virginia High School League (VHSL) to allow students to participate who attended and passed three classes out of four instead of the usual five out of six classes. The interviewees at School A knew about this rule. The Faculty Member and Parent at School B did not know of this regulation.

Discipline. The administrator at School B was able to receive a waiver from the county school administration to change some of the suspensions because one day suspension in the 4 X 4 block schedule was equivalent to two days in the traditional schedule. The other interviewees were not aware of those waivers.

The administrator of School A did not discuss discipline as a policy problem. The interviewees also did not mention a discipline policy.

Student Problems Affecting Climate Related to the Implementation of the 4 X 4 Block Schedule

Boredom. Both administrators realized that students would become bored in classes listening to lecture for 90 minutes. Therefore, whenever complaints were made, the teachers were monitored and evaluated to check for variety in teaching techniques. All of the interviewees agreed. Both students felt their teachers were interesting.

Homework. The administrators of both schools felt the

preparation for four classes was much better than preparing for six or seven classes. When the students commented they had less homework, the comment was related to less subjects and not less material in a subject. Parent B felt preparing for only four subjects had helped special education students. Parent A was concerned teachers were using too much class time for students to do homework. Both students commented the preparation for four classes was much better and the teacher was available to help with homework in class.

Honor Roll. Both administrators agreed there were more students on Honor Roll because students were only preparing for four subjects. At School B, everyone felt the number of students on the Distinguished Honor Roll had not changed, but that more students would be on the regular Honor Roll.

Class Participation. All interviewees felt students were more involved in class. The administrators felt the teachers were keeping students more involved by using better teaching techniques. Faculty member B did not think the English teachers were able to read aloud as much.

Discipline. Both administrators felt there were less discipline problems in the hall. Administrator A stated discipline problems came from classes of teachers who lectured the entire class period. Administrator B felt less disciplinary problems were coming out of classes of teachers

who used many different activities. Student B commented that the freshman coming to School B were separated from their friends in the middle school for the first time because the students were sent to different high schools. The interviewees felt disciplinary problems were better because of the implementation of the 4 X 4 block schedule.

Socialization. The administrator, faculty member, and parent at School A felt students should have more socialization time although the student did not think socialization was a problem. Clubs did not have time to meet during the day and students did not see each other as often. The socialization problem was not resolved at School A.

The School B interviewees were not concerned with any kind of socialization period. A 12-minute break had been built into the schedule between first and second blocks. All of the interviewees were satisfied with that break time.

#### Staff Problems Affecting Climate Related to the Implementation of the 4 X 4 Block Schedule

Resistance to Change. Administrator A realized change always encounters resistance. Therefore, he began the investigation of the 4 X 4 block schedule one year before it was implemented. He emphasized the 90-minute planning period to the teachers and he removed the supervisory duties for the first year. Faculty member A also mentioned teachers who resisted because they could not teach as they always had.

Parent A felt staff development would help, and Student A felt the teachers had changed.

Administrator B felt the faculty was resistant. The faculty at School B had turned down the 7-period alternating day the previous year. A resistance to the change in schedule existed as well as the resistance to change lesson plans. In addition, there were other internal problems within the faculty. The English department had to give up an extra period designated for writing evaluation. The administrator hoped the staff development programs would help ease some of the resistance. Parent B mentioned several other departments within the school which she perceived to be disgruntled.

Planning. The administrators of both schools felt the teachers were forced to plan extensively to survive the 90-minute classes and to complete the courses. The faculty member at School B commented on the level of stress the English department was feeling since the 4 X 4 block schedule was implemented.

Class Size. The class sizes at both schools were large the first year of the implementation of the 4 X 4 block schedule because of miscalculations of the numbers of students who would be enrolled in the schools. Administrator A was able to reduce some of the class sizes by eliminating study halls and asking some teachers to teach more classes.

The faculty could see the situation would be changed because the budget was approved for the following year including nine new teaching positions.

At School B, the class sizes were large which was another point of dismay for the teachers who had expected smaller class sizes from the 4 X 4 block schedule implementation and the opening of the new high school. Parent B and Student B blamed the county school board for not funding the 4 X 4 block schedule properly.

Socialization. Administrator A stated the 4 X 4 block schedule did not change the usual departmentalization of a secondary school. The other interviewees agreed.

Administrator B already had dissension among her staff over the extra period which the English teachers had each day for writing evaluation. The 4 X 4 block schedule removed the extra period from the English teachers, but it did not ease the dissension. Parent B also recognized the dissension on the staff, but she felt it had started before the implementation of the 4 X 4 block schedule.

#### Community Perceptions Affecting Climate and the Implementation of the 4 X 4 Block Schedule

Communication. Administrator A realized the community must be brought along in the process of implementing the 4 X 4 block schedule in order for the program to be successful. Therefore, Public Forums and presentations were held. The

interviewees agreed with those comments. Parent A expressed concern with parents not attending the Public Forums.

Administrator B also held Open Meetings. The interviewees from School B felt communication had been good with the School B community. The problem existed with communication to the surrounding other county high school communities. Parent B and Student B felt the county school administration had not done a good job of communicating factual information about the 4 X 4 block schedule to the other high school community parents.

Usefulness of Electives. Administrator A had conducted an informal survey to find out what electives parents and students wanted. He felt the community believed the electives were useful. Parent A commented she would like to see more electives that were worthwhile. The other two interviewees agreed with the administrator.

Administrator B felt all the electives were worthwhile. The parent and faculty member agreed with the administrator. The parent had been instrumental in helping on committees and presenting information in Open Meetings because she wanted the 4 X 4 block schedule to open more elective choices for the students. The student felt some electives were serious and some were fun depending upon the subject and the teacher. She commented the electives were there to help students.

Sequencing of Courses. Administrator A felt sequencing of courses was the number two concern of parents. He felt there could be sequencing problems in foreign language and mathematics. Parent A agreed with the administrator. The faculty member and the student were not concerned with this problem. The administrator felt the guidance department could handle those problems.

Administrator B had not heard this concern from parents. She felt sequencing should be monitored continuously. She also wanted more guidance involvement. The other interviewees felt course sequencing was a major concern. The student, who had a problem with sequencing, felt this problem was of great importance.

Harmful Effects to Fine Arts. Administrator A stated the only parents who aggressively were against the 4 X 4 block schedule were parents afraid the band and choral programs would be harmed. As soon as the regulation was made requiring students to commit for one year, the negative comments ceased. The interviewees agreed.

Administrator B also made the one-year commitment regulation immediately for band and chorus which eased the problem with parents in the School B community. The interviewees agreed.

Complaints Related to Lecturing. Administrator A stated this was the number one complaint of parents. He used the

evaluation process and staff development programs to resolve the lecturing problem. The other interviewees from School A had heard concerns from students and parents, but they agreed the administration was quick to check out any problems.

Administrator B had not heard many complaints, but she also monitored classrooms constantly. The other School B interviewees agreed.

#### Outside and Inside Influences to Change to a 4 X 4 Block Schedule

The School A administrator felt there were no outside influences pressuring him to change to the 4 X 4 block schedule. He and the other interviewees stated teachers were the strongest inside influence to change to the 4 X 4 block schedule. The teacher influence was perceived to be positive.

The School B Administrator stated there were both outside and inside influences pressuring the change to the 4 X 4 block schedule. The strong outside influences were from School B parents, the superintendent, and the central office staff. Also, current literature seemed to stress the alternative schedules as a way to improve the instructional programs.

The strong inside influences to change to the 4 X 4 block schedule came from students, some faculty, and the school

administration.

Also, negative outside and inside influences were openly at work in School B to get rid of the 4 X 4 block schedule. Those negative outside influences were from other county high school parents, the school board, other high school faculties, and realtors. The source of the negative inside influence was from some of the School B faculty.

#### Available Resources for the Implementation of the 4 X 4 Block Schedule

Administrator A was given \$7000 additional funding for materials the first year of implementation of the 4 X 4 block schedule. His budget was approved the second year for nine additional staff members. The other interviewees stated the school board was doing all it could to help make the 4 X 4 block schedule successful.

Administrator B, although encouraged to try the 4 X 4 block schedule, was constrained by the added stipulation of making the schedule change without any additional funding. Through the process, the administrator also felt another school was given funding for another alternative schedule. Central office staff provided some staff development programs. Then, some staff was removed from School B because of incorrect enrollment projections. Parent B felt the county school administration did not fund the 4 X 4 block schedule properly.

### Support for the Implementation of the 4 X 4 block Schedule

The administrator of School A and all the interviewees felt the implementation of the 4 X 4 block schedule received strong support from the faculty, school board, superintendent, and community. The administrator felt this strong support was a reason for the success of the 4 X 4 block schedule at School A.

Administrator B felt she received partial support from the faculty, no support from the school board, and strong support from the superintendent and School B community. The school board had voted to discontinue the 4 X 4 block schedule after all nine high school principals had recommended that schedule for the secondary schools in the county.

### Major Reasons for Continuing (or not continuing) the 4 X 4 Block Schedule

The major reasons for continuing the 4 X 4 block schedule were: (1) flexibility; (2) student success; (3) opportunity to get back on "track"; (4) the ease in accommodating parents and students; (5) only four class preparations; (6) the teachers change every semester; (7) availability of more credits; (8) homework help in class; (9) more experiences in the classroom; and, (10) the calming atmosphere in the school.

Since School B was not continuing the 4 X 4 block

schedule, the major reason for discontinuing the schedule was attributed to the school board who had voted against its adoption.

### Conclusions

From the findings of this study, the following conclusions were drawn. Because of the limited sample of twenty-one respondents of the survey instrument and eight interviews, these conclusions may not be generalized to all other schools.

This study indicated schools which implement the 4 X 4 block schedule will encounter problems. The number and kinds of problems may vary and are unique to each school. The problems may be administrative or instructional in nature, or they may pertain to the school climate. The administrative problems are usually related to cost or policies. The instructional problems are usually related to individual student's course arrangements, credits, class size, and socialization issues. Instructional problems are also related to teacher evaluation and staff development. School climate may be affected by student problems, staff problems, or community perceptions.

The administrators at each school used their available resources and creativity to manage, or resolve, problems. No consistent pattern was indicated in the methods of

resolving problems.

Resources to implement the 4 X 4 block schedule came from monies and personnel within the school and in the form of staff development assistance and funding from the central office staff.

In a school where the perception existed that the school board was willing to do anything it could to help, administrators and staff were more contented and creative in solving problems. The perception of limited and withheld resources contributed to the squelching of the persistence to solve problems.

#### Discussion

During the research study, certain topics "surfaced" which are worthy of discussion. The inclusion of an activity period in the schedule of a high school was one topic to be considered. One school was very adamant that the students needed the time to have organizational meetings. The other school was not concerned with including that time into the daily schedule. Because many high schools change schedules and build assemblies, pep rallies, club meetings, student pictures, and fundraising activities into the instructional day, if the activity period were to be removed, how much more subject matter could be covered in an academic day? If the high school schedule was built entirely around

academics, would the achievement of the students improve?

Another philosophical question might also be raised. Do the taxpayers view the activity period and the activities which take place during that time as necessary? Or, does the "public" view the activities as so much "fluff?" Is there a general trend in public opinion that the high school should concentrate on academics and discontinue the other activities? Is it possible that a high school could run more efficiently and more economically if the emphasis was on academics? Such questions cause administrators to think about the purpose of the high school and what the business of the school should be.

On the other hand, students would miss the social aspect involved with growing up. If the school was totally concerned with academics, then perhaps another agency such as the recreational department would have to become more involved with the students. High school educators need to look at this issue to determine what should be included in the high school curriculum. Would the high school be more efficient and effective without the built-in activities?

Another theme which was discussed by the participants in this study was the idea of early graduation. If the graduation requirements were not raised in a 4 X 4 block scheduled school, students would be able to graduate in three years. That time frame would have far-reaching

implications for college entrance and maturity level of graduates entering the world of work. Graduating from high school in three years would place the average graduate's age at sixteen. High Schools would certainly save money on programming for a year, but what would the total effect be on the community? Would more dual-enrollment classes be available with the community colleges? Would the three-year high school be more efficient? Is the question of cost really a question of how much money is involved in the high school program or how much schooling means to a society? If the cost of schooling an individual is very important in the growth of a society, does that schooling require socialization instruction? Again, this issue is a philosophical question. What should schools be doing?.

The statement was made by several respondents that an average student would do well under the 4 X 4 block schedule. Looking at instructional methodology, should students only concentrate on a few subjects at a time. If that were the case, would this mean that students would achieve better if they only studied one subject at a time?

When the 4 X 4 block schedule was implemented in the schools, the kinds and numbers of problems varied according to the unique characteristics of each school. Those problems were related to administrative, instructional, and school climate issues.

Many of the problems could have been avoided if careful attention had been given to five areas: communication, fear of change, consensus building, organization, and perceptions. Each of these areas is discussed in the following paragraphs.

When a new idea is introduced, the assumption that everyone understands what is going on must be avoided. When the 4 X 4 block schedule was introduced in the secondary schools, many concerns were usually expressed by faculty, students, parents and the community members. The administration should have made communication a major emphasis. When communication is not an emphasis, misinformation and lack of information results in erroneous rumors spreading throughout the school and its community. Effective communication would answer many of the concerns expressed by students, staff members, parents.

Resistance to change must be understood in order to work with all members of the school community. Resistance to change such as to the 4 X 4 block schedule is usually not intentional malice but simply a fear of moving into the unknown. Staff members appeared to be most fearful of teaching 90-minute classes because they were comfortable in the traditional 45-55 minute class. They felt threatened when they were moved from their comfort zone. Parents were fearful of what the new schedule would do to their

children's educational programs. Students were fearful of being in 90-minute classes. Community members were afraid the schedule would spread into their high schools. School board members were fearful of all the questions which would arise from having several different secondary schedules in place in the county at one time and the cost which might be incurred from the implementation of the 4 X 4 schedule. Activities which would alleviate the fears must be developed to lessen the resistance to change.

Consensus building was another major area which must be encouraged during the implementation process. Building consensus within the school among the staff members could have avoided the stress and dissension occurring among some of the staff members. Consensus building activities would decrease the teacher sabotage of the 4 X 4 block schedule and help to settle the internal strife. More staff members would support the change if the decision to move to the schedule had been accomplished through consensus building. Then building on cooperation with parents, students, community members, and the school board would have gained support rather than opposition.

Being organized and well planned in what will occur as the implementation of the 4 X 4 block schedule proceeds is also important. Knowing your opposition and organizing strategies to combat the opposition and concerns would have

prevented some of the problems related to implementation of the 4 X 4 block schedule.

An administrator must also be aware of the perceptions of the 4 X 4 block schedule and what is real and what is perceived. Steps must be taken to make perceptions accurate. In the school which perceived resources were being withheld or unfairly distributed, the negative attitudes prevented solving problems.

### Implications for Practice

In this section, specific suggestions are made which may be considered by public schools for implementation into practice. The suggestions are related to four areas (1) Ways to avoid the kinds and numbers of problems when the 4 X 4 block schedule is implemented, (2) ways to resolve problems which arise, (3) resources which are available, and (4) ways to improve negative perceptions.

### Ways Problems May Be Avoided When the 4 X 4 Block Schedule is Implemented

Before problems can be avoided, steps must be taken to ensure that there is a clear understanding and acceptance of who will make decisions, why the decisions are made, and how the decisions will be implemented. If decisions can be made

by the school's administrator, without a centralized involvement, and if a school's administration and staff can rationally make decisions, there should be a consensus among all the stakeholders as to how problems will be solved. Until this consensus has been established, no problems can be avoided because no one clearly understands what is occurring.

Once consensus has been established, there are several steps an administrator can take to avoid problems:

1. Assign a person and/or committee to be in charge of the communication concerning the 4 X 4 block schedule.
2. Provide multiple staff development programs to train teachers how to teach for 90-minute blocks.
3. Establish a staff development program which trains staff members in consensus building.
4. Establish a time-line of the organized activities which will be used to implement the 4 X 4 block schedule.
5. Make contact with the school board members to make sure the board members understand the facts in order to determine the status of the 4 X 4 block schedule.

#### Ways to Resolve Problems Which Arise

1. Administrators should constantly monitor classrooms for possible trouble spots.
2. The administrator should develop a plan for the most

efficient use of staff members in order to reduce class size.

3. The administrator should develop a close working relationship with the guidance counselors and explain what is expected of them in scheduling and sequencing problems.
4. The administrator should make sure the cost does not exceed the budget by running a mock schedule with the additional electives.
5. The administrator must be constantly alert to the oppositional forces at work.

#### Ways to Obtain and Use Resources

1. The administrator must start with a well-defined budget.
2. The administrator must be aware of in-house resources such as teacher expertise for staff development programs.
3. The administrator must be willing to make presentations to area businesses for the purposes of developing partnerships.
4. The administrator must be willing to ask the School Board for funding and work with central office staff to provide technical assistance.

### Ways to Improve Negative Perceptions

1. The administrator should keep information about the 4 X 4 block schedule in the public eye at all times.
2. The administrator must plan to be proactive and not reactive.
3. The administrator should invite community members to the school to see the new program in operation.

### Recommendations for Future Research

This study has focused upon the various problems related to the implementation of the 4 X 4 block schedule and ways to solve those problems. In addition, the types of resources available and the relationship of those resources to solving the problems was investigated.

Several topics were mentioned in the interviews which deserve further study. The question of the importance of socialization, or activity periods, built into the 4 X 4 block scheduled day should be studied. Research could be conducted on the types of activity plans the 4 X 4 block scheduled schools have and the necessary conditions to support the activity period. Also, the relevance of the activity period to the education of students might be investigated.

Early graduation and it's effect upon community colleges and four-year colleges would be an additional topic

for research. A study might also be conducted concerning the effects of early graduation upon school budgets.

Research could be conducted on the relationship between student achievement and the 4 X 4 block schedule now that some schools will be going into the fourth year of this schedule. This suggested research would be very difficult because of the long-range study that historically would be involved. Also, there would be a problem in separating all the variables in such a way that the schedule would be the sole variable responsible for any data collected. The "halo" effect might also play a part in the findings. An idea might be to look at ways to do the research more succinctly. One might consider some additional relationships: Is there an increase in the numbers of students that make Honor Roll because of the 4 X 4 block schedule? Are more students passing the Advanced Placement classes under the 4 X 4 block schedule? Once again, determining that the sole variable related to the findings would be a difficult task.

In addition, research might be conducted concerning whether students perform better when they only have four or less subjects to study. Again, separating the variables in order to establish a relationship with scheduling would be difficult.

A study might also be conducted concerning the early graduation of students in a 4 X 4 block scheduled school.

What effects does a three-year high school have upon colleges? Are the students who are graduating early having a difficult time adjusting to postsecondary experiences because of a lack of social growth or maturity?

Also, research could be conducted on the relationship between the 4 X 4 block schedule and standardized test scores as a measure of achievement. But, once again, one would have a difficult time separating variables in order to find a relationship.

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APPENDIX A

Principal's Letter

Dear (Principal):

I am studying the problems related to the implementation of 4 X 4 block scheduling in Virginia secondary schools. This study will be of value to principals thinking about implementing this scheduling innovation.

I have enclosed a brief survey which will help summarize the types of problems which have been experienced at your school during the implementation of this type of scheduling. I would appreciate your taking a few moments to complete this survey and return it in the self-addressed, stamped envelope provided.

From the survey data gathered, I will select two schools to study. If your school is chosen, I will call to arrange a time at which I might be able to visit your school and observe 4 X 4 block scheduling in action. During my visit I would like to interview you, or your designee, a faculty member, the SCA president, and the PTA president.

The information provided may prove invaluable to another principal who is planning for a 4 X 4 block schedule. Once again, thank you for your time and effort in completing the enclosed survey.

Sincerely,

Brenda F. Cowlbeck  
Principal  
Bedford Middle School

APPENDIX B

Principal's Survey

4 X 4 Block Scheduling Survey

Some schools have experienced problems when 4 X 4 block scheduling has been implemented. This survey will help to summarize the problems, if any you experienced at your school and how those problems were managed.

Related to the implementation of the 4 X 4 block schedule at your school:

1. Were there cost problems involving staff additions? YES NO

If yes, give one example. \_\_\_\_\_  
\_\_\_\_\_

Was that particular problem resolved? YES NO  
If yes, how was that problem resolved? \_\_\_\_\_  
\_\_\_\_\_

2. Were there cost problems involving additional materials? YES NO

If yes, give one example. \_\_\_\_\_  
\_\_\_\_\_

Was that particular problem resolved? YES NO  
If yes, how was that problem resolved? \_\_\_\_\_  
\_\_\_\_\_

3. Did you experience policy problems? YES NO  
If yes, give one example. \_\_\_\_\_  
\_\_\_\_\_

Was that particular problem resolved? YES NO  
If yes, how was that problem resolved? \_\_\_\_\_  
\_\_\_\_\_

4. Were there cost problems related to accommodating an increased number of courses? YES NO  
If yes, give one example. \_\_\_\_\_  
\_\_\_\_\_

Was that particular problem resolved? YES NO  
If yes, how was that problem resolved? \_\_\_\_\_  
\_\_\_\_\_

5. Have you had problems with sequencing courses such as foreign languages? YES NO  
If yes, give one example. \_\_\_\_\_

Was that particular problem resolved? YES NO  
If yes, how was that problem resolved? \_\_\_\_\_

6. Were there problems related to staff development? YES NO  
If yes, give one example. \_\_\_\_\_

Was that particular problem resolved? YES NO  
If yes, how was that problem resolved? \_\_\_\_\_

7. Were there transfer student problems? YES NO  
If yes, give one example. \_\_\_\_\_

Was that particular problem resolved? YES NO  
If yes, how was that problem resolved? \_\_\_\_\_

8. Were there problems with the students? YES NO  
If yes, give one example. \_\_\_\_\_

Was that particular problem resolved? \_\_\_\_\_

9. Were there problems with the staff? YES NO  
If yes, give one example. \_\_\_\_\_

Was that particular problem resolved? YES NO  
If yes, how was that problem resolved? \_\_\_\_\_

10. Did the community perceive any problems with the 4 X 4 block schedule? YES NO  
If yes, give one example. \_\_\_\_\_

Was that particular problem resolved? YES NO  
If yes, how was that problem resolved? \_\_\_\_\_

11. How long have you been using 4 X 4 block scheduling? \_\_\_\_\_

12. How did you learn of 4 X 4 block scheduling? \_\_\_\_\_

13. The major reason the decision was made for the high school to become 4 X 4 block scheduled was \_\_\_\_\_

14. Were there outside influences to change to the 4 X 4 block schedule? YES NO  
If yes, from whom? LITTLE SOME STRONG

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

15. The percent of students on free/reduced lunch is \_\_\_\_.

16. The percent of students identified as eligible for special education services is \_\_\_\_\_.

17. The number of teachers (including special educators, librarians) is \_\_\_\_\_.

18. The number of administrators (Principal and Assistants) is \_\_\_\_\_.

19. The number of guidance counselors is \_\_\_\_\_.

20. A recommendation for improving 4 X 4 block scheduling is \_\_\_\_\_

21. How long do you feel 4 X 4 block scheduling will continue to be implemented at your school? \_\_\_\_\_

APPENDIX C

Principal's Interview Protocol

From your survey responses, you indicated that \_\_\_\_\_ was a problem and that you were able to manage that problem by \_\_\_\_.

1. Would you describe the problem in more detail? \_\_\_\_\_  
\_\_\_\_\_
2. In your opinion, what caused the problem? \_\_\_\_\_  
\_\_\_\_\_
3. How were you able to manage the problem as you did? \_\_\_\_\_  
\_\_\_\_\_

(These three questions would be asked according to the survey responses.)

4. Did you perceive any change in school climate or culture of the school? \_\_\_\_\_  
How did you manage the changes? \_\_\_\_\_  
\_\_\_\_\_
5. Did you perceive any problems with the students? \_\_\_\_\_  
How were the problems managed? \_\_\_\_\_  
\_\_\_\_\_
6. Did you perceive any problems with the staff? \_\_\_\_\_  
How were the problems managed? \_\_\_\_\_  
\_\_\_\_\_
7. Did the community perceive any problems with the 4 X 4 block schedule? \_\_\_\_\_  
How were the problems managed? \_\_\_\_\_  
\_\_\_\_\_
8. Explain the outside and inside influences to change to a 4 X 4 block schedule. \_\_\_\_\_  
\_\_\_\_\_
9. What available resources did you receive? \_\_\_\_\_  
\_\_\_\_\_
10. What kind of support did you receive: faculty? \_\_\_\_\_  
school board? \_\_\_\_\_ Superintendent? \_\_\_\_\_  
community? \_\_\_\_\_
11. What are your major reasons for continuing (or not continuing 4 X 4 block scheduling? \_\_\_\_\_

APPENDIX D

Faculty Member's Interview Protocol

1. What problems did you perceive with implementing the 4 X 4 block schedule? \_\_\_\_\_  
\_\_\_\_\_  
(correlate with administrator's survey and interview answers)
2. Did you perceive any change in school climate or culture of the school? \_\_\_\_\_  
What were the changes? \_\_\_\_\_  
How were the changes handled? \_\_\_\_\_  
\_\_\_\_\_
3. Did you perceive any problems with the students? \_\_\_\_\_  
What were the problems? \_\_\_\_\_  
How were the problems handled? \_\_\_\_\_
4. Did you perceive any problems with the staff? \_\_\_\_\_  
What were the problems? \_\_\_\_\_  
How were the problems handled? \_\_\_\_\_
5. Did you perceive any problems from the community? \_\_\_\_\_  
How were the problems handled? \_\_\_\_\_
6. What did you perceive as the influences (inside and outside) which brought about changing to the 4 X 4 block schedule? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. What resources were available? \_\_\_\_\_
8. What kind of support was received from the faculty, school board, superintendent, and community? \_\_\_\_\_  
\_\_\_\_\_
9. In your opinion, what are the major reasons for continuing (or discontinuing) 4 X 4 block scheduling? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX E

SCA Representative's Interview Protocol

1. What problems did you perceive with implementing the 4 X 4 block schedule? \_\_\_\_\_  
\_\_\_\_\_  
(correlate with administrator's survey and interview answers)
2. Did you perceive any change in school climate or culture of the school? \_\_\_\_\_  
What were the changes? \_\_\_\_\_  
How were the changes handled? \_\_\_\_\_  
\_\_\_\_\_
3. Did you perceive any problems with the students? \_\_\_\_\_  
What were the problems? \_\_\_\_\_  
How were the problems handled? \_\_\_\_\_
4. Did you perceive any problems with the staff? \_\_\_\_\_  
What were the problems? \_\_\_\_\_  
How were the problems handled? \_\_\_\_\_
5. Did you perceive any problems from the community? \_\_\_\_\_  
How were the problems handled? \_\_\_\_\_
6. What did you perceive as the influences (inside and outside) which brought about changing to the 4 X 4 block schedule? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. What resources were available? \_\_\_\_\_
8. What kind of support was received from the faculty, school board, superintendent, and community? \_\_\_\_\_  
\_\_\_\_\_
9. In your opinion, what are the major reasons for continuing (or discontinuing) 4 X 4 block scheduling? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX F

PTA Representative's Interview Protocol

1. What problems did you perceive with implementing the 4 X 4 block schedule? \_\_\_\_\_  
\_\_\_\_\_  
(correlate with administrator's survey and interview answers)
2. Did you perceive any change in school climate or culture of the school? \_\_\_\_\_  
What were the changes? \_\_\_\_\_  
How were the changes handled? \_\_\_\_\_  
\_\_\_\_\_
3. Did you perceive any problems with the students? \_\_\_\_\_  
What were the problems? \_\_\_\_\_  
How were the problems handled? \_\_\_\_\_
4. Did you perceive any problems with the staff? \_\_\_\_\_  
What were the problems? \_\_\_\_\_  
How were the problems handled? \_\_\_\_\_
5. Did you perceive any problems from the community? \_\_\_\_\_  
How were the problems handled? \_\_\_\_\_
6. What did you perceive as the influences (inside and outside) which brought about changing to the 4 X 4 block schedule? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. What resources were available? \_\_\_\_\_
8. What kind of support was received from the faculty, school board, superintendent, and community? \_\_\_\_\_  
\_\_\_\_\_
9. In your opinion, what are the major reasons for continuing (or discontinuing) 4 X 4 block scheduling? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

VITA

Name: Brenda Fariss Cowlbeck  
Address: 609 Vine Street  
Bedford, Virginia 24523  
Telephone: (540) 586-1712 (Home)  
(540) 586-7735 (Work)

Personal Information:

Date of Birth: December 2, 1949  
Place of Birth: Lynchburg, Virginia  
Marital Status: Divorced  
Children: 1 girl (age 16)  
1 boy (age 14)  
Hobbies: camping, boating, reading

Education:

College: V.P.I. & S.U.  
Blacksburg, VA  
Degree: Doctor of Education - 1996  
Educational Administration  
College: V.P.I. & S.U.  
Blacksburg, VA  
Degree: Certificate of Adv. Grad. Study - 1995  
College: University of Virginia  
Charlottesville, VA  
Degree: M.A.T. in Biology - 1972  
College: Longwood College  
Farmville, VA  
Degree: B.S. Biology - 1970  
Magna Cum Laude  
High School: Randolph-Henry High School  
Charlotte Court House, VA  
Degree: Advanced Diploma - 1967  
Valedictorian  
Endorsements: Secondary Principal  
Middle School Principal  
Secondary/Middle School Supervisor  
Biology  
General Science

Certification: Post-graduate Professional

Work Experience:

1995 - 1996	Bedford Middle School Bedford County Public Schools Principal
1993 - 1995	Bedford County School Board Office Bedford County Public Schools Specialist for Middle & Secondary Ed. Discipline Review Officer Alternative Education Coordinator Drop-Out Prevention Coordinator Coordinator of Bridge School
1989 - 1994	Bedford County School Board Office Bedford County Public Schools Coordinator of Student Services Coordinator of Secondary Education Discipline Review Officer Coordinator of Gifted Education, Drug Education, Guidance, Family Life Program, and Drop-Out Prevention and Alternative Education
1985 - 1989	Liberty High School Bedford County Public Schools Assistant Principal
1985	Lynchburg School Board Office Lynchburg Public Schools Interim Secondary Coordinator
1971 - 1985	Linkhorne Middle School Lynchburg Public Schools Life Science and Physical Science Teacher (Grades 6, 7, & 8) Homebound Teacher Summer School Teacher
1970 - 1971	Rustburg High School Campbell County Public Schools Biology Teacher (Grades 9 - 12)

Professional Organizations:

National Association of Secondary School Principals  
Virginia Association of Secondary School Principals  
National Association of Middle School Principals  
Virginia Association of Middle School Principals  
Delta Kappa Gamma

Community Activities:

Bedford Baptist Church  
    Sunday School Teacher for Adults  
Athletic Boosters Club  
    Liberty High School

*Brenda Fariss Cowlbeck*

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Brenda Fariss Cowlbeck